

Compendium of Industry Specific Internal Audit Guides

(As on January 1, 2015)

Volume I



The Institute of Chartered Accountants of India
(Set up by an Act of Parliament)
New Delhi

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Foreword

In past several decades, rapid changes amplified by technology have made the overall business environment more complex. This dynamic environment has given rise to new types of risks. Internal audit function has the potential to help manage the increasingly sophisticated risk factors faced by today's organizations, and drive efficiency and sustainability. Internal audit function needs to focus on providing business insights, becoming a strategic advisor, balancing assurance and advisory thereby meeting increased stakeholder's expectations.

The Internal Audit Standards Board of the Institute of Chartered Accountants of India (ICAI) has been bringing out high quality technical literature on internal audit and risk management to upgrade the skill sets of the members. With a view to provide guidance to the members on internal audit of different industries, the Board has brought out a number of industry specific internal audit guides highlighting the peculiar aspects of these industries. I am pleased that this "Compendium of Industry Specific Internal Audit Guides" would consolidate all these industry specific internal audit guides and will be a one stop referencer for the benefits of the members.

At this juncture, I would like to congratulate CA. Charanjot Singh Nanda Chairman, Internal Audit Standards Board and all the other members of the Board for their initiatives in developing technical literature on internal audit.

I am sure that this Compendium would prove to be a useful technical resource for the members.

February 4, 2015
New Delhi

CA. K. Raghu
President, ICAI

Preface

Globalization, advances in technology, complex regulatory environment have led to an increased focus on risk management, fraud prevention and corporate governance. It is more important than ever for internal audit to be seen as a credible business partner, able to identify control weaknesses that may undermine business drivers or breach regulatory requirements. Internal audit function should overcome these challenges of higher expectations by thinking and acting strategically, building partnership of trust with all stakeholders, remaining aligned with the organization's strategy and business objectives and by delivering high quality reports that are clear and forward looking.

The Institute of Chartered Accountants of India through Internal Audit Standards Board has been working relentlessly, to reinforce the primacy of the Institute as a promoter, source and purveyor of knowledge relating to internal audit and other aspects related to it, so as to enable it's members to provide more effective and efficient value added services. The Board has been bringing out Standards on Internal Audit, Technical Guides of both generic and industry specific nature for the guidance of the members. In 2011, the Board had issued "Compendium of Technical Guides on Internal Audit" which contained text of all the Industry Specific and Generic Guides issued by the Board till June, 2011 and further issued revised edition of the same in 2013.

In 2015, the Board is bringing out separate Compendiums for Industry Specific Internal Audit Guides and Generic Internal Audit Guides. This *Compendium of Industry Specific Internal Audit Guides (As on January 1, 2015)* is divided into five volumes. The first volume contains industry specific Guides on Aluminium Industry, Upstream Oil and Gas Companies, Telecommunication Industry, Stock Brokers, Sugar Industry. The second volumes comprises of Guides on Educational Institutions, BPO Industry, Retail Industry and Life Insurance Companies. The third volume includes Mutual Fund, Infrastructure, Stock and Receivables Audit, Mining and

Extractive Industry and Not-for-Profit Organizations Guides. The fourth volume Guides are on Construction Sector, Textile Industry, Pharmaceutical Industry and Petrochemical Industry. The fifth volume contains Oil and Gas Refining & Marketing (Downstream) Enterprise, Waste Management, Beverages and IT Software Industry. In addition to this, the text of all these Guides have also been published as a separate publication of the Institute.

I would like to express my gratitude to CA. K. Raghu, President, ICAI and CA. Manoj Fadnis, Vice President, ICAI for their continuous support and encouragement to the initiatives of the Board. I must also thank my colleagues from the Council at the Internal Audit Standards Board, viz., CA. Shrinivas Yeshwant Joshi, Vice Chairman, IASB, CA. Rajkumar S. Adukia, CA. Prafulla Premeek Chhajer, CA. Sanjeev K. Maheshwari, CA. Dhinal Ashvinbhai Shah, CA. Shiwaji Bhikaji Zaware, CA. V. Murali, CA. S. Santhanakrishnan, CA. Abhijit Bandyopadhyay, CA. Sanjiv Kumar Chaudhary, CA. Atul Kumar Gupta, CA. Naveen N.D. Gupta, Shri Manoj Kumar, Shri P. Sesh Kumar and Shri R.K. Jain for their vision and support. I also wish to place on record my gratitude for the co-opted members on the Board, viz., CA. R. Balakrishnan, CA. N. S. Ayyanagoudar, CA. Sunil H. Talati, CA. J. Vedantha Ramanujam and CA. Milind Vijayvargia and special invitees, CA. Nagesh D. Pinge and CA. Hardik Chokshi for their invaluable guidance as also their dedication and support to various initiatives of the Board. I also wish to express my thanks to CA. Jyoti Singh, Secretary, Internal Audit Standards Board, CA. Arti Bansal, Asst. Secretary and CA. Pallavi Aggarwal, Management Trainee in giving final shape to the Compendium.

I am sure that this publication would be warmly received by the interested readers.

February 3, 2015
New Delhi

CA. Charanjot Singh Nanda
Chairman, IASB

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I-1

**TECHNICAL GUIDE ON
INTERNAL AUDIT IN
ALUMINIUM INDUSTRY**

Foreword

With bracing the members for global competitiveness and ability to explore new areas where they can provide value added services as its vision, the Institute of Chartered Accountants of India has been bringing out a vast variety of technical literature, in the form of standards, guidance notes, technical guides etc., not to mention the various seminars and conferences on topics of relevance, to help members forge ahead towards these goals.

I commend the Committee on Internal Audit* for working not only on developing Standards on Internal Audit but also framing guidelines – industry specific as well as generic, to help the members understand what is expected of them in their professional assignments and how best they can fulfill those expectations and provide value addition. Further, it is heartening to note is the increasing involvement of industry experts, including our members as also their zest in sharing their knowledge and experience of the various industries to the benefit of the other members as well, this Technical Guide on Internal Audit in Aluminium Industry, being one such publication.

I congratulate CA. Amarjit Chopra, Chairman, Committee on Internal Audit and his Committee members for the excellent work done. Co-opted members deserve special mention for their invaluable support and contribution.

I am sure the readers would find the Technical Guide extremely useful. I also look forward to more of such active involvement of members and other experts in the Institute's efforts to bring out more and more technical literature for the members.

January 25, 2007
New Delhi

CA. T.N. Manoharan
President

* The Council at its 282nd meeting held on November 5-7, 2008, has renamed the "Committee on Internal Audit" to "Internal Audit Standards Board (IASB)"

Preface

Value for money and accountability is what drives a management's decisions and actions today and rightly so having regard to the growing competition in all aspects of businesses, be it accessing capital, human and other resources and be it the ultimate markets and consumers for their products and services. At every step the management needs to be able to justify every rupee spent by it to the fund providers, every natural resource employed by it to the various stakeholders and ensure provision of right quality of products/ services at right time and at most economical prices to the consumer and also ensure after sales services to maintain consumer loyalty.

Internal audit has emerged as a significant tool in the hands of the management to help it successfully tide over cut-throat competition and also grow. From the shadows of being a sibling of financial audit, internal audit today is in the light thanks to its growing scope and penetration. A present day internal audit is more of an operational or a management audit, more or less a value for money audit. With that in mind, the Committee on Internal Audit, with the help of industry experts, is working on bringing out more and more industry specific internal audit guidelines for helping members working as internal auditors to better understand the intricacies of the specific industries and discharge their onerous responsibilities with utmost efficiency. The Technical Guide on Internal in Aluminium Industry is one such publication.

The Technical Guide is spread out in seven chapters, *viz.*, the introduction, technical aspects of aluminium industry, general guidelines on internal audit, internal audit of the bauxite mining and procurement function, internal audit of the production function, internal audit of the marketing function, and internal audit of finance function. The relevant chapters also contain the detailed procedures to be undertaken by the internal auditor in respect of each of the main aspects as well as the sub components thereof of an aluminium company.

Internal Audit in Aluminium Industry

I must also mention that the Technical Guide would not have seen the light of the day had it not been the efforts of CA. R K Kasliwal, Chief Financial Officer, Hindalco, ably assisted by other industry experts, viz., CA. D C Kabra, CA. Gopal Purohit, CA. Vineet Maloo and Shri R J Singh, who prepared the draft of the Technical Guide. I owe gratitude to these learned people who, despite their demanding professional lives, undertook pains to share their experiences and knowledge with the members in the form of the Technical Guide. I also thankful to my colleagues at the Committee on Internal Audit for their considered and uninhibited views so necessary to make the Technical Guide more comprehensive and user friendly. I also owe my gratitude to CA. T N Manoharan, President as well as CA. Sunil H Talati, Vice President for their constant motivation and support in the endeavours of the Committee. I also need to express my thanks to Shri Vijay Kapur, Director, ICAI and CA. Puja Wadhera, Secretary, Committee on Internal Audit for their inputs in giving final shape to the publication.

At the end, I wish to mention that though an attempt has been made to touch upon all the significant aspects of the aluminium industry, it is obviously not above the restrictions of extent of details vis a vis readability and space, fast pace changes in the subject area as also assumptions as to the basic knowledge of the readers about the industry. I may, therefore, venture to suggest that the readers should also, from time to time, refer to other relevant literature as well to keep themselves abreast of the significant developments affecting the industry.

January 24, 2007
New Delhi

CA. Amarjit Chopra
Chairman
Committee on Internal Audit

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Chapter 1

Introduction

Aluminium Industry - An Introduction

1.01 Aluminum as a metal has evolved as the second most used metal after steel. It is a non-ferrous metal and is used to make alloys, castings, forgings, flat rolled products, extrusions, wires, cables, pipes, etc. Applications of this metal are found in vital infrastructure facilities like electrical power, automobiles, railways, aviation, telecommunications, building and construction, agricultural, engineering, chemicals and packaging industry.

1.02 Aluminium products can be distinctly divided into two categories, primary metal and semi fabricated products. For production of primary metal, Aluminium is extracted from Bauxite in a two-stage process. In the first stage, Bauxite (Aluminium ore) is refined into Alumina (i.e., Al_2O_3 or Aluminium Oxide). In the second stage, Alumina is smelted through electrolysis process to produce Aluminium metal (Al).

1.03 The Aluminium metal is either converted into pig ingots, wire rods or is cast into billets or slabs for its further processing into semi-finished products like sheets, foils, rods, extrusions, etc. Pig ingots are used for the purpose of castings or further processing into redraw rods or other feedstock for semi fabricated products. Redraw rods are further drawn into cables and are used as conductors. Redraw rods are also used as feed stock for extrusions. Flat rolled products such as sheets, plates and coils are used in transportation, packaging and construction. Extrusion products in the form of sections, bars, etc., are used in transportation, construction as well as in the defense and other sectors.

1.04 Secondary or recycled Aluminium also forms significant part of total Aluminium consumption. It is produced from recycling Aluminium scrap which is a relatively less energy intensive process. However, use of secondary Aluminium is restricted to applications that do not have stringent quality requirements.

Historical Perspective of the Aluminium Industry in India

1.05 In India, the first Aluminium Company was floated by a Canadian multinational company named Alcon. Indal, Alcon's Indian subsidiary, was originally incorporated as Aluminium Production Company of India Ltd. in 1938 in Kolkata. It was India's first Aluminium manufacturing company. It started production in 1941 with a capacity of 2500 tones per annum (TPA) of Aluminium sheets, near Kolkata, using imported ingots. In 1943, to reduce the dependence on imported inputs, the company set up a 2500 TPA capacity Aluminium smelter, at Kerela. In the year 1944, the company's name was changed to Indian Aluminium Company Ltd. (Indal). In 1948, Indal acquired Bauxite mines in Muri (Bihar) for converting Bauxite ore into Alumina. Indal commissioned its first extrusion plant at Alupuram in 1955. To gain better advantages, Indal setup its second smelter plant at Hirakud in Orissa in 1959.

1.06 Meanwhile, in 1962, Hindustan Aluminium Company Ltd. (Hindalco) commenced its operation with an Aluminium facility at Renukoot in eastern Uttar Pradesh. Over the years, it grew into the largest integrated Aluminium manufacturer in the country. Hindalco, in the year 2000, acquired a majority stake in Indal, having a major presence in downstream Aluminium products and a leader in special Alumina. In the year 1965, Bharat Aluminium Company Ltd. (Balco) and Madras Aluminium Company Ltd. (Malco) were established. Balco was incorporated as a public sector undertaking and it was the first PSU in the country, which started producing Aluminium in 1974. In the year 2001, Government of India divested 51 percent equity and management control in favour of Sterlite Industries (India) Ltd. Malco was established in 1965 at the Mettur Dam, near the city of Salem, Tamil Nadu in collaboration with Montecatine of Italy. Malco is the only integrated primary Aluminium metal complex in the entire South India with its own captive mining, refining, smelting and power generation operations.

1.07 Further, National Aluminium Company Ltd. (Nalco) is considered to be a turning point in the history of Indian Aluminium Industry. Nalco has not only addressed the need for self-sufficiency

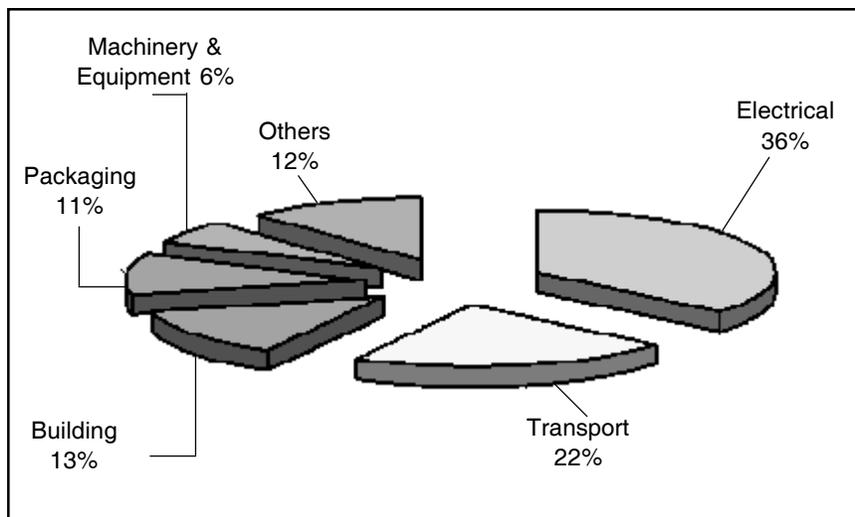
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in Aluminium, but also gave the country a technological edge. Nalco was incorporated in 1981 in the public sector, to exploit a part of the large deposits of Bauxite discovered on the East Coast. Its captive power plant and smelter plant are situated near Angul (Orissa). The capacity of Aluminium smelter at Angul was 230000 TPA. Presently, the capacity is being expanded to 345000 TPA.

1.08 In the 1970s, the Government of India promulgated the Aluminium (Control) Order and regulated the Aluminum industry through price and distribution controls and barriers to entry. The Order compelled the Indian companies to sell 50 per cent of the Aluminum produced for electrical purposes. The control was lifted in 1989 and real growth of the industry started thereafter. The Aluminum industry in India can be distinctly divided into two categories - primary metal producers and downstream metal producers. For primary metal production, Aluminium is extracted from Bauxite in a two-stage process.

1.09 All the five Indian primary metal producers, i.e., Hindalco, Nalco, Balco, Indal and Malco, are integrated aluminum manufacturers, having the manufacturing facilities for extracting Alumina from Bauxite, smelting

Current Aluminium Consumption Pattern in India



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Alumina into Aluminium and further processing Aluminium into downstream products. The downstream capacity in the Aluminum industry spurred due to sufficient duty differential between aluminum ingots or primary metal and value added downstream products. In March 1993, while the import duty on aluminum ingots was 25 percent, the duty on downstream products was 70 percent. However, with liberalisation the import tariff on Aluminium and its semi-fabricated products has gradually been brought down to 10 percent.

Objective of the Technical Guide

1.10 The objective of the Technical Guide is to provide an insight into the functioning of the primary Aluminium industry, the technical aspects peculiar to the Industry and its unique characteristics, which would be helpful to the members in conducting internal audit of an Aluminium company.

1.11 The Technical Guide covers both Alumina and Aluminium production processes and also throws light on aspects relating to Bauxite mining operations. As the size, functioning, technology and nature of manufacturing facility may vary materially from one producer to another, the Technical Guide cannot cover all the intricacies that might be involved in different practical situations. Therefore, the principles enunciated in this Guide should be applied *mutatis mutandis*, exercising professional judgment.

1.12 This Guide is also not intended to dwell on the basic internal audit procedures, which are common to all industries. It purports to provide insight into special aspects of the Aluminium Industry for management and operational audit. The Guide also discusses special areas of compliance peculiar to this Industry that call for internal auditor's scrutiny, which have been mentioned in the subsequent chapters.

Key Drivers of the Aluminium Industry

Production Technology

1.13 Technology for production of Alumina depends primarily on the type of Bauxite used. While the basic process of Alumina refining has remained unchanged over the time, the technology for production of Alumina has improved to increase the efficiency and reduce consumption of various inputs and energy thereby reducing the cost of production.

Similarly, for production of Aluminium, although the basic technology has remained the same over the years, it has been continuously upgraded to increase the productivity, volume of production per pot and reduce the capital and operating costs.

Cost of Production

1.14 Like any other commodity, continuous reduction in the cost of production of Alumina and Aluminium is vital to survive in today's competitive markets. To achieve this, either the technology has been upgraded or inefficient high cost smelters have been closed down. Further, large sized smelters are being installed to reap the benefits of economies of scale. Major cost components for Alumina are Bauxite, Caustic Soda, labour and energy. Major cost elements for Aluminium production are Alumina, power, anode Carbon, Aluminium Fluoride and labour. A close monitoring of the cost of these inputs can help producers in reducing the cost of production.

Bauxite

1.15 Availability of good quality Bauxite at economical rates is important for low cost production of Alumina. Bauxite is the basic raw material for Alumina production and consequently Aluminium metal. About three tons of Bauxite is required to produce one ton of Alumina. It is bulky in nature and its transportation costs constitute significant part of the total cost of production.

Power

1.16 Production of Aluminum is energy intensive. On an average, smelters consume 14000-15000 Kilo Watt Hours (KWh) of electricity for producing one metric tonne of Aluminum. Both Alumina refining and Aluminium smelting are continuous process operations and, therefore, need a steady supply of quality power. Fluctuations in power can make other operating parameters unstable. Further, discontinuity in the power availability can result into closure of the smelter operations.

Captive Power

1.17 In order to reduce overall costs and ensure steady supply of desired quality of power, Aluminium producers in India prefer use of captive power.

Pricing and Realisations

1.18 Aluminium is a globally traded commodity. Prices of Aluminium are determined at global exchanges, most notable amongst them being the London Metal Exchange (LME), COMEX (Commodities division of the New York Mercantile Exchange or NYMEX) and Shanghai Futures Exchange (SHFE). LME prices are the most widely followed benchmark worldwide. In India, the domestic prices closely follow the LME price movements.

1.19 Domestic price realizations depend on LME Prices, import tariffs, Rupee/Dollar exchange rate and demand - supply position of Aluminium in India. Similarly, export price realizations are dependent on LME Prices and Rupee/Dollar exchange rate.

INR/USD Rate

1.20 The exchange rate of the Rupee *vis-à-vis* the US Dollar is an important element affecting the realization in the domestic Aluminium industry. This has an important impact on the profitability of Aluminium producers in India, since almost all the inputs are priced in rupees whereas, revenues are either priced in dollars or are dollar linked.

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Import Tariffs

1.21 Import tariffs on Aluminium metal are another deciding factor in domestic selling price of Aluminium. Over the past few years, import tariffs in India have been reduced in a phased manner.

Domestic Aluminium Consumption

1.22 The demand for aluminum metal is dependent upon growth in the end use segments like power, consumer durables, automobiles, packaging, etc. To a large extent, the demand for aluminum is linked to the overall growth in the economy.

Exports

1.23 Presently, the Alumina and Aluminium production capacity of India is higher than the domestic requirement. Therefore, earning from exports is an important value driver for the Indian Aluminium industry.

Chapter 2

Technical Aspects of Aluminium Industry

2.01 In nature, Aluminum is never found in its metallic state but is a common constituent of many minerals where it is normally combined with silicon and oxygen. Bauxite is the only ore from which Aluminium can be economically retrieved. Aluminium is produced from Bauxite in following three stages:

- A. Bauxite Mining;
- B. Alumina Refining Process; and
- C. Aluminum Smelting Process.

Since, all the primary producers of Aluminium in India have integrated operations, they are producing Aluminium from Aluminium ore by following all the above three stages. Readers are requested to refer to the Glossary of terms given in Appendix I to properly understand the technical aspects of the Aluminium industry.

Bauxite Mining

2.02 This is the first stage in the Aluminium production chain. Generally, every Alumina refinery owner obtains mining leases for Bauxite mining. Bauxite is also purchased from other miners, who own mining leases. In India, all the Bauxite mines are open cast mines with varying quantities of overburdens. Bauxite is transported to the refinery through road or rail transport. In some cases where the refinery is situated at the pithead, it is transported through conveyor belt. Approximately, three tons of Bauxite yields one ton of Alumina. Plant design is influenced by the Bauxite composition. The key variables of Bauxite quality are Alumina content, silica content and mineralogical form of occurrence.

Alumina Refining Process

2.03 Alumina is extracted from Bauxite through the Bayer Process i.e., treating Bauxite with Caustic Soda. Other technological variants of this process are in use at some refineries outside India. These include Sintering process, Hybrid Bayer-Sintering method, etc., where raw material characteristics warrant such treatment.

2.04 Bauxite is crushed to required sizes normally in two stages of crushing and then wet grinding is done with process liquor to make slurry of desired size fraction and solid percentage. Before conveying Bauxite slurry to slurry heaters and/ or digesters (autoclaves), it is de-silicated and pre-heated at a certain temperature and held for specified time to remove silica content of the liquor by converting it to solid phase. De-silicated slurry is then treated with caustic soda solution in the form of process liquor at certain defined temperature suitable to the Bauxite quality. Reactions are completed in autoclaves/ digestors. Digested flashed slurry is pumped to clarification area for removal of solid impurities from sodium Aluminate liquor.

2.05 The Aluminate liquor is filtered to remove fine suspended particles. The clear Alumina enriched pregnant liquor is seeded with coarse and fine Alumina tri-hydrate seeds in two stages to have better yield (recovery). The liquor separated from the last hydrate thickener is re-cycled as spent liquor in the digestion circuit after increasing its concentration in the evaporation unit.

2.06 The Alumina Hydrate is washed and filtered and then fed to calciners/ rotary kilns where it is calcined to obtain the final product i.e., Alumina powder. The Alumina (Smelter Grade Alumina or SGA) thus produced is transported to smelting unit for metal production. Appendix II contains a diagrammatic representation of the Alumina refining process.

Aluminium Smelting Process

2.07 World over, there are two predominant technologies for Aluminium smelting – Soderberg and Pre-bake, the latter being

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more advanced and environment friendly is increasingly replacing the Soderberg technology.

2.08 Primary Aluminium is produced by electrolytic reduction of Alumina. Alumina is dissolved in molten cryolite bath and electrolysis is carried out in specially designed Aluminium electrolysis cells commonly known as 'pots' and metal is tapped periodically from pots. A number of electrolytic cells are connected in series along with certain bus bar configuration for passages of current constitute a potline.

2.09 A typical modern Aluminum reduction cell consists of a rectangular steel shell, lined with refractory thermal insulation that surrounds an inner lining of carbon to contain the highly corrosive fluoride electrolyte and molten Aluminum. Electric current enters the cell through 18 to 26 pre-baked carbon anodes or through a single continuous self-baking Soderberg anode. A crust of frozen electrolyte and Alumina covers the top of the cell around the anodes.

2.10 Anode manufacturing, which is generally in-house, includes the following processes:

- (i) Paste production - Dry aggregate preparation by crushing, milling and sieving of anode butts and petroleum coke. Preheating the dry aggregate and mixing it with pitch.
- (ii) Anode compaction - Forming the green paste to anodes by pressing or vibro-compacting.
- (iii) Anode Baking - Baking the green anodes in closed or open-type baking furnaces.
- (iv) Anode Rodding - Fixing the steel stub into the anode hole using cast iron.

The principal goal of all the processing stages is to finally produce homogeneous anodes with properties that will meet the requirement concerning the performance in the electrolytic cell.

2.11 The metal is cast into various shapes, sizes and compositions for a number of uses. The molten Aluminum is treated to ensure

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cleanliness and purity before casting it into ingots, billets or slabs, which are in turn, used to make semi-fabricated products. Alloying ingredients are also added at the casting stage to provide special properties.

2.12 In an alternative technique of continuous casting, molten metal is cast directly into semi-finished form, bypassing the ingot stage. Wire rod is also generally directly drawn from molten metal, which is subsequently re- drawn into many forms of electrical and mechanical wire. Appendix III contains a diagrammatic representation of the Aluminium smelting process.

Semi Fabricated Products

2.13 In the audit of downstream products in rolling and extrusion, the internal auditor should focus on the following aspects:

- Production planning and scheduling
- Melting losses
- Recovery monitoring
- Inventory control and Work in process inventory
- Production control and production reporting
- Quality assurance and control
- If the process is outsourced, timely metal reconciliation with the job contractors.

2.14 The working conditions in the Aluminium industry are extreme because of high temperature and involvement of chemical processes that release potentially toxic fumes comprising of hydrogen fluoride and fluorine gas besides Alumina dust, carbon dioxide and carbon monoxide, which pose environmental problems. The internal auditor should also undertake a periodical review of the environmental, health and safety management system.

General Guidelines on Internal Audit

3.01 Internal audit is an independent management function, which involves a continuous and critical appraisal of the functioning of an entity with a view to suggest improvements thereto and add value to and strengthen the overall governance mechanism of the entity, including the entity's strategic risk management and internal control system. Identification of areas to be covered under internal audit should be driven by a proper business process risk assessment jointly by the internal auditor and the management. For an effective internal audit, the internal auditor needs to have an in-depth understanding of the Industry under audit. In the modern day context, internal audit normally includes operational audit. Thus, it is essential that the internal auditor is conversant with the technical aspects of production, marketing, and purchase functions apart from finance and accounting aspects of the Industry.

Importance of Accounting Manual in Internal Auditing

3.02 The accounting information, which is an important part of the overall information system, is generated and presented by the management generally in accordance with an accounting manual. In the accounting manual, every significant aspect relating to accounting is dealt with, namely, different books of account to be maintained, description of account heads, account codes, prescribed documentation procedures, approvals from appropriate authorities for each individual voucher, preparation of periodical accounts, maintenance of various statutory registers, etc. Accounting manual can, therefore, be of immense use to the internal auditor in the conduct of his audit, particularly, in the finance and accounting area.

Internal Audit *vis-a-vis* Cost Accounting

3.03 Apart from the financial accounts, companies manufacturing Aluminium are also required to maintain Cost Records as per the directions issued by the Central Government under section 209(1) (d) of the Companies Act, 1956. In the context of the internal audit of the cost records, the internal auditor should possess knowledge about the Cost Accounting Records (Aluminium) Rules, 1972, as amended from time to time and the Cost Audit (Report) Rules, 2001. The internal auditor should satisfy himself that necessary cost records are maintained and that they serve the purpose of cost audit as well as give valuable information for cost control by bringing to the notice of the management unfavorable trends well in advance.

Internal Audit of the Bauxite Mining and Procurement Function

4.01 The main function of the Procurement Department is to ensure that right quantities of materials of the proper quality are available in the factories at the right price and time. This makes the job of Procurement Department in the Aluminium industry no different than that in other industries.

4.02 Bauxite is the basic raw material for production of Alumina and consequently, for production of Aluminium metal. Therefore, availability of sufficient quantity of good quality Bauxite at economical rates is imperative for low production cost of Alumina. Most of the Aluminium producers have their own captive mines and power plants. Companies sometimes also purchase Bauxite from other parties to supplement the quality and/ or quantity available from their own mines.

4.03 The overall procurement function can be categorised into:

- A. Bauxite Mining Lease and Operations
- B. Purchase of Bauxite
- C. Purchase of other Raw Materials/ Engineering Items
- D. Imports

Bauxite Mining Lease and Operations

Mines and Minerals (Regulation and Development) Act, 1957 and Mineral Concession Rules, 1960

4.04 The Mines and Minerals (Development and Regulation) Act, 1957, (MMDR Act, 1957) and the Mines Act, 1952, together with

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the rules and regulations framed under them, constitute the basic laws governing the mining sector in India. The relevant rules in force under the MMDR Act, 1957 are the Mineral Concession Rules, 1960, and the Mineral Conservation and Development Rules, 1988. The health and safety of the workers is governed by the Mines Rules, 1955 created under the jurisdiction of the Mines Act, 1952.

4.05 The Mineral Concession Rules, 1960 outline the procedures and conditions for obtaining a Prospecting Licence or Mining Lease. The Mineral Conservation and Development Rules, 1988 lay down guidelines for ensuring mining on a scientific basis, while at the same time, conserving the environment. The provisions of Mineral Concession Rules and Mineral Conservation and Development Rules are, however, not applicable to coal, atomic minerals and minor minerals. Readers may refer to the website of the Ministry of Mines (www.mines.nic.in) for more information on the mining sector in India.

4.06 In respect of bauxite mining and lease operations, the internal auditor would need to verify the following:

- (i) The period of validity of the various mining leases obtained by the company.
- (ii) Steps taken to renew the existing leases. Where the expiry dates are near and in case deposits/ reserves of the existing mines are near exhaustion, whether application has been made for new leases.
- (iii) Whether the terms and conditions subject to which the mining leases have been granted by the Government are being complied with. Mining operations have to be carried out in accordance with the mining plan duly approved by the Government and subject to such conditions as may be prescribed by the Controller General of Indian Bureau of Mines, for example, rehabilitation of flora, protection of third party's rights where such party is prejudicially affected by reason of any prospecting/ mining operations.

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- (iv) Whether payment of dead rent and surface rent has been made as per the provisions of the Mines and Minerals (Regulation and Development) Act, 1957.
- (v) Where backfilling of waste rocks in the area excavated during mining operations is not feasible, whether a separate site has been created for dumping the waste and whether such waste dumps have been suitably created, terraced and stabilised through vegetation or otherwise.
- (vi) The supervision system for sorting and sizing of Bauxite. This system acts as quality control mechanism for Bauxite. Silica is an impurity in Bauxite and is very costly to remove. Any alien material like sand or mud etc., are likely to contain high amount of silica. Effective supervision helps in checking loading of unwanted materials to fill up truckload. It also helps in ensuring that good material is not discarded or goes waste but is loaded for onward transportation to plant.
- (vii) Whether the worked out area is being backfilled with waste rocks, overburden etc., and afforestation in compliance with environmental regulations has been done.
- (viii) The records in respect of each earth moving equipment, showing the hours worked, idle hours, consumption of fuel and lubricant and output of the machine during such working hours.
- (ix) Whether the provisions of the Explosives Act, 1884 and Rules, 1983 in regard to transportation, storage, handling and use of explosives for blasting hard rock in the mining area are being complied with.
- (x) The written contracts and compliance with the terms and conditions thereof where the mining activities of leasehold mines have been outsourced.
- (xi) Whether the provisions of the Mines Act, 1952, which regulates the working conditions in mines, measures to be taken for the safety of the workers employed therein, are being complied with.

Royalty

4.07 Royalty has to be paid to the government at the specified rate in respect of the Bauxite removed from the leased area. After commencement of the lease, if mining is not carried out, then 'dead rent' has to be paid at the specified rate to the Government. Once the company becomes liable to pay royalty then dead rent is not required to be paid. Calculation of royalty is done by applying the specified rate on the Aluminium metal content in the Bauxite ore produced valued at the Aluminium metal price prevailing in London Metal Exchange. In respect of internal audit of royalty, the internal auditor needs to:

- (i) Ensure that proper monitoring system exists for payment of royalty on the quantity of Bauxite as per the dispatch records from the mines
- (ii) Check the source of LME prices considered for payment of royalty
- (iii) Ensure that there exists a system for timely payment of royalty
- (iv) Check whether proper return with mining department has been filed for excavation and dispatch of Bauxite ore.

Purchase of Bauxite

4.08 Although most of the Aluminium manufacturers have leasehold mines, at times Bauxite is also purchased from outside parties, primarily to conserve life of the captive mine. Bauxite is available in various grades depending upon the percentage of total available Alumina (TAA%), total Alumina (TA%), silica content ($\text{SiO}_2\%$) and Iron content ($\text{Fe}_2\text{O}_3\%$). Thus, grading of Bauxite is an important criterion for pricing and consequently an important matter for internal auditor's review. In case of purchase of Bauxite, the bonus amount, if any, paid towards supply of good quality

Bauxite and penal provisions for adverse quality/ quality variations need attention of the internal auditor.

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4.09 The internal auditor's procedures with respect to the following specific areas of bauxite purchasing would include:

Purchase

- (i) Checking the orders booked to ensure that prices were at or below prevailing market price.
- (ii) Checking the parties' bills to ensure that they are in line with the grades of Bauxite supplied.
- (iii) Checking that parties' bills are paid as per terms of payment.
- (iv) Checking whether supplies have been made within the ordered period and evaluate loss/ gain in respect of delayed supplies.
- (v) Receipt of Materials at Factory/ Raw material handling shop
- (vi) Checking the effectiveness of the system of estimation of number of racks that will be required for transportation?
- (vii) Examining whether there is system of payment of indent money to the Railway authorities for racks for transportation. Whether proper adjustment of indent money is made?
- (viii) Checking whether there is a proper system to avoid demurrage charges?
- (ix) Checking whether there is a system to ensure avoidance of overload of racks leading to punitive charges by the Government?
- (x) Checking whether there is a monitoring mechanism to ensure that all trucks loaded at mines are delivered at the railway siding or at plant within a reasonable period of time?
- (xi) Checking whether goods inward dockets raised are as per the corresponding challans and lorry weightment cards.
- (xii) Checking that the materials have been subjected to the inspection procedure laid down and have been passed.

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- (xiii) Ensuring that the goods inward dockets series is maintained. In case of missing links, investigating into the same.
- (xiv) Ensuring that after excavation of raw material from mining area, there is a proper system of weightment, that the same passes through the weigh bridge and proper entries of quantities are made.

Receipts

Checking that receipts are timely.

Inspection

Checking the inspection records to ensure that inspection is being done as per the laid down guidelines.

Stock

- (i) Physically verifying the stock at material handling shop, railway sidings, at port at a particular date and verifying the same with the stock records.
- (ii) Checking whether there is delay in supply of Bauxite from captive mines as well as in cases where the Bauxite is purchased from a third party.

Tax Obligations

The internal auditor must ensure whether any tax liability on excavation or dispatch of Bauxite ore is there under Central or State law and must also ensure that such dues are paid on due dates.

Purchase of other Raw Materials/ Engineering Items

4.10 Various types of raw materials and engineering items are purchased in the Aluminium industry. Though the internal auditor's procedures with respect of audit of purchases would be same as in any other industry, the diversity of the materials used and their

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volume would necessitate building up of several profiles, which are discussed below.

Materials Profile

4.11 The materials profile covers such aspects as annual/monthly requirements, inventory levels, nature and use of the material, range of suppliers available in the country and possibility of substitution by alternative materials, particularly, import substitution. The building up of this audit profile for each material and the assessment of the efficacy of the decision making at every step *vis-à-vis* the profile would lead to substantive internal audit findings.

Suppliers' Profile

4.12 The suppliers' profile would deal with the legal constitution of each supplier (i.e., whether a limited company, partnership or proprietorship), the names of the directors/ partners/ proprietor, the availability of manufacturing facility, nature of other businesses and whether the supplier is supplying more than one material to the company under the same banner or under a different banner. An important criterion to assess a supplier's credibility would be his manufacturing capacity, adherence to delivery schedule, price quoted, reliability of materials supplied and after- sales services. Another important criterion would be the supplier's financial strength to supply large volumes. The internal auditor should ensure that there is a proper system for vendor registration and periodical performance evaluation of the vendors.

Managers' Profile

4.13 In Aluminium industry, need for a large variety of the materials necessitates involvement of a number of managers in the procurement activity, each specializing in the given field. This in turn, necessitates building up of the profiles of individual managers. Review of the material and the supplier profile along with the manager profile would throw light on the decision-making capability of the manager concerned. This would cover such areas as optimum efficiency in buying, ability to develop alternative sources at short notices, and the market knowledge in procuring new and

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rare materials. The information for the above three profiles can be easily obtained by the internal auditor from the company's database and reviewed.

Materials Sent to Fabricators

4.14 A number of materials, especially engineering items, are sent to outside fabricators for conversion and repairs. Internal auditor would need to verify whether adequate steps have been taken to ensure that the conversion loss is kept at a minimum. The internal auditor would also need to examine whether the fabricators' accounts are continuously monitored and reconciled with the company's records.

Transportation

4.15 Raw materials/ engineering items are purchased from all over the country and transported at considerable cost to the plants. The internal auditor therefore needs to examine whether there is a proper system for enlistment of transporters, tendering, negotiation of prices and also whether there is a periodical performance evaluation of transporters so as to ensure that the transport costs incurred for the movement of materials to the factory are kept at the minimum.

4.16 Before starting the audit of other raw materials, the internal auditor should discuss with the manager concerned, the value and quantity of purchase of each item and the sources of supply. With this information he should prepare a list of items, in order of priority, for the purpose of his evaluation, keeping in view the target time for completion of his audit. The internal auditor should also make a general review of the items not listed. The following aspects should be checked for each item:

Price

- (i) In case price offered is higher than previously accepted price, the internal auditor should
 - a. Examine whether the revised quotations have been obtained;

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- b. Check supplier's requests for price revision;
 - c. Study the percentage of increase from the previous price and try to assess justification for allowing such increase; and
 - d. Check whether the increased price has been offered to a fresh supplier and reasons therefore.
- (ii) Check the alteration of orders for price revisions and reasons therefore. Examine whether the alterations of orders are signed by the competent authorities.
 - (iii) If different prices are offered to different suppliers for the same material during the same period, the reasons for discrimination.

Quantity of Material Purchased

- (i) Check the purchase orders with the requisitions and check that the ordered quantities are in agreement with that in the requisitions.
- (ii) Indicate cases of over-stocking and reasons therefore.
- (iii) Check whether orders have been placed in accordance with the prescribed stock level limits. Analyze constraints/ lapses, if any, for not ordering before hand.

Sources of Supply

- (i) Assess efforts to develop alternative sources of supply, particularly, in areas where dependence is practically on one supplier.
- (ii) In case of imports, compare the price/ cost of imported materials *vis-à-vis* that of the indigenous counterparts, if available. In this perspective, the internal auditor should try to assess the economic feasibility of imports against local procurements.

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- (iii) Examine cases of new supplier enlistment. The internal auditor should check whether approval of the technical authorities has been obtained before such enlistment. In case enlistment is made before obtaining such approval, reasons therefor should be ascertained.

Reconciliation of Suppliers' Accounts

- (i) Ensure that suppliers' accounts are being reconciled. The internal auditor should comment on cases where *ad hoc* payments are being made without reconciling the old balances.

Transport

- (i) Assess propriety of choice of mode of transport, having regard to urgency of requirement, nature of materials, etc. In case of air consignments, the internal auditor needs to check if there have been clearing delays, defeating the purpose of airfreight.
- (ii) Check the contracts with transport contractors, particularly, with reference to rates, charges, etc. Check whether the rates offered are uniform. In case of revision of rates, justification of such revision needs to be ascertained.

4.17 For audit of purchase of engineering items, the internal auditor should decide the quantum of purchase orders to be scrutinized depending upon the value and number of orders. Having decided on the quantum, the following aspects need to be covered by the internal audit:

Purchase Requisitions

The internal auditor should:

- (i) Ensure that purchase requisitions are properly authorised.
- (ii) Check the sequential order of the requisitions.
- (iii) Check whether the requisitions are complete in all respects,

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viz.,

- a. Whether a requisition is raised and promptly dispatched by the indenter.
- b. Whether the requisition is raised in advance so as to give sufficient time to the purchase manager concerned.
- c. Whether cost estimation is provided for and, if so, whether it is realistic or whether wide differences exist in comparison with actual cost as per the purchase order.

Purchase Orders

The internal auditor should:

- (i) Check whether the orders are properly raised in accordance with the purchasing procedures, and in particular whether:
 - a. Quotations are invited wherever necessary from different suppliers.
 - b. The tenders and the quotations are in line with the requisition.
 - c. The last date of opening the tender is duly given and maintained when the quotations are received.
 - d. The lowest price quoted is accepted or else reasons noted for any deviation.
 - e. The order is issued without delay and in accordance with the requisition and the accepted quotation.
 - f. The order is complete in itself giving all the necessary details including the price fixed and the delivery target.
 - g. Alteration to Order (A.T.O.) is raised wherever any amendment to original order is required to be made.
 - h. The A.T.O. has been signed by the purchase manager

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concerned, in compliance with his authority.

- (ii) Whether copies of requisitions, tenders, and quotations received, orders placed, A.T.Os are raised and all the correspondence regarding a purchase is properly filed for reference.
- (iii) Whether the price in the order is comparable with the past orders for the same material whenever quotations are not called for various reasons.
- (iv) Examine sequence of orders and point out the missing numbers.
- (v) Check whether there is proper control over outstanding orders and analyse reasons for pending deliveries.

Supply

The internal auditor would need to:

- (i) Examine whether the delivery schedule as per the purchase order is complied with by the supplier concerned.
- (ii) Examine, whenever there is delay, whether it is on account of acceptable reasons and whether frequent deferment of the delivery is noticed.

Payments

The internal auditor should verify:

- (i) Whether payments are in accordance with the terms of the orders and whether any complaints are there from the suppliers regarding delays in payments.
- (ii) Whether payments are in accordance with the procedure laid down.
- (iii) Whether advance payments to suppliers are under control and made only where absolutely necessary and properly authorised. The internal auditor would also need to evaluate advance payments in terms of number of orders and value

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thereof.

- (iv) Whether there is uniformity and consistency in respect of terms of payments. The internal auditor would also need to evaluate old outstanding liabilities as well as realization of claims against defective/ short supply.
- (v) Whether long outstanding advances or debit balances are regularly reviewed, reconciled and variations resolved.

Factory Stores

The internal auditor should:

- (i) Visit the factory and obtain a list of outstanding indents. These should be crosschecked with the Purchasing Department.
- (ii) Obtain a list of outstanding deliveries and cross-match with the Purchasing Department's records.

In addition to the above mentioned aspects, the internal auditor should also:

- (i) Check whether there is any backlog in issue of sales tax declaration forms.
- (ii) Check whether import substitution is effectively carried out, wherever possible.
- (iii) Check a few orders relating to import substitution with reference to a local supplier.
- (iv) Examine any high cost of purchasing wherever found and suggest cost saving measures, if possible.

Imports

4.18 A major criteria for the internal auditor's review would be the availability of licenses, where required, and timeliness of import decision *vis-à-vis* fund availability. The timeliness of import decisions is of paramount importance because of the lead time required for

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obtaining supplies. Whereas a decision taken a bit too early may lead to unfruitful lock-in of capital, a delayed decision might result in a stock-out situation or air-freighting consignments at substantial cost. This is particularly true for capital projects where different components of machineries may have to be imported and installed in the factory. Proper timelines would ensure that the right components are available in accordance with the planned time schedule to optimise cost through smooth installation. The formalities of clearing, the documentation involved, the bonding and de-bonding of materials etc., provide scope for further internal audit.

4.19 In respect of imports, the internal auditor should:

- (i) Check whether import orders are properly authorised and in-house authority limits are being followed.
- (ii) Check whether requisitions are received in time within the validity period of the import license.
- (iii) Examine the prices fixed in import orders.
- (iv) Check ordering date in relation to the import license validity.
- (v) Examine the license utilization.
- (vi) Analyse refund claims of penalty and duty.
- (vii) Check whether any claim has been rejected.
- (viii) Check whether there is a proper system for checking of demurrage, wharfage, clearing expenses on imports.
- (ix) Check whether purchases made through agents are properly approved with reasons/ benefit for such purchases.

Clearance

The internal auditor should:

- (i) Analyze the demurrages paid. Check the monthly demurrage statement prepared by the Clearance Department:

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- (a) As to the exactness of the amount of demurrage with reference to the monthly statement of Port Trust Deposit account.
- (b) As to the reasons for delay in clearance, with reference to the shipping files maintained in respect of date-wise arrival.
- (ii) Ascertain capital tie-up in Customs Deposit Account/ Port Trust Deposit Account and also ascertain avoidable/ unavoidable factors.
- (iii) Check whether accounting of customs duty, port fee and octroi payment has been made to correct material account.
- (iv) Check the number of overdue consignments during the period under audit (e.g., consignments cleared after 15 days from the date when all documents and licenses are handed over to the Clearance Department for a particular consignment).
- (v) Reasons for delay after the specified period.
 - (a) Comment on the efficiency of the Clearance Department.
- (vi) Check advances made to different clearing agents and the reasons for which the advances were made; comment whether advances were reasonable or in excess of needs; find out average balance of advances lying with each clearing agent during the period under audit; and check whether reconciliations are made and balances are confirmed from time to time.

Claims for Damaged/ Short Receipts

4.20 In respect of claims for damaged/ short receipts, the internal auditor would need to:-

- (i) Check the goods cleared with the receipted challans from factory and also check whether claims have been raised against short/ damaged receipts and make list of missing claims and highlight reasons.

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- (ii) Check the claims with special attention to the following:
 - a. In case of short landing, whether a short landing certificate has been obtained from the Port authorities and customs duty refund claim has been submitted.
 - b. In the case of short receipt due to leakage, evaporation etc.,
 - i. Whether marine surveys were held, and customs duty refund claim was submitted.
 - ii. When marine survey could not be held within the stipulated period, whether insurance survey was held at docks.
 - iii. If the loss of goods as per the factory is more than that as per the marine/ insurance survey and the discrepancy is substantial, whether an insurance survey at factory premises was held.
 - c. Where goods were short-landed or where a marine survey was held, whether claims have been preferred with the carriers within the stipulated period. If not, whether application to the carrier for extension of the stipulated period has been made.
 - d. In other cases of short receipt where the carrier has repudiated the claim either in full or in part, whether related documents have been promptly forwarded for insurance claim. The internal auditor would also need to analyze the reasons for repudiation by the carrier.
 - e. For the claims not preferred within the stipulated period or which are still being processed, check whether application to the carrier has been made for extension of time limit.

Claims for Air Consignments

4.21 In this area, the internal auditor would need to check whether items imported by air were received in full. If not, check whether

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damage/ short- landed certificate has been procured from the airport authorities and check whether claims for such short-landed/ damaged items have been made with the carriers and papers sent for preferring claims with the insurers.

Transport Contractor

In case of transport contractors, the internal auditor would need to check the rates of the transport contractor(s) employed by the Clearance Department with the competitive quotations.

Plant Requirement *vis-à-vis* Inventory

4.22 An important criterion for evaluating the efficacy of the purchase function is its co-ordination with production. This would cover such aspects as stock requisitions, operating with minimum stock, technical approval for development materials, technical approval for new suppliers and handling emergency stock-out positions. The internal auditor would need to review all these aspects to form an opinion on the efficacy of the coordination between the plant and the purchase department.

Chapter 5

Internal Audit of Production Function

5.01 Aluminium industry is basically a process industry where raw material, i.e., Bauxite, Caustic Soda, are used in the production process so as to arrive at Alumina. Further, alumina-refining process also needs to be undertaken so that desired quality of Alumina can be arrived at for the use in manufacture of Aluminium. Under Aluminium smelting, Alumina is converted into Aluminium metal by the use of electrolysis principle. Mostly, all aluminium producers have integrated process whereby they can also manufacture down the line/ value-added products from Aluminium metal.

5.02 Material handling is a very important support function to the production process and can be critically appraised by the internal auditor. The production process in the Aluminium industry can be classified under the following broad categories:

- a. Alumina production process
- b. Aluminium production process

Alumina Production Process

Consumption Norms of Major Inputs

5.03 Consumption of major inputs like Bauxite, Caustic Soda and Energy etc., depend on factors like quality of Bauxite and the technology employed. The internal auditor should acquaint himself with these factors before reviewing the production function. Historical averages serve as important guides in this regard.

Bauxite Consumption

5.04 The following are some of variables of the quality of Bauxite which, in addition to the digestion temperature, determine the per ton consumption of Bauxite in the Alumina production process:-

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Total Available Alumina % (TAA%) – Higher TAA% will reduce Bauxite consumption.

- Moisture content - Higher moisture content will increase Bauxite consumption.
- Alumina Extraction Efficiency and or Alumina Recovery percentage - Higher extraction efficiency will reduce Bauxite consumption.

5.05 Bauxite quality is the most important factor in dictating the cost of Alumina production. Bauxite costs account for 30-35 percent of the operating costs. It also plays a key role in determining caustic and energy costs and thus Bauxite influences nearly 70 percent of the cash costs.

Caustic Soda [Sodium Hydroxide, NaOH]

5.06 Caustic Soda consumption is measured in Kg/ Ton of Alumina production. Specific per ton consumption of Caustic Soda varies due to following reasons:

- Silica (SiO_2) content in Bauxite: More the SiO_2 contents, higher will be caustic soda consumption.
- Digestion temperature: Higher temperature results in greater reactive silica dissolution causing more caustic losses

5.07 Since Caustic Soda consumption forms a major component of cost of Alumina, the internal auditor should ensure that adequate controls exist for controlling Alumina to Caustic Soda ratio (A/C ratio) and caustic concentration at the digestion stage to get high liquor yield and recovery efficiency across the digestion circuit.

Lime Consumption

5.08 Lime is used to recover higher quantities of Caustic Soda from the process thereby reducing the latter's consumption. For this purpose, some refineries treat mud with lime to recover caustic soda depending upon overall economy and effectiveness of the operation. Lime is also used for other purposes like:

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- Making filter aid by treating with sodium carbonate/ making Tri Calcium Aluminate (TCA)
- Adding lime slurry to Bauxite slurry to meet process requirements
- Liquor causticisation to improve liquor causticity.

Energy Consumption

5.09 Electrical power, steam and fuel oil are the three types of sources of energy in the Alumina production process. Specific energy consumption depends largely upon:

- Digestion technology and temperature (w.r.t. mode of heating facility i.e., whether direct or indirect heating system is being used, single stream or double stream impacting on digestion productivity)
- Production recovery level (Impact of reversion losses in the process)
- Precipitation technology and liquor productivity
- Calcination technology (whether stationary or rotary kilns are being used, process efficiency and capacity utilisation)
- Efficiency of major equipment
- Heat recovery system across the circuit and re-utilisation.

Liquor Productivity or Yield

5.10 The liquor productivity is the key factor of Bayer plants' efficiencies and significantly impacts specific energy consumption and production cost. The area of major concern for the Alumina plants is to maximize the precipitation yield and to improve product quality. Liquor productivity (yield) is Alumina recovered from each cycle of Alumina-enriched liquor (liquor to precipitation) and is generally expressed as grams per litre (GPL).

Measurement of Production

5.11 Alumina production measurement has both calculation basis

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and weighing basis. Generally, Alumina dissolved rate is calculated to know the dissolved production in the digestion area. The parameters used are liquor flow, increase in Alumina to Caustic ratio across the digestion circuit, liquor caustic concentration and de-silication factor. Alumina production is also calculated as Alumina hydrate production and the required elements are the flow of Aluminate liquor, its caustic concentration and difference of Alumina to Caustic ratio between aluminate liquor and process-spent liquor. For calcined Alumina, production measurement is done by weight-o-meter directly and that confirms the calculated production of Alumina hydrate (as Alumina).

Valuation of Work in Progress

Caustic Soda

5.12 Caustic Soda's inventory in process is measured on the basis of caustic concentration of various streams and vessels and volume occupied by process liquor and Caustic Soda. The Caustic losses under different heads (de-silication losses, losses with red mud, sand, calcined Alumina and physical losses) are calculated. Fresh Caustic Soda is added to the system to compensate for these losses.

Relations between Hydrate Alumina Production and Calcined Alumina Production

5.13 Alumina Hydrate inventory-in-processes is measured on the basis of Alumina concentration and volume of various process streams and vessels/ tanks. The stored hydrate (for use in process) is also taken into account. Under normal operating conditions, hydrate Alumina production (as Alumina) should equal calcined Alumina production plus other uses or sale of hydrate. A gap between the two will influence the inventory changes in the process in case of no other uses of hydrate.

Inventory Valuation

Bauxite

5.14 Bauxite inventory can be estimated by calculating the Bauxite

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stock on stockpile through geometrical shapes and by making adjustment for the amount lying in various day bins and slurry holding tanks (in the form of slurry). Bauxite receipt and consumption figures are generally confirmed by weighing system (weigh bridge facility in case of consignment and weigh feeders facility in case of consumption). Bauxite consumption can also be calculated on the basis of production, digestion efficiency and quality of Bauxite.

Lime

5.15 Generally, lime slaking is done in Alumina refineries to make lime slurry of desired grams per liter (gpl) solids for its use in different processes. To keep the stock at comfortable level, facility of Lime Silo is provided. Lime slackers' feed amounts are measured by means of weigh feeders' rate totalisers. Lime consumption can also be calculated on the basis of lime slurry flow (at consumption points), its solids gpl and available lime content.

Aluminium Production Process

Metal Production

5.16 Production in pot line depends upon line current, number of cells in operation and current efficiency. The internal auditor should bear in mind that current efficiency is one of the critical parameters to be monitored in the Pot room. It depends largely on process control, technology and power fluctuations and can vary from 88 percent to 95 percent.

Specific Consumption Norms

Power Consumption

5.17 Aluminium production is a power intensive process. It requires lot of electrical energy to convert refined Alumina into Aluminium through the electrolysis process. Power cost accounts for 30 to 40 percent of the operating cost. AC power received from power generation source is converted into DC through rectifiers to feed the pot rooms. Power consumption depends largely upon Volts per pot and current efficiency. Volts per pot vary on account of

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technology, cell and busbar design, bath composition, and power fluctuations. Power consumption is measured in DC Kilo Watt hours per Metric Ton (KWh/MT) of Aluminium. Rectification losses and transmission losses are added to the DC power consumption to calculate AC power consumption at source.

5.18 Since a continuous and uninterrupted power supply is critical for the industry, almost all the Aluminium manufacturers in India have established their own captive power generation units. While reviewing the power plant operations, the internal auditor must undertake a thorough review of coal procurement process, transportation, quality control and consumption of coal for power generation.

Alumina

5.19 Alumina is the basic raw material for Aluminium production. Alumina costs account nearly 30-35 per cent of the operating cost. Consumption per ton of the Alumina depends upon its purity and dusting losses during handling. Normally, consumption varies from 1.92 MT per one MT of Aluminium to 2.00 MT per one MT of Aluminium.

Anode

5.20 Anode is measured in term of Gross and Net carbon consumption per ton of metal. Gross carbon consumption is the total number of anodes supplied to the pot room multiplied by the average weight of anode. This depends mainly upon the anode changing schedule, anode weight and unscheduled replacement in pots. Increase in the gross carbon consumption increases metal production cost, as price of gross carbon supplied to pot room is higher than spent anodes returned to the paste plant. Net carbon consumption is calculated by subtracting the weight of spent anodes returned to the paste plant from gross carbon consumption in the pot rooms. Normally, carbon consumption varies from 400 Kg/Ton to 450 Kg/Ton. Net carbon consumption depends largely upon following factors:

- Type of technology: Pre-baked technology or Soderberg

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- Anode Quality: Oxygen and Carbon di-oxide reactivity, anode permeability, baking temperature, etc.
- Pot room operation: Carbon consumption depends upon Pot room current efficiency, exposure of anodes to air. Net carbon consumption reduces with increase in current efficiency.

Aluminium Fluoride

5.21 Aluminium Fluoride (AlF_3) is added in the pots to maintain the bath the ratio. Bath Ratio is the weight ratio of Sodium Fluoride and AlF_3 in electrolyte. Its consumption depends mainly upon following factors:

- System for Fluoride recovery from exhausts gases: Dry scrubbers or Wet scrubbers and their scrubbing efficiency
- Hooding efficiency: Good hooding reduces Fluorine losses to environment.
- Percentage of Sodium di-Oxide (Na_2O) in Alumina: In pot rooms with good fume treatment plant AlF_3 is added mainly to neutralize Na_2O introduced through Alumina. Higher the percentage of Na_2O in Alumina more will be AlF_3 consumption.
- External addition of Na_2O during power interruption or normalising abnormal pots.
- Purity of AlF_3 - Higher the purity lesser the AlF_3 consumption.

Relining Materials

5.22 Relining is condition-based maintenance of closed/ shunted pots. Normally, three types of maintenance are performed on pots:

- Full lining.
- Side lining.
- Dressing.

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5.23 Cathode Carbon blocks, collector bars, refractory bricks, insulations and ramming paste are main relining materials and their consumption depends upon number of pots re-lined. For similar type of pots, per pot consumption of cathode blocks, refractory materials and insulation remains almost same. Power disruptions result in disturbed pot operations and early pot failures, thereby increase cost of pot relining and decrease productivity considerably.

5.24 While conducting internal audit of smelter operations, in addition to keeping in mind the above specified norms about process, the internal auditor must pay due attention to compliance with production planning, quality assurance, optimum capacity utilisation, Alumina inventory holding norms and process efficiency.

5.25 The internal auditor's procedures in respect of the production function would include:

Recording of Receipts at Material Handling Shop/ Stores and Physical Control

- (i) Checking the entries into the bin cards with Goods Inward Dockets (GIDs).
- (ii) Checking whether physical inspections are undertaken on a regular basis. Verifying from the physical inspection programme whether all items are covered at least once during the year.
- (iii) In case of discrepancies, checking that the records are properly adjusted and investigating into the major discrepancies, if any.

Rejections

- (i) In case of rejections as per the inspection report, verifying that the GIDs are accordingly qualified.
- (ii) Ensuring that debit notes have been raised for every rejection.
- (iii) In case of materials returned for replacement, verifying that the same have been received subsequently and checking into the cases where they have not been replaced.

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Issue of Materials to Manufacturing Process/ Production Shop

5.26 In this respect, the internal auditor's procedures would include:

- (i) Checking that the requisitions from the production shops are duly authorised.
- (ii) Ensuring that deliveries from material handling shop/ stores are the exact quantities as per the requisitions.
- (iii) Checking whether shop is over-indenting leading to store build-up at shop-floor level.
- (iv) Checking whether spares requisitioned by engineering department are duly supported by authorised signatures and capital items are not being requisitioned for maintenance.

Material Usage

5.27 While conducting internal audit of material usage, the internal auditor would need to carry out the following reconciliations in selective important production shops:

- (i) Test checking the 'Issues' as per the stores bin cards with the requisition slips of the shops as well as with the actual quantity received with production log book.
- (ii) Calculating the standard quantity of materials required for the purpose of actual production and comparing this with the actual quantity of materials used and determining the material difference.
- (iii) Analyzing the material difference as per (ii) above into the following heads:

Material difference = Wastage (as a standard percentage of actual usage) + Material booked to salvage + Material in stock + Unexplained loss.

In case of any of the above heads being unexceptionally high, enquire into the same for justification.

Labour Cost *vis-à-vis* Wages

5.28 The internal auditor's procedures with regard to labour cost *vis-à-vis* wages would include:

- (i) Comparing the time booked in the booking sheets with clock cards on a sample basis.
- (ii) For a Piece rated wage job:
 - a. In case of an in-process job, checking that the output booked in the booking sheet is in line with the standard output possible in the stated time. In case of a major variance, enquiring into its justification and authenticity.
 - b. In case of a finished job, checking the output booked in the booking sheet with the actual output generated for the period as per the production sheet.
 - c. In case of variances, enquiring into the same.
- (iii) In case of a person doing more than one piece - rated job during the period, checking that:

Total Time Booked – Overtime Hours = Normal Hours Available in the Period
- (iv) Test checking the following with the master lists:
 - a. Grade booked
 - b. Operator code
 - c. Job code.
- (v) Average Earning Job
 - a. Verifying on a sample basis that the job categorised as “average earning” job does not have any piece rate as per the master file.

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- b. Comparing the standard time required for output booked as per the master file with the actual time booked. In case of a major variance, enquiring into its justification and authenticity.
- c. Test checking the calculation of wages as per the laid down formula for arithmetical accuracy.

Chapter 6

Internal Audit of Marketing Function

6.01 An important feature of the marketing aspects in the Aluminium industry in the country is that sales are made through dealers authorised by the company. These authorised dealers, normally, also undertake activities for growth of the customer base of the company. The company pays them a commission based on the amount of sales affected by the dealers. In addition to the commission, the dealers are, normally, also given incentives in the form of additional trade discounts for achieving the sales targets set by the company for the particular dealer. Companies in this Industry also, generally, have the provision for disincentive to such dealers in case where they fail to achieve the sales targets set by the company.

6.02 The usual functions of the marketing department in the aluminium Industry can be summarized as follows:

- (i) Assessment of demand potential.
- (ii) Evaluation of product range and development of new product ranges, if considered necessary.
- (iii) Planning marketing strategy *vis-à-vis* competition.
- (iv) Assessing profitability per product range.
- (v) Co-ordination with production.
- (vi) Placement of adequate supplies in the right place at the right time.
- (vii) Negotiating prices with 'original equipment' manufacturers and with Government/ Institutional customers.
- (ix) Selling of Aluminium and down the line products to customers through dealers.

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- (x) Providing after sales services as well as replacements for manufacturing defects.
- (xi) Providing operating support to selling function such as transportation of finished goods, storing of products at selling points, raising of invoices on customers and arranging delivery, collection of sale proceeds and banking of collections.
- (xii) Advertising and sales promotion support.
- (xiii) Fixation of sales policy such as discounts, credit limits, targets, etc.
- (xiv) Administration and management of the entire selling function.
- (xv) Organising a convenient marketing set-up so that each sales officer or marketing representative is assigned a specific number of dealers in certain district for close liaison with dealers and customers.

Sales

6.03 For conducting the internal audit of marketing function, the first step is to assess the local market situation. The following guidelines may be followed by the internal auditor in this regard:

- (i) Assess demand potential for the company's product in the local market. For this, extensive discussion with the sales manager and study of trade magazines pertaining to Aluminium industry are the basic pre-requisites.
- (ii) Find out profit/ loss for various sizes and categories of Aluminium and down the line products.
- (iii) Study market share of the company and demand preference in the market.
- (iv) Familiarise with competitor's marketing policies *vis-à-vis* that of the company's.
- (v) Study dealer statistics (including terms and conditions of

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dealers' appointment) to familiarize with the company's network and dealer characteristics. The agreements entered into with the dealers should be scrutinized to protect the interests of the company.

- (vi) Assess achievements against targets with emphasis on turnover of non-profitable brands. Evaluate whether sufficient efforts have been made to push non-profitable brands and collections have been prompt therefrom.
- (vii) Examine whether there is a tendency to achieve turnover without requisite effort for collection.
- (viii) Check whether sales tax declaration forms collected promptly.
- (ix) Check whether any favour has been given by way of allocation of more popular brands to a few selected dealers.
- (x) Check whether the advertisement campaign is adequate and commensurate with the need.
- (xi) Study the pricing policy of Aluminium and Alumina. Check whether LME prices are used as benchmarks for trading.
- (xii) Examine whether the company endeavors to take maximum advantage of the product mix.

After Sales Service

6.4 In respect of the after-sales service, the internal auditor should:

- (i) Assess replacement trends, nature of failures and replacement policies.
- (ii) Examine the percentage of replacements of manufacturing defects *vis-à-vis* off-take.
- (iv) Examine which type of Aluminium and its down the line product has a higher failure record and why.
- (v) Check whether any particular dealer's failure percentage *vis-*

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à-vis his turnover higher than the norm. If so, why.

- (vi) Check whether there adequate technical audit on awards of replacement.
- (vii) Evaluate the effectiveness of after-sales service with regard to its scope and consumer satisfaction. Is this service prompt and timely?

Market Related Operations

6.05 The internal auditor's procedures with respect to market related operations include:

- (i) Checking whether the stock of Bauxite, Alumina, and Aluminium and it's down the line products is being properly maintained.
- (ii) Evaluating the effectiveness of the perpetual inventory system and the authenticity of the stock records.
- (iii) Examine the frequency of stock availability information provided to the sales personnel for high priority and low priority stock items. Also examining how accurate is the stock information and whether any improvement is possible.
- (iv) Checking whether the collection of outstanding prompt and lodgments of cheques with banks immediate and where necessary, suggesting improvements the company's banking operation system in order to facilitate faster credit of cheques lodged with them.
- (v) Evaluating the efficiency of the delivery system to the dealers and the reasons for delay between sale and actual delivery.
- (vi) Evaluating the effectiveness of the transportation system. Whether the dealers arrange for transportation.
- (vii) Checking whether adequate amount of security deposit is taken from the transporter in case roadways are used as transportation means.

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- (viii) Checking whether proper system of price fixation for transportation is used and proper provisions are made for escalation in rate and increase of diesel prices.
- (ix) Checking whether all transport contracts clearly specify the responsibility for loading and unloading of goods.
- (x) Evaluating the effectiveness of the follow-up for collections. Checking whether further invoicing is made even when old outstanding remain uncollected.
- (xi) Checking adherence to company policy regarding rebates and discounts adequate. Whether the credit policy of the company need based.
- (xii) Checking the promptness and accuracy of the billing system with particular reference to the rate contract suppliers.
- (xiii) Checking the accuracy and frequency of the availability of the printouts of accounts receivable statements. Whether the concerned department gives better service to marketing personnel in this regard.
- (xiv) Checking the effectiveness of the feedback from operating to marketing department about the information about slow-moving, non-moving, and obsolete items.
- (xv) Evaluating the effectiveness of the system of resolving customer complaints and consideration of their feedback.
- (xvi) Evaluating the effectiveness of the customer relationship management in the context of handling of complaints from customers.

Supplies

6.06 The function of the Supplies Department, generally based at head office, is to ensure that right quantities of the right product-mix is placed at the right selling point at the right time at the minimum cost. This is an extremely tricky operation since demand fluctuations are frequent and often belie logic. Planning

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supplies and distribution is hence an extremely difficult and demanding job. Considerable efforts are made to balance production and demand so that the deviations from the annual plan are minimal otherwise; the entire company's profitability and performance may go haywire *vis-à-vis* the plan. The scope for internal audit is hence considerable under this function.

6.07 The areas of examination for the internal auditor would include:

- (i) How efficient is the information network with the selling points regarding monthly requirements.
- (ii) How do such requirements compare with the plan?
- (iii) How quick is the marketing department to respond to changing needs.
- (iv) How effective is the re-allocation system to satisfy local needs without deviating from the overall company plan.
- (v) Are production orders placed timely and in conformity with outstanding requirements position? Since flexibility in products is limited, are marketing office' requests by-passed.
- (vi) Is the distribution system efficient *vis-à-vis* operating costs and capital tie-up? Is there overstocking in the sales locations or factories.
- (vii) Is there excessive cost of freight in transportation of finished products from one sales point to another in search of an outlet?
- (viii) Did the company make the best bargain in fixation of transport rate? Is the mix between rail and road transport economical.
- (ix) Is underloading loss high?
- (x) How effective is the system of claims on carriers.
- (xi) Is distance in Kilometer proper based on some authenticated data?

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- (xii) Is there any provision for penalty/ termination of business with Transporter who are regular defaulter in not delivering the material in time?

Advertising

6.08 Aluminium industry spends heavy amounts on advertising. Due to cut-throat competition between public sector and private sector companies, the advertisement campaigns are regular. Since each company tries to maintain or increase its share of market, the new innovation and technological advantages are spread over the large customer base mainly through the mode of advertisement. Although, it is impossible to objectively evaluate the effectiveness of an advertising campaign, yet some scope exists for conducting internal audit. The first focus of the internal auditor would be to evaluate, in subjective terms, whether the advertisement campaign is in line with the company's overall objective and whether it is directed at the right kind of audience. A number of agencies are working in the country today who measure the success or failure of a campaign. A perusal of their reports may give a lead. In quantitative terms, the placement of right quantum and type of literature at various points, the extent of the coverage, the rates charged by the advertising agencies etc., come in for review.

6.09 The other procedures of the internal auditor in this regard would include:

- (i) Check product-wise-media-wise budget vs. actual expenditure and reasons for variances.
- (ii) Conduct in-depth vouching of:
 - a. Media expenditure (Press/ Print/ Radio/ TV/ Film/ Misc.).
 - b. Miscellaneous expenditure (Surveys, Reports, etc.).
 - c. Sales promotion expenditure (Special campaigns).
- (iii) Conduct vouching of agency charges for:
 - a. Agency personnel traveling expenses.

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- b. Agency supervision charges on print jobs.
- c. Agency charges for blocks, designs, and other services.
- (iv) Examine contract/ casual rates offered and in force with various newspapers and periodicals. Check utilization of contracted space during contract period.
- (v) Examine contract rates for radio and TV and vouch for receipts of advertisers' discount due to the company.
- (vi) Vouch hoarding rentals, if any, paid/ payable.
- (vii) Check utilization of free paintings for hoardings, if any.
- (viii) Evaluate reasons for escalation of hoarding rentals, if any.
- (ix) Vouch casual expenditure on advertisements made on casual basis including authorisations for the same.
- (x) Evaluate the asset control/ stock control for advertising materials and equipment.

Rebates and Discounts

6.10 Rebates and discounts are an inherent sales tool for achieving turnover. From the internal auditor's point of view, the following areas need to be considered:

- (i) Whether there is a budget for rebates and discounts approved by the top management.
- (ii) Whether there is a codified scheme for rebates and discounts or whether the scheme allows undue discretion to field level decision making.
- (iii) Whether the rebate and discounts scheme is uniform in its application.
- (iv) How the rebates and discounts affect contribution per ton of finished goods sold.

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- (v) Whether there is a proper control system for implementation of rebates and discounts. Is it being given by way of credit notes authorised by the appropriate authority.
- (vi) Whether the provision is made in accounts for rebates and discounts correctly drawn up.

Price Amendments

6.11 Fixing of product price and decision on price amendments are matters of concern for the finance manager. The internal auditor should examine the following in this regard:

- (i) Whether pricing of Alumina, Aluminium, and other down the line products are based on a scientific evaluation of cost and a reasonable gross contribution so that even after charging of overheads, margins per product are positive.
- (ii) As and when price amendments take place, whether these have been authorised by the appropriate authority with concurrence of the finance manager?
- (iii) Whether price amendments are implemented on the due date? How does the finance manager ensure that billing does not continue at the pre-price increase rates by antedating the invoices?
- (iv) As and when the Government approves rate contract prices, whether supplementary bills are promptly raised and collected?

Compliance with Laws

6.12 Compliance audit in marketing area mainly deals with excise; value added tax, central sales tax laws and laws relating to Octroi duties, wherever leviable.

Other Aspects

6.13 Following are some other aspects which need to be looked into by the internal auditor and his procedures therefore.

Cash

- (i) Physically verify petty cash with the cashier, with the postal clerk, with the delivery clerk and any other imprest. Does the petty cash contain IOU's pending for a long period?
- (ii) Is petty cash held more than required?
- (iii) Physically check cash/ cheques lying with the delivery clerk against receipts from customers.
- (iv) Check whether customers' cash is receipted properly and deposited in the bank with minimum delay.
- (v) Whether the accounts manager/ officer is exercising his powers within the limits of powers delegated to him.

Expenses

- (i) Are the expenses relating to sales within control?
- (ii) Check traveling expenses of sales personnel to ensure that the same are in line with the levels lay down by the company.
- (iii) Check expenses on cars provided for touring purposes.
- (iv) Check mileage statements and trip sheets for company's delivery vans.
- (v) Check expenses relating to exports. Are they in line with the quantity and amount of goods exported?
- (vi) Check whether any expenses incurred at railway sidings are appropriate.
- (vii) Check payment made to Port Trust towards loading and unloading of wagons.

Accounts

- (i) Examine whether the commission paid to the sales dealers are in accordance with the policy of the company in that regard as also whether the calculations are accurate.

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- (ii) Examine whether, while calculating the above commission, appropriate adjustments have been made for incentives and/or disincentives to the dealers and whether the same are in accordance with the policy of the company therefore.
- (iii) Examine whether sales and returns are correctly accounted for in debtor's ledger.
- (iv) Check calculations of commission paid to various sales agents
- (v) Check calculations for rebates and discounts for accuracy and conformance with the company's policy.
- (vi) Examine whether collections are as per the sales norms laid down by the company for local and outstation sales. Analyse and evaluate reasons for overdue debts.
- (vii) Check whether credit is being allowed beyond levels approved under the company's marketing policy.
- (viii) Check that supplementary bills are raised for rate contract transactions wherever a rate revision has been approved.
- (ix) In case of short payments from commercial houses, state transport corporations, etc., analyze reasons therefor. Evaluate inefficiencies, if any, leading to liquidated damages.
- (x) Check whether unaccounted credits are lying against any party's account.
- (xi) Whether the accounts receivable information is sent to head office on a timely basis.
- (xii) Analyze all bad and doubtful debts and reasons therefor.
- (xiii) Whether adjustments in debtors' accounts by Credit Notes or otherwise have been appropriately authorized.
- (xiv) Whether interest has been charged on late payments.

Banking

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- (i) Check whether lodgments of cheques into bank are prompt.
- (ii) Check dishonor of cheques and identify customers/dealers whose cheques are dishonored frequently.
- (iii) Check the bank reconciliation statement(s) and analyse causes of delayed credits.
- (iv) Ascertain whether the remittance of funds is prompt.
- (v) Ascertain whether telegraphic transfers (TTs) are promptly credited in the Head Office Bank Account.

Sales Tax/ Value Added Tax

- (i) Whether the statutory registers have been properly maintained as required by the relevant statute.
- (ii) Whether the collection of declaration forms is prompt?
- (iii) Whether sales/ VAT tax returns submitted and payments have been made during the stipulated time period?
- (iv) Analyze reasons for add-backs to turnover by the Sales Tax Assessing Officer.
- (v) Analyze reasons for penalty charged by Sales Tax Assessing Officer.
- (vi) Obtain the status of sales tax cases pending before the Assessing Officer and the list of completed cases.

Octroi

- (i) Whether octroi certificates are being received for goods entering the octroi zone.
- (ii) Whether refunds being claimed for exports are as per the rules.
- (iii) The octroi refunds outstanding and how effective are the follow-ups.

Warehouse

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- (i) Verify physical stock in comparison with the bin cards.
- (ii) Ascertain whether the physical inspection is regular.
- (iii) Whether stock keeping neat and scientific.
- (iv) Whether there are any damaged, slow-moving and obsolete items in stock.
- (v) Whether claims have been raised on carriers for short/damaged deliveries and whether the recovery is prompt.
- (vi) Whether dispatch of goods is timely.
- (vii) Whether documents have been properly recorded for each dispatch.
- (viii) Whether outstation bookings are prompt and regular. Whether the security of lorry waybills is satisfactory.
- (ix) Ascertain, by making random check of stock at transporters' godowns, whether goods are removed by the dealers from there.
- (x) Whether the goods received under complaint from customers are properly documented and recorded.
- (xi) Whether the items under complaint, regularly inspected and awards given.
- (xii) Whether the replacement figure is within the norms of the company.
- (xiii) Whether the replaced Aluminium is scrapped in the presence of a responsible official.
- (xiv) Ascertain the company's policy on defective goods? Are they immediately inspected by service engineers and, if downgraded, is the downgrading done by an authorised person.

Office Services

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- (i) Whether signed copies of invoices are sequentially filed and whether the evidence of receipt by the customers well established.
- (ii) Who fixes the rates for carting contractors/ outstation transporters? Whether the rates are comparable with market rates and whether the bill payment system is satisfactory.
- (iii) Physically verify all assets and tally with the Assets Register.
- (iv) Check leave, attendance and service record cards of all employees.

Supplies Function (Generally a Head Office Function)

- (i) Check marketing office requirements and status of supplies.
- (ii) Compare production plan and outstanding requirement position from the marketing offices.
- (iii) Check amendments to production orders and reasons therefore.
- (iv) Allocation/ Distribution:
 - a. Check the basis of allocation/distribution of Alumina, Aluminium and other downstream products to various regions in the period of audit.
 - b. How do the actual dispatches compare with planned allocation?
 - c. If there are common sizes in production in more than one factory, evaluate whether economies of local distribution have been achieved.

Transit Time

- (i) Review the laid down transit time.

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- (ii) Review actual transit time.
- (iii) How adequate is the follow-up of delayed transit.
- (iv) Is there any scope for despatch by rail at greater economy to the company?
- (v) Review detention charges - examine detention slips for their authenticity and accuracy of billing.

Fixation of Rates

- (i) Compare the rates fixed with the data available in the company about prevailing market rates for road transport from destination to destination.
- (ii) Check contracts with transporters and find out whether appropriate authority has signed the contracts.

Appraisal of performance of transport contractors

- (i) Check transit time of each transporter and compare it with the norms established as per the contracts.
- (ii) Is the placement of trucks by transport contractors satisfactory? Are ordinary and extra-long chassis trucks placed as per the company's requirements?
- (iii) Conduct a review of transit damages and claims on carriers. Is the transit damage of any contractor higher than the usual trend?

Basis of Allotment of Business to Transporters

- (i) Evaluate percentage of business done by each transporter.
- (ii) Is the allocation of sectors fair and unbiased?
- (iii) Does the company maintain an up-to-date list of fleet strength of all transporters with special emphasis on extra-long chassis trucks?

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- (iv) Inspect the bank guarantees provided by the transporters for validity and value.

Railway/ Road

- (i) Evaluate transit time in both.
- (ii) Compare requirements of stocks at depots/ sales cover of stocks *vis-à-vis* transit time.
- (iii) Evaluate savings in rail-dispatch in terms of comparative total costs and unit costs. Analyze road and rail dispatches.
- (iv) Is the collection of freight recoverable for dispatches to original equipment manufacturers prompt and regular?
- (v) Review the facilities/ concessions for placement of wagons at factories.
- (vi) Is under loading loss high and can it be reduced.

Bill Passing

- (i) Ascertain the system of freight bill passing.
- (ii) Is the evidence of receipt of goods attached to carrier's bills?
- (iii) In case of loss of material/ Truck whether amount is recovered from the transporter/ Insurance.
- (iv) Are deviations in contract terms duly approved by an authorised person?

Chapter 7

Internal Audit of Finance Function

7.01 Internal audit originated from financial audit. Although its concept has primarily changed to management and operational audit, the importance of financial audit can never be minimised. All professionals working as internal auditors are therefore conversant with financial auditing. The nature of the finance function is by and large uniform for all industries whether it is Aluminium or any other. Most accounting aspects of marketing, purchasing and production having already been covered in preceding chapters, guidance on financial audit is therefore, kept to a minimum. A few special aspects of Aluminium industry, however, need to be kept in mind for their financial implications which has been dealt with hereinafter.

7.02 Aluminium is a cyclical business – hence it calls for the players to have deep pockets of liquidity in order to deal with weak market conditions. It is also necessary to have surplus funds to finance capacity additions/ expansions/ acquisitions as and when the market opportunities arise. As the prices of the metal depend on the movements of international prices on the London Metal Exchange (LME) – and with buyers moving into both short-term/ long-term contracts – the producers need to insulate their earnings from the volatilities of price movements. This calls for the use of hedging instruments like derivatives (futures, options, etc.). The internal auditor must therefore consider management’s adherence to company’s treasury policies, procedures and adequacy of controls and MIS related to investment management, interest rate risk management, foreign exchange risk management, commodity hedging, and fund management.

Working Capital

7.03 In today’s tight money situation, working capital management in Aluminium industry assumes considerable importance. It is within

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the internal auditor's ambit to see how effective has been the working capital management. The following are the illustrative focus areas for the internal auditor:

- (i) Does the financial management receive daily information on turnover, collection remittances, production, closing stocks, raw material inventories, etc.? Is the information timely and accurate?
- (ii) Are collection norms being adhered to or are there undue delays in collection?
- (iii) Are funds being deployed to priority items to achieve speedier working capital rotation?
- (iv) Are best payment terms being obtained for critical supplies?
- (v) Is the finance manager using adequate cost control measures? Does he have the authority to do so over other functional heads?

Insurance

7.04 Aluminium is a capital-intensive industry. Hence, adequate insurance of assets and products is a significant aspect of financial management. Further, the Industry attracts product liability arising out of quality variations/ manufacturing defects. Product liability is the legal liability of an insured to pay compensation against death or bodily injury to any person or damage to his property arising out of use of the product.

As a result, an extensive insurance cover has to be taken by the manufacturing companies for product liability. Without this insurance, exports are not possible to most countries in the world especially to U.S.A. and Canada. Foreign insurers lay extremely stringent and demanding terms for the insurance cover and the premium is quite high. The guideline for the internal auditor would be to examine that an effective cover has been taken at the best possible price and the company's financial security is not being compromised in any possible way.

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7.05 The internal auditor's procedures with respect to the various aspects of insurance would include :

Steamer Claims

- (i) Checking whether steamer survey has been conducted within 3 days of discharge of materials at port.
- (ii) Checking whether insurance survey has been conducted within the period of insurance.
- (iii) Checking whether claim on the carrier agent has been raised within the limitation period (one year from the arrival of the ship).
- (iv) Checking whether claim papers are forwarded within reasonable period to Insurance Department by the Clearing Department.
- (v) Checking whether claims on insurers are raised by the Insurance Department within a reasonable period.

Road Claims

- (i) Checking whether the consignment notes are duly endorsed about the shortage.
- (ii) Checking whether the carrier's short certificate has been duly obtained.
- (iii) Checking the carrier's short certificate and invoice, to substantiate the value of the loss, and the relevant declaration number has been forwarded to the Insurance Department within a reasonable period.
- (iv) Checking whether the claim on the insurer has been raised by the Insurance Department within a reasonable period.

Fire Claims

- (i) Checking whether the Fire Brigade Report and Police Investigation report, if any, has been duly forwarded to the Insurance Department.

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- (ii) Checking whether all necessary documents to substantiate the value of the loss have been forwarded to the Insurance Department.
- (iii) Checking whether claims on insurers have been raised by the Insurance Department within reasonable time and followed-up.

Burglary Claims

- (i) Checking whether F.I.R. has been lodged with the Police and Police Investigation Report has been obtained and duly forwarded to the Insurance Department.
- (ii) Checking whether all necessary claim papers substantiating the loss have been forwarded to the Insurance Department.
- (iii) Checking whether claim on insurer has been lodged by the Insurance Department within reasonable period and properly followed-up.

Budgetary Control

7.06 In the face of increasing competition, survival depends on cost efficiency. Control has to be exercised through budgets so that the system in itself can ensure that expenses are maintained within the given parameters. Expenses for the forthcoming year are estimated at the beginning of the year which has a correlation with previous year's actual and projections for the forthcoming year. The budgets are generally approved by the head of Finance Department. It is the duty of the internal auditor to monitor adverse variations and make in-depth enquiries as to their causes.

7.07 In respect of budgetary control, the internal auditor's areas of focus and his responsibilities with regard to them are discussed in the following paragraphs.

Stock Reconciliation

It is imperative that reconciliation is made between stock figures at individual sales offices and stock figure as per the Head Office accounts.

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Stock Reconciliation

- (i) Check Challan Edits to ensure that there are no long standing Challans.
- (ii) Enquire from the sales office about each Challan Edit to find out whether the stock has been accounted for in the sales office but by inadvertence the information has not been accounted for in the central computer.
- (iii) Check DD (Depot-to-Depot transfer) Edits to ensure that there are no old DDs outstanding.
- (iv) Enquire from the sales office whether the DDs have actually been received but not accounted for in the central computer.
- (v) In case of a discrepancy between sales office stock and H.O. stock, identify the location where discrepancy has taken place and narrow down the field to the month in which the discrepancy arose.
- (vi) Go through the transaction listing of the month identified as per para (v) above and arrive at the specific causes of the discrepancy.
- (vii) Examine whether the rectifications have been appropriately carried out.
- (viii) Eradicate all negative stock balances at the year-end by reversing turnover. Remember negative stock can only arise if invoicing is higher than stock availability.

Debtors Reconciliation

7.08 It is the responsibility of the internal auditor to ensure that the Head Office ledger balance of debtors' tallies with individual memorandum records maintained at the districts.

Debtors Reconciliation

- (i) Ensure that both the Head Office and sales office have relied on identical data to arrive at net turnover, i.e., sales

Internal Audit in Aluminium Industry

minus cancellations. If sales location has accounted for invoices of subsequent month in its turnover, this needs to be reversed.

- (ii) Ensure that collections of subsequent month have not been accounted for as the year-end collections.
- (iii) Check whether all financial adjustments made at the sales office have been duly accounted for at the Head Office through appropriate journals.
- (iv) Inter decentralised centre collections, i.e., collections made by decentralised center for another is always a source of great worry at the time of debtors' reconciliation. The auditor has to ensure that all such credits raised by one decentralised centre for another by the year-end have been appropriately journalised at the Head Office or else the ledger balance will not match with the decentralised center balance.
- (v) All rebates and discounts as well as write-offs vide financial vouchers or credit notes at sales office have to be accounted for in the Head Office Ledger.
- (vi) At the end of the reconciliation, locations-wise, debtors balance at H.O. must match with sales locations' outstandings.
- (vii) Where central billing is resorted to from factories for OE customers, vide appropriate journal, the debtors have to be transferred to the location concerned, otherwise the debt might feature in the Head Office ledger without being accounted for by the concerned depot.

7.09 Besides the above two fundamental reconciliation there are various ancillary reconciliations which an internal auditor needs to examine. These are the Sales Tax Reconciliation (i.e. reconciliation of Sales Tax Account in the General Ledger with details of receipts and payments of Sales Tax) maintained by the sales office, deposit reconciliation, advances to staff reconciliation, etc.

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7.10 Some of the other important areas of concern to the internal auditor in respect of the finance function and his procedures therefor are as follows:

Assets

Fixed Assets

- (i) Check the Fixed Assets Register as at the year-end and tally it with the ledger. Examine whether depreciation has been correctly charged.
- (ii) Tests check the Assets Sold Schedule with receipts and see that profit/ loss has been correctly computed.
- (iii) Check Advance Payment Account for asset purchases and examine whether transfers to Fixed Assets Account have been appropriate and timely.
- (iv) Is the register of Patents and Trademarks maintained and is it up- to-date?
- (v) How often is a physical check made of fixed assets and compared with the Fixed Assets Register?
- (vi) Does the Fixed Assets Register contain the appropriate information?
- (vii) What is the system of authorisation of capital expenditure?
- (viii) If in-house employees do capital work, how is the work valued?
- (ix) Check whether the system exists for verification/ confirmation of assets with third parties including assets sent for repairs.

Inventories

- (i) Test check the Closing Stock Schedule for finished goods and examine whether appropriate adjustments have been made in valuation of obsolete and slow moving stocks.

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- (ii) Tests check the Closing Stock Schedule of raw materials and work-in-progress/ stores and cross tally it with the balance sheet.
- (iii) Identify major raw materials from the Closing Stock Schedule and reconcile book stock with physical stock. In case there is any major discrepancy ascertain reasons therefore.

Investments

- (i) Check the Investments Schedule prepared as at the year-end.
- (ii) Are receivables from investments such as dividends, interest etc., being correctly accounted for?

Cash and Bank

- (i) Reconcile the cash in hand with decentralised units, and the certificates of unit managers.
- (ii) Reconcile the Bank Overdraft Account in the ledger with the bank statements.

Sundry Debtors

- (i) Reconcile Sundry Debtors Account in the ledger as at the year-end with the returns submitted by depots.
- (ii) Tests check journal entries regarding financial adjustments raised by the depots with actual source dockets.
- (iii) Check bad debts written off/ written back and see that the same are properly authorised. Have adequate provisions been made in the accounts for doubtful debts.

Deposits

- (i) Check the deposit accounts in the ledger, *viz.*, rent, gas and electricity, telephone etc., with detailed registers maintained at each location.

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- (ii) Tests vouch the payments/ receipts in this account.
- (iii) Enquire into deposits lying outstanding for a long time and find out the reasons therefor.
- (iv) Reconcile the Franking Machine Deposit account in the ledger with returns from decentralised units, and in case of any difference enquire into any reason therefore.
- (v) Reconcile Port Deposit A/c and Customs Deposit A/c with certified statements.

Receivables

- (i) Check the year-end entries for receivables.
- (ii) What is the procedure for informing lodgment of claims to Accounts Department? Are there any missing claims?

Liabilities

Acceptances

- (i) Cross check the total creditors balance in ledger with the individual creditors' balances.
 - a. Test check entries in the creditors' accounts with respect to receipts of materials, payments and acceptances made.
 - b. Comment on old creditors' balances, if any, lying unpaid.
- (ii) Tests check the acceptances outstanding as at the year-end.
- (iii) Analyse advances made to suppliers and enquire into long outstanding advances.

Provision for Taxation

Check the accuracy of Provision for Taxation Account in the ledger.

Accrued Expenses

- (i) Analyze outstanding liabilities on the basis of documents, bills etc.
- (ii) Are liabilities for expenses certified by the operating managers?
- (iii) Is the system of payments strong enough to ensure that duplicate liabilities are not created and missing liabilities are avoided?

Profit and Loss Account

Sales

- (i) Tests check the sales booking in the ledger with journal entries passed and monthly returns from sales points.
- (ii) Test check products supplied free and at concession for defectives with the returns from the depots.
- (iii) Check the challans raised but not invoiced out for direct billings from the factories with invoices raised subsequently.
- (iv) Check the company's policy regarding invoices raised but not delivered at the year-end? Is there a deliberate attempt to inflate turnover?

Excise Duty

- (i) Reconcile the excise duty deposits in the ledger with excise duty control statement.
- (ii) Ensure that CENVAT credit availed of has been properly accounted for.

Rebates on Sale

Crosscheck rebates and discounts in the ledger with the summary prepared on the basis of depot records. Tests check the same with the schemes.

Interest

Check the interest paid/ received in the ledger with respect to bank overdraft/ public deposits/ loan from financial institutions, deposits with agencies and inter-corporate deposits.

Miscellaneous

Suspense Account

- (i) Analyze the Suspense A/c in the ledger, if any, with the schedule of expenses comprising the Suspense A/c.
- (ii) Enquire into any old outstanding lying in the Suspense A/c and the reasons why they cannot be transferred to appropriate account head.

Budgetary Variance Analysis

- (i) Identify the items in respect of which adverse variances have arisen.
- (ii) Check the reasons for adverse variances from the concerned locations.
- (iii) Find out whether the variance was controllable or uncontrollable. Uncontrollable variances could be such as wage agreements, variable D.A. etc. On these expenses, the location concerned has no control.
- (iv) Having identified the controllable expenses where adverse variance have taken place, examine in-depth, the explanations given.
- (v) For expenses with favourable variances, question whether cushion was being kept in the budget. Prevent charging of expenses with adverse variances to expense heads with favorable variances to keep overall expenses within total budget.

Cash

Cash Count

- (i) Count the petty cash balance and add to it the totals of IOUs and tally it with the balance as per the cashbook.
- (ii) Prepare a detailed list of IOUs and comment on the nature of these and whether they are pending settlement for a long time.
- (iii) Check the cash receipts lodgments and tally them with the cash book.

Petty Cash

- (i) Select a month within the audit period and vouch petty cash payments (100%) to examine, amongst other things, the following:
 - a. That the vouchers are in sequence.
 - b. That they are 'paid' stamped and date of payment is indicated.
 - c. That the expenses are within the entitlement limits as per the company's regulations.
 - d. That they are routed through the particular department as per the rules framed in this regard.
 - e. That the departmental authority's signature has been obtained.
 - f. That the vouchers are supported by adequate documents as per the principles of vouching, and
 - g. That the correct account head has been used in the vouchers.
- (ii) Check that all the relevant information has been correctly entered into the cashbook.

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- (iii) Tests check some entries on the receipt side of the petty cash book.

Accrued Expenses

Bank Transactions

- (i) Bank transaction:
 - a. Test check bank payments applying principles of vouching and according to the guidelines mentioned in respect of petty cash as above
 - b. Test check bank receipts with reference to receipts issued and lodgment slips and supporting documents.
 - c. Examine whether the receipts are banked promptly.
 - d. Check the transfer charges for remittances by various banks.
- (ii) Check whether the telegraphic transfers and other remittances from various locations are being credited to the Head Office Account.
- (iii) Test check the interest charged on overdrafts by various banks.
- (iv) Test check the bill discounting operation, if any and interest charged. Comment on that.
- (v) Bank Reconciliation:
 - a. Ascertain whether the accounting records are regularly agreed to with the bank statements.
 - b. Check bank statements of various banks at different locations with reference to the cash book.
 - c. Check reconciliation statements despatched by various Depot/ Sub-depot locations.

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- d. Check reconciliation statements prepared at the Head Office for various banks.
- e. Prepare a list of long outstanding items in reconciliation and find out what action has been taken.

Staff Cheques

Ascertain whether the procedures for raising of vouchers and receipts have been followed.

Rent Payments

Check the overall control over payment of rent.

- (a) Check rent files for different premises.
- (b) Reconcile between the rent paid for a few months with that payable.

Road Transport Claim Bills

- (i) Check the register and the correspondence file to determine whether the deductions on account of short/ damaged receipts have been made from the freight payable promptly.
- (ii) Ascertain the outstanding positions of the bills for which deductions are yet to be made.

Capital Expenditure

Verification of Authenticity

- (i) Check whether all sanctions are duly authorised by requisite authorities before capital expenditure is made.
- (ii) Examine whether proper procedure is followed before capital expenditure is embarked upon.

Evaluation of Proposal

- (i) Check that the accounting department has gone through the

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appropriate techniques of evaluation of project profitability before approval. In case of new suggestions, inform the management promptly.

- (ii) Verify and authenticate with the engineers the data provided by them to the accounting department for evaluation. If the data provided was inaccurate evaluate the impact of inaccuracy and bring it to the management's notice.

Execution of Project

- (i) Examine whether the time schedule for capital expenditure has been strictly adhered to. In case of failure, identify accountability centres.
- (ii) Check whether there are cost over-runs in the project. Identify whether over-runs were because of errors in evaluation of the project or inefficiency in execution.
- (iii) In case of unforeseen factors causing delays in project execution, identify why the factors could not be foreseen at the point of evaluation.

Capital/Revenue

- (i) Ensure the revenue expenditures are not being capitalized.

Certification by Engineers

- (i) Check whether engineering department gave certificate for installation of equipment and certificate for commissioning of project.
- (ii) Check that the capitalisation of the project in the company's accounts has been as per the said engineering certification.

Salvage/ Tenders

Salvage

- (i) Check whether the quantities booked as salvage are crosschecked on receipt at salvage.

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- (ii) Check whether salvage from production shop has duly been authorised by appropriate authority.
- (iii) Check housekeeping and security at salvage yard.
- (iv) Examine that un-booked materials do not find their way to salvage.
- (v) Check whether salvage is appropriately segregated in the yard and appropriately tagged.

Tender

- (i) Check whether sealed tenders are received against advertisements.
- (ii) Check whether margin money has been deposited.
- (iii) Check whether the tender committee has duly authorised disposal of salvage.
- (iv) Check whether the tender committee has accepted the highest rate.
- (v) In cases where the tender committee has accepted lower rate, assess the reasoning therefore.
- (vi) Check whether payments are first deposited before materials are allowed to be lifted from the yard.
- (vii) Check whether security control is adequate at the time of lifting.
- (viii) Check whether gate passes are authorised before material movement.

Appendix I

Glossary

Alumina Section

Alumina	Oxide of Aluminium; Al_2O_3
Alumina Hydrate	It is Alumina in the form of hydrate $\{Al(OH)_3\}$ generally computed as Alumina (Al_2O_3)
Alumina Calcined	When three molecules of water are removed from Alumina hydrate by calcining it at higher temperature, the product is known as Alumina Calcined.
Caustic Concentration, C	Grams of caustic per litre of liquor in the process (NaOH expressed as Na_2CO_3)
Digesters	The vessels in which Alumina content of Bauxite is dissolved in caustic soda solution at defined temperature and holding time.
Digestion Circuit	The area of Alumina Plant where Bauxite is dissolved in caustic soda solution at required conditions and heat is recovered by flashing. It also includes de-silication process.
Digestion Efficiency (%)	It shows the extent of Bauxite's Alumina dissolution in the solution. It depends on factors like Bauxite quality, digester temperature, and solution's caustic concentration etc.
Desilicated Slurry	Bauxite slurry that has undergone de-silication process at defined temperature with sufficient holding time

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to remove silica content of liquor by converting it to solid phase.

Gibbsitic Bauxite	Type of Bauxite in the form of trihydrate $\{Al_2O_3 \cdot 3H_2O\}$ that gets dissolved at lower temperature (106-145°C)
Slurry	Bauxite solids in liquor for transportation by pumps in pipelines and vessels
Spent Liquor	The process liquor mainly as caustic soda in circulation after recovery of Alumina in precipitation circuit. It is circulated to digestion circuit by improving its concentration by evaporating its water content.
TAA (%)	It is Total Available Alumina in Bauxite to be processed at definite temperature.
Trihydrate Seed	The particles of Alumina trihydrate (both of coarse and fine fractions) to be used as seed in precipitation process to facilitate agglomeration and growth for maximum Alumina recovery from the system.
Yield/Liquor Productivity (gpl)	Alumina recovered from one litre of Aluminate liquor in each cycle. Also known as liquor productivity.

Smelter Section

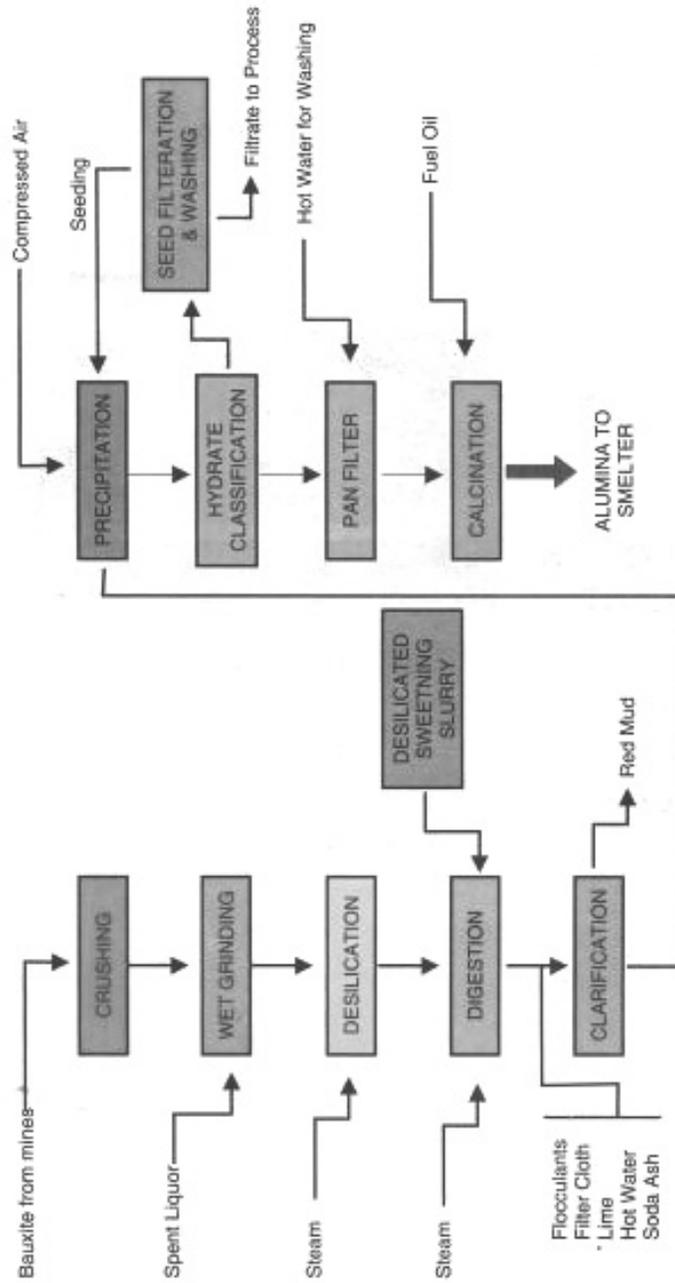
Bath Ratio	It is the weight ratio of NaF and AlF_3 in electrolyte.
Current efficiency (%)	It measures ratio of actual production and theoretical production of metal. It is one of the important performance parameters of Smelter.

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Electrolytic Reduction	The electrolysis process where Alumina gets dissociated in Aluminium (Al^{+3}) and oxygen ions (O^{-2}). Aluminium deposits at cathode and oxygen reacts with carbon to form CO_2 .
Gross Carbon Consumption (kg/T)	This is the total number of anodes supplied to Pot room multiplied by average weight of anode.
Molten Cryolite (Na_3AlF_6)	It is the major component of Hall Heroult electrolyte having uniquely high solubility for oxides.
Net Carbon Consumption (Kg/T)	This is calculated by subtracting weight of spent anodes returned to paste plant from gross carbon consumption in pot room.
Pot	The specially designed electrolytic cell in which Alumina is dissolved in molten cryolite bath and electrolysis is carried out.
Potline	A number of electrolytic cells connected in series with certain bus bar configuration for passage of current and spread over two rooms constitutes a potline.
Line Current	Current flow in a pot line
Volts/ Pot	Total voltage drop across an electrolytic cell.

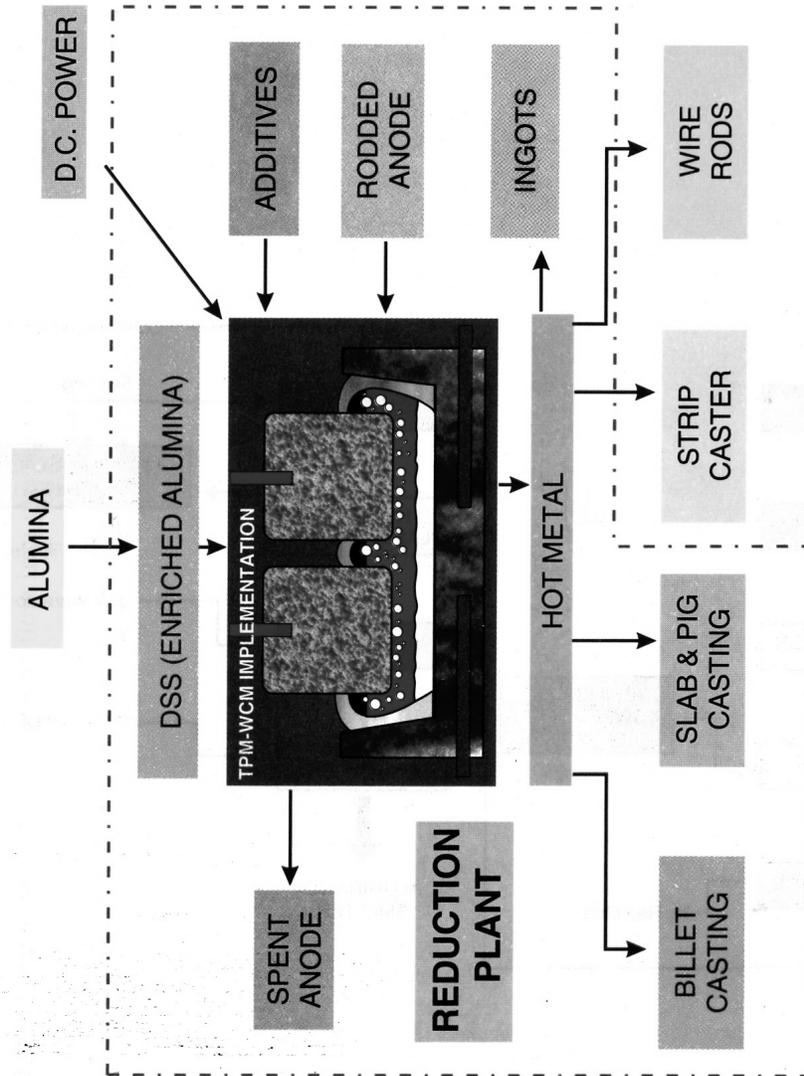
Appendix II

Alumina Refinery Process Flow Diagram



Appendix III

Aluminium Production: Smelter Process Flow



I-2
TECHNICAL GUIDE
ON INTERNAL AUDIT
IN UPSTREAM
OIL & GAS COMPANIES

Foreword

With the all round steady growth being witnessed by the Indian economy, a large number of challenges and opportunities for the members are also emerging as to how they can contribute their might to sustain this growth. Internal audit, which is one of the niche areas of the members of the Institute, has emerged as an important tool in the hands of the enterprises not only to maximise shareholders' value but also value to the society as a whole.

The Institute on its part has been working quite proactively to help members sharpen their skill sets in this area. I am pleased to note that the Committee on Internal Audit of the Institute is issuing yet another industry specific literature, Technical Guide on Internal Audit in Upstream Oil and Gas Companies.

I congratulate CA. Abhijit Bandyopadhyay, Chairman, Committee on Internal Audit and other Committee members on the issuance of this Technical Guide.

I am sure that this Technical Guide will be of immense help to the readers.

June 15, 2007
New Delhi

CA. Sunil H. Talati
President
ICAI

Preface

Oil, without sounding as exaggeration, exerts great economic and political influence worldwide. The environment in which the oil and gas industry functions, throws up technological, financial and other challenges almost every day. To be successful, the enterprises in the oil and gas companies need to be really responsive to not only the existing challenges but also be able to pre-empt them.

Internal audit is a service which can immensely help the industry overcome the challenges and increase value. Keeping this in mind, the Committee on Internal Audit is issuing the Technical Guide on Internal Audit in Upstream Oil & Gas Companies as a part of series of the Technical Guides on internal audit of a number of other industries identified by the Committee. This Technical Guide will help the members of the Institute as well as others working as internal auditors in the said industry to understand the basic operations undertaken in the industry and also internal audit aspects relating to the same.

With a view to providing appropriate guidance in a manner that is easily understood by all the readers, this publication is divided into the four main chapters, dealing with the very fundamental concepts in upstream oil and gas companies, sequentially as introduction, technical aspects in exploration and production industry, internal audit of joint operating agreement, internal audit of functional areas. Annexures containing flow charts regarding the cost treatment of various processes and stages of production and a glossary of the terms used in the oil and gas industry are also given in this Guide for providing valuable guidance to readers. The glossary of terms should be read before going through this Guide for better understanding the technical terms. In addition to the technical guidance provided in the Guide, general audit procedure would also be applicable.

I am grateful to CA. Satyavati Berera, New Delhi for preparing the draft of the Technical Guide. I am also thankful to Shri B. L.

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Ghasoliya, Executive Director (Internal Audit), ONGC Ltd. for his invaluable comments and suggestions for improving the draft Guide. I also wish to thank the members of the Committee on Internal Audit, including the co-opted members for their continuous support, to the research endeavours of the Committee. I also owe my gratitude to CA. Sunil H. Talati, President, ICAI and CA. Ved Kumar Jain, Vice President, ICAI for their continuous encouragement and support. I also want to express my thanks to Shri Vijay Kapur, Director, ICAI, CA. Puja Wadhwa, Secretary, Committee on Internal Audit and CA. Arti Aggarwal, Executive Officer for their untiring efforts in bringing out this publication.

I believe that this publication would serve as a basic guide for the members and other readers interested in the subject.

June 15, 2007
Kolkata

CA. Abhijit Bandyopadhyay
Chairman
Committee on Internal Audit

Importance Definitions and Terminologies

Abandon	To discontinue attempts to produce oil or gas from a mining lease area or a well and to plug the reservoir in accordance with regulatory requirements and salvage all recoverable equipments.
Appraisal Well	A well drilled as part of an appraisal drilling programme, which is carried out to determine the physical extent of oil and gas reserves and likely production rate of a field.
Artificial Lift	Any method of getting oil to the surface which is not dependent on natural pressure.
Barrel of Oil	The unit of volume measurement used for petroleum and its products. 1 barrel = 159 litres (approx).
Block	A defined area for purposes of licensing or leasing to an enterprise or enterprises for exploration, development and production rights.
Blow Out	The process where gas or oil pressure in a well overcomes the weight of the drilling fluids and blows it out of the hole.
Bottom-Hole Contract	Money or property paid to an operator for use in drilling a well on property in which the payer has no property interest. The contributions are payable when the well reaches a pre-determined depth, regardless of whether the well is productive or non-

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productive. The payer may receive proprietary information on the well's potential productivity.

Bottom-Hole Contribution

A contribution, usually by a nearby lease holder, to encourage the drilling of a well to help in evaluation of his own acreage or a payment made to ensure information about the result of a well drilled by another oil company. It is paid when a given depth is reached.

Cash Call

A request for finance made by the operator of a joint venture to the other consortium members.

Cess

A levy imposed under the Oil Industry (Development) Act, 1974 on crude oil produced and payable to the Central Government.

Christmas Tree

A term applied to a series of pipes, valves and fittings assembled at the top of a well to control the flow of the oil and which is inserted in the production pipe.

Condensate

Low vapour pressure hydrocarbons obtained from natural gas through condensation or extraction and refers solely to those hydrocarbons that are liquid at normal surface temperature and pressure conditions.

Crude Oil

Petroleum in its natural state before it has been refined or otherwise treated but from which water and foreign substances have been extracted.

Depletion, Depreciation and Amortisation (DD&A)

Depletion relates to the reservoir, depreciation to the capitalised assets and amortisation to the cost of the license interest.

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Depletion	The exhaustion of a reservoir by extracting the oil or gas.
Developed Property	Property on which wells have been drilled and production equipment has been installed.
Development Activities	Development activities for extraction of oil and gas include, but are not limited to the purchase, shipment or storage of equipment and materials used in developing oil and gas accumulations, completion of successful exploration wells, the drilling, completion, re-completion and testing of development wells, the drilling, completion and re-completion of service wells, the laying of gathering lines, the construction of offshore platforms and installations, the installation of separators, tankages, pumps, artificial lift and other producing and injection facilities required to produce, process and transport oil or gas into main oil storage or gas processing facilities, either onshore or offshore, including laying of infield pipelines, the installation of the said storage or gas processing facilities.
Development Well	A well drilled, deepened, completed or re-completed within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.
Drill Bit	Part of drilling tools, which actually cuts the rock away to form a well.
Drilling Rig	The superstructure and related equipment used in drilling.
Dry Gas	Natural gas with a small proportion of liquid hydrocarbons which is produced without liquids.

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Dry Hole	A well, which has proved to be non-productive.
Dry Hole Contribution	A contribution made by one enterprise towards costs incurred by another enterprise that is drilling a nearby well to obtain information from the latter. The contribution is made when the well is complete and is found to be unsuccessful.
Enhanced Oil Recovery (EOR)	A range of techniques, such as water injection, gas injection, de-pressurisation, water flood designed to increase flow rates from a reservoir.
Exploitation	The drilling of an oil accumulation in order to produce it.
Exploration	The effort of searching for an oil or gas prospect. Successful exploration is followed by exploitation.
Exploratory Well	A well drilled for the purpose of searching for undiscovered oil and gas accumulations on any geological prospect. An exploratory well is a well that is not a development well, a service well, or a stratigraphic test well, as those terms are defined separately.
Farm Out	An agreement between operators whereby the owner of the lease who does not wish to drill, assigns it to another operator who does wish to drill and agrees to bear the costs of exploration and/or development of an existing licensee in exchange for a share in the licence interests. An interest is retained by the lease owner.
Field	An area consisting of a single reservoir or multiple reservoirs all grouped on or related to the same individual geological structural

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feature and/or stratigraphic condition. There may be two or more reservoirs in a field which are separated vertically by intervening impervious strata, or laterally by local geologic barriers, or by both. Reservoirs that are associated by being in overlapping or adjacent fields may be treated as a single or common operational field. The geological terms 'structural feature' and 'stratigraphic condition' are intended to identify localised geological features as opposed to the broader terms of basins, trends, provinces, plays, areas-of-interest, etc.

Flaring of Gas	The burning of gas when the quantity produced with oil is too small to sell or utilise.
Flowing Well	A well which produces oil or gas to the surface without artificial lift equipment.
Full Cost Accounting Method (FCM)	Under the full cost method, all costs incurred in prospecting, acquiring mineral interests, exploration, and development are accumulated in large cost centres that may not be related to geological factors. The cost centre, under this method, is not normally smaller than a country except where warranted by major difference in economic, fiscal or other factors in the country. The capitalised costs of each cost centre are depreciated as the reserves in each cost centre are produced. (Refer Annexure I)
Gas Lift	A technique used for providing assistance in lifting of oil through a well by introducing gas into the tubing.
Gathering Line	A pipeline used in gathering crude oil from the oil field to a point on a main pipeline.

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Gathering System	A pipeline system connecting a number of wells to a central point.
Geological and Geophysical Studies	Processes which seek surface or subterranean indications of earth structure or formation where experience has shown the possibility of existence of mineral deposits.
Geological Survey	An exploratory program directed to examination of rock and sediments obtained by boring or drilling, or by inspection of surface outcroppings.
Geophysical Survey	A study of the configuration of the earth's crust in a given area, as determined by the use of seismic, gravity, magnetic and geo-chemical procedures.
Hydrocarbons	Any combination of the chemical elements, hydrogen and carbon. May occasionally contain minor quantities of other elements such as oxygen, chlorine, sulphur.
Impairment	It denotes the situation when carrying amount of asset may not be recoverable on the basis of future cash flows from the use of asset and ultimate disposal.
Injection Well	A well used for introducing extraneous fluids and/or gases to a subsurface formation in an attempt to maintain or stimulate the rate of production from nearby wells.
Integrated Oil Company	An oil company which engages in all phases of the oil industry, i.e., exploration, production, refining and marketing, i.e., companies involved in both the upstream and downstream activities.

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Intangible Drilling Costs (IDC)

Intangible drilling costs are costs incurred which have no physical substance or are not expected to have salvage value such as:

- Costs of obtaining and negotiating a contract with a drilling contractor.
- Survey and seismic work as to the location of the well.
- Costs of road to location of well site.
- Costs of dirt work on location - cellar, pits and drilling pack.
- Costs of transporting rig to site and rig-up charges.
- Costs incurred for water, electricity and other items necessary for the operation.
- Drilling charges.
- Costs of technical services rendered during the drilling activities by engineers, geologists, fluid technicians, etc.
- Costs of logging and drill stem test services.
- Cost of swabbing, fracturing and acidizing.
- Costs of rental equipment used during drilling and well tests.
- Drill mud costs.
- Cost of setting casing.
- Cost of transportation of pipe, casing and tubing.

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- Cost of rig down and site restoration.
- Various other costs.

Joint Operating Agreement

An agreement between two or more lease owners providing for the operation of a lease in which one operates the lease with all owners sharing the cost.

Joint Venture

A business association in which each member has a fractional undivided interest in all assets, liabilities, income and expenses with the right to separately sell, divide or mortgage his interest.

Kill a Well

To cause a flowing well to stop, usually by filling the hole with water or heavy drilling mud.

Licence

Two types of licences are:

- (1) Petroleum Exploration licence -
An Exploration Licence is a non-exclusive right to carry out preliminary searches for petroleum.
- (2) Mining Lease -
The licence issued for offshore and onshore properties for conducting development and production activity.

Liquified Natural Gas (LNG)

Gas, predominantly methane, from oil field sources, which is held in the liquid state by the application of pressure and low temperature to facilitate transport and storage

Liquid Petroleum Gas (LPG)

Light hydrocarbon material, gaseous at normal temperatures and pressures, which are held in the liquid state by pressure or refrigeration to facilitate storage, transport

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and handling. Commercial liquified petroleum gas consists essentially of propane, butane or mixtures thereof.

Logging	The recording of rock characteristics as measured by a down hole mechanical-electrical device.
Mcf	The unit to measure natural gas consisting of one thousand cubic feet of gas at 60 degrees Fahrenheit at atmospheric pressure.
Natural Gas	Natural gas means gas obtained from oil and gas wells and consisting primarily of hydrocarbons. Natural gas is usually classified as “wet” or “dry”, depending on whether the proportions of liquid hydrocarbon constituents in it are large or small. It does not include LPG, carbon dioxide or other gaseous products.
Natural Gas Liquids (NGL)	Hydrocarbons (primarily ethane, propane, butane and natural gasoline) which can be extracted from wet natural gas and become liquid under various combinations of increasing pressure and lower temperature.
NELP	New Exploration Licensing Policy announced by the Government of India wherein a level playing field has been provided to all operators in the petroleum sector.
Non-Operator	A party having an interest in a lease or reservation who allows another participant to conduct the development and operation of the property in the mutual interest of all participants.

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Oil and Gas Reserves

Oil and gas reserves are those quantities of oil and gas, which are anticipated to be commercially recoverable from known accumulations from a given date forward.

All oil and gas reserve estimates involve some degree of uncertainty. Uncertainty depends chiefly on availability of reliable geological and engineering data at the time of the estimate and interpretation of data.

Based on relative degree of uncertainty, oil and gas reserves can be classified as 'Proved Oil and Gas Reserves' and 'Unproved Oil and Gas Reserves'.

Proved oil and gas reserves are those quantities of mineral oil, natural gas and natural gas liquids which, upon analysis of geological and engineering data, demonstrate with reasonable certainty to be commercially recoverable in future from known oil and gas reservoirs under existing economic and operating conditions.

Proved oil and gas reserves can be classified as 'Proved Developed Oil and Gas Reserves' and 'Proved Undeveloped Oil and Gas Reserves'.

Proved developed oil and gas reserves are reserves that can be expected to be recovered through existing wells with existing equipment and operating methods. Additional oil and gas expected to be obtained through the application of advanced recovery techniques for supplementing the natural forces and mechanisms of primary recovery should be included as *proved developed reserves* only

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after testing by a pilot project or after the operation of an installed programme has confirmed through production response that increased recovery will be achieved.

Proved undeveloped oil and gas reserves are reserves that are expected to be recovered from new wells on undrilled acreage, or from existing well for which a relatively major expenditure is required for recompletion. Reserves on undrilled acreage should be limited to those drilling units offsetting productive units that are reasonably certain of production when drilled. Proved reserves for other undrilled units can be claimed only if it can be demonstrated with certainty that there is continuity of production from the existing productive formation. Under no circumstances should estimates for proved undeveloped reserves be attributable to any acreage for which an application of advanced recovery technique is contemplated, unless such techniques have been proved effective by actual tests in the area and in the same reservoir.

Oil Gravity	The density of oil compared to the density of water, i.e., the specific gravity of the oil. Measured in degrees A.P.I (American Petroleum Institute). Oil with a low number is less valuable than with a high number. The high number indicates a low density.
Oil in Place	Total reserves in a reservoir, including both recoverable and non-recoverable reserves.
Open Flow	The unrestricted rate of flow of a well.

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Operating Costs	The amounts paid to operate the property, not including management, general or administrative overhead costs or any taxes.
Operation	The development and production of an oil or gas property; includes pumping, storing, treating of oil, maintenance of producing facilities.
Operator	The person, whether proprietor or lessee, actually operating an oil well or lease, i.e., the member of a joint venture responsible for carrying out the exploration, development and production activities on behalf of the other partners.
Primary Reserves	The oil and gas recoverable from a well without using secondary recovery methods.
Production Payment	A right to get cash or a portion of oil production from a property until an agreed amount has been received.
Production Platform	The structure used in offshore oil production to support a drilling rig which is used to drill development wells, and to house other facilities and stores.
Production Well	A well drilled from a fixed production platform to drain the oil or gas from the reservoir during the production phase.
Prospect	A geographical area which contains sedimentary rocks and structure favorable for the presence of oil or gas.
Recoverable Reserves	The portion of the reserves of oil and gas which are estimated to be capable of being extracted and produced.

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Reservoir	A porous and permeable underground formation containing a natural accumulation of producible oil or gas that is confined by impermeable rock or water barriers and is individual and separate from other reservoirs.
Royalty	A levy imposed under the Petroleum and Natural Gas Rules, 1959 payable to the respective State or Central Government granting the lease (Central Government in case of offshore) on crude oil and natural gas obtained.
Seismic Survey	A method of survey used by an oil company in order to locate possible oil traps.
Service Well	A service well is a well drilled or completed for the purpose of supporting production in an existing field. Wells in this class are drilled for specific purposes such as, gas injection (natural gas, propane, butane, or flue gas), water injection, steam injection, air injection, polymer injection, salt-water disposal, water supply for injection, observation, or injection for combustion.
Spud	Making a hole to commence the drilling of a well.
Structure	An underground geological feature capable of forming a reservoir for oil and gas.
Stratigraphic test well	A stratigraphic test is a drilling effort, geologically directed, to obtain information pertaining to a specific geologic condition. Such wells customarily are drilled without the intention of being completed for hydrocarbon production. The classification also includes tests identified as core tests

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and all types of expendable holes related to hydrocarbon exploration. Stratigraphic test wells (sometimes called expendable wells) are classified as follows:

- Exploratory-type stratigraphic test well:
A stratigraphic test well not drilled in a proved area.
- Development-type stratigraphic test well:
A stratigraphic test well drilled in a proved area.

Successful Efforts Method (SEM)

Under the successful efforts method, generally only those costs that lead directly to the discovery, acquisition, or development of specific, discrete oil and gas reserves are capitalised and become part of the capitalised costs of the cost centre. Costs that are known at the time of incurrence to fail to meet this criterion are generally charged to expense in the period they are incurred. When the outcome of such costs is unknown at the time they are incurred, they are recorded as capital work-in-progress and written off when the costs are determined to be non-productive. (Refer Annexure II).

Support Equipment and Facilities

Equipment and facilities of the nature of service units, camp facilities go downs (for stores and spares), workshops (for equipment repairs) transport services (trucks and helicopters), catering facilities and drilling and seismic equipment.

Tangible Costs

The cost of equipment or items having a salvage value, when the well ceases production, and their initial installing costs. These Costs include:

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- Surface casing (even though the casing is permanently cemented and unsalvageable).
- Well casing and tubing.
- Stabilizers, centralizers and other down hole equipment.
- Pumping unit, treaters and separators.
- Wellhead or Christmas tree.
- Salt water disposal equipment (including cost of disposal well).
- Recycling equipment including flowlines.
- Production tank battery including labour costs to build.
- Construction of turn-around pad at tank battery with additional overflow pits.

Tangible Well and Field Equipment

Tangible well and field equipment includes subsurface equipment in successful wells (casing, tubing and subsurface valves, etc.), surface equipment (pumps, flow lines, etc.) and all other equipment serving the producing location including but not limited to separators, heaters, measurement devices, engines, storage tanks, buildings, pipelines or gathering lines, etc.

Ultimate Recoverable Reserves

Crude oil and gas reserves that can be produced from existing facilities plus secondary recovery methods.

Unit of Production (UoP) Method

The method of depreciation (depletion) under which depreciation (depletion) is calculated on the basis of the number of

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	production or similar units expected to be obtained from the assets by the enterprise.
Unproven Area	An area in which no wells have been drilled.
Upstream	The exploration, development and production activities of an oil company.
Water Injection Well	A well through which water is introduced into a reservoir to increase oil production from other wells.
Wildcat	An exploration well drilled in an unproved territory, i.e., without complete knowledge of the geology of the locality.
Work Over	Remedial work to the equipment within a well, the well pipework or relating to attempts to increase the rate of flow.

Abbreviations

AFE	Authorisation For Expenditure
BS&W	Base Sediment and Water
CTF	Central Tank Farm
DD&A	Depletion, Depreciation and Amortisation
DGH	Director General of Hydrocarbons
DPR	Drilling Parameter Recorder
DGMS	Directorate General of Mines Safety
DGCA	Director General of Civil Aviation
E&P	Exploration and Production
EPS	Engineering Prototype System
ESP	Electric Submersible Pump
ETP	Effluent Treatment plant
G&G	Geological and Geophysical
GGs	Group Gathering Stations
IMR	Inspection, Maintenance and Repair
JIB	Joint Interest Billing
JOA	Joint Operating Agreement
MSV	Multi Support Vessel
OBG	Over Burden Gradient
OISD	Oil Industry Safety Directorate

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OSV	Off -shore Support Vessel
NELP	New Exploration Licensing Policy
PSC	Production Sharing Contract
SRP	Sucker Rod Pump
SHP	Subsurface Hydraulic Pumping
WSS	Well Stimulation Services

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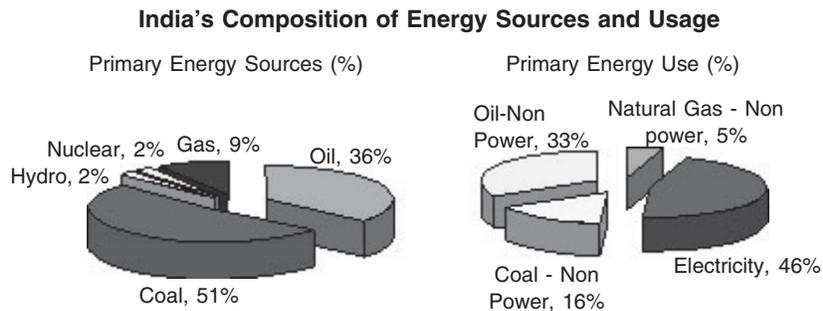
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Chapter 1

Introduction

Importance of the Petroleum Industry

1.1 Petroleum Sector plays a vital role in the economic growth of the Country, as economy is more dependent on petroleum products in day-to-day life. Out of the total energy mix of oil, natural gas, coal, hydroelectric and nuclear/ others, the Petroleum component occupies a major share in the total mix.



Source : Planning Commission of India, 2006

1.2 Petroleum has emerged as the world's most useful source of energy and a vital commodity in international market. The use of crude oil as a source of energy started around 1890 only. Till early forties, demand of petroleum products was low but with world wide growth of industry there was a sudden shift in favour of petroleum as energy source as compared to coal. Major expansion and development in automobile industry also took place during this period. Oil dominated as a source of energy for transportation, electricity generation and heating of buildings. It has also become essential as a petrochemical feed stock.

1.3 The demand for the petroleum products is increasing year by year thereby putting pressure on exploration and production of crude oil and refining and marketing of petroleum products. The increasing trend in the population and growth in the individual

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consumption has put more pressure in terms of demand for petroleum products. With economic growth and modernization, the demand for petroleum products is expected to rise further.

1.4 The Oil sector has two major activities - Exploration and Production (E&P) of crude oil and gas is an upstream activity while refining, distribution and marketing are classified as downstream activities. In India, the operations of petroleum companies can be grouped into:

- (i) Exploration and Production
- (ii) Refining and Marketing
- (iii) Pure Refining
- (iv) Pure Marketing.

The share of petroleum products and natural gas in the total energy consumption has been increasing over the years. The country is heavily dependent on import of crude oil and this dependence will increase in the years to come.

Exploration and Production (E&P)

1.5 Exploration and Production refers to exploration for underground reservoirs of oil and gas, and production of the discovered oil and gas using drilled wells through which the reservoir's oil, gas, and water are brought to the surface and separated. The E&P activities are also called upstream activities.

1.6 The principal activities involved in E&P are undertaking seismic surveys, drilling exploratory and appraisal wells, economic evaluation of the project, entering into agreements with the State, formulation of field development and production plan, production, sale and decommissioning of the wells and facilities.

Refining

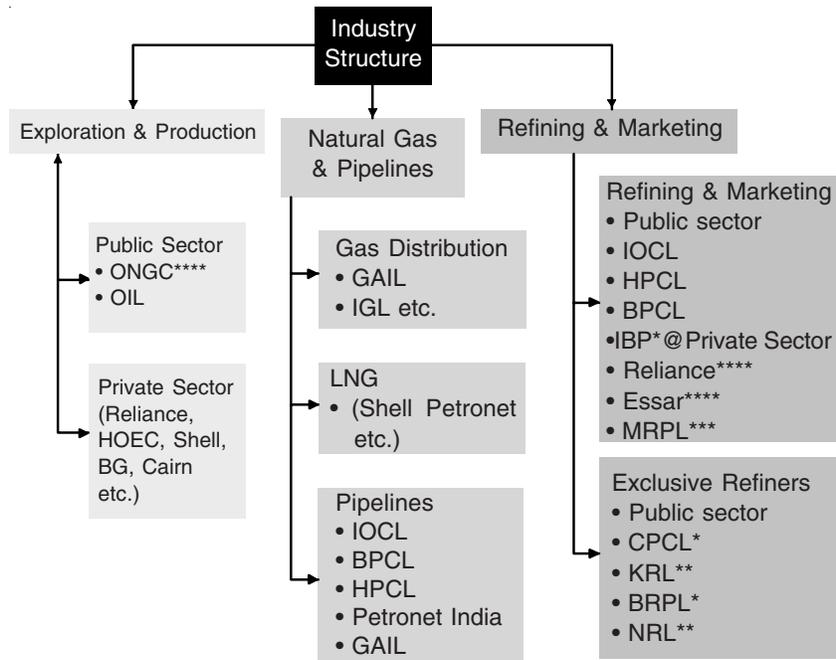
1.7 Refining activity involves receiving the crude through pipelines/ coastal tankers from the indigenous/ import destination, for refining the crude into different products at different temperature on the basis of demand/ requirement of respective product. Refining

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is an important activity since the crude has to be refined into different products for the final use of products by the consumers. India can perhaps claim to have established one of the earliest refineries in the World.

Marketing

1.8 Marketing activity involves the process of receiving the finished products or refined crude oil products, through pipeline, costal tankers, rail wagons and tank trucks for storing the products in the Installation/ Terminal/ Depot for onward distribution to final consumers. The marketing activity comes as a last but not the least activity in the chain of production, refining, marketing and distribution of petroleum products. The activity involving refining of the crude oil and that involved in marketing and distribution of refined petroleum products are also called downstream activities.



* Majority stake acquired by IOCL
 ** Majority stake acquired by BPCL
 *** Only refining company. Majority stake acquired by ONGC
 **** Marketing rights available for petroleum products
 @ Exclusive marketing company.

Characteristics of E&P Industry

1.9 The exploration, development and production of oil and gas is together also referred to as the extractive industry. The extractive industry has the following characteristics:

- Substantial Business Risks
 - ◆ Exploratory Business-including offshore leases-risks of non discovery of reserves in any one location.
 - ◆ Subject to rapid market changes in supply and demand.
 - ◆ Significant environmental risks.
 - ◆ Companies must recoup enough products from successful ventures to recoup investment in dry holes as well as overhead.
- Capital Intensive
 - ◆ Significant upfront capital cash outlays yield recovery over long-term.
 - ◆ Capital expenditures do not always result in economically viable wells.
- Highly Regulated Operations
 - ◆ Rights for exploring mineral interests are given by the government.
 - ◆ The manner of protecting the environment is highly regulated.
- Unconventional Accounting
 - ◆ No relationship between costs and underlying assets. In most industries, at the date an asset is acquired, its value exactly equals its cost whereas in oil and gas exploration, the underlying value of the oil and gas reserves has no correlation exploration.

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- ◆ Matching concept not adhered to. with the cost of
- ◆ Most expenditures produce no assets.
- ◆ Value of discoveries is recognised over time as hydrocarbons are produced long after the economic event giving rise to them has taken place.

Evolution of E&P Industry in India

1.10 The E&P industry in India is more than a century old. What started off as a trickle from one small oil field in the rain forests of upper Assam has today become a major activity in several areas of on land and offshore India.

1.11 The Petroleum Exploration and Exploitation activities were carried out by the two National Oil Companies (NOCs) viz., Oil and Natural Gas Corporation Ltd. (ONGC) and Oil India Ltd. (OIL). However, with the phenomenal increase in the consumption of petroleum products, the gap between domestic supply and demand has been ever increasing. To diminish this gap, the industry was partially opened to the private sector in the 1980s when some foreign oil companies were invited to augment the exploratory efforts, in the offshore areas. This was followed by the liberalisation of policies in 1991 when sedimentary basins were also opened to domestic and foreign private companies. Consequently several exploration blocks and some small and medium sized discovered fields were offered to private and joint venture companies through various bidding rounds. Due to the spurt in activities in the upstream sector, a regulatory body, Directorate General of Hydrocarbons (DGH) was set up in 1993, to oversee the exploratory and development activities of oil companies. The Government has enacted following Acts for regulation of activities of oil companies:

- The Oilfields (Regulation and Development) Act, 1948: It provides for the regulation of oilfields and development of mineral oil resources.
- The Petroleum and Natural Gas Rules, 1959: It specifies the Rules made by the Central Government for regulating the

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grant of exploration licenses in mining leases in respect of petroleum and natural gas which belongs to government and for conservation and development thereof.

- The Oil Industries Development Act, 1974: It provides for provisions relating to payment of cess by E&P companies.

1.12 Today, the major trends in the Indian E&P industry are towards privatisation and globalisation of resources looking at technology to improve the finding and recovery of oil. India is heavily dependent on imports to meet the rapidly growing demand for petroleum products. It is evident that vast amounts of capital investments are necessary to substantially augment the exploration efforts. With this background, the Government formulated a New Exploration Licensing Policy (NELP) to provide a level playing field in which all parties can compete on equal terms for the award of exploration acreage. Till date, five rounds of bidding and allocation of blocks under NELP have taken place. The sixth round of bidding under NELP is in the process.

Scope of the Technical Guide

1.13 The Technical Guide provides an insight with regard to:

- Exploration and Production activities
- Internal audit of Exploration and Production activities.

The Technical Guide will be useful to the readers in understanding various technical aspects of the E and P industry as also the significant aspects of internal audit in this Industry. Since the size, functioning and nature of activities may vary from one company to another, the Guide cannot cover all intricacies that may be involved in all practical situations. The various aspects/principles enunciated in the Guide, therefore, might require appropriate modification/adjustments depending on size, function and nature of activities of a company under audit. Further, the Guide also does not cover the routine aspects of internal audit which are common to almost all types of industries, such as, payroll, sales promotions, debtors, creditors, etc.

Chapter 2

Technical Aspects in Exploration and Production (E&P) Industry

Exploration and Production (E&P) Activities

2.1 The operations carried out by any upstream oil and gas companies can be segregated into acquisition, exploration, development and production. Costs incurred in oil and gas producing activities can accordingly be classified into the following six major categories:

- Acquisition of Property
- Exploration and appraisal
- Development
- Production
- Support facilities and equipment
- Abandonment and surrender of properties.

Acquisition of Property

Activities

2.2 Before an oil company decides to acquire a block/ acreage, it usually evaluates areas where oil and gas reservoirs might be economically discovered and developed. After suitable areas have been identified, the oil company approaches the owner who owns the rights to oil and gas in these areas for exploration, development and production of the underground minerals on the property.

2.3 The acquisition phase involves the activities related to obtaining legal rights to explore for, develop, and produce wasting resources on a mineral property. Legal rights may be acquired by:

- (a) Purchasing of minerals (outright ownership);

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- (b) Obtaining a lease or concession;
- (c) Entering into a production sharing contract* (or Production Sharing Agreement);
- (d) Entering into a joint venture or a farm-in/ farm-out arrangement; and
- (e) Entering into a service contract (also called a service agreement or risk service contract).

2.4 In India, all mineral rights are owned by the Government of India. The oil companies enter into a Production Sharing Contract (PSC) with the Government of India for specified blocks. Pursuant to the PSC, an oil company wishing to undertake survey and exploration activities has to initially obtain a Petroleum Exploration License (PEL) or a Letter of Authority (LOA). PELs are usually granted for six years and can be renewed for a further period of six years. A Mining Lease (ML) is required by those enterprises that are desirous of engaging in development and production activities. Whilst the PEL/ LOA and the ML are granted by the respective State Governments for onshore E&P activities, the Central Government is the granting authority for offshore E&P activities.

Costs

2.5 These are the costs incurred in acquiring the right to explore, drill and produce oil and natural gas. They include lease bonus, broker's fees, legal costs and all other costs incurred in obtaining a mineral lease. They also include the cost incurred for temporary occupation of the land including crop compensations paid to the farmers.

Exploration and Appraisal

Activities

2.6 After the acquisition of land, oil companies generally perform Geological and Geophysical (G&G) works to evaluate the likelihood

* The concept of Production Sharing Contracts has been explained later.

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of those specific areas containing oil or gas reserves. This may include site surveys, seismic studies, including exploratory drilling. If the study of the seismic survey indicates that the structure will yield hydrocarbons, the exploration Company starts drilling an exploratory well in the chosen site. The results of the exploration activity could be a discovery. The reserves of oil or gas estimates at this stage may be proved or unproved. The estimates are further confirmed and the commercial quantities are determined by the appraisal activity.

2.7 Evaluation or appraisal means determining the technical feasibility and commercial viability of mineral deposits that have been found through exploration. After an exploratory well (or more than one exploratory well) has been drilled into a reservoir and has resulted in the discovery of oil and/ or gas reserves, additional wells, known as appraisal wells, may be drilled to gain information about the size and characteristics of the reservoir, to help in assessing its commercial potential, and to better estimate the recoverable reserves. In addition to the drilling of appraisal wells, the appraisal phase includes:

- (a) Carrying out detailed engineering studies to determine how best the reservoir can be developed to obtain maximum recovery;
- (b) Surveying transportation and infrastructure requirements;
- (c) Market and finance studies; and
- (d) Carrying out detailed economic evaluations to determine whether development of the reserves is commercially justified. Often the establishment of the commercially recoverable quantities of oil or gas determines the successful conclusion of an exploration programme. In other words, till the establishment of the commercial oil or gas, the exploration activity is presumed to be unsuccessful. The decision to develop a field or reservoir is taken only after the establishment of commercially recoverable reserves.

Costs

2.8 Principal types of exploration costs are:

- (i) G&G costs including costs incurred to gain access to properties to conduct G&G studies, salaries and expenses of geologists, geophysical crews, etc.
- (ii) Dry hole and bottom hole contribution.
- (iii) Drilling and equipping exploratory and exploratory type stratigraphic wells.
- (iv) Carrying and retaining costs of undeveloped property such as delay rentals, property taxes, etc.
- (v) Depreciation and applicable operating cost of support equipment and facilities.

Development

Activities

2.9 Development is the establishment of access to the mineral reserves and other preparations for commercial production. In the petroleum industry, the development phase involves:

- Gaining access to and preparing well locations for drilling, clearing ground, draining, building roads, and relocating public roads, gas lines and power lines to develop reserves;
- Constructing platforms or preparing drill sites;
- Drilling wells to gain access to and produce the oil and gas reserves; and
- Installing equipment and facilities necessary for getting the oil and gas to the surface and for handling, storing and processing or treating the oil and gas to make them marketable or transportable. The equipment involved includes such items as flow lines to get the product from the well to

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treating equipment or to a storage area or gathering point for transportation away from the production site, heaters, treaters, separators, storage tanks and waste disposal systems.

Costs

2.10 The principal types of development costs are:

- (i) Costs incurred to gain access and to prepare well locations for drilling, clearing the ground, drainage, building roads, etc.
- (ii) Costs incurred for drilling and equipping development wells including; development type stratigraphic wells, cost of platforms and well equipment.
- (iii) Costs incurred for acquiring, constructing and installing production facilities.
- (iv) Costs incurred for providing improved recovery systems.
- (v) Depreciation and applicable operating costs of support equipment and facilities.

Production

Activities

2.11 The production phase involves the extraction of the natural resources from the earth and the related processes necessary to make the produced resource marketable or transportable. These activities include lifting the oil or gas to the surface, gathering production from individual wells to a common point in the field or on the mineral property, field treating, field processing and storage of the production in field storage tanks. The production function comes to a stop when the hydrocarbons enter the delivery point, i.e., at the outlet well on the production storage tank or at the first point at which oil, gas or gas liquids are delivered to a main pipeline, a common carrier, refineries or a marine terminal.

Costs

2.12 These costs are incurred to operate and maintain the enterprise's wells and related equipment facilities and other costs and include:

- (i) Labour costs to operate wells and equipment.
- (ii) Repair and maintenance, work over costs.
- (iii) Production taxes such as cess, royalty, etc.
- (iv) Costs of materials, supplies, fuel and other services utilised in operating the wells related equipment and facilities.
- (v) Insurance on property.

Support Facilities and Equipment

2.13 In order to be able to carry out the aforesaid activities, all oil producing companies require support equipment and facilities. These would be in the nature of field service units, camp facilities, godowns (for stores and spares), workshops (for equipment repairs), transport services (trucks, helicopters for offshore rigs), catering facilities, etc.

2.14 The expenses relating to the operation of such support facilities and activities are allocated to those activities receiving the benefits. Thus, costs of depreciation, taxes, repairs and operation of equipment (such as, seismic equipment, construction and grading equipment, drilling equipment, vehicles, repair shops, warehouses, supply points, camps and division, district, or field offices) may relate in whole or in part to exploration, development or production activities and would accordingly be allocated to these activities on an appropriate basis.

Abandonment and Surrender of Properties

2.15 Abandonment is the term most widely used to describe the process of plugging and abandoning wells, of dismantlement of wellheads, of production and transport facilities and of restoration

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of producing areas in accordance with license requirements and the relevant legislation. Thus, abandonment relates to the discontinuation of all operations and surrendering of all interest in a property. The more significant costs incurred by oil and gas producing companies relate to offshore, remote and environmentally sensitive areas where site restoration and related costs original cost of the producing facilities.

Production Sharing Contract and Joint Operative Agreements

Production Sharing Contract (PSC)

2.16 In the petroleum industry today, the most common arrangement by which enterprises obtain the rights to explore, develop and produce oil and gas is the Production Sharing Contract (PSC), sometimes called a Production Sharing Agreement. Although the precise form and content of PSCs vary from country to country, and even within a single country, the following are some of the commonly found features of a PSC:

- (a) The national Government retains ownership of the reserves and grants the petroleum enterprise (the “contractor”) the right to explore, develop and produce the reserves.
- (b) The national oil company of the host country is directly involved in management of operations. The contractor is responsible to the national oil company for carrying out operations in accordance with contract terms.
- (c) The contractor may be required to pay a bonus at the time the PSC is entered into, or production bonuses as oil is produced.
- (d) The contractor provides all financing and technology necessary to carry out operations and pays all of the costs specified in the PSC.
- (e) The contract frequently calls for the contractor to provide infrastructure development to the host country. For example,

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the contractor may be required to build roads, water systems, hospitals, schools and other facilities before or during the course of operations. Additionally, the contractor is typically required to provide training to the personnel of the Government, the national oil company of the host country, and those of the venture partners. The costs associated with infrastructure development and personnel training may or may not be recoverable from future production.

- (f) The contract may specify the amount of money that must be spent during the exploration phase and may set a time limit before which the work must be done. If the work is not performed, the contract may require that the unspent amount must be paid in cash to the Government.
- (g) The contractor is required typically to bear all the risks related to exploration and, sometimes, to development.
- (h) The equipment that is imported or acquired for development and production activities becomes the property of the national oil company of the host country, often, at the time the equipment is landed or acquired.
- (i) The contractor must submit annual work programs and budgets for approval by the national oil company of the host country.
- (j) A royalty may be payable to the host Government.
- (k) The operating costs and specified exploration and development costs are recoverable out of a specified percentage of production revenues after the royalty payment each year. The oil representing the costs to be recovered is referred to as *Cost Recovery Oil*.
- (l) The revenues remaining after royalty and cost recovery are called *Profit Oil*. The Profit Oil is split between the Government and the contractor on a predetermined basis.
- (m) The contractor is usually subject to income tax. Income, for tax purposes, is determined in accordance with the

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Government's policies. In many cases, there is no income tax *per se*; rather a levy is included in the Government's share of production, much like a royalty. Still in other cases, the agreement may provide for a tax on the contractor's profits, with the tax being collected by the Government in kind.

- (n) Many countries prohibit the contractor from obtaining a direct ownership interest in reserves. Contractors may have an entitlement interest, i.e., an interest in the reserves as a consequence of Cost Recovery Oil and Profit Oil.

Most of the above features form part of Production Sharing Contracts entered in India.

Joint Operating Agreement

2.17 A Joint Operating Agreement (JOA) is an agreement between two or more lease owners providing for the operation of a lease in which one operates the lease with all owners sharing the cost. Under the agreement, one of the working interest members is designated as the Operator to manage the development and operation of the joint venture's properties in an efficient manner. The JOA sets out the duties, obligations, rights and responsibilities of the working interest owners to the joint venture operations and specifies how costs and benefits are to be shared.

Chapter 3

Internal Audit of the Joint Operating Agreement

Operator

3.1 The members of the joint ventures collectively (referred to as “Consortium”) enter into a “Production Sharing Contract” (PSC) with the host Government. The consortium members enter into an agreement among themselves to specify the terms of joint arrangement referred to as “Joint Operating Agreement” (JOA) which determines all significant matters of operating and financial policy. Under the JOA, an Operator is elected to manage the operations and all members share the costs. The Operator forwards various statements to the other members for accounting of their share of the costs incurred for managing the operations.

3.2 An Operator is a person, whether proprietor or lessee, actually operating a mine or oil well or lease, i.e., the member of a joint venture responsible for carrying out the exploration, development and production activities on behalf of the other partners. A person is designated as an Operator as per the provisions of the PSC. The duties, roles and responsibilities of the Operator are provided in the PSC as well as the Joint Operating Agreement.

Work Programme and Budgets and Approval for Expenditure

3.3 The Work Programmes and Budgets are prepared for carrying the joint operations as per the provisions and timelines stipulated in the PSC/ JOA. Each Work Programme sets out, in reasonable details, the work proposed to be carried out, principal materials to be purchased and facilities to be erected for the joint operations for the period to which such Work Program applies. It is accompanied by a Budget showing an estimate of the expenditures and funds required. The Work Programme and Budget

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is approved by the Operating Committee and the Management Committee.

3.4 The following should be verified for this purpose:

- Whether Work Programmes and Budgets are submitted to the Operating Committee and the Management Committee as per the timelines stipulated in the PSC/ JOA.
- Whether timely and adequate inputs are provided to the Finance Department, as per the Work Programme, for preparation of Budget and Work Programme and in line with the PSC/ Development Plan.
- Whether budgets are revised when there is a change in the planned activity and necessary approvals are taken.
- The basis of preparation of Work Programme and Budgets - its accuracy, completeness and authenticity.
- Whether the budgets are reviewed and approved at the appropriate level internally, before being forwarded for approval to the Operating Committee/Management Committee.
- Whether the budgets vs. actuals are monitored on a periodic basis and corrective actions are taken wherever required.
- Whether periodic statements, e.g., Statement of Costs, Expenditures and Receipts, etc., are furnished as required by the PSC as per the timelines stipulated in the PSC.
- Whether any activity is undertaken by the Operator which is beyond the approved Work Programmes and Budgets.
- Whether the approval of the Operating Committee and the Management Committee is obtained, in case, actual expenses exceed budgeted expenses for each line item of the budget at the point of time stipulated in the PSC and the JOA.

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- Whether timely replies are being submitted to the venture partners/ Directorate General of Hydrocarbons (DGH) for their queries on budgets.

Authorisation For Expenditure (AFE)

3.5 Prior to incurring any expenditure or incurring any commitment for work, the Operator prepares an Authorisation for Expenditure (AFE). The Joint Operating Agreements contains provisions for seeking approval of venture partners before undertaking certain specified activities through Authorisation for Expenditures (AFE). If the Operating Committee approves an AFE for the work, the Operator is authorized to conduct the work under the terms of the Operating Agreement. The AFE proposed by the Operator usually contains the particulars of the work with reference to the approved Work Program and Budget, best estimate of the total funds, proposed work schedule, timetable of expenditure and any other supporting information as necessary for any decision.

3.6 The following should be verified for this purpose:

- Whether AFEs are prepared for all activities as required by the Joint Operating Agreements, e.g., seismic acquisition and processing, exploration and appraisal well, development well, deepening of any well below original total depth, involving exploratory footage, platform or group of platforms, subsea pipeline/ major pipeline, activities exceeding specified monetary limits.
- Whether the AFEs are complete and correct and in line with the approved budgets.
- Whether the AFEs are reviewed and approved at the appropriate level before being forwarded for approval of the joint venture partners.
- Whether venture partners' approvals are sought on the AFEs prior to commencement of the activity.
- Whether AFEs vs. actual details are submitted to the venture partners as per the provisions of the JOA.

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- Whether a supplementary AFE is raised when it is anticipated that an AFE will be over spent by the specified percentage as per the provisions of the JOA.

Maintenance of Working Interest

3.7 Working Interest refers to the a Party's undivided interest in certain rights and obligations under the Operating Agreement in Joint Property and certain rights and obligations as per the provisions of the PSC and JOA. The Working Interest is particularly important since the share of expenses and income are allocated on the basis of the defined percentage.

3.8 The following should be verified for this purpose:

- Whether the Working Interests are updated as per the PSC and JOA for the purpose of billing.
- Whether the Working Interests are valid and authorised.
- Whether maintenance of Working Interests is restricted in the accounting system.
- Whether the log of Working Interests is reviewed on a periodic basis.

Cash Call and Joint Interest Billing

3.9 In order to fund the operations of the joint venture, the Operator raises cash call on other venture partner(s) in accordance with their participating interest. Cash calls are raised for the expenditures (as per the approved Work Programmes, Budgets and AFEs.) and for currencies, in which the money is spent. A cash call is the Operator's estimate of the amount required from the Parties to enable the operator to make cash payments less cash receipts in the relevant period.

3.10 The following should be verified for this purpose:

- Whether cash calls have been raised on all the venture

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partners in accordance with the timelines stipulated in the Joint Operating Agreement for all expenditures pertaining to joint operations.

- Whether fund requirements for raising cash call have been estimated on the basis of inputs received from the concerned departments.
- Whether cash calls are raised for expenditures as per the approved work programmes and budgets.
- Whether cash call statement is accompanied by cash reconciliation statement for the previous month and excess/shortage of the previous month has been adjusted in the current cash call.
- Whether cash call statement contains the necessary information as required by the Joint Operating Agreement, e.g., estimation of funds budget line item wise for the next month, estimate of fund requirement for subsequent two months, for information purposes.
- Whether cash call statements are reviewed and approved at the appropriate level before being forwarded for approval.
- Whether the daily bank balance are reviewed to verify that funds are not lying idle and cash calls are not excessive.
- Whether there is any commingling of joint funds with the Operator's own funds and whether a separate bank account is being maintained by the Operator and all receipts and payments related to the joint operations are made through this account.
- Whether interest is levied for delay in payments by any of the venture partners as per the Joint Operating Agreement.
- Nature of clarifications sought by the Non-Operators on the cash call statement and the reasons for the same.

Special Advance from Venture Partners

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3.11 In respect of the special advance from the venture partners, the following would need to be verified:

- Whether for any unforeseen activity not covered by the cash call, special advances are being sought from the non-operators.
- Whether timely information for new activity is received from the concerned technical department to raise the special advance from the venture partners.
- Whether any unforeseen activity is within the preview of the approved Work Programme and Budget.
- Whether money from the other venture partners was received within the time stipulated in the JOA.
- Whether special advances are reviewed and approved at the appropriate level before being forwarded to the venture partners.
- Whether interest is levied for delay in payments by any venture partner as per the Joint Operating Agreement.

Revised Cash Call Statement

3.12 In respect of the revised cash call statement, the internal auditor would verify:

- Number of disputes raised by the Non-Operators on the cash calls and the reasons for the same.
- Number of times cash call has been revised pursuant to the notice received from the Non-Operator and reasons for the same.
- Whether adequate discussions have been done before revising the cash call statement and reasons for revision are documented.
- Whether cash call has been revised within the time period stipulated in the Joint Operating Agreement.

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- Whether revised cash call has been approved by the appropriate authority.

Refund of Excess Cash

3.13 The internal auditor's procedures would include:

- Checking the number of times the refund of excess cash has been sought by the Non-Operators.
- Verifying the reasons for maintaining excess cash balance than the requirements and that they were used to address the same.
- Verifying whether the refund of excess cash has been approved by an appropriate authority.

Interest on Funds Lying in Joint Bank Accounts

3.14 Any interest received from interest bearing joint bank account containing funds received from the joint venture partners is credited to the joint venture partners on an equitable basis or as per the terms of JOA, taking into consideration the date of funding by each partner to the joint accounts in proportion to the total funding into the joint account. The internal auditor should verify whether adequate details for interest allocations are submitted to the venture partners.

Default Notice and Levy of Interest

3.15 The internal auditor should verify whether:

- A default notice has been served on the partner in default of payment of cash call within the timelines stipulated in the Joint Operating Agreement.
- Along with the default notice, notices have been served on other venture partners for payment of amounts in default.
- Funds have been received from the non-defaulting venture partners within the timelines specified as per the JOA.

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- Reasons for default by the venture partners should also be verified.
- The defaulting venture partner has paid the amount in default along with interest and whether interest calculations have been verified by the Finance Department.
- Funds received from defaulting venture partners along with interest have been appropriately allocated between the non-defaulting venture partners and remitted.

Joint Interest Billing (JIB) Statement

3.16 As per the provisions of the JOA, the Operator is required to send a Billing Statement to the Non-Operator for all disbursements and all receipts of the Joint Account during the month, year to date and inception to date, analysed as appropriate between each AFE. The Billing Statement should be sufficiently detailed or contain such explanation as is necessary to enable comparison with the appropriate item in the Work Programme and Budget.

3.17 The following should be verified for this purpose:

- Whether JIB Statements are prepared and forwarded to the joint venture partners within the time specified in the JOA.
- Whether JIB Statement contains the information relating to the funds advanced by the partner in each currency, details of expenses and credits, along with a reconciliation of the funds with the expenditures made.
- The accuracy and completeness of the Billing Statements from the underlying records e.g., ledgers, etc.
- Whether the Billing Statements agree with the block trial balances.
- The accuracy and completeness of the Cash Reconciliation Statements prepared along with the Billing Statements.
- Whether the Billing Statements have been reviewed and approved before being sent to the venture partners.

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- Whether the timely replies have been submitted to the venture partners for their queries on the Billing Statements.

Expenses and Payables

Accounts Payable

3.18 The following aspects need to be verified: Whether the receipt of goods/ services is supported by appropriate the documents, e.g., Goods Receipt Note (GRN) for goods, acknowledgement of receipt of services from the user department.

- A sample of invoices processed with respect to the following:
 - ♦ Purchase Order/ Contract
 - ♦ Goods Receipt Note/ Services received
 - ♦ Supporting documents
 - ♦ Appropriate approvals.
- For invoices of consultants, verify the following additional documents:
 - ♦ Day rate
 - ♦ Period
 - ♦ Nature of engagement
 - ♦ Block and activity.
- Whether foreign currency transactions have been accounted for as per the provisions of the PSC and the JOA.
- Whether the General Ledger Account Code and the allocation details of the block are correct.
- Whether deductions have been made for any delayed supply/ execution of services as per the terms of the Purchase Order.

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- Whether any other deduction to be made as per the terms of the Purchase Order has been taken into consideration at the time of processing of invoice.
- Whether appropriate discounts have been avoided from the suppliers as per the terms of contract.
- Whether recoveries have been made from the suppliers for the services provided to them such as helicopter/ telecommunications/ accommodations, etc.
- Whether tax deducted at source is correct as per the provisions of the Income-tax Act, 1961 for the Indian vendors and as per the tax order obtained for the foreign vendors.
- Applicability of service tax/ work contract tax and the deduction of the same from the invoice at the time of processing.
- Whether contracts which have been executed are closed on timely basis.

In many cases, there may be a provision for the parties to the consortium to provide services/ material to the Joint Venture. In such cases, the internal auditor should examine the contract/ agreement/ MoU between the parties and the Joint Venture for supply of such services/ material.

The internal auditor should also verify the chargeability of all imported items to the Joint Venture blocks *vis-à-vis* the purposes and names and blocks for which the item were imported as mentioned in the Essentiality Certificate issued by the DGM. If the items were not imported for a particular block, the expenditure should not be changed to the block and *vice versa*.

Review of Vendor Balances

3.19 This would include verifying:

- Whether vendor balances are periodically reviewed for the following:

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- ◆ Any debit balances in the Creditors' account and the reasons for the balances.
- ◆ Duplicate vendor codes, if any.
- ◆ Any advances paid to the vendors pending to be adjusted.
- Whether balance confirmations are sought from the vendors on a periodic basis for reconciliation purposes.
- On a sample basis, the reconciliation obtained from the vendor and the necessary adjustment entries passed in the books of account after obtaining necessary approvals.
- Whether any disputed amount in the vendor reconciliation process has been appropriately followed with the vendor.

Allocation of Expenses to Respective Blocks

3.20 General and administrative costs are expenditures incurred on general administration and management primarily and principally relate to petroleum operations in or in connection with the contract area and usually include main office, field office, etc. The allocation of expenses become applicable in those cases where the company has multiple blocks and certain common expenses are incurred by the company for all the blocks. In such cases, guidelines are formed by the company for allocation of the expenses on a consistent basis.

3.21 The following should be verified in such cases:

- Whether expenses have been appropriately allocated on a consistent basis as per the internal guidelines of the PSA/JOA.
- Whether all direct chargeable expenditures are identified and charged to respective blocks and that no expenditures have been charged to JV blocks which are not related to a particular JV.

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- Whether the accounting entry for allocation has been authorised.
- Whether in the absence of a specific accounting policy in the JV, the guidance is drawn from the parent company's accounting policy.
- Whether the overheads of the parent company of the operator have been appropriately allocated between different blocks, in terms of JOA.
- Whether the time sheet is duly filled by each employee with the particulars of the activity performed during the month for the purpose of allocation of expenses respective blocks.
- Whether the time sheet filled by the employees has been authorized by the respective functional head and manhours are appropriately allocated as per time sheet.

Banking Activities

3.22 The following should be verified for this purpose:

- Whether the invoices are released for payment only by the due date of payment.
- Whether payment of invoices has been authorized by the appropriate authority.
- Whether bank reconciliation is carried out on periodic basis for all bank accounts and is appropriately reviewed.
- Whether details of the stale cheque are reviewed periodically and necessary adjustments are made.
- Whether bank guarantees received are approved and are kept in safe custody of authorized personnel.
- Whether for bank guarantees received directly from the vendor, a confirmation has been obtained from the issuing bank for the validity of the bank guarantee.

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- Whether there exist(s) a review mechanism for the validity of the bank guarantees.
- Whether before issue of bank guarantee, adequate justification is provided by the user department for the need.
- Whether the issue of bank guarantee has been authorized by the appropriate authority.
- Whether the particulars of the issue of Letter of Credit, with the justification, have been provided.
- Whether issue of Letter of Credit has been authorised by the appropriate authority.
- Whether the tax deducted at source has been deposited as per the provisions of Income-tax Act, 1961.
- The calculation and accounting entry for interest on bank deposits.
- Whether cash has been physically verified on a periodic basis by the person other than the custodian of cash.
- Cash and fidelity insurance policies undertaken.

Procurement

Indent/ Purchase Requisition Process

3.23 The following should be verified for this purpose:

- Whether the material requirement estimation process is adequately defined.
- Whether there is a system of checking the position of the existing stock of a material before a requisition order is placed.
- Whether indent raised by the user is complete and includes the complete specifications.

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- Whether the indent is approved by an appropriate authority.
- Whether there is any undue delay in taking the procurement action after the receipt of the approved indent from the concerned department. For this, in some cases the internal auditor should check whether goods are received within the time specified by the indenting department and also how the indenting department keeps track of open indents.
- Whether a quotation/ tendering process is followed as per the provisions contained in the PSC/ JOA in terms of number of quotations, value of purchases, approved vendors, etc.
- Whether a list of qualified vendor is approved by the Operating Committee as per the provisions of the PSC/ JOA and maintained by the Procurement Department.
- Whether the materials are being used as per the procurement plan in respect of PEL/ ML fields for the purpose of customs duty exemption.

Request for Quotation/ Tender

3.24 Request For Quotation (RFQ) is usually prepared as per the requirements of Indent. The internal auditor should verify:

- The completeness of RFQ and its timeliness, i.e., date of receipt of indent from the user department *vis-à-vis* date of release of RFQ.
- Whether all RFQs are monitored through unique serial number.
- Whether bidder qualification criteria is clearly defined and pre-approved by the Operating Committee or the Management Committee as per the provisions of the PSC/ JOA.
- Whether a list of qualified vendor is approved by the Operating Committee as per the provisions of the PSC/JOA and maintained by the Procurement Department.

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- Whether the List of approved vendors is periodically updated and any vendor with poor performance record is deleted from that list and all deletions to the list are approved as per the provisions of the JOA.
- Adherence to the tendering procedure as per the provisions of the PSC and JOA.

Raising of Purchase Orders

3.25 For this aspect, the internal auditor should verify:

- Whether the system of raising purchase orders and contracts comply with the laid down rules and procedures. For this, the internal auditor should also check whether:
 - ◆ Purchase orders are serially numbered.
 - ◆ Serial number of Purchase Order is linked with RFQ.
 - ◆ Amendments in terms of purchase orders have been duly approved.
 - ◆ The terms and conditions regarding price, discounts, mode of payment, terms of payment, delivery, etc., are clearly specified and are in conformity with the quotations and approval of competent authority.
 - ◆ Purchase orders contain penalty clause for delay in delivery/ poor quality of materials.
- Whether Purchase Orders are authorised by an appropriate official.
- Whether access to Purchase Order and supplier processing functions/ data is restricted to authorised personnel segregated from incompatible duties.

Supplier Supplying Customized Goods/Single Source Suppliers

3.26 The internal auditor's procedures in this regard would include:

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- Carrying out an analysis to ensure that adequate reasons exist for sourcing goods from particular suppliers.
- Verifying that periodic evaluation is carried out for each supplier with respect to the following parameters:
 - ◆ Quality of goods supplied.
 - ◆ Rejection of goods.
 - ◆ Adherence to delivery schedule.
 - ◆ Price charged *vis-à-vis* that prevalent in the market for similar goods.
 - ◆ Credit period extended *vis-à-vis* that prevalent in the market.
- Verifying that adequate reasons exist for price increase and that the same have been properly documented.
- Checking that, where there is only one supplier and the requirements of the company have increased over the period, efforts are being made to develop new vendors.

Vendor Database and Performance Evaluation

3.27 The internal auditor's procedure include:

- Verifying that the vendor database, stating item wise suppliers and rates, is maintained and is kept upto date. For this, the internal auditor also needs to check whether:
 - ◆ Lists of potential suppliers for all major purchases are maintained, regularly reviewed and updated.
 - ◆ Files are maintained for all major suppliers, detailing not only the information on prices, assortment and capabilities but also details of previous experiences or related information (e.g., reliability, quality or delivery problems) and details on the financial position of the supplier.

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- ◆ The Procurement Department monitors frequency of goods returned to supplier.
- ◆ Appropriate guidelines have been established for determining the criteria to select suppliers.
- Verifying that performance of key suppliers is monitored on a periodic basis as per the guidelines framed by the Company, and corrective action is initiated by the Procurement department against suppliers with poor performance record.

Inventory Management

Material Receipt at Shorebase Stores (including rejection of material)

3.28 The following should be verified by the internal auditor for this purpose:

- Whether the system and procedures laid down by the Company are followed at the time of receipt, inspection and issue of material.
- Whether there is maintained a stores ledger for each block showing all receipts and issues of various materials along with their values.
- Whether stores originally purchased for the block/ parent company are being used by the JV or *vice versa* are being routed through such ledgers.
- Whether Customs clearance is obtained before receipt of material at the shorebase stores.
- Whether the data generated at the time of Gate Entry is complete, accurate and timely.
- Whether, in case, any material is found to be in a damaged condition, an insurance claim was lodged with the insurance company.

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- Whether the material is inspected at the time of receiving and the particulars are mentioned in the Goods Receipt Note.
- Whether the Material Tags are available with all the material stored in the warehouse.
- Whether the rejection of material is promptly and formally intimated to the Procurement department and the concerned User department.
- Whether the rejected material is stored in a separate designated warehousing location and pre-printed 'Rejected Material' tags are attached with all the rejected material.
- Reviewing and analysing the time for which rejected material is stored at Shorebase Stores before dispatching it back to the vendor.
- In case of dispatch of rejected material to the vendor, transportation/ shipment is arranged by the vendor.
- Review the inventory turnover, especially, instances of excessive and non moving inventory.

Issue of Material

3.29 Internal audit of issue of material involves, *inter alia*, the following procedures:

- Verifying that the request for issue supported with adequate documents. of materials is
- Reviewing and analysing the time taken for transferring the material from Shorebase Stores to Installation Stores.
- Verifying that at the time of receipt of material at the Rig Stores, Goods Receipt Note is prepared on a timely basis.
- Reviewing the accuracy of the Cargo Manifest. For this, the internal auditor would also verify whether the item and its quantity as mentioned in the Cargo Manifest, and the physical material received by the Rig Stores.

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- In case of short delivery of material at Rig Stores, verifying the reconciliation of short material carried out by the Shorebase Stores and Rig Stores.
- Verifying that issue of material is charged to books of account of the particular block at the time of issue of material to the User Department at the Rig.

Scrap Generation and Disposal

3.30 The internal auditor should review the following for this aspect:

- The timeliness in identification of material as scrap material. Verify that formal approval is obtained, before classifying any material as scrap material.
- That scrap material is stored in a separate warehouse location.
- That periodic review of scrap material is carried out.
- The status of scrap material as on date to ascertain to analyse the reasons for any abnormal trend in generation of scrap material.
- That the disposal of scrap material is approved by an appropriate authority.
- The process of disposal of scrap material in order to verify whether the scrap material is disposed off at optimum price and terms.
- The compliance with the terms of the Joint Operating Agreement with respect to the disposal of material.
- That necessary Customs Clearance is obtained before physical removal of scrap material from the port area.
- Completeness, accuracy and timeliness of the accounting entries passed for generation and disposal of scrap material.

Physical Verification of Inventory

3.31 For the aspect of physical verification of inventory, the internal auditor would:

- Verify whether independent physical verification of inventory is conducted as per the frequency specified in the Production Sharing Contract/Joint Operating Agreement.
- Verify whether results of physical verification are formally documented and initialled by the custodian of the department and by the personnel responsible for the physical verification.
- Review and analyse the difference between physical and book quantities of material.
- Verify the completeness, accuracy and timeliness of adjustment entries passed for variances in the physical and book quantities of material.

Secondment of Personnel

3.32 In certain cases, deployment of personnel on secondment is done to utilize the employees' expertise as also in terms of the policy of the Company. The secondment is governed by a contract. Based on the time sheet submitted by the employees, the Company raises the invoices to the Joint Venture Partners.

3.33 The following should be verified by the internal auditor:

- Contracts for the terms and conditions for secondment of personnel.
- Invoices raised for the secondment of personnel are as per the terms and conditions of the contract.
- Invoices with respect to the following:
 - ◆ Time sheet of the seconded employee
 - ◆ Rate per hour per day

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- ◆ Amount billed
- ◆ Authorisation as per the Schedule of Authority
- Receivables for receipts as per the invoices.

Non-Operator

3.34 Non-Operator is a party having an interest in a lease allows another participant to conduct the development and operation of the property in the mutual interest of all the participants.

Work Programme and Budgets

3.35 The Work Programme and Budgets prepared by the Operator, are reviewed by the Non-Operator. The following should be verified by the internal auditor for this purpose:

- Whether Work Programmes and Budgets are being submitted to the Operating Committee and the Management Committee as per the timelines stipulated in the PSC/ JOA.
- The basis of preparation of Work Programme and Budgets to check the accuracy, completeness and authenticity of such basis of preparation of Work Program and Budgets and ensuring that adequate review is carried internally before the budgets are approved by Non-Operators.
- Whether the Operator has effective mechanism for monitoring progress of Work Programme and Budgets.
- Whether periodic statements are received from the Operator for Budget vs Actual expenditures.
- Whether timely amendments are carried out to Budgets on changes in activity plan and approval of the Operating Committee and the Management Committee is sought.
- Whether any activity is undertaken by the Operator which is beyond the approved Work Programmes and Budgets.

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- The approval of the Operating Committee and the Management Committee is obtained if actual expenses exceed budgeted expenses for each line item of budget at the end of the year.

Approval For Expenditure (AFE)

3.36 AFE is raised by the Operator and forwarded to the Non-Operator for approval. For this purpose, the following should be verified:

- Whether AFE is submitted to the Joint Operating Committee and approval is obtained by the Operator before entering into any commitment or incurring any expenditure with respect to any one item in excess of the amount specified in JOA under an approved Exploration Programme/Development Programme/Production Programme and Budget.
- The completeness and correctness of the AFE to verify whether AFE is in line with the approved budgets.
- Whether AFE vs. actual details are received from the Joint Venture partner as required by JOA.
- Whether supplementary AFE is received from the Operator, when it is anticipated that AFE will be over expanded by more than such amount/ percentage as may be stipulated in the JOA and adequate justification is provided for cost overruns.

Cash Call and Joint Interest Billing

Cash Call from Operator

3.37 Cash call means any request for payment of cash made by the Operator to the parties (Non-Operator) in connection with the Joint Operations. The following should be verified by the internal auditor for this purpose:

- That the estimated amount of Cash Calls raised by the Operator is not excessive. The internal auditor should also

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review the available cash balance, estimated expenses for the relevant period and the shortfall/ excess from the previous period's cash calls.

- Daily bank balance of the Operator to verify that funds are not lying idle and cash calls are not excessive.
- That there is no commingling of joint funds with Operator-owned funds and a separate bank account is being maintained by the Operator and all receipts and payments related to the joint operations are made through this account.
- That cash calls are received on timely basis by the Operator from other joint venture partners.
- That interest is levied for delay in payments by any venture partners as per JOA.
- That wherever funds received from Non-Operators are not required immediately, excess funds are deposited in the interest bearing short term deposits by the Operator.
- That if money received against cash call from a Non-Operator exceeded its share of cash expenditures and the Non-Operator requested for refund of excess cash, whether such refund was made by the Operator within the time stipulated in the JOA.
- That Special Advance is sought by the Operator only for an unforeseen activity which was not part of the original activity plan for that month and not covered by the monthly cash call.
- That adequate details for interest allocations are submitted to venture partners.
- That in case any joint venture partner was in default for payment of its participating share of joint expenses, a written notice of default was served on such partner within the time specified in the JOA.

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- The accuracy and completeness of periodic Cash Reconciliation Statements prepared by the Operator.
- That any short/ excess as per the cash reconciliation is adjusted by the Operator in the next month cash call.

Interest on Funds Lying in Joint Bank Accounts

3.38 In this respect, the internal auditor should verify that any interest received from interest bearing joint bank account, containing funds received from the joint venture partners, is credited to the joint venture partners on an equitable basis, taking into consideration the date of funding by each partner to the joint accounts in proportion to the total funding into the joint account. The internal auditor should also verify that adequate details for interest allocations are submitted to the venture partners.

Joint Interest Billing (JIB) Statement

3.39 This refers to the billing statement received from the Operator in accordance with the Joint Operating Agreement specifying the charges and credits, i.e., cost and cost adjustments relating to the joint operations. The following should be verified for this purpose:

- Whether the JIB Statement is prepared by the Operator and forwarded to the joint venture partners within the time stipulated in the JOA.
- Whether JIB Statement contains sufficient information to understand the nature of expenditure and has reference to the Budgets and AFE.
- Whether expenditure and income as per the billing statement have been appropriately incorporated in the books of account.
- Whether the Billing Statements are reviewed by the Non-Operator for accuracy.
- The process of incorporation of JIB balances as per the books.

Chapter 4

Internal Audit of Functional Areas

4.1 The internal auditor of an upstream oil and gas company, in addition to the various aspects of the Joint Operating Agreement, also needs to devote attention to certain functional areas of the industry, such as, geological and geophysical activities, engineering and construction activities, revenue, fixed assets, etc. The internal auditor's procedures in each of these areas are discussed in the following paragraphs.

Geological and Geophysical (C&G) Activities

4.2 The following constitute the important G&G activities:

- Acquisition of data
- Processing of data
- Interpretation of data.

The internal auditor's procedures in respect of these areas are discussed in the following paragraphs.

Acquisition of Data

4.3 The internal auditor needs to:

- Ensure that existing work being done within the department is backed up by a physical plan. For this, the internal auditor should:
 - ◆ Obtain the approved copy of the annual plan and compare the same to the monthly activity report of the department.
 - ◆ Verify that there is an appropriate basis for such plans with respect to:

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- ❖ Details of initial geological survey which indicate areas where geophysical and geochemical surveys need to be done.
- ❖ An overall plan of how these areas are going to be covered and the time it shall take to do the same.
- ❖ An estimate of the number of people available within the department to carry out the work in each area.
- ❖ Correlation of all the above mentioned data in the form of a plan and decide the level of outsourcing.
- Ensure that a system to update such plans is there in the event that the original plans made were not achieved. For this:
 - Check the year to date physical results achieved against the budgeted results.
 - If there are large variations, ascertain the reasons for the same.
 - If the variations are not controllable, inquire as to the reasons for non-revision of physical targets.
- Check if there are any controls (like monthly reporting and review) within the department to confirm that:
 - ◆ The work performed during the year is within the definition of items contained in the yearly plan.
 - ◆ The work performed under each sub-component is done within the amounts specified in the annual plan.
- Verify that for AFE, approvals that have been taken and whether there is a monitoring of actual performance of work in line with the approval.

Processing and Interpretation of Data

4.4 In respect of the aspect of processing of data, the internal auditor's procedures would include the following:

- Ensuring that there is an appropriate basis for such plans and verifying the availability of the following:
 - ◆ Details of areas where Seismic/ Gravity/ Magnetic/ Vibrosis surveys are going to be done.
 - ◆ An overall plan of how much data is going to be generated from these areas and how much time it would take to process them.
 - ◆ An estimate of the number of people available within the department to carry out the work in each area.

4.5 In addition to the above, the internal auditor also needs to focus on the following aspects of G&G activities.

Conduct of Survey and Recording of Data

4.6 The following important activities should be verified by the internal auditor for this purpose:

- That proper procedure exists and is followed while deciding the type of survey (2D, 3D or 4D survey) to be done. For this, the internal auditor would:
 - ◆ Obtain the approved report prepared for deciding type of survey to be conducted.
 - ◆ Inquire into cost benefit analysis conducted for feasibility of survey (2D, 3D or 4D), if any.
 - ◆ Also, review cost benefit analysis done for the other surveys such as Geochemical survey, Reservoir Data Acquisition.
- That proper procedure have been followed for determination of number of channels required to be used, optimum depth

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determination and line kilometres to be covered, etc. and also review the basis, documentation done and back up papers in respect of these.

- Those Seismic units are optimally utilised. For this, the internal auditor would:
 - ◆ Obtain the report prepared in respect of planned utilisation of seismic units.
 - ◆ Review the variations reported and the reasons for utilisation of seismic units.
- In respect of cost of line coverage the internal auditor needs to:
 - ◆ Obtain the report for analysis of cost.
 - ◆ Ensure that analysis of cost is done with respect to quantity and quality of data collected by each field party.
- That all surveys done are properly recorded. For this, the internal auditor should:
 - ◆ Enquire the observatory reports which indicate the place of survey, time of survey and the number of data tapes, etc., prepared by the field parties and given to the data processing department.
 - ◆ Select some of these and ensure that data tapes for them are available with the department.
 - ◆ Check that all recorded data is subjected to quality check and adequately reported.
- That adequate physical security exists of the recorded data, for example,
 - ◆ Are there locks on the field lab and is there a need of a guard for the same?
 - ◆ Are there fire extinguishers in the field lab?

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- ◆ Is there a possibility of rain water coming into the lab?
- ◆ Are the tapes at the lab numbered as soon as they are recorded?

Hardware/ Software

4.7 The internal auditor should:

- Check whether the Department has any records in respect of hardware/ software under its supervision for the purpose of allocating work to different machines for processing the data.
- Check whether the equipment under supervision is physically verified every year. For this:
 - ◆ Obtain the record of physical verification of the last year and review the same for variations, if any.
 - ◆ Ascertain if all hardware/ software under supervision of the Department is adequate to meet the needs of the Department and is in working conditions. For this:
 - ❖ Ascertain if there have been time lags in the processing of data is due to shortage of processing capacity.
 - ❖ Also ascertain if any outsourcing of data processing is being done by the Department and review the reasons for the same.
 - ❖ Ascertain whether the Department is short or in excess of hardware/ software in comparison to its needs. Also ascertain if the department has kept itself updated in respect of hardware/ software technology.
 - ❖ Ascertain the need for entering into annual maintenance contract. For this, review the maintenance expenditure for the hardware/ software and the reasons for the same.

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- Ascertain if the hardware/ software have been properly maintained.
- Ascertain whether the breakdown of hardware/ software is very high and find out reasons why the Department has not entered into maintenance contracts with the OEM or other agency.

Receipt of Data and its Analysis

4.8 The internal auditor should verify whether:

- There are controls over the completeness of data received from the Data Acquisition Department. For this, the internal auditor may:
 - Obtain some data tapes sent by the field parties directly from them and review the receiving records at the processing lab to ensure that the same were also received.
 - Also review correspondence records between data processing lab and field parties to ascertain if there had been any instances where the lab had reported to field party for receipt of incomplete data.
 - Review whether the data received is properly recorded in the records of the processing centre.
- Adequate records are maintained while giving the data to users within the Department for further processing by reviewing the issue records for data tapes, for example,
 - The name of person to whom the tapes are being given.
 - The number of data tapes given.
 - Date on which the tapes are given.
 - The location and observatory report of the survey to which the tapes relate.

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- A physical verification of tapes is done on a periodical basis.
- The storage conditions in the library are appropriate and evaluate the physical security of the tapes.

In addition, ascertain what is done with spoiled tapes and review the process of their disposal. It should also be verified whether there is adequate authorisation prior to discarding/ scrapping of any tapes within the library.

Evaluation of Data and Release of Well

4.9 For this, the internal auditor should:

- Ensure that constitution of evaluation teams is as per agreed norms, i.e., each team consists of people of requisite field and experience. For this:
 - ◆ Obtain the structure of interpretation team required for the data interpretation of the surveys.
 - ◆ Obtain a list of people in the interpretation department and their qualifications.
 - ◆ Compare the two to ensure that people of all streams as required to interpret different data are present in the Interpretation Department.
- Examine whether there is any monitoring of the time taken to interpret the data given to the interpretation team and review the records maintained in this respect to ascertain major delays, if any.
- Examine the adequacy of records maintained to document discussions and conclusions of interpretation team. Such documents should indicate:
 - ◆ Constitution of the team.
 - Processing results that were analysed by them.

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- Reasons cited for release/ non-release of well for exploratory drilling.
- Ascertain whether any database/ information is maintained about unsuccessful wells and the same is used during subsequent decisions.

Performance of Drilling Services

4.10 The internal auditor's procedures would include:

- Ensuring that existing work being done within the Department is backed up by a plan.
- Ensuring that there is an appropriate basis for such plans, for example:
 - ◆ The level of work should be based on the staff strength of the Department.
 - ◆ The future projections of work in terms of physical targets for the Department should be made on the basis of historical data of previous years as well as plans received from the Exploration Group and the Operations Group both of whom need the services of Drilling.
- Verifying whether the cost of operations including labour, material, and overheads has been calculated on the basis of the physical targets to be achieved, planned after studying the above mentioned documents.
- Ensuring that drilling services are performed in an organised way. For this, the internal auditor should verify whether:
 - ◆ Weekly plans are made by drilling services regional head and co-ordinated with location personnel.
 - ◆ Data is kept and analysed in respect of time taken to respond and attend to any request for services.

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- ◆ Targets of drilling and time within which the same needs to be done are well defined for each drilling location.
- ◆ There is co-ordination with other services like exploration/ basin, cementing, well logging, etc., is done well in advance to ensure availability of their personnel where required.
- Ensuring that adequate numbers of people are present in each location to provide drilling services. For this, the internal auditor should review:
 - ◆ The annual plan of drilling services which would indicate the number and depth of wells to be drilled.
 - ◆ The number of people required for performance of such operations of drilling.
 - ◆ Based on all the above, evaluate the adequacy of the number of people at the location.
- Ensuring that the requisite machinery is available at the site.
- Ensuring availability of raw material while conducting operations. For this, he should verify:
 - ◆ That adequate raw material planning is done to ensure that stocks of raw material are available when needed and also are not excessive.
 - ◆ The stores ledger to ascertain if there had been any stock outs which had affected the work over operations.
 - ◆ Ascertain if minimum, maximum, re-order levels of consumables have been fixed to ensure that adequate raw material is available at all times.
 - ◆ If any, monthly reports of raw material are taken out to review the stock position of items that could be critical.

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- ◆ Also find out the extent of inter-location transfer of material or extent of emergency purchases which had to be done only because proper raw material planning was not done.
- Acquisition of data verifying whether the raw material used in operations is of good quality and as per the need of the operation being conducted.
- Verifying whether proper quality assurance testing of all raw materials is done when it is received at the drill site.
- Verifying whether any material bought and used was rejected during the drilling services, if yes, then whether the reasons therefor were properly investigated.
- Ensuring that monitoring and evaluation of the performance of outsourced rigs for drilling operations is done to ensure maximum value addition. For this:
 - ◆ Ensure that outsourcing is being done only where internal capability is not adequate.
 - ◆ Obtain a copy of the contract entered into with them.
 - ◆ Ascertain if the performance of the external contractor is being measured in line with the agreed benchmarks set for them.
 - ◆ Ensure that any inefficiency in operations are noted and adjusted in subsequent payments through keeping a proper record of the operations.
- Ensuring that regular dry docking of vessels is undertaken for proper upkeep of the ships.
- Ensuring that proper analysis of reporting of major deviations is done regarding:
 - ◆ Breakdown and Rig maintenance procedure.
 - ◆ Waiting time.

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- ◆ Utilisation of material.
 - ◆ Consumption of Tubular, High Speed Diesel, chemicals and Bits.
 - ◆ Loss of Rig days against planned and reasons therefor.
 - ◆ Analysis of drillograph and functioning of drillometer at drill sites.
 - ◆ The functioning of other equipment and their idle time and list of standby equipment.
 - ◆ Time and expenditure incurred on inter-location movement.
 - ◆ Optimum utilisation of different types of rigs.
 - ◆ Prompt response is provided to the indentors requesting for drilling services.
 - ◆ Ensure that the targets of drilling and time within which the same needs to be done are well defined for each drilling location.
 - ◆ Co-ordination with other services like exploration/ basin, cementing, well logging, etc., is done well in advance to ensure availability whenever required of their personnel
- Ensuring that the processes to be followed for the drilling activity have been adequately documented and distributed to relevant locations. For this, the internal auditor should verify whether a drilling manual explaining the procedures for drilling operations is in place and has been distributed to the location personnel.
 - Ensuring that there is minimum waiting time for the rig to avoid non-operating costs. For this, check:
 - ◆ Whether a report showing the non-operating charges paid during the period and the reasons for the same is presented to the senior official.

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- ◆ Whether prompt action is taken for minimizing the cost.
- ◆ Whether the latest technology is used for constant upgradation of the processes and minimising the non-operating charges.
- Ensuring that the time lag between the development of the well and the actual production is minimal. For this, the internal auditor should, compare the date of discovery of the well, with the date of actual production and check that the reasons of the same are evaluated by an appropriate official and prompt action is taken on the reasons of the delays.

Adherence to Mining Laws

4.11 The internal auditor would need to ensure that mining; OISD and DGH norms and laws are complied during the conduct of drilling activity. For this, he should verify:

- Permissions to drill are taken and a copy is kept at the drill site prior to commencement of any activity.
- A legal official reviews these permissions and gives the go ahead to drill.
- Drilling location in charge has a copy of the applicable laws and a checklist of the same that he needs to adhere to during the drilling operations.

Performance of Cementing Services

4.12 For this, the internal auditor's procedure would include:

- Ensuring that a prompt response is provided to the indentor requesting for cementing services. For this, the internal auditor would check:
 - ◆ That weekly plans are made by the Cementing Department.
 - ◆ That adequate people and machinery are kept available for services, which may come up without prior notice.

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- ◆ That data is kept and analyzed in respect of time taken to respond and attend to any request for services.
- ◆ The availability of consumables/ stores while conducting operations and whether adequate consumables/ stores planning is done to ensure that stocks of cement is available when needed.
- ◆ The stores ledger to ascertain if there had been any stock outs which had affected the cementing operations.
- ◆ That consumables/ stores used in operations are of good quality and as per the need of the operation being conducted.
- ◆ That proper quality assurance testing of cement is done when it is received at the site.
- ◆ That mix of cementing and related additives is decided by the cementing officers based on the need of the operations. The internal auditor should review some such mixes based on cementing process reports.
- Ensuring that monitoring and evaluation of the performance of outsourced rigs for cementing operations is done to ensure maximum value addition. For this:
 - ◆ Ascertain if any outsourced parties are being used for the cementing operations.
 - ◆ Obtain a copy of the contract entered into with them.
 - ◆ Ascertain if the performance of the external contractors is being measured in line with the agreed benchmarks set for them.
 - ◆ Ensure that any inefficiency in operations is noted and adjusted in subsequent payments by keeping a proper record of the operations.
- Ensuring that the non-operating charges such as waiting time for cement to dry during surface casing are minimized.

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For this, check:

- The report showing the non-operating charges paid during the period and the reasons for the same.
 - Whether prompt action is taken for minimizing the cost.
 - Whether latest technology is used for constant upgradation of the processes and minimizing the non operating charges.
- Ensuring that proper planning is done for the consumables/ stores to minimise waiting time.

Performance of Mud Services

4.13 Internal audit of mud services would involve:

- Ensuring that a prompt response is provided to the indentor requesting for mud services. For this, verify:
 - That adequate people and instruments are kept available for services, which may come up without prior notice, i.e., in case of emergency or not planning properly.
 - Data is kept and analysed in respect of time taken to respond and attend to any request for services.
- Verifying whether adequate number of people is present in each location to provide mud services. For this:
 - Ascertain the level of operation planned for mud services at each location.
 - Evaluate the number of people required for performance of such operations.
 - Based on all the above evaluate the adequacy of the number of people at the location.

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- Ensuring that the requisite apparatus is available at the site. For this:
 - ◆ Interview the personnel at locations and ascertain if the apparatus at their disposal is adequate for performance of services expected by them.
 - ◆ Evaluate the level of existing operations at the site and evaluate whether the apparatus available are adequate for performance of such services.
 - ◆ Also ascertain if there has been a lot of inward and outward movement of mud units and if the same was on account of non availability of apparatus.

- Ensuring availability of consumables/ stores while conducting operations. For this, verify:
 - ◆ Whether adequate consumables/ stores planning is done to ensure those stocks of mud and chemicals are available when needed.
 - ◆ Stores ledger to ascertain if there had been any stock outs which had affected the mud services.
 - ◆ That raw material used in operations is of good quality and as per the need of the operation being conducted.
 - ◆ That proper quality assurance testing of mud is done when it is received at the site.
 - ◆ Mix of mud and related additives are decided by the drilling officers based on the need of the operations. Review some such mixes based on mud process reports.
 - ◆ The documented procedures are followed in preparing the mud and using it into the well. Review some of the mud operations to ascertain if documented procedures, if any, have been followed.

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- Ensuring that monitoring and evaluation of the performance of outsourced rigs, if any for mud services is done to ensure maximum value addition. For this:
 - ◆ Ascertain if any outsourced parties are being used for mud operations.
 - ◆ Obtain a copy of the contract entered into with them.
 - ◆ Ascertain if the performance of the external contractors is being measured in line with the agreed benchmarks set for them.
- Ensuring that any inefficiency in operations are noted and adjusted in subsequent payments through keeping a proper record of the operations.

Performance of Work Over Services

4.14 Internal auditor's procedures would include:

- Whether work over activities have been delegated to Rigs with similar pug marks and whether deployment of Rigs has been planned in accordance with pug mark so that production activities as well as work over activities in nearby geographical areas can be carried out by the same Rig to save on Rig move days.
- Verifying whether a prompt response is provided to the subsurface team and others requesting for work over services (including servicing of wells, pumping of wells, stimulation of wells, testing of wells, water shut off jobs, fishing, casing repairs, layer transfers, increasing oil pressure, etc.).
- Verifying whether adequate number of people are present in each location to provide work over services. For this:
 - ◆ Ascertain the level of operation planned for work over services at each location.
 - ◆ Evaluate the number of people required for performance of such operations.

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- ◆ Compare calculations with the actual numbers present there.
- ◆ Also ascertain by interviewing locational personnels whether there had been any delays in the performance of services and the reasons for the same.
- ◆ Based on all the above, evaluate the adequacy of the number of people at the location.
- Verifying whether the requisite machinery is available at the site. For this:
 - ◆ Interview the location personnel at locations and ascertain if the machinery at their disposal is adequate for performance of services expected by them.
 - ◆ Evaluate the level of existing operations at the site and evaluate whether the machines available are adequate for performance of such services.
 - ◆ Also review the extent of outsourced rigs for work over services due to inadequate machinery.
- Verifying the availability of raw material while conducting operations. For this:
 - ◆ Ensure that adequate raw material planning is done to ensure that stocks of raw material are available when needed.
 - ◆ Review stores ledger to ascertain if there had been any stock outs which had affected the work over operations.
 - ◆ Ascertain if minimum, maximum and re-order levels of consumables have been fixed to ensure that adequate raw material is available at all times.
 - ◆ Also review if any, a monthly report of raw material is taken out to review the stock position of items that could be critical.

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- ◆ Find out the extent of inter-location transfer of material or extent of emergency purchases which had to be done only because proper raw material planning was not done.
- ◆ Verifying whether consumables/ stores used in operations are of good quality and as per the need of the operation being conducted.
- ◆ Verifying whether proper quality assurance testing of all consumables/ stores is done when it is received at the site/ warehouse.
- ◆ Reviewing whether any material was bought and used but was rejected during the work over services and whether reasons thereof properly investigated.
- Verifying whether monitoring and evaluation of the performance of outsourced rigs for work over operations is done to ensure maximum value addition. For this:
 - ◆ Ascertain if any, outsourced parties are being used for work over operations.
 - ◆ Obtain a copy of the contract entered into with them.
 - ◆ Ascertain if the performance of the external contractor is being measured in line with the agreed benchmarks set for them.
 - ◆ Ensure that any inefficiency in operations are noted and adjusted in subsequent payments through keeping a proper record of the operations.
- Verifying whether the non operating charges are minimised. For this:
 - ◆ Check the report showing the non-operating charges paid during the period and whether the reason for the same is presented to the competent authority.

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- ◆ Check whether prompt action is taken for minimising the cost.
- ◆ Check whether the latest technologies are used for constant upgradation of the processes and minimising the non-operating charges.
- Verifying whether proper planning is done for the consumables/ stores to minimise waiting time.
- Examining whether Rigs are being used for work over activities on account of poor operating conditions (other than due to monsoons) as well as the reasons for using jack up Rigs having a very high per day operating rate for work over activities.

Engineering & Construction Activities

Budget, Planning and Cost Control

4.15 The internal auditor's procedures in this regard would include:

- Verifying whether there is adequate budget provision for all works under execution during the year and whether the same is being monitored by the person in-charge for the project. For this:
 - ◆ Obtain the approved budget costs along with amendments thereafter.
 - ◆ Obtain the actual cost of construction so far.
 - ◆ Obtain the latest certificates of the architects and ascertain the percentage of work completed.
 - ◆ Compare budget and actual cost for the percentage of construction completed.
 - ◆ Check if the Department does similar exercise to keep a control over cost.

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- ◆ Obtain and review list for estimated cost/ approved cost/ project details name of contractor/ date of completion/ actual cost if the project is completed. Review the list on sample basis.
- ◆ Verify whether a feasibility report was prepared, rate of return calculated and the optimum size of the plant was selected.
- Verifying whether the work conducted is as per the annual work plan. For this:
 - ◆ Obtain the approved copy of the annual plan and compare the same with the monthly activity report of the department.
 - ◆ Verify whether specifications, quantum of work and other details indicated in tenders, etc., are in line with the approvals obtained.

Feasibility Analysis and Approvals

4.16 For this, the internal auditor should ensure that the Preliminary Feasibility Report (PFR) is prepared based on and after:

- All factors related to the projects like number of platforms, type of platforms, life of platform *vis-à-vis* estimated oil that is expected to be extracted, top side facilities envisaged, details of pipelines, proximity to the nearest facilities, etc., have been considered,
- Ensuring that relevant approval is obtained for the projects on the Preliminary Feasibility Report and the Detailed Feasibility Reports.
- Ensuring that if the project is considered commercially viable in the PFR then only it is pursued further.
- Carrying out an analysis of the feasibility studies conducted and projects executed out of such studies.

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4.17 The internal auditor should also ascertain the reasons for non execution of other feasibility reports and the costs involved at the feasibility stage and justification of the same.

4.18 In case external agencies have been used in preparing such reports, the internal auditor should also verify whether the same has been done since the competence was not available with the Company or any other reasons thereof.

Financial Analysis and Cost Estimation

4.19 The internal auditor should verify whether detailed cost estimates have been prepared for all projects, which have been used during the bidding and tendering process and also check the validity of some of such estimates. For this:

Ensure that the estimates prepared were detailed enough to facilitate the bidders in their bidding process. Also review the details provided by the user department including their specifications to ensure they were comprehensive enough to enable the E&C division in preparing the cost estimates.

Revenue

Sales

4.20 The internal auditor should review and verify the following for this purpose:

- The accounting policies of the Company for accounting of sales especially take or pay, underlifts/ overlifts, contractual liabilities, etc., to ensure compliance with the Accounting Standards.
- Whether the information fed into the billing system is in accordance with the sales contracts.
- Whether the invoices are raised on customers on a timely basis and are approved by an appropriate authority.
- Whether the sales invoices are in accordance with the Gas

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Sales Contract/ Crude Offtake Agreement, e.g., pricing, discounts, contract quantity, etc.

- Whether the invoices sent to the customer are accompanied with appropriate documents as required by the sales contracts, e.g., daily quantity delivered report, quality testing report, etc.
- Complaints received from the customers related to invoicing and the reasons for the same.
- Whether the consideration is received on a timely basis from the customers and adequate follow up is done for delay in payments.
- Whether interest is levied on the customers as per the sales contracts for delay in payments.
- Whether a quantitative reconciliation is undertaken to identify if there are excessive process/ transportation losses.

Royalty

4.21 In respect of royalty, the internal auditor should review and verify the following:

- Whether royalty has been paid at the wellhead value, as specified in the Production Sharing Contract.
- Whether wellhead value has been calculated as per the methodology agreed with the Directorate General of Hydrocarbons.
- Verify the accuracy of the calculations of the wellhead value.
- Whether royalty has been calculated as per the rates specified in the Production Sharing Contract/ Petroleum and Natural Gas Rules.
- Whether any royalty is paid on the gas used for petroleum operations, e.g., reinjection, gas lift, etc.

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- Whether royalty calculations are appropriately reviewed before payment.
- Whether royalty is paid as per the due dates of payment.

Profit Petroleum

4.22 The internal auditor should verify the following for this purpose:

- Whether investment multiple has been calculated in the manner as provided in the Production Sharing Contract.
- Whether all costs incurred have been treated as cost recoverable except for costs specifically not allowed as recoverable by Production Sharing Contract. For this, the internal auditor should review the nature of costs considered as unrecoverable.
- Whether sharing of profit petroleum is based on the investment multiple of the preceding year.
- Whether the Government share in the profit petroleum has been determined as per the percentages linked to investment multiple as specified in the Production Sharing Contract.
- Whether investment multiple and profit petroleum calculations are authorised by the appropriate authority.
- Whether the Government's share of profit petroleum is calculated on provisional basis during the year and is deposited on a timely basis.
- Whether the final calculations of profit petroleum are submitted to the Directorate General of Hydrocarbons at the end of the year and short/ excess payments have been adjusted.

Reserve Estimation

4.23 The internal auditor's procedures in this regard would include:

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- Ensuring whether appropriate method for estimating reserves is used by the Reserves Estimation Department.
- Identifying the right method based upon category of reserves by:
 - ◆ Obtaining reserves estimation chart along with back up paper used for its preparation.
 - ◆ Ensuring that workings are approved and check its calculation on a test check basis.
 - ◆ Ensuring that chart is approved by the appropriate authority.
- Ensuring whether method for estimation of reserves has been followed consistently over the period for estimation of reserves.
- Ensuring whether the definition of reserves for the purposes of classification of proven and probable reserves has been followed consistently.
- Ensuring whether proper technical and commercial viability is taken for estimating the reserves.
- Ensuring whether the reserves are revised based on latest available geologic and reservoir engineering data.
- Ensuring whether the data is properly stored and kept confidential/ in safe custody.

Reservoir Management

4.24 For internal audit of reservoir management, the internal auditor would need to:

- Review the documentation, if any, made for optimal management of each reservoir. (Optimisation involves performance monitoring of individual well flow rates and total reservoir production rates). For this, he would:
 - ◆ Obtain the reservoir management plan.

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- ◆ Ensure that reservoir management plan is prepared after considering all relevant parameters.
- ◆ Ensure that reservoir management plan is approved.
- ◆ Ensure that data for approval of plan is authenticated.
- Review the well flow rates as per the plan *vis-à-vis* actual.
- Obtain the listing of well flow rates planned for each well from latest available plan.
- Obtain the actual well flow rates for each well from the Production Department.
- Inquire about the reasons for difference between planned and actual flow rates.
- Obtain the well maintenance report and inquire about reasons for choking, if any, of a well.
- Ensure that reservoir management plan is revised based on latest available information.
- Review the number of wells planned for ultimate recovery and the actual wells drilled.
- Obtain the number of wells planned for drilling from the field development plan.
- Review the actual activities with planned activities.
- Review the documentation and correspondence made to report on variations between planned development and actual development.
- Ensure that actual flow rates from reservoir do not exceed maximum efficiency rates. (Reservoirs in which the ultimate recovery is related to production, there is maximum efficiency rate above which there will be significant reduction in the ultimate recovery). For this, the internal auditor would:

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- ◆ Obtain the Maximum Efficiency Rates (MER) for each reservoir.
- ◆ Ensure that data used to calculate MER is approved.
- ◆ Inquire about the method used for computing MER and ensure that it is standardised method.
- ◆ Check the calculation of the MER on a test check basis.
- ◆ Ascertain, if any, producing wells were collapsed or shut in and review the reasons for the same.

Investment Multiple

4.25 The share of the Government and the Contractor respectively of Profit Petroleum from the Contract Area in any year is determined by the Investment Multiple as per the provisions of the PSC. The internal auditor's procedure with regard to the investment multiple would involve:

- Calculation of Net Cash Income which is the sum of:
 - ◆ Cost Petroleum entitlement
 - ◆ Profit petroleum entitlement
 - ◆ Incidental income *less* production costs and royalty payments.
- Calculation of investment made by the contractor as per the provisions of the PSC.
- Verification of the costs or expenditure not allowable as per the PSC.
- Actual calculation of Investment Multiple as per the above data.
- Review and authorisation by appropriate authority.

Fixed Asset

Capitalisation and Depletion

4.26 The following should be verified by the internal auditor for this purpose:

- The accounting policy of the company for capitalization and depletion to ensure compliance with the Accounting Standards and “Guidance Note on Accounting for Oil and Gas Producing Activities”, issued by the Institute of Chartered Accountants of India.
- Whether all acquisition, exploration and development costs have been accounted for as per “Guidance Note on Accounting for Oil and Gas Producing Activities”.
- Whether borrowing costs have been capitalized in accordance with the requirements of the Accounting Standards.
- When a well is ready to commence commercial production, whether all costs corresponding to the proved reserves have been transferred from Capital Work in Progress to Producing Properties Account.
- Whether well work over costs have been appropriately accounted for as capital or operating costs.
- Where a drilling of a well is complete and determination of proved reserves has not been made, whether the costs pertaining to the well have been carried forward without justification.
- Whether carried costs pertaining to unproved properties have been transferred to amortization base or charged off as and when the property is determined to be dry.
- Whether information available after the Balance Sheet date but before approval of the financial statements by the Board of Directors has been considered for determining accounting treatment of ongoing projects/ wells, etc.

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- Whether timely and appropriate inputs have been received from the Technical Department for capitalisation purposes.
- Whether appropriate review has been carried before capitalisation of costs.
- Whether provision for abandonment has been created wherever required as per Production Sharing Contract or the relevant legislation.
- Whether abandonment costs have been capitalised along with the facility costs and are being depleted.
- Whether provision for abandonment is revised when the estimates for costs etc., change.
- Whether assets have been capitalised on the date they are ready to be put to use.
- For this, the internal auditor should also examine, on a test basis, some Asset Completion Certificates *vis-à-vis* date of creation of fixed assets.
- Whether insurance spares have been categorised properly for tax benefits.
- Where any spare can be used only in conjunction with a particular fixed asset, whether the same has been aligned with the main asset and whether at the time of disposal, the same has been depicted separately.
- Whether the Capital Work in Progress includes any item that has been lying for a very long time and has not been categorized with the main asset/ project and the reasons for the same.
- Whether any items of revenue nature have been booked under Capital Work in Progress and *vice versa*.
- Whether depletion has been calculated as per the provisions of the “Guidance Note on Accounting for Oil and Gas Producing Activities”.

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- Whether timely and appropriate inputs for depletion such as reserves, future costs, etc. have been received from the Technical Department.
- Whether depreciation on support equipment and facilities is as per the written down value method and rates specified in Schedule XIV of the Companies Act, 1956.

Physical Verification of Assets

4.27 The following should be verified for the physical verification of assets:

- Whether physical verification of fixed assets has been carried out as per company policy/ PSC.
- Whether appropriate plan was drawn and instructions were issued for carrying out physical verification.
- Whether physical verification was carried out by teams which are independent of custodian of the fixed assets and person responsible for maintaining the fixed assets register.
- Whether for assets which are lying underground, e.g., pipelines, which cannot be physically verified, the relevant reports have been generated to check the existence of asset and use of the asset.
- Whether value of fixed assets in transit have been appropriality accounted for.
- Whether discrepancy reports for differences between book records and physical assets have been generated.
- Whether for shortages, appropriate explanations have been obtained from the user departments/ custodians.
- Whether appropriate approvals have been obtained for adjusting the discrepancies in the books of account. The internal auditor would also need to verify the JOA/ PSC provisions in this regard.

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- Whether necessary and appropriate adjustments have been carried out for shortages, etc.

Fixed Assets and their Usage Charges

4.28 The internal auditor should verify the following in this regard:

- Whether separate memorandum records/ registers are being maintained for all such fixed assets for which the partners of the JV contribute through the JIB and whether these records are verified regularly.
- If assets are purchased for usage at more than one blocks, the internal auditor should verify the following in respect of usage charges:
 - ◆ For calculating the usage charges, life of the assets, except in case of electricals/ software, has been taken as the period equal to the contract period as per the PSC/ JOA.
 - ◆ Life of such assets and the allocation of their usage charges to various blocks has been approved by all the parties to the JV and is consistent.
 - ◆ Separate records are being maintained by the Operator for recording these assets and allocation to the various blocks.
 - ◆ In case of assets originally belonging to the parent company but being used for JV as well, whether appropriate allocation is being made to the JV for the depreciation on those assets.
 - ◆ Suitable residual value of the assets is also being considered for calculating the usage charges.
 - ◆ Proper accounting is being done in respect of assets being transferred from/ to other blocks.
 - ◆ The system for disposal/ condemnation of such assets.

PSC Reports

4.29 The internal auditor would need to check whether the PSC Reports are submitted as per the provisions and timelines of the PSC. The following statements are usually submitted either on a monthly or a quarterly basis:

- Production Statement
- Value of Production and Pricing Statement
- Statement of Costs, Expenditures and Receipts
- Cost Recovery Statements
- Profit Sharing Statement
- End of Year Statement
- Budget Statement.

The following should also be verified by the internal auditor:

- The base figures supporting the statements
- Adherence to the timelines
- Review and authorisation of the statements
- Any clarifications sought by DGH on the statements.

On Shore Specific

Sub Surface Area

Planning of Well Production

4.30 With respect to planning of well production, the internal auditor would need to:

- Ensure that advance planning for the whole year is done in respect of the production of each well of the region. For this,

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the internal auditor would verify the annual well production plans and check whether a plan has been charted out for each well in the region. This plan should be made on the basis of the total expected reservoir of the field after adjusting the amount of oil extracted in earlier years and the number of years, the well is to continue. Such annual plans should then have been converted into weekly plans for all wells which should have been given to the Group Gathering Stations (GGS) of the project.

- Ensure that regular updation and review of the actual production against the planned production is done for each well.
- Review the analysis carried out for production details comparison *vis-à-vis* water injection, gas injection, or polymer flooding and review the documentation done to support that injection is consistent.

Monitoring of Production Levels

4.31 For monitoring of production levels, the internal auditor should ensure that regular analysis on a Central Tank Farm (CTF), GGS and well-wise basis is done for the level of oil production.

It is important because without oil production monitoring, problems in the well or the pipeline will not be detected and would lead to loss of revenue. For this, the internal auditor should:

- Ascertain the departments. data that is collected and sent to other
- Evaluate whether the data collected is adequate for understanding the performance of wells or not.
- Ensure that adequate investigation is done where the production is found to be lacking against expectations.
- Ensure that required pressure and quantity of water has been injected.
- Validate the above mentioned steps after reviewing the production level reports received at various times.

Scheduled Maintenance and Work Over Operations

4.32 For this aspect, the internal auditor's procedures would include:

- Ensuring whether scheduled maintenance and work over operations for various wells have been planned in advance. For this, the internal auditor would also need to:
 - ◆ Review the production plan and interview the subsurface personnel.
 - ◆ Ascertain if the subsurface team had reviewed the extent of work over operations required to be done on each well.
 - ◆ Ascertain and evaluate the duration and timing of other maintenance operations over the wells to improve their performance which should have been planned in the beginning of the year or during the year based on the results of the data collected.
 - ◆ Ensuring whether the subsurface department regulates and plans proper water injection into the oil wells in the field. For this, the internal auditor would need to...
 - ◆ Meet with subsurface manager to enquire about the water injection plan and schemes that have been formulated for the field.
 - ◆ Ascertain the critical factors that have been considered in the preparation of the plan and the data that has been collected for the same.
 - ◆ Review the plan and evaluate whether any improvement in the same is possible.
 - ◆ Review the daily report received from the Main Pump House to see whether the pumping of oil is being done as per the agreed plans made at the beginning.

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- ◆ Ensure that a track of total amount of water pumped into each well is being tracked and the pump house is aware of the same so that over pumping of water does not take place.
- ◆ Review the number of water injection wells drilled and actual number of wells injected.

Surface Areas

4.33 Internal audit of the Surface Areas would involve consideration of the following areas:

Collection of Oil

4.34 The internal auditor's procedures include:

- Ensuring whether appropriate records are maintained in respect of the collection of oil and gas from the wells and reviewing the daily production records of the wells to see that the same are being properly prepared
- Ensuring whether regular visits of the oil well are conducted and all oil well installations are inspected. For this, his additional procedures would include:
 - ◆ Verifying whether a plan has been formulated for coverage of all oil wells under their station to inspect them, inspect the flow lines and ensure the smooth running of the installed equipment at the wells.
 - ◆ Verifying whether the person visiting each well comes back and files a brief report of the inspection in a preformatted document.
 - ◆ Reviewing some such reports to ascertain if any discrepancies are noted and what actions are normally taken against them.
 - ◆ Examining the reviews and signs off on all such inspection reports promptly on their filing.

Internal Audit in Upstream Oil & Gas Companies

- ◆ Obtaining and reviewing the reports generated for capacity utilisation for GGS/ EPS.
- ◆ Inquiring into reasons for under utilisation of GGS/ EPS with reference number of wells connected and the liquid production handled by such GGS/ EPS.
- Ensuring that production targets are communicated and monitored by the Group Gathering Stations (GGS). For this, the internal auditor would verify whether:
 - ◆ A monthly, weekly and daily production plan is sent for each of the GGS for the wells.
 - ◆ Ensuring that the data collected through DPR is compared against these plans and significant variations when they arise are properly investigated.
 - ◆ Reviewing current status of the production against the budgeted amount and ascertain causes, if any, for the variations therein.

Testing and Maintenance of Flow Lines

4.35 Internal audit of testing and maintenance of flow lines involves ensuring that all flow lines are regularly tested and inspected for any blockage, etc. For this, the internal auditor would need to:

- Review inspection reports of flow lines to see if inspections are carried out and ensure that all lines are covered and tested.
- Ensure that records of the pressure in all flow lines are properly tested.
- Review safety audit reports of the installation and check if the recommendations made have been implemented.

Water Injection Scheme

4.36 For audit of the Water Injection Scheme, the internal auditor needs to ensure that a proper plan for the amount of water to be

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pumped into the water injection wells is received from the sub surface team by the pump house. For this, his procedures would include:

- Obtaining the latest pumping plan and daily pumping reports and ensuring that the water pumping is being done in line with the plan.
- Any shortfalls pumping are promptly reported to the subsurface team for their consideration and advice.
- Reviewing whether a constant flow of fresh and treated water is maintained to facilitate its pumping into the wells. For this:
 - ◆ Reviewing the existing system of collecting fresh water from the river and ensure that the water station collects and sends the water to the pump house.
 - ◆ Reviewing the quantity of water and pressure at the despatch end and actual quantity and pressure injected at wells to ascertain utilisation of capacity of water pumps and pilferage, if any.
 - ◆ Reviewing whether collection pump house at the riverfront is aware of the amount of water to be collected. Ascertain if, a daily water collection plan is given to the collection pump house based on the pumping of water to be done at the Main Pump House.
 - ◆ Reviewing whether water to be pumped into the wells is properly treated prior to the actual pumping.

Central Tank Farm (CTF) - Purification of Oil

4.37 Internal audit of this aspect includes ensuring that a proper check of the quality of oil collected is done once it collects at the tanks and that similar kind of oil is collected in one tank to facilitate demulsification. For this, the internal auditor should verify:

- That regular checking of the quality of the oil collected from the GGS is done to ascertain its chemical properties and facilitate the decision of the type of the demulsifier to use.

Internal Audit in Upstream Oil & Gas Companies

- That once the quality and chemical properties are checked. The pipelines should have been so arranged so that the same kind of oil is collected in the same tank.
- That gas and oil collected at the CTF are properly purified for other contents.
- That demulsifying agents being used in the process are of the right quality and have been quality checked prior to usage. Review material receipt reports of the emulsifiers to ensure the cleansing of oil.
- That demulsification process of a few days to ensure that the right demulsifiers were used and were effective.
- That for gas, separation is done effectively with no condensate and other foreign material.
- That output of gas from the CTF is in line with the input requirements at the Gas Plant and that quality checking is being done to ensure the same.
- That all oil once treated is collected together in a separate tank prior to being pumped to client.

4.38 In addition, the internal auditor should also obtain and review the study carried out for methodology of disposal of oil sludge from the CTF and revenue generated from them on annual basis, i.e., comparison done on yearly basis with reference to quantity handled.

Pumping to Customers

4.39 The internal auditor's procedures in this regard include ensuring that oil once ready is pumped to the customers as per the agreed time schedules. For this, the internal auditor would need to verify that:

- The pumping of oil schedule is received from the Customers.
- The CTF adheres to the time schedules and sends the oil

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during the period agreed upon. Review the pumping report for few days to validate the same.

- Oil intake certificate is promptly obtained at the time of receipt by the representative at the refinery where oil being pumped. For this...
 - ◆ Check the date of preparation to ensure that the same was made on the day of pumping of oil.
 - ◆ Check whether proper production reconciliation is done on a periodical basis. For this, check whether...
 - ❖ Flow meters at CTF are properly calibrated and the calibration is periodically checked.
 - ❖ Pumping records of the extent of oil pumped to the customer are properly kept and maintained.
 - ❖ A weekly reconciliation of oil pumped and received by the customer is done to ensure that all oil sent is received at the other end.
 - ❖ Such reconciliations to check their accuracy and compare them with the pumping records.

Logistics

Procurement of Logistic Services

4.40 Internal audit of procurement of logistic services would include:

- Ensuring whether services in respect of transportation of materials and people are outsourced only where in-house transportation is either not capable to perform the services themselves or where it is uneconomical to do so. For this, the internal auditor would:
 - ◆ Select some of the outsourced contracts for each type of vehicles like light vehicles, emergency vehicles,

Internal Audit in Upstream Oil & Gas Companies

buses, cranes, and water tankers, specialised vehicles hired by regional office and by the projects for transportation.

- ◆ Check compliance of corporate policy in respect of hired vehicles with respect to year/ model and types of vehicles.
 - ◆ Ascertain and review the reason for outsourcing the same externally to third party contractors.
 - ◆ Verify whether formal contracts/ agreements are drawn up for all significant transport arrangements and are signed on behalf of the organisation by an appropriate official.
- Ensuring whether payment and utilisation of vehicle is as per the terms of contract.
 - Obtaining and reviewing the reports generated for analysing frequency of utilisation of vehicles beyond certain hours.
 - Reviewing fixed charges, mileage charges, OT detention charges, frequency of utilisation of vehicles beyond certain hours.

Helicopter Services

4.41 The following procedures should be adopted by the internal auditor for review of helicopter services:

- Reviewing whether a feasibility study has been done to ensure that it is more profitable to have and operate own helicopter than outsource such services.
- Obtaining and reviewing the management reports regarding the utilisation of owned helicopters, procurement of spares and expenditure on repairs and maintenance.
- Reviewing whether operations of the helicopters are handled by qualified people. For this, verify whether:

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- ◆ Proper tendering procedures have been followed and technical capability properly measured in the selection of contractor for management and operation of the helicopters.
 - ◆ Contractor complies with all statutory aviation laws and that same is his responsibility as per the contract.
 - ◆ That there are no unwanted flights and all movement of the helicopter are duly authorised.
 - ◆ That there is a suitable coordination for accommodating and clubbing people for the flights.
- Checking that appropriate billing is done on the outside agencies (such as the contractors) using the Helicopter services.

Quality Assurance

4.42 In respect of Quality Assurance aspect, the internal auditor would ensure that all logistics related tasks are measured for time taken to perform, i.e., quality of the services *vis-à-vis* time taken to perform them. For this, his procedures would include:

- Ensuring that appropriate systems are in place to keep track of the time taken to perform various tasks in the logistics department.
- Ensuring that this time is compared against benchmarked time in respect of such tasks and steps taken to improve if there is time lag.
- Ensuring that user departments' comments are taken and analysed to see that services are as per their expectations.
- Ensuring that the same procedures are performed for outsourced services and that their contract includes clauses for ensuring completion of work in time.

Off Shore Specific

Horizontal drilling

4.43 The internal auditor's procedures include:

- Reviewing the cost benefit analysis for drilling horizontal well *vis-à-vis* vertical or directional well.
- Identifying the reasons other than technical (such as area not available, etc) for doing horizontal drilling.
- Ensuring that the team performing horizontal drilling has adequate experience in doing such drilling activities.
- Ensuring that producing zone is tapped as anticipated and planned.

Drain Hole Drilling

4.44 Drain hole drilling is one of specialised drilling just like horizontal drilling in which specialized equipment are used. For this purpose, the internal auditor would need to review the following:

- The cost benefit analysis for drain hole drilling.
- The team performing drain hole drilling has adequate experience in doing such drilling activities.
- Drilling is done as planned by the Drilling Department.
- Latest technology is available in respect of drain hole drilling.

Operations Offshore

Budgeting, Planning and Cost Control

4.45 The internal auditor's procedures include:

- Ensuring that existing work being done within the Department is backed up by an annual plan.

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- Ensuring that there is an appropriate basis for such plans. For e.g.,
 - ◆ Details of number of wells in the region/ attached with each platform.
 - ◆ An overall plan of how much oil is likely to be extracted from these wells.
 - ◆ An estimate of the number of people available within the Department to carry out the work in each area.
 - ◆ Correlation of all the above mentioned data in the form of a plan.

- Ensuring that a system to update such plans is there in the event that the original plans made were not achieved. For this:
 - ◆ Check the year to date physical results achieved against the budgeted results.
 - ◆ If there are large variations ascertain the reasons for the same.
 - ◆ If the variations are not controllable, inquire as to the reasons for non revision of physical targets.

- Ensuring that an analysis for material consumption is being carried out at the platform. For this:
 - ◆ Ascertain which are the top ten raw materials consumed at the platform.
 - ◆ Review whether an analysis of the amount of raw material *vis-à-vis* production is being carried out.
 - ◆ Also ensure that this analysis is based on consumption standards benchmarked within the company.
 - ◆ Review actions taken where there are variances.

Internal Audit in Upstream Oil & Gas Companies

- ◆ Also check if there are any controls (like, monthly reporting and review) within the Department to confirm that:
 - ❖ The work performed during the year is within the definition of items contained in the yearly plan.
 - ❖ The work performed under each sub-component is done within the amounts specified in the annual plan.
- Verifying that detailed cost estimates have been prepared for all jobs in the feasibility reports. Also check the validity of some of such estimates. For this...
 - ◆ Review details provided in the reports.
 - ◆ Ensure that all costs have been considered for feasibility based on the past experience.
 - ◆ All relevant technical factors have been considered.

Coordination with Logistics - both sea and air

4.46 The internal auditor's procedures involve:

- Ensuring that both air and sea transports are available to the platforms to meet both day to day needs and emergency needs.
- Ensuring that the vessels are being used for transport of material and stand by/ emergency duties.
- Ensuring that for supply vessels:
 - ◆ An intimation is sent by the respective Department for transportation of material.
 - ◆ A manifest is raised by logistics in two copies (one copy for master of the vessel and one for filing).
 - ◆ A receipt for delivery of material is taken from the respective Rig/ Platform.

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- Ensuring that the helicopters are being used for, e.g.,
 - ◆ Crew change
 - ◆ Production task
 - ◆ Medical evacuation.
- Ensuring that an employee-wise analysis of delays in reporting duties is being carried out.
- Ensuring that for helicopters:
 - ◆ Intimation is sent by the respective Department for crew change.
 - ◆ An employee-wise analysis of delays in reporting duties is being carried out.

Management of Personnel at Installations

4.47 The internal auditor's procedures would include:

- Ensuring that adequate number and of appropriately qualified personnel are available at the installations, for example,
 - ◆ Electrical engineer
 - ◆ Mechanical engineer
 - ◆ Instrumentation engineer
 - ◆ Safety personnel
 - ◆ Process and well head personnel
 - ◆ Chemical engineer
 - ◆ Medical staff
 - ◆ Catering, cleaning and contract staff.

Internal Audit in Upstream Oil & Gas Companies

- Ensuring that adequate numbers of people are present in each location to provide services. For this:
 - ◆ Review the annual plan of operations of the Installation which would indicate the quantity of oil to be extracted.
 - ◆ Evaluate the number of people required for performance of such operations.
 - ◆ Based on all the above, evaluate the adequacy of the number of people at the location.

Environment, Health and Safety

4.48 In respect of environment, health and safety, the internal auditor's procedures should include:

- Ensuring that an appropriate plan exists for Safety and Environment Management. Such plan should include:
 - ◆ Number of safety and environment audits/ inspections to be conducted.
 - ◆ Locations where such audits are going to be conducted.
 - ◆ Guidelines for frequency of audit.
 - ◆ Ensure that a system of following up on the plan is in existence. In case the target is not achieved, ascertain the reasons for the same. For this:
 - ❖ Request for a copy of the annual audit programme.
 - ❖ Obtain monthly activity reports of the division.
 - ❖ Compare the above mentioned two documents.
- Verifying whether the inspection/ audit reports have been completed as per the schedule and submitted in time to the respective project managers.

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- Verifying from the audit reports of a few rigs/ platforms, the random checks for implementation of outstanding audit points.
- Ensuring that there is a system of checking the implementation status of the various reports.
- Making an analysis of the number of fatal and non-fatal accidents as compared to the previous year and also ascertaining the reasons for these accidents and why they could not be averted. For this, the internal auditor should:
 - ◆ Ask the safety officer of the project to provide details of all accidents that took place at the project in the last one year.
 - ◆ Also inquire about the reasons for such accidents and why safety was compromised.
 - ◆ Verify whether all accidents are reported on the correct formats as per OISD/ DGMS.

Compliance with Statutory Guidelines

4.49 For this, the internal auditor needs to:

- Ensure that all the statutory guidelines of OISD and DGMS have been strictly adhered to. For this:
 - ◆ Obtain safety checklists from the safety officer at the project level.
 - ◆ Ensure all guidelines are covered by the checklist.
 - ◆ Ensure the safety officer is in receipt of any amendments issued by OISD and DGMS.

Others

4.50 The internal auditor should:

- Verify whether environmental policies and procedures have

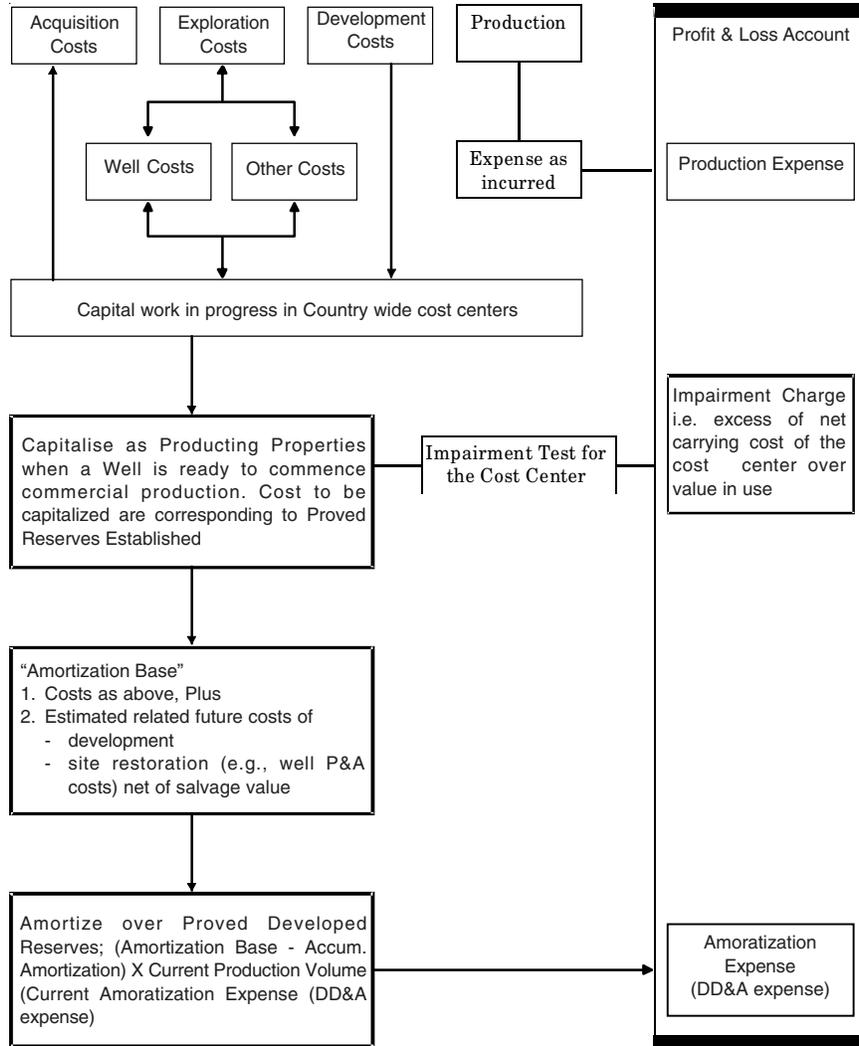
Internal Audit in Upstream Oil & Gas Companies

been established and formally documented by the organization. For this...

- ◆ Review the safety manual and the environmental policy related sub section.
- ◆ Find out how the Department is kept aware of the latest amendments in the environmental issues. They may need to subscribe to a mail service or they may need to establish contact with the concerned authority in the environment ministry of the Government.
- Ensure that changes in environmental requirements are reported to the projects on a timely basis.
- Ascertain if environmental awareness training is provided to all appropriate personnel. For this:
 - ◆ Obtain the regional plan for safety awareness of the employees in the region.
 - ◆ Obtain year to date progress of the safety training programs.
 - ◆ Ascertain why there is a difference in the above two.
 - ◆ Find out the level of attendance at these programs to ensure that adequate importance is felt about it.
- Ascertain if the organization liaise with environmental groups, local authorities, etc., on a regular basis.

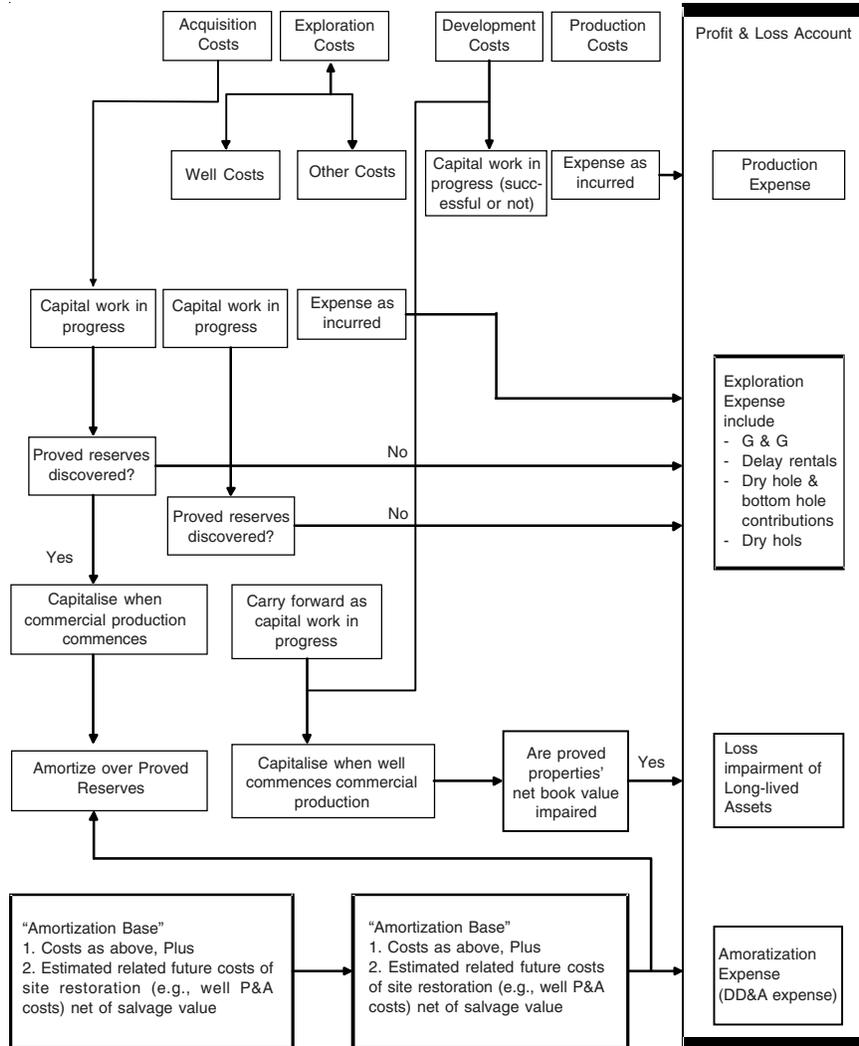
Annexure I

Full Cost Method



Annexure II

Successful Efforts Method



I-3

**TECHNICAL GUIDE ON
INTERNAL AUDIT IN
TELECOMMUNICATIONS
INDUSTRY**

Foreword

The telecommunications industry has unarguably been the biggest catalyst in giving our world its present shape and colour. It is the telecommunications industry which with all its advancements over the last 50 years or so has given the word “accessibility” new dimensions.

To help this Industry bolster its contribution to the social and economic development, it is essential that its own foundations are strong enough not only to survive but also grow and sustain that growth. Modern managements have various ways and means to nourish this growth and using internal audit is one such means. Essentially a management function, internal audit, in the most simple of words, helps managements effectively and efficiently utilise their limited resources and remain prepared for facing the uncertainties of future. The internal auditors, on the other hand need to be really knowledgeable of a dynamic industry as telecommunications to be able to identify the areas of concern and accordingly make a fruitful contribution by helping the management resolve them.

I am happy to note that the Committee on Internal Audit has brought out this Technical Guide on Internal Audit in Telecommunications Industry. Written by an eminent expert in the field, the Technical Guide provides the readers a crisp insight into the various technicalities arising in the operations of this Industry and the resultant issues which the internal auditors must know.

I am sure that this Technical Guide too would be warmly received by the members and other interested readers.

May 3, 2008
New Delhi

CA. Ved Jain
President, ICAI

Preface

Internal auditing is being widely accepted as an effective control device for efficient and effective management of economic enterprises, comprising a complete financial and operational review. As per the modern concept of internal auditing, the internal auditor apart from reviewing routine accounting procedures and policies also evaluates the performance of management processes to determine whether there has been effective and efficient utilization of the resources of the enterprise. For such a review and evaluation, the internal auditor must possess knowledge of the technical, commercial and other aspects of the operations of the enterprise concerned.

India is the fourth largest telecom market in Asia after China, Japan and South Korea. The Indian telecom network is the eighth largest in the world and the second largest among emerging economies. At current levels, telecom intensiveness of Indian economy measured as the ratio of telecom revenues to GDP is 2.1 percent. In view of the complexity, volume and growth of telecom industry, Internal auditors have a dynamic role to play to support the management in helping fostering this growth. Keeping this in mind, the Committee on Internal Audit has brought out this Technical Guide on Internal Audit in Telecom sector. This Technical Guide contains extensive guidance on all significant aspects such as the regulatory framework in which the telecom companies operate, frauds, revenue assurance and revenue recognition, network. The Appendix to the Technical Guide contains list of abbreviations and glossary of terms for better understanding of the readers.

I am extremely grateful to CA. Pravin Chandra Shah of Reliance Communications and his entire team, Shri Sunil Kumar, Shri Bharat Rastogi, Shri Atul Prabhu and Dr. Pritosh Chandra Basu for squeezing out sometime out of their professional and personal commitments and preparing the basic draft of this Technical Guide.

Compendium of Industry Specific Internal Audit Guides

I am obliged to CA. Ved Jain, our President and CA. Uttam Prakash Agarwal, our Vice President for giving me this opportunity. I also wish to thank my colleagues in the Committee on Internal Audit, CA. Bhavna Gautam Doshi, CA. Sunil H. Talati, CA. Mahesh P. Sarda, CA. Shanti Lal Daga, CA. K. P. Khandelwal, CA. Manoj Fadnis, CA. Anuj Goyal, CA. Amarjit Chopra, Shri Manoj K. Sarkar, Shri A.K. Awasthi, Dr. Pritam Singh, Shri O.P. Vaish, CA. Parthasarathi De, CA. R. Srivatsan, CA. Narendra Kumar Aneja, CA. Charanjit Surendra Attra, CA. Nagesh Dinkar Pinge and CA. Manu Chadha for their constant support and guidance in giving final shape to this Technical Guide. I would also like to appreciate the efforts of the Secretariat of the Committee on Internal Audit in giving the final shape to the Technical Guide.

I am certain that the readers, especially members of the Institute, working as internal auditors in telecom sector would find this Technical Guide immensely useful.

April 29, 2008
Kolkata

CA. Abhijit Bandyopadhyay
Chairman,
Committee on Internal Audit

Abbreviations

ADC	Access Deficit Charges
AGR	Adjusted Gross Revenue
ARPU	Average Revenue Per User
BIA	Broadband Internet Access
BTS	Base Transceiver Station
CDMA	Core Divisional Multiple Access
CDR	Call Data/Detail Record
CPE	Customer Premises Equipment
CVV	Card Verification Value
DIA	Direct Internet Access
DoT	Department of Telecommunications
GOI	Government of India
GSM	Global System for Mobile Telephony
IDC	Internet Data Center
ILD	International Long Distance
IN	Intelligent Network
IPLC	International Private Leased Circuit
ISDN	Integrated Service Digital Network
ISP	Internet Service Provider
IUC	Interconnect Usage Charges

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MCN	Media Convergence Node
MSC	Mobile Switching Center
NLD	National Long Distance
OFC	Optical Fiber Cable
PBG	Performance Bank Guarantee
PCO	Public Call Office
POI	Proof of Identity
POI	Point of Interconnect/Interaction
POR	Proof of Residence
POTS	Plain Old Telephone System
PSTN	Public Switched Telecom Network
QoS	Quality of Service
RCV	Recharge Vouchers
SAS	System on Accounting Separation
SEBI	Securities Exchange Board of India
SIM	Subscriber Identity Module
SMS	Short Messaging Service
TDSAT	Telecom Disputes Settlement and Appellate Tribunal
TRAI	Telecom Regulatory Authority of India
VAS	Value Added Services
VPN	Virtual Private Network
WPC	Wireless Planning and Co-ordination Wing

Glossary

Adjusted Gross Revenue	Revenue as per books of account adjusted for certain factors to arrive at the revenue share of the Government of India.
Base Transmission Station	Base Transmission Station encodes, encrypts, multiplexes, modulates and feeds the RF signals to the antenna.
Intelligent Network	Telecommunications network architecture that has the ability to process call control and related functions <i>via</i> distributed network transfer points and control centers as opposed to a concentrated in- switching system.
Integrated Service Digital Network	A structured all digital telephone network system that was developed to replace (upgrade) existing analog telephone networks. This system allows voice and data to be transmitted simultaneously across the world using end to end digital connectivity.
Mediation	A network device in a telecommunications network that receives, processes, reformats and sends information to other formats between network elements. This works as an aggregator, which collect the CDR from various NEs, convert into a common format and forward for billing & reporting.
Mobile-service Switching Center	Mobile-service Switching Center (MSC) is the central switch of a mobile or cellular radio infrastructure. Although this term is sometimes written as “Mobile Switching

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Center". The MSC is not itself mobile or movable.

Optical Fibre Cable A thin filament of glass (usually smaller than a human hair) that is used to transmit voice data or video signals in the form of light energy (typically in pulses).

Switch A network device (typically a computer) that is capable of connecting communication paths to other communication paths. Early switches used mechanical levers (cross-bars) to interconnect lines.

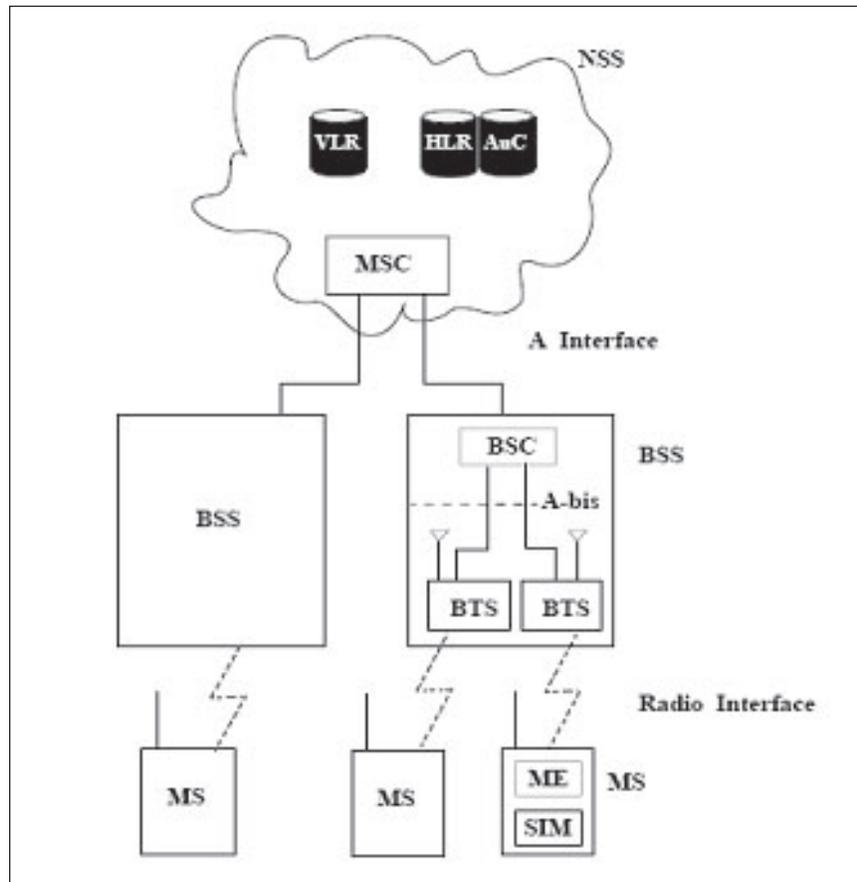
Virtual Private Network Secure private communication path(s) through one or more data network that is dedicated between two points. VPN connections allow data to safely and privately pass over public networks (such as the Internet).

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Chapter 1

Network Architecture of Telecommunications Company



1.1 In this architecture, a mobile station (MS) communicates with a base station system (BSS) through the radio interface. The BSS is connected to the network and switching subsystem (NSS) by communicating with a mobile switching center.

Mobile Station (MS)

1.2 The MS consists of two parts:

- **Subscriber Identity Module (SIM):** A SIM contains the subscriber-related information including the Personal Identity Number (PIN) and PIN Unblocking Key(PUK) codes, the subscriber-related data also include a list of abbreviated and customized dialing numbers, short messages received when the subscriber is not present, and names of preferred networks to provide service, and so on. The SIM is protected by a personal identity number (PIN) of length between four to eight digits. The PIN is loaded by the network operator at the subscription time. This PIN can be deactivated or changed by the user.
- **Mobile Equipment (ME):** The ME contains the non-customer-related hardware and software specific to the radio interface. This unit is popularly known as the cell phone or mobile phone.

The Base Station System (BSS)

1.3 All radio-related functions are performed in the BSS, which consists of base station controllers (BSCs) and the base transceiver stations (BTSs). It connects the MS and the NSS. In a typical cellular wireless system, an area is divided geographically into a number of cell sites, each defined by a radio frequency (RF) radiation pattern from a respective base transceiver station (BTS) antenna. The base station antennae in the cells are in turn coupled to a base station controller (BSC), which is then coupled to a telecommunications switch (e.g., mobile switching center (MSC)) or gateway that provides connectivity with a transport network such as the PSTN or the Internet.

- **BSC**—The BSC provides all the control functions and physical links between the MSC and BTS. It is a high-capacity switch that provides functions such as handover, cell configuration data, and control of radio frequency (RF) power levels in

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base transceiver stations. A number of BSCs are served by an MSC.

- **BTS**—The BTS handles the radio interface to the mobile station. The BTS is the radio equipment (transceivers and antennas) needed to service each cell in the network. A group of BTSs are controlled by a BSC. The components of a BTS are:
 - **Transceiver** : It basically does transmission and reception of signals. Additionally it does sending and receiving of signals to/from higher network entities like the BSC.
 - **Power Amplifier (PA)**: It amplifies the signal from transceiver for transmission through antenna.
 - **Combiner** : It combines feeds from several transceivers so that they could be sent out through a single antenna. It is used to reduce the number of antennas.
 - **Duplexer** : It is used to separate the sending and receiving signals to/from antenna.
 - **Antenna** : A part of the BTS.
 - **Alarm Extension System** : Collects working status alarms of various units in BTS and extends them to the Operation and Maintenance (O&M) monitoring stations.

The Network Switching System (NSS)

1.4 The switching system (NSS) is responsible for performing call processing and subscriber-related functions. The switching system includes the following functional units:

- **Home Location Register (HLR)**—The HLR is a database used for storage and management of subscriptions. The HLR is considered the most important database, as it stores permanent data about subscribers, including a subscriber's service profile, location information, and activity status. When

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an individual buys a subscription from one of the operators, he or she is registered in the HLR of that operator.

- **Mobile Services Switching Center (MSC)**—The MSC performs the telephony switching functions of the system. It controls calls to and from other telephone and data systems.
- **Visitor Location Register (VLR)**—The VLR is a database that contains temporary information about subscribers that is needed by the MSC in order to service visiting subscribers. The VLR is always integrated with the MSC. When a mobile station roams into a new MSC area, the VLR connected to that MSC will request data about the mobile station from the HLR. Later, if the mobile station makes a call, the VLR will have the information needed for call setup without having to interrogate the HLR each time.
- **Authentication Center (AUC)**—A unit called the AUC provides authentication and encryption parameters that verify the user's identity and ensure the confidentiality of each call. The AUC protects network operators from different types of fraud found in today's cellular world.
- **Equipment Identity Register (EIR)**—The EIR is a database that contains information about the identity of mobile equipment that prevents calls from stolen, unauthorized, or defective mobile stations. The AUC and EIR are implemented as stand-alone nodes or as a combined AUC/EIR node.

The Operation and Support System

1.5 The operations and maintenance center (OMC) is connected to all equipment in the switching system and to the BSC. The implementation of OMC is called the operation and support system (OSS). An important function of OSS is to provide a network overview and support the maintenance activities of different operation and maintenance organizations.

Additional Functional Elements

- **Message center (MXE)**—The MXE is a node that provides integrated voice, fax, and data messaging. Specifically, the MXE handles short message service, cell broadcast, voice mail, fax mail, e-mail, and notification.
- **Mobile service node (MSN)**—The MSN is the node that handles the mobile intelligent network (IN) services.
- **Gateway mobile services switching center (GMSC)**—A gateway is a node used to interconnect two networks. The gateway is often implemented in an MSC. The MSC is then referred to as the GMSC.
- **GSM interworking unit (GIWU)**—The GIWU consists of both hardware and software that provides an interface to various networks for data communications. Through the GIWU, users can alternate between speech and data during the same call. The GIWU hardware equipment is physically located at the MSC/VLR.

Call Flow Process

1.6 The call flow process is as follows:

A) Outgoing call setup:

1. The first part to mobile call processing is initialization which happens when one turns on his phone. We get a connection to a nearby cell site which means we need a frequency to transmit on. The mobile checks a frequency list contained in its SIM card.
2. Then the mobile becomes a receiver, checking for a signal from any base station within range. The mobile acts like a scanning radio, going through each frequency on its list, one by one, testing reception as it goes. It measures the received level for each channel. The GSM system, not the handset, decides after this test which cell site should take the call.

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That's usually the cell site delivering the highest signal strength to the mobile.

3. Depending on the best signal strength received, usually, the nearest cell site antenna makes a radio connection with the phone. This connection is made possible by the BTS which then passes the call to a Base Station Controller(BSC).
4. The call is then passed to a mobile switching office, which communicates with local and distant databases like the HLR and VLR before allowing a call. MSC determines current location of target mobile using HLR, VLR and by communicating with other MSCs. Source MSC initiates a call setup message to MSC covering target area

B) Incoming call setup:

1. Target MSC (covering current location of mobile) initiates a paging message.
2. Base Stations forward the paging message on downlink channel in coverage area.
3. If mobile is on (monitoring the signaling channel), it responds to BS.
4. BS sends a channel allocation message and informs MSC.
5. Network activity: Network completes the two halves of the connection

Chapter 2

The Regulatory Framework

Licence Requirement

2.1 Telecom industry is regulated by the Ministry of Communications and Information Technology, Government of India through the Telecom Regulatory Authority of India (TRAI). TRAI regulates the telecom business through licensing requirements. A telecom company can provide only those services and in such telecom circles, for which license has been granted. Any Telecom Operator intending to enter into telecom business has to fulfil the following licensing requirement:

- Foreign equity in the paid up capital of the licensee company should not, at any time during the entire licence period, exceed such percentage of total equity as has been mentioned in the licence agreement or as decided by the Government of India from time to time.
- Licensee shall have a minimum paid up equity capital of such amount as has been mentioned in the licence agreement or as decided by the Government of India from time to time.
- The Licensee Company and its promoters shall have to maintain a combined net-worth as prescribed in the licence agreement or as decided by the Government of India from time to time.
- Licence shall be valid only for the period, services and for telecom circles mentioned in the agreement.

Fee

2.2 As per the Financial Terms and Conditions of the Licence agreement, a telecom operator has to pay the following fees: -

Entry Fee

2.3 This is a one time fee which an operator is required to pay before signing the agreement. At present the entry fee for National Long Distance (NLD)/ International Long Distance (ILD). Licence is Rs. 2.50 Crore each.

Licence Fee (Revenue Share)

2.4 In addition to the Entry fee, a licensee is also required to pay licence fee on quarterly basis in the form of revenue share at the prescribed rate on the **Adjusted Gross Revenue (AGR)**, viz,

- For first three quarters of the financial year - within 15 days of completion of the relevant quarter on actual revenue on accrual basis.
- For last quarter – by 25th of March of each financial year, on estimated basis but not less than the payment made in the 3rd quarter.

Each quarterly instalment of the Licence Fee is payable based on the Adjusted Gross Revenue, duly certified, along with an affidavit by a representative of the Licensee, authorised by the resolution passed by the Board of Directors of the Licensee Company.

2.5 The Licence Fee varies based on the type of service and classification of telecom circles as may be prescribed by TRAI from time to time. License Fee for NLD/ ILD is 6% of AGR for each service and for V-SAT/ Internet Telephony is 6 % of AGR. NLD/ ILD and V-SAT Licenses are on all India basis. Adjusted Gross Revenue includes installation charges, late fees, sale proceeds of handsets, revenue on account of interest, dividend, value added services, supplementary services, access or interconnection charges, roaming charges, revenue form

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permissible sharing of infrastructure and any other miscellaneous revenue, without any set off for related item of expense, etc. and for arriving at the Adjusted Gross Revenue following expenses only are allowed as deduction:

- PSTN (Public Switched Telecom Network) related call charges (Access Charges) actually paid to the other eligible/ entitled telecommunication service providers (not applicable from 1st April, 2008);
- Roaming revenue actually passed on to the other eligible/ entitled telecommunication service providers; and
- Service Tax on provision of service and Sales Tax actually paid to the Government if component of Sales Tax and Service Tax has been included in the Gross Revenue.

2.6 The above definition of AGR was challenged with Telecom Disputes Settlement and Appellate Tribunal (TDSAT) by the telecom companies and their association on the following grounds:

- i. Present definition of AGR includes several revenue streams unrelated to service activities like interest and dividend income from investments, revenues from sale of handsets, capital goods, sharing/ leasing of infrastructure.
- ii. Definition of AGR does not allow certain legitimate deductions like bad debts, etc.
- iii. Income is considered on an accrual basis while deductible expenses are considered on an actual/ pass through basis.
- iv. Interest income from short-term investment of surplus capital or surplus incomes on which a revenue share has already been paid in the previous year.
- v. All deposits credited in the Profit and Loss Account are included in the revenues.

2.7 TDSAT in its judgment emphasized on the basic factor that “The licence uses the words, revenue arising from licensed activity.” Therefore, one has to always apply the test, whether the revenue

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sought to be included in AGR arises from licensed activity. Keeping this in view, TDSAT allowed for exclusion of following types of revenues from the AGR:

- i. Income from dividends
- ii. Capital Gain from sale of fixed assets and investments
- iii. Interest on investments
- iv. Gains from foreign exchange fluctuations
- v. Reversal of provisions for bad debts and taxes etc.
- vi. Revenue from sale of unbundled handsets
- vii. Other miscellaneous revenue earned from management consultancy fee, Insurance Claims
- viii. Payments received on behalf of third parties
- ix. Receipts from the Universal Service Obligation (USO) funds
- x. Bad debts, waivers and discounts given to realise the amount

2.8 The Telecom Companies are also required to submit the following documents to Controller of Communication Accounts (CCA):

- a) On Quarterly basis
 - i. Audited statement of Revenue and License Fee.
 - ii. Auditors Report
 - iii. Affidavit duly signed by authorised signatory as per Board's resolution
 - iv. Operator wise details of actual Interconnection Usage Charge (IUC) payment.
- b) On Annual Basis
 - i. Audited annual accounts

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- ii. Reconciliation of Gross Revenue (GR), AGR and audited accounts.—within seven days of signing the audited annual accounts.

Radio Spectrum

Radio Spectrum Requirement

2.9 The spectrum is allotted for various purposes: analog TV broadcasts get a certain slot (from 54 to 88 MHz, 174 to 216 MHz and 470 to 806 MHz), FM radio gets a certain slot (88 to 108 MHz), AM radio gets a certain slot (535 to 1700 kHz). Telecommunication systems also require a certain amount of electromagnetic bandwidth to operate; accordingly cellular communications (mobile phones) get certain slots.

2.10 As the world becomes increasingly wireless (with cordless phones, cell phones, wireless internet, GPS devices, etc), allocation of the available spectrum to each technology becomes increasingly contentious. Each user community (usually Mobile Service Providers) wants more bandwidth in order to be able to sell and service more units. For any given slot of bandwidth, there is a limited amount of data that can be shared in that bandwidth, so vendors want more bandwidth so they can handle more devices in a given area.

Radio Spectrum Charges

2.11 In addition to Entry Fee and Licence Fee, the Licensee is also required to pay fees and royalty for the use of radio frequencies on the basis of specified percentage of AGR as per the details prescribed by the Wireless Planning and Coordination Wing (WPC) of DoT. The spectrum charges for Global System for Mobile Communications (GSM) is collected as a percentage of AGR while Code Division Multiple Access (CDMA) spectrum a percentage of AGR as well as fixed charges for point to point links (microwave access) and backbone links of all Unified Access Service Licence (UASL) Licensees using CDMA spectrum.

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Table of Spectrum Charges

Quantum of Spectrum allotted(MHz)	Spectrum Charges CDMA (% of AGR)	Spectrum Charges GSM (% of AGR)
Upto 4.4+4.4	—	2%
Upto 5.0+5.0	2%	—
Upto 6.2+6.2	3%	3%
Upto 10.0+10.0	4%	4%
Upto 12.5 +12.5	5%	5%

Table of Microwave Access and Backbone Charges

Spectrum Bandwidth	Spectrum charges (% of AGR)	Cumulative Spectrum charges (% of AGR)
First Carrier of 28 MHz(paired)	0.15%	0.15%
Second Carrier of 28MHz (paired)	0.20%	0.35%
Third Carrier of 28 MHz(paired)	0.20%	0.55%
Fourth Carrier of 28 MHz(paired)	0.25%	0.80%
Fifth Carrier of 28 MHz(paired)	0.30%	1.10%
Sixth Carrier of 28 MHz(paired)	0.35%	1.45%

2.12 The Spectrum Charges are required to be paid in advance on quarterly basis within 15 days of the beginning of relevant quarter on the basis of estimated AGR. Spectrum charges are levied on the AGR of the full circle despite allocation of additional spectrum that may have been made for a city/part of licensed area. The Government of India is considering of levying fixed charges for allocation of spectrum.

Calculation of Interest/ Penalty on Delayed Payment

2.13 Penal interest to be levied for delayed payments is on the same terms and conditions as in the main DOT license agreement. However, for the time being the work of computation of interest/ penalty/short payment etc. will continue to be done by the DOT and any demands on this account will be raised only by DOT.

Financial Bank Guarantee and Performance Bank Guarantee

2.14 Further, Licensee has to submit Performance Bank Guarantee (PBG) and Financial Bank Guarantee of prescribed amount as has been mentioned in the licence agreement. The Internal Auditors need to examine the Licence agreement to ensure that there is no default, w.r.t., financial and other conditions specified in the agreement as any default may lead to suspension / cancellation of license and the very existence of the company may be in jeopardy.

Subscriber Verification

2.15 TRAI has issued detailed guidelines, w.r.t., verification of subscribers at the time of acquisition, such as, obtaining and verification of Point of Interest (POI)/ POR from the subscribers. The compliance with these guidelines is mandatory for every operator. As such, internal auditors should check and satisfy that the company has proper controls for verification of identity and address of the subscriber, at the time of acquisition of customer, so that, compliance with the TRAI guidelines are ensured.

Routing of Call

2.16 Telecom Company has to route the call through the trunk allotted by the other telecom company for transmission of calls to other telecom company's network. There are dedicated trunks for carrying Local, NLD, ILD calls. A telecom company can not route local calls either through NLD or ILD trunk and *vice versa*. Any

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violation of these conditions may attract penalty. Internal auditor should understand these provisions and verify interconnect bill or any notice received in this regard from other telecom company to find out whether any penalty is levied on the company.

Metering and Billing Audit

2.17 In order to bring standardisation and transparency in the metering and billing procedures being followed by various operators, TRAI developed a regulation “Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006”, which has benchmarks for metering and billing system. The salient features of Code are as follows:

- i. Before a customer is enrolled as a subscriber of any telecommunication service, he shall be provided in advance with detailed information relating to the tariff for using that service. Further, the service provider shall inform the customer in writing, within a week of activation of service, the complete details of his tariff plan.
- ii. Where a value-added service (e.g., download of content, such as a film clip or ring tone) or entry to an interactive service (such as a game) can be selected through a choice of the service user (e.g., by dialing a specific number) then the charge for the service must be provided to the customer before he commits to use the service.
- iii. The services provided to the customer and all subsequent changes therein shall be those agreed with him in writing prior to providing the service or changing its provisions.
- iv. All the charges must be consistent with published tariff applicable to the user.
- v. Payments made by a post-paid customer shall be credited to his account immediately for cash payment and within reasonable time in case of cheque payment. For pre-paid customers, top-up credit shall be applied to a customer's account within 15 minutes of its application.

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- vi. Where the service provider unilaterally intends to restrict or cease service to the customer, a notice shall be provided to the customer in advance of such action so that the customer has reasonable time to take preventive action to avoid restriction or cessation of service.
- vii. The service provider shall have a documented process for identifying, investigating and dealing with billing complaints and creating appropriate records thereof.
- viii. Reliability performance of the total metering and billing system should be within the tolerances specified by TRAI.
- ix. The telecom company shall submit the compliance of code of practices adopted to TRAI on yearly basis.
- x. The Authority has notified a panel of agencies capable for auditing the metering and billing system to certify the adequacy of Metering and Billing System of Telecom Company.
- xi. The telecom companies shall arrange audit of their Metering and Billing System in compliance with this regulation on an annual basis through any one of the auditors notified by the Authority and an audit certificate thereof shall be furnished to the Authority not later than 30th June of every year.

The internal auditors should satisfy themselves that the audit is carried out by the notified auditors and that the company has taken corrective actions on the observations reported by the auditors.

Quality of Service (QoS) Parameters

2.18 Telecom Regulatory Authority of India has prescribed quality of service parameters for various Basic Wireline and Wireless and Cellular Mobile Telephone Services (CMTS), e.g. provision of telephone, fault repair, grade of service, call completion rate, response time to customer for assistance network performance, billing complaints and customer perception of services, etc. The internal auditors need to acquaint themselves with these parameters, analyse the relevant data and report the adverse features observed to the management.

Chapter 3

Frauds

Introduction

3.1 Fraud is a constantly evolving, many-faceted phenomenon. When the first analogue mobile communications networks were launched, weaknesses in the security, particularly the lack of encryption of both the voice channel and the authentication data made the networks susceptible to eavesdropping and cloning. With the change of technology, ingenious ways of fraud are also emerging. As per an estimate, there are more than 200 types of telecom frauds that exist and number is increasing with the advent of 3G services.

3.2 There is a very thin line between fraud and negligence. As far as telecom is concerned, it may be difficult to establish frauds when mistakes occur in activities like configuration of switches/ rate plan in billing system, waivers and adjustments and acquisition of non-paying subscribers. Fraud in telecom industry may be described as any service obtained without intention of paying. Some common types of frauds in telecommunications industry are discussed in the following paragraphs.

External Frauds

Subscription Fraud

3.3 Subscription fraud may be of two types. Firstly, connection is obtained by providing fraudulent documents/ information and secondly, after providing the correct documents, a customer uses the network for making NLD/ILD and roaming calls. The fraudsters start building up his credit limit by paying initial bills and as he enjoys the increased credit limit, he makes large number of NLD/ILD calls with no intention to pay the bill.

3.4 For dealing with the first category of fraud, the telecom company should have practice of verifying the original documents,

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proper address and credit verification of customers, so that, there is a minimal possibility of committing such frauds. Internal auditors should verify that these practices are rigorously followed by the operational team of the company.

3.5 Handling of second category of subscriber fraud poses a great difficulty as there are no preventive measures and in many cases, the amount due from customers is lower than the cost of recovery and legal actions. But by adopting the following measures, telecom companies may be able to reduce their exposure:-

- i. Putting adequate de-duping processes (checking of the data base of existing bad and suspended/ terminated customers) in place to ensure that existing bad suspended/terminated customer do not re-enter into the system by having a new connection.
- ii. Evaluation of credit rating of the customers and assigning credit limit and allowing him to keep exposure upto his assigned credit limit.
- iii. Efficient dunning policy, so that, the customers are made aware about exceeding credit limit and initiating barring of services in case exposure is above deposit/ credit limit. However, care should be taken by the company that the premier customers are not affected.
- iv. Regular monitoring of high usage and exceptionally long duration ILD/ NLD calls.
- v. Regular monitoring of the calls made during odd hours e.g. late night, early morning calls.
- vi. There should be clear guidelines for screening of subscription forms and to verify identity of subscriber.
- vii. Analysis of undelivered bills even though the payment is being received in respect thereof. The fraudsters may pay the initial bills with no intention to pay future bills of large amounts.

3.6 Further, TRAI has made mandatory for all operators to verify the identity of all their prepaid and postpaid subscribers. The internal

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auditor should evaluate whether the company has adopted requisite practices. They should be more vigilant while verifying the proof of identity and proof of address of the subscribers as the connections taken through fraudulent documents may lead to serious implications in addition to loss of revenue to the company.

Illegal Telephone Exchanges

3.7 These exchanges terminate voice over internet protocol (VoIP) International calls over public switched telephone network (PSTN). Fraudster receives international calls from foreign countries over VoIP (through an ISP). VoIP calls forwarded to desired destinations within country by using switching equipment which may cause loss of ADC charges. Telecom company may have to pay heavy penalty on detection of such calls by the authorities. Such frauds can be prevented or detected by adopting following measures: -

- i. Encourage the customers to report the display of local calling numbers for International calls.
- ii. By putting an appropriate configuration of alarms in the Fraud Management System for long duration ILD/ NLD calls and analysis of high usage of suspicious calls.
- iii. Implement a system to identify the subscribers of high usage in a BTS or nearby BTS,
- iv. Subscribers verification process to be tightened,
- v. Analyse the incoming and outgoing call ratios.

3.8 Internal Auditor should analyse the reports of Revenue Assurance and Fraud Management Cell and satisfy himself that the appropriate and timely steps are taken to detect and prevent such frauds.

Cloning of Handsets and SIM Cards

3.9 In cloning fraud, the phone's authentication parameters are copied into other handsets, so that the network believes that it is the original handset that is being authenticated. The telecom

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company charges the calls to original customer who will obviously deny having made such calls and consequently the telecom company will lose its revenue.

3.10 Cloning of Handsets/ SIM cards is re-emerging as a significant threat to mobile operator's revenues. It allows fraudsters to make high value calls for which the telecom company can not collect any revenue. In addition, in most cases of cloning, the operator will have to make substantial payments in the form of IUC charges to other telecom companies. Such frauds can be identified by analyzing the call collusion/ call velocity and calling pattern.

Credit Card Frauds

3.11 Many telecom companies accept e-payments and credit card payments. A fraudster may make payment by using a third party credit card number and three digit Card Verification Value (CVV) number. Subsequently, original card holder may refuse to pay the amount, claiming that he has not used the credit card. In such scenario, the credit card company may charge back the amount which may result into loss to the telecom company. The exposure to such type of frauds can be restricted by:-

- a. Putting a limit on number of swipes in a given time frame.
- b. Specifying the limit on the maximum of amount of payment which can be made through credit card.
- c. Monitoring of payments of multiple bills using same credit card.
- d. Monitoring that batch closures for the credit cards by which credit card company makes payment is done timely and such batch closure report to be scrutinised for identification of frauds.

Internal Auditor should critically examine the above reports and verify the internal controls implemented by the company to prevent such frauds.

Premium Rate/ Value Added Services related Frauds

3.12 Telecom Companies are providing Premium Rate Numbers (i.e. 52222, 59999, 57777 etc.) to their customers for value added services, wherein, all calls are charged at a very high rate. Content provider for Premium Number Service is entitled for revenue share on the basis of the number of incoming calls. In such a scenario, a content provider may try to get the maximum number of calls using all tactics e.g. content provider may obtain another number with fraudulent documents/ information with no intention to pay the bill and will make calls to Premium Rate Number for getting higher revenue.

This can be detected and prevented by monitoring the activities of Premium Rate Services, traffic pattern and CDR's of Premium Rate Numbers.

Internal Frauds

Dealer Fraud

3.13 A telecom company appoints dealers, distributors, channel partners for various business activities such as acquisition of customers, collection of bills, etc. These channels will get commission/ incentives on the basis of different slabs for total number of new acquisitions/ connections, collection targets achieved, etc. On the other hand they are penalised for not achieving the collection targets. Sometimes to maximise commission/ incentives or to avoid penalties these channels may use fake documents for acquisitions of customers or may make fake entries for collection of bills. They may delay deposit the amount collected. This can be detected by having:

- i. Effective implementation of guidelines issued for screening of subscription forms and verification of identity and address of subscriber.
- ii. Robust process for timely bank reconciliation of collections made.

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- iii. Review of channel partner's profitability and policies on an ongoing basis.
- iv. Incentives/commissions policy can be structured in such a manner that it will not encourage the malpractices by penalizing the Channel Partners in addition to non-payment of commission.

Wrong Configuration in Operating Systems

3.14 Telecom Company has to configure various data, such as subscriber data, tariff plans, Call charges, in the various operating systems like switches, phonenet, billing system, etc. The bills are generated after matching of entire data in these operating systems. The employee of Telecom Company may fraudulently modify the data, i.e. they may configure the switches in such a manner that the CDR is not generated for particular Number(s) or they may configure/modify the different tariff plan etc. This can be detected by effective monitoring of configuration of tariff plans and exceptional reports of billing systems/ switches etc.

Telecom Related Business Risks

3.15 The telecom industry in India is exposed to various business risks due to the following reasons:-

- i. Fast pace of growth of the telecommunication industry;
- ii. The enormous data being generated and handled due to large subscriber base;
- iii. The revenue per subscriber is very low due to which cost of collection of revenue is higher;
- iv. Fast changing technology; dearth to keep ahead on innovative technology;
- v. Fierce competition amongst all the Telecom Service Providers;

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- vi. Catering to the varying customer needs in the global marketplace;
- vii. Geographical wide spread of the subscriber base.

Every telecom company therefore needs to have an effective Enterprise Risk Management framework in place for enhancing business performance by:

- a. Identifying and managing strategic, operational, financial, compliance and financial reporting related risks on a real time basis across the enterprise;
- b. Institutionalising and embedding the risk assessment, mitigation and monitoring processes across and within the enterprise; and
- c. Strengthening Corporate Governance mechanism to enhance stakeholder's value. Clause 49 of the listing agreement requires that all companies should have an effective Enterprise Risk Management framework in place.

3.16 Some of the business risks relevant to telecommunication business in general are as follows:-

- i. Allocation of Spectrum by Government is one of the biggest risk persisting in the Indian telecommunication business. If the required spectrum is not allocated, operators may not be able to provide innovative value added services;
- ii. Since the volume of data is very large, there may be limitations of existing IT systems to support new service offerings;
- iii. Due to enormous volume of data, the telecom fraud management system and revenue assurance system may not be adequate. As per a survey carried out by Subexazure, the average fraud losses have risen to 4.5% of the turnover in 2007 as against 2.9% in 2006;

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- iv. Inadequate disaster recovery/ business continuity policy and processes. The capital cost of having a parallel disaster recovery system is very high;
- v. Due to abnormally large volume of data, the data archival and retrieval processes may not be adequate;
- vi. Establishment of an enterprisewide IT risk management program to identify, monitor and mitigate risks to IT infrastructure;
- vii. The data is handled at various levels and by various outside agencies such as franchisees, channel partners, collection agencies etc., hence it is very difficult to maintain business information security;
- viii. There are challenges in respect of customer service and timely complaint resolution. These challenges are resulting into customer dissatisfaction. This ultimately results into impacting company's image which causes subscribers churn and revenue loss;
- ix. Poor information flow from business groups resulting in delay in network upgradation decisions;
- x. Internal scaling of operations may fall short of market demands thereby cause loss of potential revenue;
- xi. Inaccurate estimate of the demand for network service and inability to continuously optimise standard specifications for passive infrastructure to reduce capital expenditure;
- xii. Revenue leakages from postpaid, prepaid, interconnect and roaming billing systems may not be identified and plugged timely;
- xiii. Revenue growth may lag substantially behind the subscriber growth, due to progressive reduction in Average Revenue Per User (ARPU);

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- xiv. Time to configure new products in the systems may be higher than the other operators, leading to delay in launching new products;
- xv. Obtaining Right of Way (ROW) permissions for laying the cables particularly for last mile connectivity in respect of wire line business in metropolitan and other towns, is a challenge;
- xvi. Due to involvement of various agencies and performance pressure, the subscriber's documents may not be genuine thereby violating the TRAI guidelines and also result in loss of revenue to the company;
- xvii. The acute shortage of skilled manpower in telecom industry;
- xviii. Telecom industry is also witnessing a very high employee attrition.

3.17 The internal auditor needs to acquaint himself with the Enterprise Risk Management plan undertaken by the company and should monitor whether the telecom company is taking actions as per the risk mitigation plans.

Chapter 4

Revenue Assurance and Revenue Recognition

Revenue Assurance and Leakages

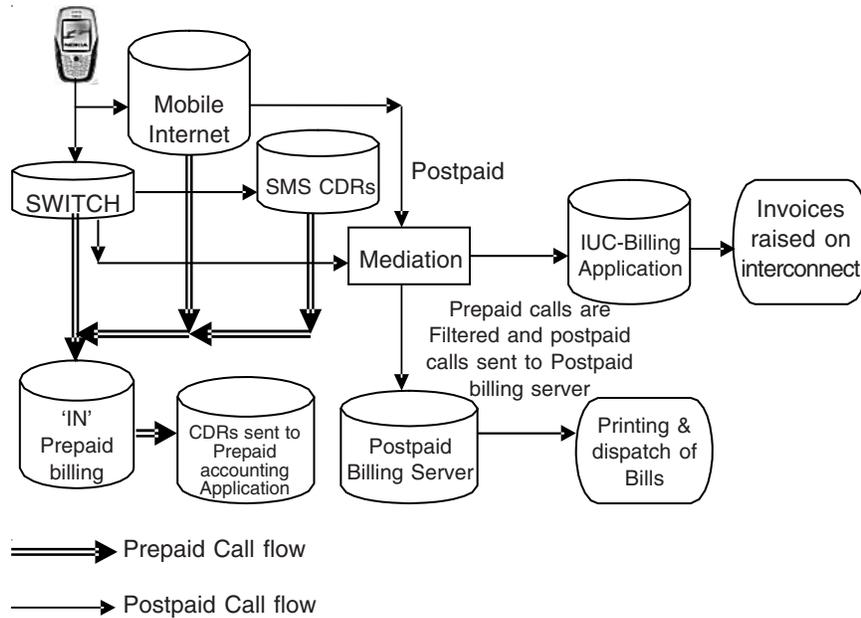
4.1 The areas covered under revenue assurance review would *inter alia* include the review of processes related to Call Data Record (CDR) generation, CDR processing, rate plan configuration, billing and rating for prepaid, postpaid, roaming, IUC and VAS revenue streams. Determination and recognition of revenue in case of telecom company is not simple. In telecom industry, revenue is earned on the basis of number of minutes services used (MoU). There is no single rate for applying to number of minutes services used. There are number of tariff plans which are configured in system and the customers are billed as per the plan applicable to them. The revenue is generated on the basis of CDR which is a record containing information relating to a single call. It contains the information such as caller number, called number, duration of call, place of origin, and destination, etc. In a broader way, the revenue can be determined, assured and recognised by adopting the steps enumerated below.

4.2 When a call is made, it is transmitted to the nearest 'Switch' of the telecom operator, so that, it identifies the calling number and destination (called number) and routes the call as per the predefined rules. Switch identifies the call and differentiates postpaid and prepaid subscribers and also the type of calls. Prepaid calls are diverted to the prepaid billing software first to find out whether subscriber is eligible to make a call and subsequently for rating of CDRs as per prepaid tariff plans and necessary adjustments in the customers talk time balance. Postpaid CDRs are pooled in the 'Mediation' (a call interpreting application) software, for further filtration and chargeable CDRs are sent to billing software in readable form, for rating and generation of bill. The customer data and the applicable tariff plans are pre-configured in the billing

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software. The bills are generated by matching CDRs with the configured data. This has been explained in the following exhibit.

Billing/ CDR flow process



4.3 Telecom companies should also analyse the root causes of revenue leakages. Substantial revenue is lost because of the following reasons:

- Prepaid CDR may be configured as postpaid CDR and *vice versa*, hence call may be allowed without reducing the balance of prepaid subscriber and not charged in case of postpaid subscriber.
- Prepaid calls may not be charged on 'Real Time' basis and the subscriber may get through with the calls without having adequate balance in his account.
- Configuration in 'Switch' may be wrong and CDRs may be blocked to be generated.
- Wrong configuration of tariff plans in the Prepaid/Postpaid billing system.

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- CDRs generated by 'Switches' may not be forwarded to the billing system due to system constraints, such as high volume of data at particular point of time, lack of synchronisation between the systems.
- Call duration discrepancies in CDRs between 'Switch' and billing system, due to system constraints.
- Chargeable CDRs as per 'Switches' may appear as non chargeable in billing system.

4.4 Internal auditor should verify that the company has proper revenue assurance process and that these processes are being followed and the necessary corrective actions are taken. They should verify the 'error CDRs' to analyse the reasons for non-rating of CDRs.

Revenue from Roaming

4.5 Roaming is a general term refers to the extending of connectivity service in a location that is different from the home location.

4.6 Traditional Roaming is defined as the ability for a cellular customer to automatically make and receive voice calls, send and receive data, or access other services, including home data services, when travelling outside the geographical coverage area of the home network, by means of using a visited network.

Types of Roaming

4.7 Various types of roaming is as follows:

- **National Roaming-** This type of roaming refers to the ability to move from one mobile operator to another in the same country
- **International Roaming-** This type of roaming refers to the ability to move to a foreign service provider's network.
- **Within Operator-** Roaming within India on Telecom Operators own Network.

Roaming Process

4.8 When the mobile device is turned on or is transferred *via* a handover to the network, this new “visited” network sees the device, notices that it is not registered with its own system, and attempts to identify its home network. If there is no roaming agreement between the two networks, maintenance of service is impossible, and service is denied by the visited network.

4.9 The visited network contacts the home network and requests service information (including whether or not the mobile should be allowed to roam) about the roaming device using the IMSI number.

4.10 If successful, the visited network begins to maintain a temporary subscriber record for the device. Likewise, the home network updates its information to indicate that the mobile is on the host network so that any information sent to that device can be correctly routed.

Roaming Agreement

4.11 In order that a subscriber is able to “latch” on to a visited network, a roaming agreement needs to be in place between the visited network and the home network. This agreement is established after a series of testing processes called IREG and TADIG. While the IREG testing is to test the proper functioning of the established communication links, the TADIG testing is to check the billing part.

4.12 The usage by a subscriber in a visited network is captured in a file called the TAP (Transferred Account Procedure) for GSM file and is transferred to the home network. A TAP file contains details of the calls made by the subscriber *viz.* location, calling party, called party, time of call and duration, etc. The TAP files are rated as per the tariffs charged by the visited operator. The home operator then

Credit Control

4.13 In order to have control over exposure towards postpaid subscribers, every telecom company implements credit control

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policy. The primary objective to have a credit control policy is to ensure that 100% of dues are collected on time, reduce exposure, and define the documents and approval required to give “Credit Limits” to the subscribers.

4.14 Under the credit control policy, a credit limit is assigned to each of the postpaid subscribers, based on the tariff plan, past usage, payment history and credit worthiness of the subscribers. The credit limit is constantly upgraded/downgraded based on the above factors. The Telecom company should inform the customer about fixing/ change in the credit limit. It is also mandatory to mention the credit limit in every invoice raised to the customers.

4.15 The internal auditor needs to examine the credit policy implemented by the telecom company and its effectiveness by verifying the process of configuration of credit limits to various categories of subscribers. He should also verify the dunning process followed by the telecom company.

Dunning Process

4.16 Dunning is the process of methodically communicating with customers to ensure the collection of accounts receivable. It follows the process that progresses from gentle to strict reminders (through calls, letters/ calls/ SMSs) as accounts become more past due. There are two types of dunning process, as follows:-

a. Time based dunning

In this process, customer is reminded about the payment of bill on the specified time, before the due date, on the due date and after the due date of the payment.

b. Value based dunning

In this process, as customer’s unbilled amount approaches close to its predefined credit limit, telecom company reminds him about his exposure and advise him to make the payment for uninterrupted continuation of services.

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4.17 Dunning process includes the termination of services of the defaulting subscribers step by step, e.g. initially, the outgoing ILD is barred, then outgoing NLD services are barred, and so on. Finally, all the services including incoming calls to the defaulting subscribers are barred. The internal auditor should verify that the telecom company has an effective dunning policy in place, the customers are terminated and recovery process is started as per the policy.

Waiver Management

4.18 Sometimes customer complains of incorrect bill sent to him and subsequently there are issues relating to waiver and adjustments. Waiver management is an incidental function in telecom industry. There are various types of waivers which are granted at various levels. Every telecom company has its own policy and guidelines for grant of waivers. Generally, following are the reasons for which waivers are granted: -

- a. Late Payment Charges
- b. Configuration of incorrect tariff plan
- c. Incorrect calls time as well as number called being charged to the customer
- d. Generation of bill comprising of rental charges even after surrender of connection
- e. Concession promised to corporate customers, not reflected in the bill
- f. Waiver due to goodwill gesture

Since grant of waiver results in loss of revenue, these should be granted very judiciously. There should be proper policy, guidelines and the authority matrix.

4.19 The internal auditor should analyse the reasons of waivers and ensure that these are as per policy and proper supporting are available and waiver is as per authority matrix and it should result in actual realisation of revenue.

Revenue Recognition

4.20 Generally, revenue is recognised on providing the services. However, there are certain services for which money is collected in advance and provision of services are deferred and it is difficult to allocate the revenue over the period of service. In absence of standard industry guidelines, there is no clarity for recognizing certain revenue. Few such cases are discussed below:

Postpaid Service Revenue

4.21 Recognition of revenue in case of postpaid services is simpler and uniformly recognised by the various companies more or less on the accepted principle of recognition of revenue. The internal auditor should ensure that the rental charges have been apportioned properly.

Prepaid Service Revenue

4.22 Prepaid service revenue (Recharge Vouchers) can be bifurcated into three segments, i.e.,

- a) Service/ Administrative Charges or Fee,
- b) Service Tax payable to the Government and
- c) Talk time available to the subscriber.

Service Tax amount is payable to the Government on of sale RCVs to the dealers/distributors. In case of Administration Charges and 'Talk Time', different practices are followed for revenue recognition by different telecom companies. The internal auditor should verify that the accounting policies adopted by the company, in respect of revenue recognition have been consistently followed.

Issues With Reference to Lifetime Validity Offer for One Year or More

4.23 While recognising the revenue in respect of 'Life Time Validity' offer, various factors included in the offer need to be looked into.

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Though the offer may mention the period “during the validity of the licensed period” but there are possibilities that licensed period may get an extension. It has been seen that prepaid customers have a tendency to churn out within 18 to 24 months. Hence legally, the services are to be provided for the lifetime, practically services will be provided for a period of 18 months to 24 months.

As there are no industry guidelines with reference to administration charges/talk time and method of identifying estimated useful life of the subscriber, internal auditors should verify that the accounting policies adopted by the company have been adhered to consistently. They should bring out the changes, if any, made in subsequent years from the accounting policies.

Registration, Processing and Activation Charges

4.24 These charges are levied to the customer at the time of acquisition. Revenue is generally recognised either immediately or on the activation of services by the customer or differed and amortised over the related estimated customers relationship period, as derived from the estimated customer churn period.

Chapter 5

Network

5.1 Every telecom company should have a robust system of surveillance and maintenance of network as failure of the network will disrupt the services which can cause customer dissatisfaction and churn of customers. Down time monitoring is a crucial requirement in such scenario.

Infrastructure Sharing Charges for Passive Links (Point of Interconnection) of Telecom Companies

5.2 Every off net call (i.e. calls to other operators network) has to be routed through 'Point of Interaction' (POI) as per TRAI guidelines. For obtaining POI, port and other charges are payable to other telecom company as agreed mutually subject to overall ceiling laid down by TRAI. This has following structure.

- (a) Port Charges
- (b) Active Link Charges
- (c) Passive Link Charges

5.3 Every telecom company has right to demand for POI on payment of charges in advance on annual basis subject to ceiling laid down by TRAI. All telecom companies are bound by regulation to provide the Port to other company on demand and on payment of port charges subject to availability of ports, sufficiency of traffic and technical feasibility.

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Port Charges

Port Charges		
Particulars	Port Charges	
Date of Implementation	April 1, 2007	
Coverage	Charges for Ports (other than the Port Charges for Internet, which are specified in Schedule VI of the Telecommunication Tariff Order 1999)	
Port Charges covering all switches	No. of Ports	Port Charges (in Rs) per annum
	1 to 16 PCMs	$N \times 39000$
	17 to 32 PCMs	6,24,000 $+(N-16) \times 22,500$
	33 to 64 PCMs	9,84,000 $+(N-32) \times 14,500$
	65 to 128 PCMs	14,48,000 $+(N-64) \times 11,500$
	129 to 256 PCMs	21,84,000 $+(N-128) \times 10,500$
Note N refers to the number of Ports within the capacity ranges under the column 'No of Ports'		

Active Link Charges

5.4 In addition to Port Charges, a telecom company has to pay to BSNL, Active Charges. These are the links of Licensed Telecom Service Providers for which transmission equipment of service provider is installed in BSNL's exchange premises and their network is connected through it. The rental charges of infrastructure in this case have been streamlined and are given below :-

- i. Charges for sharing of building space
- ii. Electricity and miscellaneous charges

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- iii. Charges for tower sharing
- iv. Charges for duct sharing

Charges for Sharing of Building Space

5.5 The Licensed Telecom Service Providers are given space (bay) for installation of their various equipments. The charges vary based on the category of the city.

Categories of City	Charges
A	Rs. 36,000 per bay per annum
B	Rs. 28,000 per bay per annum
C	Rs. 20,000 per bay per annum
Unclassified	Rs. 13,000 per bay per annum

Miscellaneous Infrastructure Service Charges

5.6 These charges include the sharing of following services:

- DC power at –48V up to 10 A/ transmissions bay;
- AC power for lights, fans, testing instruments etc;
- Air-conditioning charges (sharing of existing air-conditioning system);
- Generator Backup;
- Earthing charges (Tapping from exchange earth bar is allowed)
- Fire equipment (Sharing in case of requirement)

Charges for providing these facilities are varying as per the category of city, the rates for these categories of cities are as under:

Categories of City	Charges
A cities	Rs. 2,00,000 per bay per annum

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B cities	Rs. 1,80,000 per bay per annum
C cities	Rs. 1,50,000 per bay per annum
Unclassified cities	Rs. 1,20,000 per bay per annum

Tower Charges

5.7 Charges per antenna are as under

Tower Height All Cities Charges

Up to 30 meters	Rs. 1,20,000 per annum
31-60 meters	Rs. 2,50,000 per annum
More than 60 meters	Rs. 4,00,000 per annum

The above charges will be multiplied by no. of antennas in case multiple antennas are installed by Licensed Telecom Service Providers.

Duct Charges

5.8 Telecom operators have to take permission to lay their OFC cable, 50 mm pipe inside the BSNL exchange premises after paying a refundable security of Rs.50,000.

5.9 All the charges discussed in (i) to (iv) above are applicable w.e.f. 1st April, 2006 with a provision of 10% annual increase every year i.e., 01/04/07 onwards and are payable in advance every year.

Passive Link Charges

5.10 Apart from Port Charges and Active Link Charges, telecom operators have to pay following charges to BSNL for providing passive link connectivity for 'Pols' between BSNL and telecom operator :-

- i. Infrastructure Charges for passive links with HDSL modem, @ Rs. 15000/- per annum

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- ii. Infrastructure Charges for passive link with HDSL modem, @ Rs. 3000/- per annum. However minimum infrastructure sharing charges up to 5 EIs shall be Rs. 15000/-

5.11 The internal auditor should verify that the company has applied the ports/other infrastructure based on the proper planning and estimated requirement, so that, the excessive payment is not made for unwarranted infrastructure.

Interconnection Usage Charges (IUC)

5.12 Interconnect Usage Charges consist of following factors:-

1. Access Deficit Charges (ADC charges)
2. Carriage Charges (NLD/NLD charges)
3. Call Termination Charges

Access Deficit Charges (ADC charges)

5.13 The National Telecom Policy 1999 requires telecom companies to have access to telephony even in the rural areas. Since BSNL was the only service provider in rural areas and its revenues were not enough to cover up the fixed costs, Access Deficit Charges (ADC) have been introduced by TRAI from May 1, 2003 for a limited period to give time to incumbent operators for rebalancing the tariff during a transition period. The ADC regime w.e.f. April 1, 2007 is as follows:

- No ADC on outgoing ILD calls.
- On incoming ILD calls- Re. 1 per minute
- ADC on revenue share is 0.75% of AGR of all Access License, NLD, and ILD.
- Revenue from rural wire-line subscribers will not form the part of AGR for the purpose of ADC.
- AGR will be the same as defined in the License except above. Similarly, the payment of ADC based on AGR has to

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be made on quarterly basis to BSNL by other operators. However the ADC amount of revenue from urban wire line subscriber will be retained by the respective service providers

(Note : Effective from April, 2008, ADC charges are not applicable for local calls and effective from October 1, 2008, ADC charges are not applicable on incoming ILD calls also.)

Carriage Charges (NLD/ ILD charges)

5.14 The carriage charge is the amount paid to the long distance carrier by the cellular and fixed telephone operator. The carriage cost varies between 20 paise to Rs 1.10 per minute depending on the distance of the call and IUC agreement between Telecom Companies.

Call Termination Charges

5.15 Termination charges are the charges paid to Mobile Operators for NLD and ILD calls terminating on their network. Every Telecom company has to pay interconnection charges (IUC) on all local/ NLD/ILD calls terminating on other telecom company's network as per the schedule of fee notified by TRAI. Similarly it will receive the IUC from other operators for all local/ NLD/ ILD calls terminated on its network.

- A) On all Local Calls and Intracircle calls (0-50 kms) - Fixed Phone to Mobile/ WLL and *vice-versa*
- B) On all Intracircle Calls (>50 kms):-
 - i) From Fixed Phone to Fixed Phone /Mobile / WLL
 - ii) Mobile /WLL to Fixed Phone
- C) On all Inter Circle Calls
- D) On all incoming and outgoing ILD calls

5.16 IUC Charges are paid as per the IUC agreement entered with the telecom companies and in accordance with CDRs data

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base of both the companies. In case the variation in CDR data between both the companies, these charges are paid as per following payment schedule : -

Variation Range (+)	Payment
0 – 0.25%	As per bill
0.25% - 2%	50% of the bill amount is paid upfront and balance after reconciliation of CDR
Above 2%	After Reconciliation of CDR per mutually agreed

5.17 Internal auditor should verify whether there exists a proper system for verification and payment of IUC. If there are continuous differences between the company's CDRs and other company's CDRs, the differences should be investigated to ensure that the company's billing system is functioning properly.

Sharing of Passive Infrastructure Charges

5.18 In telecom industry, huge capital is required to create the network for providing telecom services. In order to minimise the requirement of huge funds for creating costly infrastructure for reaching out to new consumers, the companies are resorting to the sharing of active and passive infrastructure. Sharing of infrastructure is method wherein two or more telecom companies create a pool of passive infrastructure, i.e. Towers, Dark Fiber etc. and make use thereof on payment of agreed charges on the basis of quantum of usage.

5.19 The infrastructure sharing on fair, transparent and commercial terms ensures that consumers get choice of service, quality as well as affordability. On the other hand, the operators get an attractive commercial proposition and an opportunity to expand coverage and reach of their services.

5.20 Internal auditor should ensure that the telecom company has proper agreement for sharing of infrastructure in place and network usage details are properly generated and billed to the infrastructure sharing partners.

Chapter 6

IT and Other Systems

6.1 Telecommunications industry, being a service-based industry, can provide services to its customers through the well-configured and synchronised technical as well as commercial systems. Disintegrated IT and other technical and commercial systems will lead to manual processing and ultimately customer dissatisfaction. Telecom Industry by its nature generates very large volume of low value transactions. Unless the telecom company has a robust IT infrastructure, it may not be able to cater to the needs of business. Some specific IT infrastructure related issues are discussed in the following paragraphs.

Scalability of the systems

6.2 High rate of growth and volume of transactions, emphasise the need of robust IT infrastructure which is scalable to support the future growth and volume.

Synchronisation of Various IT Systems and Common Reference Data

6.3 Telecom company deploys various systems and application for customer creation, activation, service provision, billing, collection, accounting and MIS reports generation, etc. All these systems may run parallel. In case, if these systems are not properly synchronised with each other, different systems will show different results for the same query, for example, if there is no synchronisation, subscriber data as per acquisition system may vary from subscriber data as per billing system, resulting into under / excess billing or non-billing. The internal auditor is to check that there is synchronisation amongst various systems. They should also carry out the system audit to identify the gaps, if any.

Sufficiency of Information

6.4 Meaningful and adequate information is key to management

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for taking various decisions. The systems employed by the telecom companies should be able to generate various reports. Due to the fierce competition, every telecom company tries to bring out innovative schemes to attract the subscribers. The IT infrastructure should be structured in such a manner that the customer's behaviour and spending data is available for formatting and marketing new and innovative schemes and ensuring that it generates the sufficient revenue.

Security of Information

6.5 In order to maintain the confidentiality of the information and to avoid misuse of information, the security of data is critical. Right to access should be given only to those persons who are duly approved. Authorisation should be given on the principles of 'Need to Know' and 'Need to Have'. There should be proper administration of granting access by creation of user ID and proper password which can not easily hacked.

6.6 Secondly, transactions like waiver adjustments in bill and impacting revenue/expenses are entered/passed through system. Employees are given such power to record the transactions. Strict monitoring and controls about grant of such powers and creation of user ID and password. It should also be monitored that these authorisations are not misused.

6.7 IT infrastructure of a telecom company should be able to deal with:-

- Protection from the hacking by providing necessary fire walls,
- Effective access control processes including password mechanism deployed by the company,
- User ID creation and suspension process- User IDs of resigned employees should be blocked immediately to avoid unauthorised use.

Chapter 7

Collection, Banking and Money Reconciliation

7.1 In a telecom company revenue is generated from the following major activities:-

- i. Billing to Post Paid Subscribers
- ii. Billing to Broadband Customers
- iii. Billing to IDC Customers
- iv. Sales of RCV's / E-recharge
- v. Sales of Handsets and Accessories, wherever applicable.

7.2 Collection is done by way of Cash/Cheque/DD/Credit Card/ Debit Card etc. on above mentioned accounts. These collections are made by the company owned outlets, channel partners, collection agencies and distributors etc.

7.3 Telecom companies have to comply with TRAI requirements of providing credit to the customers within a specified time depending upon the mode of payment, i.e. cash, cheque, credit card etc. One of the peculiarity of the telecom industry is that there is a very high volume of low value collections in cash at far-off locations by third parties, i.e. channel partners and collection agencies. Even in the case of own outlets, it may be through contractual employees. It is therefore essential that the company has a robust process for collection, timely banking of collections ensuring that amount deposited is credited by bank and transfer of clear balance to pool account and bank reconciliation. For better control and ease of reconciliation of various bank accounts, generally the telecom companies maintain two separate accounts for collection and payments.

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- 7.4 The major concern areas in this regard include:-
- i. Amount collected are not accounted properly/ wrongly accounted in customers account
 - ii. Delay in depositing/ non depositing the amount collected
 - iii. Management of bouncing of cheques
 - iv. Management of charge back in case of credit card payments
 - v. Non credit / Wrong / delay in crediting the amount deposited by the bank
 - vi. Reconciliation of number of bank accounts
 - vii. Delay in transfer of amount collected to central pool account
 - viii. Proper control over printing, issue, use of Manual Receipt Books and reconciliation of used receipt books.
- 7.5 Internal auditor should verify the process of reconciliation of various bank accounts and controls in place to ensure collections made at various touch points are properly monitored and timely steps are taken by the management in exceptional circumstances.

Chapter 8

Selling, Distribution and Marketing Expenses

8.1 Growth of telecom business is directly proportionate to the dealers' network. The telecom companies provide a variety of incentives/commissions to the dealers/channel partners for encouraging them to acquire more and more business for telecom company. At the same time they are required to provide huge amounts towards marketing expenses/sales schemes, in their budgets for attracting the customer to buy their product.

Selling and Distribution Expenses

8.2 The Channel Partner's expenses such as customer acquisition commission, sales incentives, and collection commission form a substantial part of selling and distribution expenses. This requires a proper documented commission and incentive policy. Due to inherent competitive nature of the business, the telecom companies launch innovative schemes very frequently and some times without adequate controls. Since the volume is enormous and more system dependant, internal auditor should verify the existence and efficacy of the processes/database for making various payments to channel partners.

Other Marketing Expenses

8.3 Telecom companies are compelled to allocate substantial budgets for sales, marketing and publicity due to fierce competition and high business growth in the industry. Marketing of the services and products is carried through following ways:-

- (a) Print media
- (b) Hoardings, Signage
- (c) Electronic Media
- (d) Sponsorship of events

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8.4 As the business is spread across the country, orders for marketing collaterals like Brochures; Banners; Posters; Collaterals; Vinyl Printing, are placed locally. As different rates are prevalent in different States, generally, standard rates are defined by the company and purchases of these materials should be made preferably below the specified prices, however the material should be available in time say exactly on launch of the scheme. Another concern area is procurement of exact quantity, as shortage will affect the sale and excess will lead to wastages. Advertisements on hoardings are displayed at various location sites for a contracted period. The rate varies based on the location and the period. The rate should be negotiated keeping in view the best interest of the company.

8.5 The major concerns areas in this regard include:-

- (a) The advertisement is not displayed at the contracted location,
- (b) The vinyl/ printed material is damaged,
- (c) In the case of long duration contract, the rates are cheaper and at times cost of putting the advertisement on hoarding is included in the rate however it should be ensured that advertisement does not become outdated. There should be provision for change of advertisement contents during the period of agreement.
- (d) It should be ensured that as soon as the contracted period is over, the vinyl/ printed material is returned.
- (e) In case the Signages are displayed at retail shops, the shopkeeper, sometimes replaces the Signages with that of other telecom companies and does not care to return the Signages. The telecom companies to have a proper understanding with the shopkeeper about return of Signages.
- (f) In the case of radio and TV advertisements, concerned areas are as under:-
 - i. Broadcast/ display of advertisement for agreed time slot

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- ii. Rate negotiation due to bulk advertising including agreement with the advertising agency to pass on all the discounts/year end discounts.
- (g) Concern areas in respect of promotional schemes / events are as under:-
- i. Proper system and process to identify the eligible winner for prizes need to be implemented so that complaints do not arise about wrong declaration of the winner.
 - ii. Sales are not inflated by the dealers/ distributors to achieve the targets

Internal auditor has to verify the methods and process to monitor these expenses, keeping in view the above concern areas.

Chapter 9

Fixed Assets

9.1 Telecom companies are under enormous pressure to deliver innovative services and products. On the other hand, they need to improve their profitability. This requires a focused, controlled and well-planned framework of fixed assets management. In today's scenario, the telecom companies are facing the following challenges towards effective fixed assets management.

Fast Pace of Obsolescence

9.2 Emerging technologies are placing too much pressure on the telecom companies to constantly review the useful life of the fixed assets and account for their obsolescence.

9.3 Other Constraints/critical areas relating to fixed assets management particularly network assets include:

- i. Assignment of enough resources to provide sufficient control over fixed assets
- ii. Robust system for regular assessment of control environment for assets managed by third parties
- iii. Availability of automated systems to track assets
- iv. Existence of robust plan in place to verify, track and manage transition to next generation networks.
- v. Adequacy of the plans for disposal of retired and redundant assets.
- vi. Appropriateness of implementation of assets capitalisation policies.

9.4 Apart from the normal fixed assets like land & building, equipment, DG sets, air-conditioning, etc. the underground OFC cables/ wires, BTS towers, Network cards and equipments are

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telecom specific important fixed assets constituting the substantial proportion of companies fixed assets. The difficulties in verification of these fixed assets are as under:-

- i. Underground cable can not be verified physically.
- ii. BTS towers are scattered over the geography and hence logistics and cost make it difficult to verify the same physically.
- iii. Network Cards are used in the MCNs / MSC and the cost of each is substantial. Secondly, it is difficult to identify and verify the cards by commercial persons hence technical support is required. Many times network cards sent for repairs are not received back in stipulated timeframe or not received back at all.

9.5 Internal auditors have to satisfy the existence of these fixed assets by :-

- i. Verifying the company's process for payment of the assets at the time of purchases and installation.
- ii. Verifying the company's surveillance system to safeguards these Assets,
- iii. Obtaining the reports from the network system about non-functionality of BTS towers and down time reporting due to cable cut,
- iv. Carrying out the physical verification of the active and passive infrastructure assets lying at BTS towers on sample basis.

In case of sites taken on the rental basis particularly for BTS tower; it should be ensured that company has a proper process/control for making payments of rent and agreements provided for the longer term.

There are certain equipments, kept at the third party premises. While entering the service agreement, care should be taken to insert relevant clause ensuring safeguard and return of company's assets on termination of agreement.

Chapter 10

Manpower – Payroll

10.1 Telecom Industry, being service oriented depends heavily on its manpower. While planning the manpower requirement, apart from regular employees, additional manpower requirement is met through contractual manpower and outsourcing the activities. Consequently, the success and growth of these companies also depend upon the manpower handling.

10.2 The major concern areas in this regard include:-

- a. The attendance, leave records and payroll processing of such manpower providing agencies.
- b. Verification of employees actually deployed for work.
- c. Compliance with all the labour laws and other statutory laws being a principal employer,
- d. Lack of skilled manpower.
- e. High attrition amongst contractual employees
- f. Integrity and security of data handled by contractual manpower.

The internal auditor should verify that the company has proper systems and processes to control these aspects.

Chapter 11

Other Services

Broadband Services

11.1 Many telecom companies are providing broadband services in addition to the normal voice telephony. Broadband may be defined as ***“An ‘always-on’ data connection that is able to support interactive services including internet access and has the capability of the minimum download speed of 256 kilo bits per second (kbps) to an individual subscriber from the Point Of Presence (POP) of the service provider intending to provide broadband service where multiple such individual broadband connections are aggregated and the subscriber is able to access these interactive services including the internet through this POP. The interactive services will exclude any services for which a separate licence is specifically required, for example, real-time voice transmission, except to the extent that it is presently permitted under ISP licence with Internet Telephony.”***

11.2 The broadband business is divided in two segments as follows:

- (a) Voice; and
- (b) Data.

Various products / services covered under Broadband have been discussed in the following paragraphs:

International Private Leased Circuit (IPLC)

11.3 IPLC is a point-to-point data service solely dedicated for business needs. Since the customer gets dedicated bandwidth, he is assured of complete security and privacy in communication. This service entitles a high-speed connectivity - 24 hours a day, anywhere in the world *via* submarine cable or satellite.

Internet Leased Lines

11.4 Internet Leased Line is a high-speed internet solution for organisations with large communication and information requirements. It provides effective internet access tailor-made according to the specific needs, from anywhere in the world.

Managed Data Network

11.5 The diverse and complex communication requirements of today have created the need for a highly efficient and intelligent wide area networking solution that runs uninterruptedly at all times. Managed Data Network Service based on Frame Relay technology is used to meet this growing need. Frame Relay technology is a managed end-to-end solution that provides a high performance integrated data network created to meet businesses' mission critical applications as well as the bandwidth on demand that most 'bursty' data applications need.

Internet Protocol - Virtual Private Network Services (IP-VPN).

11.6 It provides a seamless and efficient flow of information between an enterprise's corporate office, its business associates, employees. There are two types of IP-VPN packages:

a) Dial IP-VPN Services

11.7 Dial IP-VPN services help mobile customers/branch offices to get connected to their corporate network by establishing a tunnel on the existing IP based network so that communication can be done effectively between two parties. The technology requires having a IP- VPN concentrator at the customer's premises, which would permit only its authorised clients to access its network securely.

b) Site-to-Site IP-VPN Services

11.8 This service would bring corporate networks on a cost-effective IP based network so they can communicate with each other

Internal Audit in Telecommunications Industry

anytime, as and when required. In doing so, they would be sharing public data network.

Video Conferencing (VC)

11.9 Videoconferencing (VC) is the combination of dedicated audio, video, and communications networking technology for real-time interaction, and is often used by groups of people who gather in a specific setting (often a conference room) to communicate with other groups of people.

Net Telephony

11.10 Making international calls through the net is no longer a news of surprise. The convergence of voice, video, fax, and data has revolutionised the world of telecommunications. It is a new technology that will drastically reduce the cost of long distance calls and provide unprecedented opportunities for service providers, resellers, developers and end users. With the help of this technology one can dial through Session Initiation Protocol (SIP) based handset to any SIP based phone or PSTN phone abroad. Multi-location corporates can also substantially save on inter-office telephone call charges/ NLD calling charges by subscribing to CUG (calling facility).

Integrated Services Digital Network (ISDN)

11.11 Integrated Services Digital Network (ISDN) is comprised of digital telephony and data-transport services offered by regional telephone carriers. ISDN involves the digitisation of the telephone network, which permits voice, data, text, graphics, music, video, and other source material to be transmitted over existing telephone wires. The emergence of ISDN represents an effort to standardise subscriber services, user/network interfaces, and network and internetwork capabilities. ISDN applications include high-speed image applications (such as Group IV facsimile), additional telephone lines in homes to serve the telecommuting industry, high-speed file transfer, and videoconferencing. Voice service is also an application for ISDN.

National Long Distance Leased Line

11.12 National Long Distance Leased Line (NLD LL) is a high-speed solution for enterprises with large communication requirements. NLD leased line service is a dedicated point-to-point bandwidth, solely dedicated for the customer's business needs. Since the bandwidth is totally dedicated to the customer, the service provides secure, reliable and high-speed connectivity.

Public Call Office (PCO)

11.13 In addition to the revenue from retail and corporate customers, PCO is a major source of revenue for telecom companies. India still has low penetration as compared to other countries. PCO is the most convenient source of communication particularly in rural areas and for the people who can not afford to subscribe a telecom service. The PCO business is carried out by PCO operators and it has two models, viz.

Postpaid PCO

11.14 Under this model, PCO connection/ Coin collection boxes are given to PCO operator upon payment of predefined security deposit and calls are charged at concessional rates. The PCO operator is to deposit the bill on the due dates.

Prepaid PCO

11.15 Under this model, PCO connection is given to PCO operator generally upon payment of predefined security deposit. The telecom company provides the telephone instrument and PCO operator has to purchase the PCO Recharge Vouchers from the telecom operator/dealer to make the calls. It can be of following two types:-

- i. Normal PCO
- ii. Coin-collection box

An internal auditor should ensure that the company has adequate internal controls to recover the handsets in respect of inactive

Internal Audit in Telecommunications Industry

PCO instruments. Further, in respect of Postpaid model, all the internal controls, applicable to normal postpaid subscriber, should be applied.

Value Added Services (VAS)

11.16 The Indian mobile telephony market has grown at a rapid pace in the past six to seven years. Declining call tariffs in conjunction with favorable regulatory policies have led to a tremendous increase in the subscriber base, crossing the 100 million mark in 2006. While the growing subscriber base has positively impacted industry revenues (which have risen consistently over the past few years), operator margins also have shrunk, pulling down “Average Revenue per User” (ARPU). As ARPU declines and voice gets commoditized, the challenge is to retain customers, develop alternative revenue streams, and create a basis for differentiation in high-churn markets.

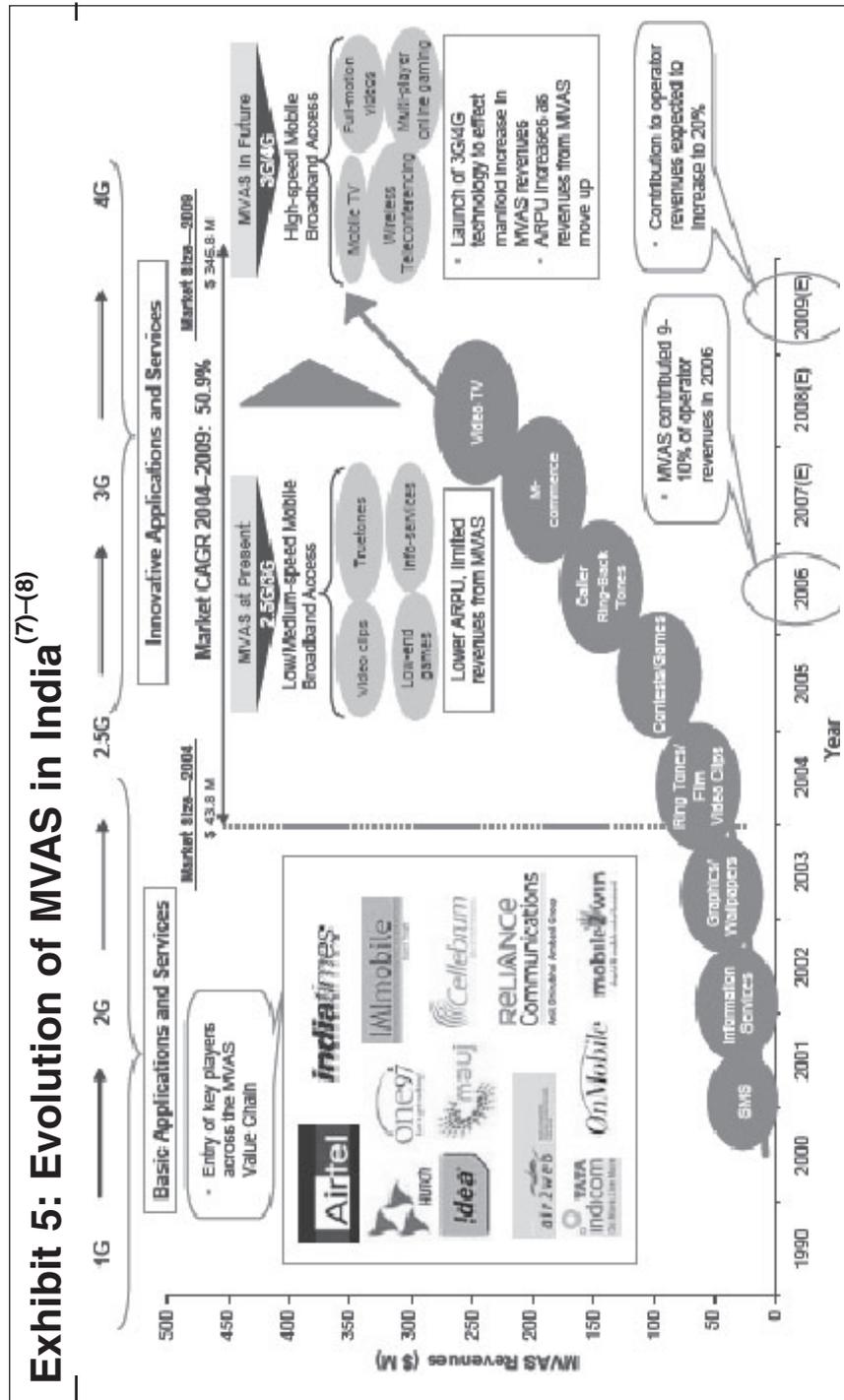
11.17 In the wake of changing industry markets, telecom operators are looking at “Mobile Value Added Services” (MVAS) as the next wave of growth, and a large chunk of revenues is expected to flow from VAS in the near future. Market growth drivers on the supply side include declining ARPU, brand differentiation needs, and growing focus on entertainment-related content; demand-side drivers include the booming Indian economy, increasing user comfort with basic mobility services, personalization of content and devices and cheaper handsets.

Mobile Value Added Services (MVAS)

11.18 Mobile Value Added Services are those services that are not part of the basic voice offer and are availed separately by the end user. They are used as a tool for differentiation and allow mobile operators to develop another stream of revenue.

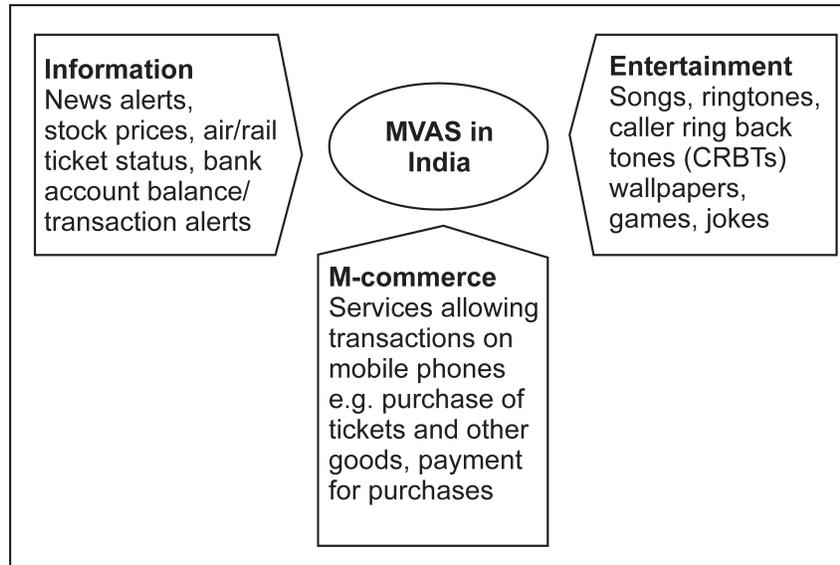
Evolution of MVAS in India

11.19 The evaluation of MVAS has been explained in the following exhibit:



Different MVAS Categories in India

11.20 Different MVAS Categories are explained in the following exhibit.



Mobile Music : Mobile music comprises ringtones, caller ring-back tones, and music clips.

Mobile Gaming: According to the projections, as many as 78.6 mn people will be playing mobile games by 2009, and game downloads will have increased more than tenfold from current levels

Mobile Email : Mobile users can send and receive email and hook into corporate computer networks.

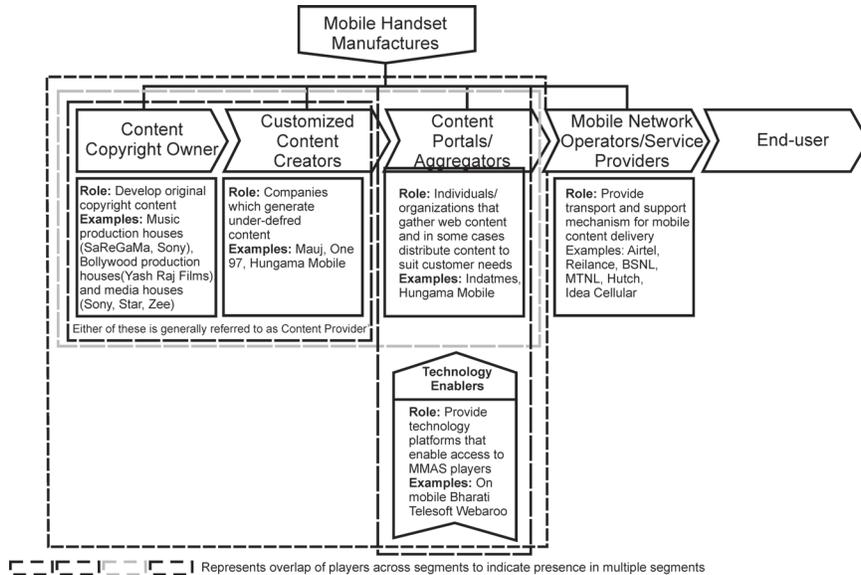
Mobile Videos and Animation clips : Indians are crazy about Bollywood movies and music. Today there are 10, 20, and 30 second music video clips available for download and will soon expand to include movie trailers, sports highlights, animation

Mobile Contests/Voting : Television is an integral part of the daily lives of average Indians. The proliferation of global television channels has changed TV viewing from a passive activity to an interactive activity. Daily soaps, music, and contest shows provide the option for viewers to participate through SMS

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News Alerts/ Match scores : Mobile subscribers get news alerts on the go. Cricket match scores is another big application in India

MVAS value chain



11.21 The main stakeholders involved in the VAS value chain are:

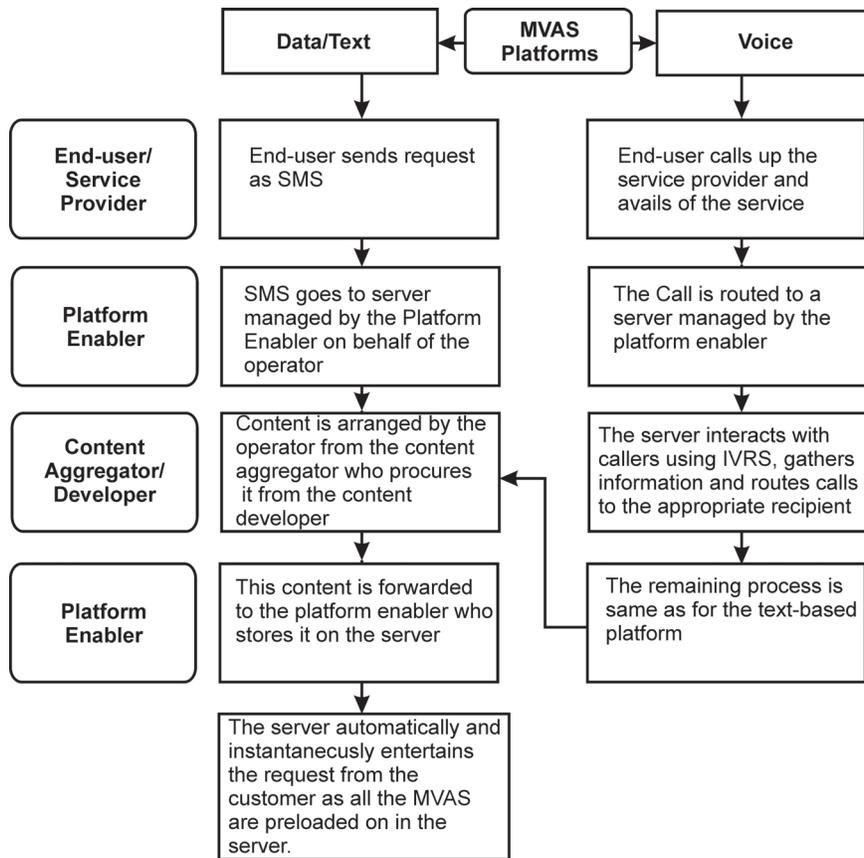
- **Content copyright owners:** At the first level of the MVAS value chain are the content copyright owners, which develop original copyright content. Examples include music production houses (SaReGaMa, Sony), Bollywood production houses (Yash Raj Films), and media houses (Sony, Star, Zee, etc.)
- **Customized content creators:** Refers to companies that generate customized content for users through their own portals. Examples include Mauj, One 97, and Hungama Mobile.
- **Content portals/aggregators:** These are individuals/ organizations that gather web content and in some cases distribute content to suit customer needs. Examples include Indiatimes and Hungama Mobile.
- **Mobile operators:** They provide transport and support mechanisms for delivery of mobile content. Examples include

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Airtel, Reliance, BSNL, MTNL, Hutch, Idea Cellular, etc.

- Technology enablers: On the other end of the value chain are technology enablers. These provide technology platforms that enable access to MVAS. Players include OnMobile, Bharti Telesoft, Webaroo, etc.
- Handset manufacturers: Mobile handset manufacturers have also started playing an important role, through their interaction with all other stakeholders across the value chain. Their activities include embedding software links in their handsets, allowing direct access to content portals, creating services customized to the need of certain regions, etc. Key players in the Indian market include Nokia, Motorola, and Samsung.

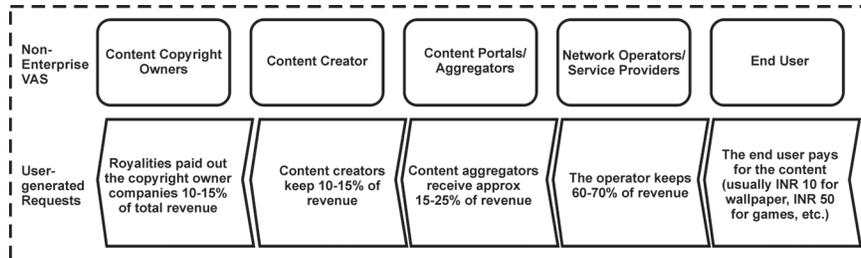
MVAS Platforms



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exhibit:

Revenue Sharing in VAS



11.23 Revenue Sharing in VAS has been explained in the following exhibit.

11.24 Operators typically retain the biggest chunk of revenues. Copyright fee given to content developer/owner comes from the margin of Content Aggregator or Operator or both. Revenue sharing arrangement is between the operator, the aggregator and the owner.

Pricing of VAS

11.25 The telecommunication industry continues debating the merits of usage based, pay-as-you-go pricing versus flat-rate, all-you-can-eat pricing.

10.26 For value-added service providers, usage-based pricing facilitates introducing new products and services and lets sellers evaluate unknown high-quality services. Compared to prepaid flat-rate plans, usage-based pricing imposes lower costs on consumers who try a new value added service because they can immediately drop the service whenever they find it unsatisfactory.

Challenges to the Growth of VAS in India

11.27 Following are the challenges to the growth of VAS in India:

- Focus only on youth and entertainment.

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- Piracy of content.
- Lack of infrastructure.
- Preference for low feature handsets.
- High cost to the end user.
- Absence of utility services.
- Lack of transparency in Revenue sharing.
- Underdeveloped WAP market.
- High volumes of spam.

Other Issues

Recharge Voucher Management

12.1 Major revenue of a telecom company comes from the sale of Prepaid Recharge Vouchers. Revenue accounting is more complex for prepaid vouchers. Collections against sale of prepaid cards and refill vouchers are recognised as revenues only after customers utilise the services or on expiry of grace period, subsequent to expiry. In case of prepaid vouchers, the majority of telecom operators have deployed the Intelligent Network (IN) system to monitor the usage of prepaid services on a real time basis and they can disconnect services when customers utilise their available talk time balance to the fullest extent. Thus, for prepaid services, revenue recognition is based on reports generated by the IN system.

12.2 The internal auditor has to be conversant with complex prepaid billing systems and various interfaces that the billing system has with other network systems / switches and accounting systems. The internal auditor should ensure that the telecom company has proper controls in place with respect to the following activities:-

- i. Generation and printing of PIN nos on the vouchers and its handling / password protection / security at company level and at printer's level.
- ii. Security of secret codes (in encrypted form) given for RCVs printing at Printers place
- iii. Upload of correspondin
- iv. gbfng PIN nos in the prepaid billing system as per the tariff plan.
- v. Ready for use activation of recharge vouchers in the prepaid billing system only at the time of sale to distributors.

Internal Audit in Telecommunications Industry

- vi. Final activation of recharge by the subscriber.
- vii. Real time depletion of the Talk time to the credit of subscribers at the time of use.
- viii. Replacement in respect of Expired/ Damaged RCVs

E-Recharge

12.3 As the name indicates, this is a way of loading the balance in the customer's account electronically without any physical use of voucher. In this case, there should be proper link between the system that facilitates the electronic upload, system, wherein, the stock has been maintained and the financial system, wherein, the money has been entered, so that, when the balance is uploaded to the customer's account, it should be reduced from stock and against the receipt of money. The internal auditor has to ensure that there is proper control over the E-recharge process and there is a system of reconciliation between the stock as per electronic system and stock as per financial system.

Card Related Issues

12.4 The Indian cellular industry has also faced double taxation issues in case of activation charges and the sale price of SIM cards. Sales Tax authorities include the value of activation charges in the sale price of SIM cards on the grounds that the activation procedure was incidental to sales. Hence activation charges formed part of sales and were thus liable for Sales Tax. On the other hand Service Tax authorities hold a contrary view stating that the sale of SIM cards are incidental to the provision of services and hence proceeds of sale of SIM cards is also liable for Service Tax. The High Courts of Allahabad in Uttar Pradesh, Punjab & Haryana have rejected the stand of the Sales Tax authorities that Sales Tax should be levied on rentals charged by Operators on subscribers. The Supreme Court, overruled these decisions of the High Courts.

12.5 However, the Kerala High Court took a different view in the case of *Escotel Mobile Communication vs. Union of India*. The

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Kerala High Court held that sale of SIM cards included its activation; hence activation charges could be subjected to the Kerala General Sales Tax Act. In the same vein, the Kerala High Court also upheld that the sale of SIM cards and process of activation were both services and were hence liable for service tax payment under section 65(72) (b) of the Finance Act, 1994.

12.6 Another writ petition was filed under Article 32 of the Constitution before the Supreme Court in the case of *Bharat Sanchar Nigam Limited and Anr. vs. Union of India and Others*. After a careful analysis of conflicting judgments of various High Courts, the Supreme Court has referred the matter back to the Sales Tax authorities for fresh assessment, while keeping in view the following broad principles:

- i. Goods do not include electromagnetic waves or radio frequencies.
- ii. The nature of transaction involved in providing a telephone connection may be a composite contract of service and sale.
- iii. If the SIM card is not sold by the assessee to the subscribers but is merely a part of services rendered by service providers, then a SIM card cannot be charged separately to tax.
- iv. The High Court also erred in including the cost of services in the value of SIM cards by relying on aspects doctrine. The doctrine does not allow States to entrench upon the Union List and tax services by including the cost of such services in the value of goods.

Revised decision of the Sales Tax authorities is awaited.

Channel Partners

12.7 As telecom business is spread at width and breadth of the country's geography, company has to appoint channel partners/ distributors/ dealers for conducting the business activities and billing collections at various locations. The Channel Partners are paid commission for rendering these services. Apart from commission, they are also offered incentives as per various sales schemes

Internal Audit in Telecommunications Industry

launched by the telecom company from time to time. They are also eligible for interest on deposits held by the company, if the agreement states so. As a deterrent, penalties are levied on them for not achieving sales/ collections and other targets. The concern areas here are that sales/ collection may be manipulated/ inflated to meet the targets and earn higher commission.

Refund of Deposit to Customers

12.8 Deposits are obtained from customers for services rendered. In case the customers are surrendering the facilities or services provided by these companies, they have to refund the deposits after adjusting any unpaid bills and usage charges through Cheque/ DD. The major concern areas here are:-

- i. Refund of deposit by way of cash.
- ii. Deposit refund cheques are prepared but not issued to the customer.

Recovery of Handsets and Customer Premises Equipments (CPEs)

12.9 One of the major challenges in telecom industry is the recovery of company owned handsets and other equipments lying at the premises of the customer after the termination of subscriber connection. Internal auditor should verify that the company has proper controls in place for recovery of customer premises equipments after the connection has been terminated and there exist adequate controls levying the penalty for not surrendering the CPEs. They should also verify that customer should not be terminated/security deposit is not refunded unless the CPE is recovered or he pays the cost of CPE.

Accounting Separation

12.10 In a move to streamline the operations of telecom service providers and make them more “accountable”, the Telecom Regulatory Authority of India (TRAI) has issued guidelines for a System on Accounting Separation (SAS). The main objective of

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the Accounting Separation Regulation is to measure financial performance of individual services and to identify cross-subsidisation across services and to help detect predatory pricing, etc. This exercise also helps the operator to provide audited cost figures for tariff setting. It requires listed Telecom Service providers to prepare accounting separation reports on the basis of historical cost accounting every year. Every second year the Telecom Service provider should prepare accounting separation reports based on replacement cost accounting.

Exemption from Accounting Separation Regulation, 2004

12.11 By a recent amendment, TRAI has exempted the following categories of operators from maintaining Accounting Separation Records:

- (a) Operators whose annual turnover in the previous year did not exceed Rs. 25 Crore, and
- (b) Standalone operators who operate in single segments like ISP, Radio Paging and PMRTS, Currently the rules are applicable to nine categories of service providers. The Reporting System on Accounting Separation Regulations, 2004 provides a clear year-on-year indication of the service provider's financial performance within each of the services.

12.12 The accounts have to be separated in the following segments:

Type of Operating License/Service

12.13 The accounts have to be separated for each telecom service. This separation has been prescribed to measure financial performance of individual services and to identify cross-subsidisation, if any, across services.

Geographical Area

12.14 The Department of Telecommunication (DoT) has issued licenses to the telecom service providers mostly geographical area-wise. To review and compare results across licensed areas, this

Internal Audit in Telecommunications Industry

form of Accounting Separation has been prescribed.

Product/Network service

12.15 The term “product/network service” for Accounting Separation means a service within a licensed service, which is priced or regulated separately. The separation of accounts of products/network services is required, to make transparent the costs involved in the provision of that product/network service.

Network Cost

12.16 Separation of network cost has been prescribed to unbundle cost of network elements. Unbundled cost of network elements provides the basis to study the cost of interconnection arrangement and also provides inputs for cost-based tariffs.

12.17 These accounting separation statements have to be submitted to TRAI on an annual basis. The reporting period would be the same as being followed by the operators for preparing the annual financial statements under the Companies Act, 1956. In case, the above reporting period consists of more than 12 calendar months but does not exceed 15 months, a break-up of the results for the 12 months and the balance period is not required. In case the reporting period exceeds 15 months, break up of the results into 12 months and the balance period is required for reporting to TRAI. The operators are required to submit the reports within 6 months of the accounting year-end. The reports to be submitted to TRAI also need to be audited by an independent auditor.

Reference

Website of Telecom Regulatory Authority of India (www.trai.gov.in)

Website of Department of Telecommunication (www.dot.gov.in)

Website of Bharat Sanchar Nigam Limited (www.bsnl.co.in)

Website of Telecom Disputes Settlement & Appellate Tribunal (www.tdsat.nic.in)

I-4

**TECHNICAL GUIDE ON
INTERNAL AUDIT OF
STOCK BROKERS**

Foreword

During the last decade, there have been substantial regulatory, structural, institutional and operational changes in the securities industry. These have been brought in with the objective of improving market efficiency, enhancing transparency, preventing unfair trade practices and bringing the Indian market up to the international standards. Introduction of mandatory half-yearly internal audit for stock brokers and clearing members is one such step taken by the Securities and Exchange Board of India which would contribute towards strengthening controls and also reducing risks under volatile market conditions.

I am happy to note that the Internal Audit Standards Board is issuing this Technical Guide on Internal Audit of Stock brokers for the guidance of the members and other readers. I congratulate CA. Shanti Lal Daga, Chairman, Internal Audit Standards Board and members of the Board on issuance of this Technical Guide. This Technical Guide comprehensively deals with the peculiar aspects of stock broking business, including various regulatory aspects, and provides a step-wise approach for internal audit.

I am sure that this Technical Guide will assist the members and others in efficiently discharging their responsibilities.

March 20, 2009
New Delhi

CA. Uttam Prakash Agarwal
President, ICAI

PREFACE

As the global economy surged forward full steam, the need for having a full fledged, strategically directed internal audit emerged as an inevitable service that could provide assurance that there is transparency in reporting, as a part of good governance. With the very same objectives the Securities Exchange Board of India, being the capital market regulator, has mandated half-yearly internal audit of the stock brokers. This would not only ensure compliance with the legal and regulatory norms but would also prove instrumental in making the system more efficient.

Internal audit is core competence area of chartered accountants. It is an important assignment being undertaken both by practicing members of the Institute as well as those in industry. This demands the internal auditor to have requisite skills and high level of knowledge of the organisation as well as its interrelationship with the variables in its operating environment.

The Internal Audit Standards Board of the Institute issues not only Standards on Internal Audit to codify the best practice in the field of internal audit but also a number of generic as well as industry specific technical guides. The Board is issuing this Technical Guide on Internal Audit of Stock Brokers as a part of series of the publications on Internal Audit. This Guide would provide to the members of the Institute as well as others an in-depth understanding of the activities undertaken by the stock broker and the regulatory and legal framework in which they operate.

This Technical Guide has been divided into three parts. The first part deals with legal framework, technical and operating aspects of the stock broking business. It gives a brief overview on various aspects like, client registration, settlement of funds and securities, margins, trading terminals, money laundering, advertisement, brokerage and revenue leakage, sub-brokers, etc. The second part of the Guide explains the internal audit process and also deals with internal control evaluation and risk assessment. It also

Compendium of Industry Specific TG on Internal Audit

contains detailed checklist on internal audit that would help the readers in understanding the various technicalities arising during the internal audit of a stock broker. The third part of the Guide contains Appendices which includes Illustrative Engagement Letter and also a compilation of various rules and bye-laws applicable to stock-broking business.

I must, at this juncture, express my deep gratitude to CA. Sanjeev K. Maheshwari, Central Council member and convenor of the study group and its member, CA. Bhavesh R. Vora, CA. Hiren N. Mehta, CA. Kinjal Shah and CA. Sandeep Maheshwari for squeezing time out of their pressing pre-occupations to share their wealth of knowledge and experience with us and preparing the basic draft of the Guide. I am also thankful to CA. Uttam Prakash Agarwal, President, ICAI and CA. Amarjit Chopra, Vice President, ICAI for their continuous vision and encouragement. I am also thankful to my colleagues at the Internal Audit Standards Board for providing valuable guidance on making the Technical Guide more useful. I also wish to express my appreciation for the support of CA. Jyoti Singh, Secretary, Internal Audit Standards Board and her team of officers, CA. Arti Aggarwal and CA. Gurpreet Singh, Sr. Executive Officers in finalisation of the publication.

I am sure that this Guide would help the readers in understanding all the techniques and methodologies required to carry out the internal audit of stock broker.

March 20, 2009
Hyderabad

CA. Shanti Lal Daga
Chairman,
Internal Audit Standards Board

Abbreviations

ABC	Additional Base Capital
AML	Anti-Money Laundering
BG	Bank Guarantee
BOLT TWS	BSE On Line Trading Terminal Work Station
BSE	Bombay Stock Exchange Limited
CC	Clearing Corporation
CDSL	Central Depository Services (India) Limited
CISA	Clearing Member Investor's Securities Account
CM	Clearing Member
CRF	Client Registration Form
CSC	Clients of Special Category
CTCL	Computer to Computer Link
CTR	Cash Transaction Report
DCA	Department of Company Affairs
DEA	Department of Economic Affairs
DP	Depository Participant
ECN	Electronic Contract Note
ETF	Exchange Traded Fund
F&O	Futures and Options
FATF	Financial Action Task Force
FIU	Financial Intelligence Unit
HNI	High Net Worth Individuals
IBT	Internet Based Trading
IML	Intermediate Message Layer
KYC	Know Your Client
LAN	Local Area Network
MCA	Member Client Agreement

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MTF	Margin Trading Facility
MTM	Mark to Market
NCFM	National Stock Exchange's Certification on Financial Markets
NEAT	National Exchange for Automated Trading
NSCCL	National Securities Clearing Corporation Limited
NSDL	National Securities Depository Limited
NSE	National Stock Exchange of India Limited
PAN	Permanent Account Number
PEP	Politically Exposed Persons
PMLA	Prevention of Money Laundering Act, 2002
RDD	Risk Disclosure Document
SEBI	Securities and Exchange Board of India
SIA	Standard on Internal Audit
SPAN	Standard Portfolio Analysis of Risk
SRO	Self-Regulatory Organisation
STP	Straight Through Processing
STR	Suspicious Transaction Reporting
STT	Securities Transaction Tax
T to T	Trade to Trade
T-Day	Trading Day
TM	Trading Member
UCC	Unique Client Code
UIN	Unique Identification Number
VaR	Value at Risk
VSAT	Very Small Aperture Terminal

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Part I

Chapter I-1

Historical Background of Capital Market

Early Years

1.1 The equity brokerage industry in India is one of the oldest in the Asia region. The roots of a stock market in India began in the 1860s during the American Civil War that led to a sudden surge in the demand for cotton from India, resulting in setting up of a number of joint stock companies that issued securities to raise finance. This trend was akin to the rapid growth of securities markets in Europe and the North America in the background of expansion of rail roads and exploration of natural resources and land development.

1.2 In the aftermath of the 1865 crash, banks, on whose building steps share brokers used to gather to seek stock tips and share news, disallowed them thus, forcing them to find a place of their own, which later turned into the Dalal Street. A group of about 300 brokers formed the stock exchange in July 1875, which led to the formation of a trust known as the “Native Share and Stock Brokers Association”.

A unique feature of the stock market development in India was that it was entirely driven by local enterprise. Following the establishment of the first stock exchange in Mumbai, other stock exchanges came into being in major cities in India, namely Ahmedabad (1894), Calcutta (1908), Madras (1937), Uttar Pradesh (1940), Nagpur (1940) and Hyderabad (1944). The stock markets gained from surge and boom in several industries such as, jute, tea, coal etc, at different points of time.

Beginning of a New Equity Culture

1.3 A new set of economic and financial sector reforms that began in the early 1990s gave further impetus to the growth of the

Internal Audit of Stock Brokers

stock markets in India. As a part of the reform process, it became imperative to strengthen the role of the capital markets that could play an important role in efficient mobilisation and allocation of financial resources to the real economy. Towards this end, several measures were taken to streamline the processes and systems, including setting up of an efficient market infrastructure to enable Indian finance to grow further and mature.

1.4 The Securities and Exchange Board of India (SEBI), which was set up in 1988 as an administrative arrangement, was given statutory powers with the enactment of the SEBI Act, 1992. The broad objectives of the SEBI are to protect the interests of the investors in securities, to promote the development of securities markets and to regulate the securities markets. Regulatory jurisdiction of SEBI extends over companies listed on Stock Exchanges and Companies intending to get their securities listed on any recognised stock exchange on the issuance of securities and transfer of securities, in addition to all intermediaries and persons associated with securities market. The scope and functioning of the SEBI has greatly expanded with the rapid growth of securities markets in India in the last fifteen years.

1.5 Following the recommendations of the High Powered Study Group on Establishment of New Stock Exchanges, the National Stock Exchange of India (NSE) was promoted by financial institutions with an aim to provide access to investors all over the country. NSE was incorporated in November 1992 as a tax paying company, the first of such stock exchanges in India, since stock exchanges earlier were trusts, being run on non-profit basis. NSE was recognised as a stock exchange under the Securities Contracts (Regulations) Act, 1956 in April, 1993. The setting up of the National Stock Exchange brought to Indian capital markets several innovations and modern practices and procedures such as, nation-wide trading network, electronic trading, greater transparency in price discovery and process driven operations that had significant bearing on further growth of the stock markets in India.

1.6 Faster and efficient securities settlement system is an important ingredient of a successful stock market. To speed up the securities settlement process, the Depositories Act, 1996 was

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passed that allowed for dematerialisation (and rematerialisation) of securities in depositories and the transfer of securities through electronic book entry. The National Securities Depository Limited (NSDL) was set up by leading financial institutions and it commenced operations in October, 1996. Subsequently, Central Depository Services (India) Limited (CDSL) was promoted by Bombay Stock Exchange and other financial institutions.

Rapid Growth

1.7 Stock markets became intensely technology and process driven, giving little scope for manual intervention that has been the source of market abuse in the past. Electronic trading, digital certification, straight through processing, electronic contract notes, online broking have emerged as major trends in technology. Risk management became robust reducing the recurrence of payment defaults. Product expansion took place in a speedy manner. Indian equity markets now offer, in addition to trading in equities, opportunities in trading of derivatives in futures and options in index, stocks and currency derivatives. Exchange Traded Funds (ETFs) are showing gradual growth.

Current Scenario

1.8 Presently, besides Regional Stock Exchanges, there are two main stock exchanges, i.e., National Stock Exchange (NSE) and Bombay Stock Exchange (BSE). Stock exchange reforms brought in professional management separating conflicts of interest between brokers as owners of the exchanges and traders/dealers.

1.9 The growth in capital market has been exponential as measured in terms of amount raised from the market, number of stock exchanges and other intermediaries, the number of listed stocks, market capitalisation, trading volumes and turnover on stock exchanges, and investor population. Simultaneously, there have been significant changes in the profiles of the investors, issuers and intermediaries. The following table shows Market Participants in Securities Market as on March 31, 2008:

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Market Participants in Securities Market

Particulars	Number as on March 31, 2008
Securities Appellate Tribunal	1
Regulators*	4
Depositories	2
Stock Exchanges with equity trading	19
Brokers	9,487
Sub-brokers	44,073
FII's 1,319	
Portfolio Managers	205
Custodians	15
Registrars to an Issue and Share Transfer Agents	76
Merchant Bankers	155
Bankers to an Issue	50
Debenture Trustees	28
Underwriters	35
Venture Capital Funds	106
Mutual Funds	40
Collective Investment Schemes	0
* DCA, DEA, RBI & SEBI	

Source: SEBI

Chapter I-2

Legal Framework

Legislation

2.1 The five main legislations governing the securities market are:

(a) Securities Contracts (Regulation) Act, 1956

It provides for direct and indirect control of virtually all aspects of securities trading and the running of stock exchanges and aims to prevent undesirable transactions in securities. It gives Central Government regulatory jurisdiction over stock exchanges, contracts in securities and listing of securities. As a condition of recognition, a stock exchange complies with conditions prescribed by Central Government. Organised trading activity in securities takes place on a specified recognised stock exchange. The stock exchanges determine their own listing regulations which have to conform to the minimum listing criteria set out in the Rules.

(b) Securities and Exchange Board of India (SEBI) Act, 1992

The SEBI Act, 1992 was enacted to empower SEBI with statutory powers for protecting the interests of investors in securities, promoting the development of the securities market and regulating the securities market. It lays down the guidelines with respect to the management, powers and functions of SEBI. It has powers to register and regulate all market intermediaries and also to penalise them in case of violations of the provisions of the Act, Rules and Regulations made there under. It specifies the registration requirements for intermediaries in the securities market, guidelines for prohibition of manipulative and deceptive devices, insider trading, penalties and adjudication powers and various other guidelines with respect to the securities market. SEBI has

full autonomy and authority to regulate and develop an orderly securities market.

(c) Depositories Act, 1996

The Depositories Act, 1996 provides for the establishment of depositories in securities with the objective of ensuring free transferability of securities with speed, accuracy and security by making securities of public limited companies freely transferable subject to certain exceptions; dematerializing the securities in the depository mode; and providing for maintenance of ownership records in a book entry form. In order to streamline the settlement process, the Act envisages transfer of ownership of securities electronically by book entry without making the securities move from person to person. The Act has made the securities of all public limited companies freely transferable, restricting the company's right to use discretion in effecting the transfer of securities, and the transfer deed and other procedural requirements under the Companies Act have been dispensed with.

(d) Companies Act, 1956

It deals with issue, allotment and transfer of securities and various aspects relating to company management. It provides for standard of disclosure in public issues of capital, particularly in the fields of company management and projects, information about other listed companies under the same management, and management perception of risk factors. It also regulates underwriting, the use of premium and discounts on issues, rights and bonus issues, payment of interest and dividends, supply of annual report and other information.

(e) Prevention of Money Laundering Act, 2002

The primary object of the Act is to prevent money-laundering and to provide for confiscation of property derived from or involved in money-laundering. The term money-laundering

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is defined as whoever acquires, owns, possess or transfers any proceeds of crime; or knowingly enters into any transaction which is related to proceeds of crime either directly or indirectly or conceals or aids in the concealment of the proceeds or gains of crime within India or outside India commits the offence of money-laundering. Besides providing punishment for the offence of money-laundering, the Act also provides other measures for prevention of Money Laundering. The Act also casts an obligation on the intermediaries, banking companies etc to furnish information, of such prescribed transactions to the Financial Intelligence Unit- India, to appoint a principal officer, to maintain certain records etc.

Rules and Regulations

2.2 The Government has framed rules under the SC(R)A, SEBI Act and the Depositories Act. SEBI has framed regulations under the SEBI Act and the Depositories Act for registration and regulation of all market intermediaries, for prevention of unfair trade practices, insider trading, etc. Under these Acts, Government and SEBI issue notifications, guidelines, and circulars, which need to be complied with by market participants. Some of the important regulations are as follows:

- (a) SEBI (Stock Brokers and Sub-Brokers) Rules, 1992
- (b) Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 1992
- (c) Securities and Exchange Board of India (Procedure for Holding Enquiry by Enquiry Officer and Imposing Penalty) Regulations, 2002
- (d) Securities and Exchange Board of India (Ombudsman) Regulations, 2003
- (e) Securities and Exchange Board of India (Prohibition of Fraudulent and Unfair Trade Practices relating to the Securities Market) Regulations, 2003

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- (f) SEBI (Interest Liability Regularisation) Scheme, 2004
- (g) Securities and Exchange Board of India (Certification of Associated Persons In The Securities Markets) Regulations, 2007

The Self-regulatory Organisations (SROs) like stock exchanges have also laid down their rules and regulations for market participants.

Regulators

2.3 The regulators ensure that the market participants behave in a desired manner so that the securities market continue to be a major source of finance for corporate and government and the interest of investors are protected. The responsibility for regulating the securities market is shared by Department of Economic Affairs (DEA), Department of Company Affairs (DCA), Reserve Bank of India (RBI) and Securities and Exchange Board of India (SEBI) as shown in the following Table:

Regulation of the Securities Market

Acts	Section	Powers	Exercisable by
Securities Contracts (Regulation) Act, 1956	4A	Corporatisation and demutualisation of stock exchanges	SEBI
	4B	Procedure for Corporatisation and demutualisation	
	6	Call for periodical returns or direct inquiries to be made	
	8A	Clearing Corporation	
	9	Approval of byelaws of recognised stock exchanges	
	10	Make or amend bye-laws	

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Acts	Section	Powers	Exercisable by
		of recognised stock exchanges	
	12A	Power to issue directions	
	13A	Additional trading floor	
	17	Licensing of dealers in securities in certain areas	
	3	Application for recognition of stock exchanges	Central Government and concurrently exercisable by SEBI
	4	Grant of recognition to stock exchanges	
	5	Withdrawal of recognition	
	7	Submission of Annual Report	
	7A	Rules restricting voting rights	
	8	Direct rules to be made or to make rules	
	11	Supersede governing body of a recognized stock exchanges	
	12	Suspend business of Recognised Stock Exchanges	
	13	Contracts in notified areas illegal in certain circumstances	
	14	Contracts in notified areas void in certain circumstances	
	16	Prohibition of contracts	
	18	Exclusion of spot delivery contracts	

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Acts	Section	Powers	Exercisable by
	22	Right of Appeal against refusal to list	SAT
	28	Inapplicability of the SC(R)A in certain cases	
	21A	Appeal against the decision of recognized stock exchange to delist the securities	
	22A	Appeal against refusal by stock exchanges to list securities of public companies	
	22B	Procedures and Powers of SAT	
	16	Prohibition of Contracts	Central Government and concurrently exercisable by SEBI and RBI
	22F	Appeal against the decision of SAT	Supreme Court
	All other powers under the Act		Central Government
Securities Contracts (Regulation) Rules, 1992		SEBI	
Rules, Regulations and Bye-Laws		Stock Exchanges	
SEBI Act, 1992	3, 5 & 6 13	Establishment and Management of SEBI	Central Government

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Acts	Section	Powers	Exercisable by
	14 15 15K to 15S 16 17 18 20 24B 29 3134	Establishment of SAT To issue directions To supersede SEBI SEBI to submit returns and reports To make rules Rules and Regulations to be laid before Parliament	
	15T & 15U 24A	Appellate powers Composition of certain offences	SAT
	4 15Z	Management of Board Appeal to Supreme Court	Central Government and RBI Supreme Court
	All other powers		SEBI
Depositories Act, 1996	22B 23 24 27 29	Power to grant immunity Appeals To make rules Rules and Regulations to be laid before the Parliament Removal of difficulties	Central Government

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Acts	Section	Powers	Exercisable by
	23A & 23B	Appellate powers	SAT
	22A	Composition of certain offences	
	23F	Appeal against order or decision of SAT Supreme Court	
	26	To make bye-laws	Depositories
	All other powers		SEBI
Companies Act, 1956	55 to 58, 59 to 81, 108 to 110, 112, 113, 116 to 122, 206, 206A, 207	Issue of securities, transfer of securities, and non-payment of dividend in case of listed public companies and in case of those public companies which intend to get their securities listed on any recognised stock exchange in India. SEBI	SEBI
	108A to 108E, 108I		Central Government

* Government has issued notifications providing that the contracts for sale and purchase of government securities, gold-related securities, money market securities and securities derived from these securities and ready forward contracts in debt securities shall be regulated by RBI. Such contracts, if executed on stock exchanges, shall, however, be regulated by SEBI in a manner that is consistent with the guidelines issued by RBI.

Chapter I-3

Books of Accounts, Records and Documents

3.1 Securities Contracts (Regulation) Rules, 1957 and the Securities and Exchange Board of India (Stock Brokers and Sub-Brokers) Regulations, 1992 specifies maintenance of proper books of accounts. The stock broker should maintain separate set of books of accounts for each of the stock exchanges.

3.2 The various provisions dealing with maintenance of books and records are as follows:

(a) Rule 15 of the Securities Contracts (Regulation) Rules, 1957

- 1) Every member of a recognised stock exchange shall maintain and preserve the following books of account and documents for a period of five years:
 - i) Register of transactions (Sauda book).
 - ii) Clients' ledger.
 - iii) General ledger.
 - iv) Journals.
 - v) Cash book.
 - vi) Bank pass-book.
 - vii) Documents register showing full particulars of shares and securities received and delivered.
- 2) Every member of a recognised stock exchange shall maintain and preserve the following documents for a period of two years:

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- i) Member's contract books showing details of all contracts entered into by him with other members of the same exchange or counterfoils or duplicates of memos of confirmation issued to such other members.
- ii) Counterfoils or duplicates of contract notes issued to clients.
- iii) Written consent of clients in respect of contracts entered into as principals.

(b) Regulation 17 and 18 of SEBI (Stock Brokers and Sub-Brokers) Regulation, 1992

It specifies maintenance of proper books of accounts, records, etc. as under for a period of 5 years:

Regulation 17

Every stock broker shall keep and maintain the following books of accounts, records and documents namely; -

- i) Register of transactions (Sauda Book);
- ii) Clients ledger;
- iii) General ledger;
- iv) Journals;
- v) Cash book;
- vi) Bank pass book;
- vii) Documents register containing, *interalia*, particulars of securities received and delivered in physical form and the statement of accounts and other records relating to receipt and delivery of securities provided by the Depository Participants in respect of dematerialised securities;

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- viii) Members' contract books showing details of all contracts entered into by him with other members of the same exchange or counterfoils or duplicates of memos of confirmation issued to such other member;
- ix) Counterfoils or duplicates of contract notes issued to clients;
- x) Written consent of clients in respect of contracts entered into as principals;
- xi) Margin deposit book;
- xii) Registers of accounts of sub-brokers;
- xiii) An agreement with a sub-broker specifying the scope of authority and responsibilities of the Stock-Broker and such sub-broker; and
- xiv) An agreement with the stock broker and with the client of the sub-broker to establish privity of contract between a stock broker and the client of the sub-broker.

Every stock-broker shall intimate to the SEBI the place where the books of accounts, records and documents are maintained.

Regulation 18

Every Stock Broker shall preserve the books of accounts and other records maintained under Regulation 17 for a minimum period of 5 years.

In case where copies of the records/ documents have been collected by enforcement agencies like, CBI, Police, Crime Branch, etc., during the course of their investigation, then the originals of such documents, both in electronic and physical form, shall be required to be preserved till the trial is completed.

The broker should maintain and preserve for a period of 7 years mapping of client IDs used at the time of order entry in the trading system with those unique client IDs along with client name, address and other particulars given in the Know Your Client Form.

(c) Rule 6 of the Prevention of Money Laundering Rules, 2005

Under Rule 6 of the Prevention of Money Laundering Rules, 2005, the records referred to in Rule 3 shall be maintained for a period of 10 years from the date of cessation of the transactions between the client and the intermediary.

Chapter I-4

Client Registration and Unique Client Code (UCC)

4.1 A broker should take reasonable steps to assess the background, genuineness, financial soundness and investment objectives of the client when establishing relationship with a new client. It is expected that the brokers of Stock Exchanges know their clients through a proper introductory procedure and exercise due precaution while dealing with the clients. Broker should ensure that client is personally known or has been introduced to him by a person known to him. A record of introduction of all clients should be kept by brokers.

4.2 Stock broker has to enter into agreements with the each of their clients in the specified format before accepting or placing orders on their behalf. The said agreement shall be executed on non-judicial stamp paper of adequate value, duly signed by both the parties on all the pages.

4.3 Classification of the client should be done into high, medium or low risk category depending on parameters such as, the client's background, type of business relationship, transactions, etc. Broker should apply each of the clients due diligence measures on a risk sensitive basis and adopt an enhanced client due diligence process for high risk categories of client and *vice versa*.

Uniform Document Requirement

4.4 SEBI has, vide its Circular No. SEBI/MIRSD/DPS-1/Cir-31/2004, dated August 26, 2004, devised standard formats for the Client Registration. In order to bring about uniformity in documentary requirements across different segments and exchanges and to avoid duplication and multiplicity of documents, SEBI has formulated uniform set of documents which are listed below:

- i) Client Registration Form (CRF) - It is uniform across all the

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segments and exchanges where the broker is trading on different segments and exchanges.

- ii) Member Clients Agreements (MCA) - It is uniform across all the segments of an exchange. However, a separate agreement in the same format would be required for each of the exchanges where the broker is trading on different exchanges.
- iii) Model Tripartite Agreement between Broker, Sub-broker and Clients- It is applicable only in cash segment and a separate agreement in the same format would be required for each of the exchanges.
- iv) Uniform Risk Disclosure Documents (RDD) - It is uniform across all the segments and exchanges.
- v) Broker and Sub-broker agreement.

4.5 The requirement of obtaining Client Registration Form may be waived for SEBI registered Foreign Institutional Investor, Mutual Funds, Venture Capital Funds and Foreign Venture Capital Investors, Scheduled Commercial Banks, Multilateral and Bilateral Development Financial Institutions, State Industrial Development Corporations, Insurance Companies registered with the Insurance Regulatory Development Authority of India or Section 4A of the Companies Act, 1956. Further, the Stock Broker and the above-mentioned clients may at their discretion, decide about the requirement of entering into broker-client agreement and bringing the contents of Risk Disclosure Document to the notice of such clients.

4.6 NSE has, vide its Circular No. NSE/INSP/7657 dated July 5, 2006 and BSE has, vide its Notice No. 20060704-6 dated July 4, 2006, drawn the attention of the broker to contents of SEBI Circular No. SEBI/MIRSD/DPS-I/Cir-31/2004 dated August 26, 2004. SEBI has vide such circular prescribed uniform document requirement for trading. Trading members are further advised by the said NSE and BSE circulars to ensure the following:

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- (i) At the time of registering a client, the client shall be informed in writing that only the documents stated above are mandatory and any additional clause or documentation shall be voluntary and at the discretion of member and client.
- (ii) Additional documents shall state at the beginning in bold that the document is voluntary.
- (iii) However, if such documents are required in order to ensure smooth functioning of special facility such as, internet trading offered by the trading member, the client shall be informed in writing clearly that such documents are voluntary and the client need not execute such documents if he/she does not wish to use that facility.
- (iv) Such documents, if any, shall also recognise specifically the right of the client to terminate the document. In such an eventuality, the trading member may terminate the special facility.
- (v) The docket or folder containing draft mandatory documents for signing and the checklist containing mandatory documents shall not include draft voluntary documentations, if any. Further, these mandatory documents should relate to only opening the account for stock trading and not for any other additional business/activity like, opening of Bank Account, DP Account, etc.
- (vi) No documentation shall give any exclusive right or control to the trading member or third party over the demat account or ledger account or bank account of the client except to the extent of and restricted to the client (including family members who have given authorisation) obligation to the trading member in respect of the transactions done or to be done (like upfront margin) by the trading member on behalf of the client on the Exchange.

4.7 Further, NSE has, vide its Circular No. NSE/INVG/ 2006/ 7236 dated March 3, 2006 and BSE has, vide its Notice No. 20060704-6 dated July 4, 2006, advised the brokers to ensure

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that all client registration details as mentioned in the Client Registration Form/Know Your Client (KYC) form are complete in all respect and are reviewed and updated periodically. The brokers were also advised to monitor the trading activities of their clients based on the financial details as contained in the client's KYC. Further, financial details as contained in the client's KYC should be used to monitor the trading activities of the clients. Brokers are also advised to periodically review their database to ensure its completeness and accuracy.

4.8 Upon registration of a client, trading members shall deliver to the client a copy of the duly completed client registration documents *viz.*, Client registration form/KYC, Member Client Agreement/Tripartite Agreement, Risk Disclosure Document and a copy of any other document executed with the client. The Unique Client Code (UCC) allotted to a client for trading and the e-mail id furnished by the client for the purpose of receiving electronic contract notes and other relevant details, shall be communicated by the trading member through the client registration documents or otherwise in writing to the client. Proof of such delivery/communication is to be maintained along with the registration documents pertaining to the clients. In respect of clients registered prior to June 24, 2008, the above-mentioned documents and details shall be provided upon request from such clients.

PAN – Sole Identification Number

4.9. Obtaining PAN Card details of the client is compulsory for all categories of clients. PAN is the sole identification number for all participants transacting in the securities market, irrespective of the amount of transaction. The broker official accepting the account opening form should verify the photocopy of the PAN Card against the original. Also, PAN is required to be cross checked with the Income Tax website. It is suggested that after verification of original, the broker official should sign and stamp the copy and write "verified with original" on the copy. The broker official should also take care that the copy obtained as a proof of PAN should be legible.

Documents Required for Account Opening

4.10 The documents/information to be submitted by various categories of investors as per SEBI Model KYC documents are as follows:

(A) In Case of Individual Client:

- (i) Photocopy of PAN Card
- (ii) Proof of ID (any one of the following):
 - (a) PAN Card
 - (b) MAPIN/UIN Card
 - (c) Passport
 - (d) Driving License
 - (e) Election Card
 - (f) Photo ID Card issued by employer registered under MAPIN
- (iii) Proof of Address (any one of the following):
 - (a) Passport
 - (b) Election Card
 - (c) Driving License
 - (d) Bank Passbook
 - (e) Rent Agreement
 - (f) Ration Card
 - (g) Flat Maintenance Bill
 - (h) Telephone Bill

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- (i) Electricity Bill
- (j) Certificate issued by employer registered under MAPIN
- (k) Insurance Policy
- (iv) Proof of Bank Account (copy of a canceled Cheque leaf containing pre-printed name of the Client or pass book/bank statement containing name of the Client).
- (v) A passport size photograph (preferably with signing across the photograph).

(B) Non-Individual Clients

(I) In Case of HUF Client

- (i) Photocopy of Id Proof of Karta.
- (ii) Photocopy of PAN Card of HUF.
- (iii) Proof of Bank Account of HUF (copy of a canceled Cheque leaf containing pre-printed name of the Client or pass book/ bank statement containing name of the Client).
- (iv) Copies of the balance sheet (Annual Report) for the last two financial years (copies of annual balance sheet to be submitted every year).

(II) In Case of Partnership Firm Client

- (i) Photocopy of PAN Card of the Firm.
- (ii) Copy of Partnership Deed.
- (iii) Proof of Bank Account (Copy of a canceled Cheque leaf containing pre-printed name of the Client or pass book/bank statement containing name of the Client).
- (iv) Photograph of Partners.

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- (v) Copies of the balance sheet (Annual Report) for the last two financial years (copies of annual balance sheet to be submitted every year).

(III) In Case of Corporate Client

- (i) Photocopy of PAN Card of the company.
- (ii) Copies of the balance sheet (Annual Report) for the last two financial years (copies of annual balance sheet to be submitted every year).
- (iii) Copy of latest share holding pattern including list of all those holding more than 5% in the share capital of the company, duly certified by the company secretary/ Whole-time director/MD. (Copy of updated shareholding pattern to be submitted every year, and should be on the Letter head of the client).
- (iv) Duly certified Copies of the Memorandum and Articles of Association.
- (v) Copy of the Resolution of board of directors' approving participation in equity/derivatives/debt trading and naming authorized persons for dealing in securities.
- (vi) Photographs of Whole time directors, individual promoters holding 5% or more, either directly or indirectly, in the shareholding of the company and of persons authorised to deal in securities.
- (vii) Proof of Bank Account (Copy of a canceled Cheque leaf containing pre-printed name of the Client or pass book/bank statement containing name of the Client).

(IV) In Case of Trust

- (i) Photocopy of PAN Card of Trust.
- (ii) Copy of Trust deed duly certified by trustee.
- (iii) Resolution authorising one or more trustee to deal with the broker.

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- (iv) Proof of Bank Account (Copy of a canceled Cheque leaf containing pre-printed name of the Client or pass book/bank statement containing name of the Client).
- (v) In case of Trust is a corporate then additional detail as given in 'In case of Corporate Client' will be applicable.

4.11 Apart from the abovementioned documents prescribed by SEBI, the following documents may be obtained from the client for better compliance and internal controls.

(A) In Case of Individual Client

- (i) Proof of Demat Account (Copy of Client Master/Status report containing account details or latest transaction/holding statement containing name of the Client).

(B) Non-Individual Clients

(I) In Case of HUF Client

- (i) Photocopy of PAN Card of Karta.
- (ii) Proof of Address of Karta.
- (iii) Proof of Demat Account (Copy of Client Master/ Status report containing account details or latest transaction/holding statement containing name of the Client).
- (iv) Consent Letter of HUF members with specimen signature of all co-parceners stating about authorising one or more members of HUF to involve in the trading activity with Broker.

(II) In Case of Partnership Firm Client

- (i) Proof of Demat account of Authorised Partner (Copy of Client Master/Status report containing account details or latest transaction/holding statement containing name of the Client).
- (ii) Consent Letter from all Partners stating about authorising one of the Partners to involve in trading activity with Broker.

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- (iii) Photocopy of ID proof of authorised Partner (who is allowed to deal with the broker according to consent letter).
- (iv) List of Partners with addresses on the letterhead of Firm.

(III) In Case of Corporate Client

- (i) Details of the Directors along with proof of Identity.
- (ii) Proof of Demat Account.

(IV) In Case of Trust

- (i) Proof of Demat Account.
- (ii) Details of the trustee along with ID proof of trustee.

Broker may also seek additional information, if any, so as to satisfy himself about the antecedents of the client. It would be broker's responsibility to provide clients details as and when required by SEBI or stock exchanges.

In - Person Verification

4.12 Broker should ensure 'in-person' verification by their own staff while registering the clients, including clients of their branches and sub brokers, and that this function is not outsourced. Further, the date of verification, name and signature of the official who has done in-person verification and the stamp of the member should be incorporated in the client registration form. In case of 'in-person' verification of non-residents, the members should obtain from such clients KYC documents attested by any one of the following entities - Notary Public, Court, Magistrate, Judge, Local Banker, Indian Embassy/Consulate General in the country where the client resides. The above requirement is applicable w.e.f. July 4, 2008.

Remisier to Act as Introducer

4.13 Broker should ensure remisier has signed as an introducer in the KYC form for clients introduced by him for dealing on BSE (applicable w.e.f. August 1, 2008).

Inventory Controls

4.14 Broker should have inventory controls relating to blank KYC documents given to branches/ sub-brokers/ clients and lying at Head Office of the broker. Reconciliation of the inventory should be done on periodical basis and discrepancies, if any, should be resolved. It is suggested that Inward/ Outward register should be maintained for the purpose of blank documents provided to branches and sub-brokers and also for filled up documents received from branches and sub-brokers. It is further advised that control serial numbers should be printed on KYC docket for better internal controls. This control serial numbers should be noted in Inward/ Outward Register and even in Master records of back office software for the purpose of tracking. Broker should have proper storage facility for keeping registered KYC documents of clients thereby ensuring that retrieval of documents is easy and fast. As the KYC documents are important and permanent records, it should be kept in safe custody of authorised officials.

Unique Client Code (UCC)

4.15 Stock Broker has to allot a client code to each of his clients including the clients of his sub-brokers which is unique. The same code shall not be allotted to any other client by the stock broker and not more than one code should be allotted to one client. SEBI has made it mandatory for all stock brokers to use Unique Client Codes (UCC) for all clients. When a broker enters an order on behalf of a client, then such a broker shall at the time of entering orders on behalf of such client, enter the Unique Client Code in respect of such client. Broker should ensure that all details of Unique Client Code have been uploaded after completion of all formalities related to client registration and details of UCC is matching with details produced along with the KYC form. Apart from uploading, every broker is responsible to furnish particulars of Unique Client Code of each of his clients to the Exchange in such form, manner, at such intervals and within such time as may be specified by the Exchange from time to time.

4.16 For certain categories of investors who are required by

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applicable regulations not to buy or sell without adequate funds or securities to their credit before execution of transaction and whose transactions are to be settled by delivery only, for such entities the brokers may be permitted to allot up to two trading client codes (*i.e.*, for their buy and sell transactions separately so that each leg of transaction is treated separately and not netted). Both the trading client codes should be mapped to the same Unique Client Code allotted to that client.

Chapter I-5

Margins

5.1 Margins are important elements of a Risk Management System. In case of capital market, the broker is required to prepare a well documented Risk Management System and collect margin according to organisation's policy. The quantum of these margins and also form and mode of collections are left to the discretion of the brokers. However, in case of futures and options market, the broker shall collect the initial margins as stipulated by the exchanges.

Collection of Margins from Clients

5.2 SEBI vide its circular no. MRD/DoP/SE/CIR-07/2005 dated February 23, 2005 has stated that, brokers should have a prudent system of Risk Management to protect themselves from the client default. Margins are likely to be an important element of such a system. The same shall be well documented and be made accessible to the clients and the stock exchanges. It is suggested that such well documented policy should be adopted by passing the requisite resolution by the broker. However, the quantum of margins and the form and mode of collection of margins from the clients are left to the discretion of the broker.

Cash Segment

5.3 In Cash Segment, broker has to pay 'Daily Margin' to the exchange. Daily Margin comprises of the sum of Value at Risk (VaR) Margin, Extreme Loss Margin and Mark-to-Market Margin.

Value at Risk (VaR) Margin

5.4 The Value at Risk (VaR) margin shall be collected by the exchange on an upfront basis by adjusting against the total liquid assets of the broker at the time of trade. The VaR margin shall be collected on the gross open position of the broker. The gross open position, for this purpose, would mean the gross of all net positions across all the clients of a broker including his proprietary position.

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There would be no netting off of positions across different settlements. For example, in case of a broker, if client A has a buy position of 1000 in a security and client B has a sell position of 1000 in the same security, the net position of the broker in the security would be taken as 2000. It would be summed up to arrive at the broker's open position for the purpose of margin calculation. The VaR Margin so collected shall be released on completion of pay-in of the settlement.

Extreme Loss Margin

5.5 The Extreme Loss Margin shall be collected/ adjusted against the total liquid assets of the broker on a real time basis. It shall be collected on the gross open position of the broker. The gross open position, for this purpose, would mean the gross of all net positions across all the clients of a broker including its proprietary position. There would be no netting off of positions across different settlements. The Extreme Loss Margin collected shall be released on completion of pay-in of the settlement.

Mark-to-Market (MTM) Margin

5.6 Mark-to-market loss shall be calculated by marking each transaction in security to the closing price of the security at the end of trading. In case the security has not been traded on a particular day, the latest available closing price at the exchange shall be considered as the closing price. In case the net outstanding position in any security is nil, the difference between the buy and sell values shall be considered as notional loss for the purpose of calculating the mark to market margin payable.

5.7 The mark-to-Market (MTM) margin shall be collected from the broker before the start of the trading of the next day. The MTM margin shall also be collected/adjusted from/against the cash/cash equivalent component of the liquid net worth deposited with the Exchange. The MTM margin shall be collected on the gross open position of the broker. The gross open position, for this purpose, would mean the gross of all net positions across all the clients of a broker including its proprietary position. For this purpose, the position of a client would be netted across its various securities

and the positions of all the clients of a broker would be grossed. There would be no netting off of the positions and set off against MTM profits across two rolling settlements, i.e., T day and T-1 day. However, for computation of MTM profits/losses for the day, netting or set off against MTM profits would be permitted. In case of Trade to Trade Segment (T-to-T segment) each trade shall be marked to market based on the closing price of that security. The MTM margin so collected shall be released on completion of pay-in of the settlement.

Derivatives Segment

5.8 Exchange charges and collects the following types of Margins from the Broker:

(I) Initial Margin

- (i) The Exchange collects initial margin upfront for all the open positions of a clearing member based on the margins computed by Standardised Portfolio Analysis of Risk (SPAN).
- (ii) Initial Margins can be paid by members in the form of cash, bank guarantee, fixed deposit receipts and approved securities.
- (iii) A clearing member is in turn required to collect the initial margin from the trading members and his respective clients. Similarly, a trading member should collect upfront margins from his clients.
- (iv) For client positions, Initial Margin shall be netted at the level of individual client and grossed across all clients, at the trading/ clearing member level, without any set-offs between clients.
- (v) For proprietary positions, Initial Margin shall be netted at trading/ clearing member level without any set-offs between client and proprietary positions.

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- (vi) In case a trading member wishes to take additional trading positions his clearing member is required to provide Additional Base Capital (ABC) to Clearing Corporation. ABC can be provided by the members in the form of cash, bank guarantee, fixed deposit receipts and approved securities.

(II) Mark-to-Market (MTM) Margin

- (i) The Exchange debits/credits Mark-to Market margin loss/profit from or in the clearing members' accounts with designated banks on T+1 day basis.
- (ii) The MTM margin is computed by marking the daily net open position of a member in all series to the closing price of the respective series to find out the notional profit/loss a broker would incur in case his net open position in all series at the end of the day in consideration were to be closed out.
- (iii) All notional profits made in some series and all notional losses in other series as well as all realised profit and losses incurred by the brokers on the positions squared up are netted and net amount is collected or paid as MTM margin.
- (iv) MTM Margins is payable in cash only.
- (v) A clearing member is in turn required to collect the MTM margin from his clients in cash only.

(III) Premium Margin

- (i) In addition to Initial Margin, Premium Margin would be charged to members. The Premium Margin (i.e., the premium on call and put option) is the client-wise margin amount payable for the day and will be required to be paid by the buyer till the settlement is complete.

(IV) Assignment Margin

- (i) Assignment Margin (i.e., option margin on call and put option) is levied on a clearing member in addition to SPAN margin and Premium Margin. It is required to be paid on assigned positions of clearing members towards interim and final Exercise Settlement obligations for option contracts on individual securities, till such obligations are fulfilled.
- (ii) The margin is charged on the Net Exercise Settlement Value payable by a clearing member towards interim and final Exercise Settlement and is deductible from the effective deposits of the clearing member available towards margins.
- (iii) Assignment margin is released to the clearing members on exercise of settlement pay-in.

Client Margin

5.9 Clearing members and trading members are required to collect initial margins from all their clients. The collection of margins at client level in the derivatives market is essential as derivatives are leveraged products and non-collection of margins at the client level would provide zero cost leverage. In the derivatives market, all money paid by the client towards margins is kept in trust with the Clearing House/ Clearing Corporation and in the event of default of the trading or clearing member the amount paid by the client towards margins are segregated and not utilised towards the default of the broker. Therefore, clearing members are required to compulsorily report on a daily basis, details in respect of such margin amount due and collected, from their trading members/ clients, clearing and settling through them. Trading members are also required to report on a daily basis details of the amount due and collected from their clients.

5.10 The reporting of the collection of the margins by the clients is done electronically through the system at the end of each trading day. The reporting of collection of client level margins plays a

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crucial role not only in ensuring that brokers collect margin from clients but it also provides the clearing corporation with a record of the quantum of funds it has to keep in trust for the clients. Brokers are required to collect initial margin from clients in one or more of the following mode(s):

- (a) Cash;
- (b) Fixed Deposit Receipts (FDRs) issued by any one or more of the approved commercial banks;
- (c) Bank Guarantee issued by any one or more of the approved commercial banks;
- (d) Deposit of approved securities in dematerialised form or such other collateral form, with the applicable hair cut. The list of approved securities and applicable hair cut thereon is specified by the Clearing Corporation from time to time.

Client Margin Reporting

5.11 The cut-off day up to which a broker may report client margin details to clearing corporation is within 2 working days after the trade day, i.e., within T+2 day basis.

Chapter I-6

Register of Transaction (Sauda Book) Contract Note

6.1 Broker is required to maintain a 'Sauda Book', which contains details of all deals transacted by them on a day-to-day basis. These details are maintained settlement-wise. This register normally contains the transactions both for member's own business and member's business on behalf of clients on the exchange. The Sauda Book is prepared by importing data into the back office accounting system from the 'trade file' (NSE) or 'BRK file' (BSE) received from the exchange on a daily basis. The Sauda Book is equivalent to purchase register maintained by the trading/manufacturing entity in regular parlance. It, generally, contains the following details:

- Name of the scrip
- Scrip Code
- Order number
- Order Time
- Trade number
- Trade Time
- Name of the client on whose behalf the deals have been done
- Client code
- Market Rate
- Net rate
- Quantity of scrip bought or sold
- Settlement number
- Date

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6.2 Trade file or BRK file is a statement provided by exchange and downloaded by the broker on a daily basis. This statement reflects all the transactions executed by a broker from all his terminals for that day on the exchange. Trade file/ BRK file generally provides the following details:

- Name of the scrip
- Scrip Code
- ISIN
- Terminal number
- Order number
- Order Time
- Trade number
- Trade Time
- Client code
- Rate
- Quantity of scrip bought or sold
- Settlement number
- Date

Checks and Balances

6.3 This file serves as an external confirmation of the trades reflected in the Sauda Book and, hence, is very useful in the audit process. It helps to establish whether all the trades reflected in the Sauda Book are executed on the exchange and also helps to detect the off-market trades, if any executed by the broker. Similarly any changes w.r.t. the following could be detected by matching the trade file/ BRK file and the Sauda Book:

- Client code modification

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- Market rate modification
- Cross deals
- Off-market trades
- Principal to Principal trades
- Front Running.

Contract Note

6.4 If Sauda Book is similar to purchase register, contract notes is equivalent to an invoice issued by the trading/ manufacturing entity in regular parlance. The content of the contract notes are extracted from the data in the Sauda Book. Contract note is a document which establishes contractual obligation between the broker and the client. This is an important document which is normally relied upon in case of disputes between the broker and the client. The format of contract note has been prescribed by the respective exchanges as under:

Sr.no.	Exchange	Segment	Regulations	Circular No. and Date
(i)	BSE	Cash Market	14	20060627-18 dated June 27, 2006
(ii)	NSE	Capital Market	3.5	NSEIL/ LEGAL/ 7036 dated January 5, 2006
(iii)	NSE	F&O	3.6	NSEIL/ LEGAL/ 7037 dated January 5, 2006 and NSEIL/ LEGAL/ 8319 dated January 2, 2007

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6.5 As per Regulation 14 of BSE, there are various formats of contract notes explained as under:

Format	Particulars	Remarks
Form A	Format of Contract Notes Issued by Members acting as Agents on Behalf of the Clients	This is equivalent to a delivery challan and contains only the quantitative details of trades executed on behalf of clients.
Form AA	Alternative Format to Form A (known as Contract cum Bill)	This is equivalent to an Invoice-cum-Delivery challan and contains quantitative details as well as amount of trades executed on behalf of clients.
Form B	Format of Contract Notes Issued by Members acting as Principals	This is issued for trades executed on principal to principal basis.

Contents of Contract Note

6.6 As per the generally accepted market practice, contract notes-cum-bill is issued for cash segment, however for the F&O segment broker is required to issue separately the Contract note and the bill. In addition to the prescribed information, broker can provide other additional details/ information as he may deem fit. Broker is also required to attach details of trades if a summary Contract note (with average rate) has been issued to the client. Generally, the Contract note also contains details of other charges, levies, taxes, etc., to the extent recoverable from client. The stock exchange facilitates viewing of trades details on their website up to 5 days from the date of execution of trade. This ensures transparency in the execution of trades and discourages modification of trade by broker with any malafide intentions. PAN of client is required to be printed on the Contract note in case the contract value exceeds Rs. 1 Lac.

Issuance of Contract Note

6.7 Broker is required to issue Contract notes in duplicate to all his clients within 24 hours of execution of trade, i.e., by next

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working day. Broker is required to obtain the date and signature of client in case of hand delivery of the Contract notes and in case where the Contract notes are sent by courier/ post, adequate dispatch record is required to be maintained. Contract notes are required to be signed by the director/ proprietor/ partner/ authorised signatory or power of attorney holder as the case may be. The details of the signatory along with necessary board resolution/ power of attorney should be submitted to the exchange and the name of such signatory(s) is also required to be printed on the Contract note. Contract notes issued by the broker should be compared with trade files to ensure that contract notes are issued to all the clients and also to ensure that there are no off-market trades executed by the broker.

Numbering of Contract Notes

6.8 Brokers are required to issue contract notes to clients, which are serially numbered. Such numbering shall be on annual basis and not on daily basis. The contract note issued to client shall be numbered with unique running serial number commencing from 1 which shall be reset at the beginning of every financial year.

Brokerage

6.9 Broker can not charge brokerage at a rate exceeding 2.5% of the contract value or Rs. 0.25/- per share, whichever is higher. In case of option, contract brokerage should be charged on the premium amount (not on the premium plus strike price) at a rate not exceeding 2.5% or Rs. 100 whichever is higher.

Securities Transaction Tax

6.10 Statement of Securities Transaction Tax (STT) may be issued on annual (financial year) basis, unless required by the client otherwise, within one month from the close of the financial year. However, broker shall continue to give total STT amount on the Contract notes. Format of statement of STT has been prescribed by both the exchanges.

Electronic Contract Note (ECN)

6.11 Broker is allowed to issue contract notes authenticated by means of digital signatures provided that the broker has obtained digital signature certificate from Certifying Authority under the Information Technology Act, 2000. Contract notes issued in electronic format is required to be digitally signed. SEBI circular MRD/ DoP/ SE/ Cir-20/2005 dated September 8, 2005 specifies the conditions for issuance of Contract notes in electronic form which are being discussed in following paragraphs.

Issuing ECNs When Specifically Consented

6.12 The digitally signed ECNs may be sent only to those clients who have opted to receive the contract notes in an electronic form, either in the Member Client agreement/ Tripartite agreement or by a separate letter. The mode of confirmation shall be as per the agreement entered into with the clients.

Where to Send ECNs

6.13 The usual mode of delivery of ECNs to the clients shall be through e-mail. For this purpose, the client shall provide an appropriate e-mail account to the broker which shall be made available at all times for such receipts of ECNs.

Requirement of Digital Signature

6.14 All ECNs sent through the e-mail shall be digitally signed, encrypted, non-tamperable and shall comply with the provisions of the Information Technology Act, 2000. In case the ECN is sent through e-mail as an attachment, the attached file shall also be secured with the digital signature, encrypted and non-tamperable.

Requirements for Acknowledgement, Proof of Delivery, Log Report, etc.

Acknowledgement

6.15 The acknowledgement of the e-mail shall be retained by the broker in a soft and non-tamperable form.

Proof of Delivery

6.16 The proof of delivery i.e., log report generated by the system at the time of sending the Contract notes shall be maintained by the broker for the specified period under the extant regulations of SEBI/ stock exchanges and shall be made available during inspection, audit, etc.

The broker shall clearly communicate to the client in the agreement executed with the client, for this purpose, that non-receipt of bounced mail notification by the broker shall amount to delivery of the Contract note at the e-mail ID of the client.

Log Report for Rejected or Bounced Mails

6.17 The log report shall also provide the details of the Contract notes that are not delivered to the client/e-mails rejected or bounced back. Also, the broker shall take all possible steps (including settings of mail servers, etc) to ensure receipt of notification of bounced mails by the broker at all times within the stipulated time period under the extant regulations of SEBI/stock exchanges.

When to Issue or Send in Physical Mode

Issue in Physical Mode

6.18 In the case of those clients who do not opt to receive the Contract notes in the electronic form, the broker shall continue to send Contract notes in the physical mode to such clients.

Send in Physical Mode

6.19 Wherever the ECNs have not been delivered to the client or has been rejected (bouncing of mails) by the e-mail ID of the client, the broker shall send a physical Contract note to the client within the stipulated time under the extant regulations of SEBI/ stock exchanges and maintain the proof of delivery of such physical Contract notes.

General Requirements

ECNs through Website

6.20 In addition to the e-mail communication of the ECNs in the manner stated above, in order to further strengthen the electronic communication channel, the broker shall simultaneously publish the ECN on his designated website in a secured way and enable relevant access to the clients.

Access to the Website

6.21 In order to enable clients to access the ECNs posted in the designated website in a secured way, the broker shall allot a unique user name and password for the purpose, with an option to the client to access the same and save the contract note electronically or take a print out of the same.

Preservation/ Archive of Electronic Documents

6.22 The broker shall retain/ archive such electronic documents as per the extant rules/ regulations/ circulars/ guidelines issued by the SEBI or the Stock Exchanges from time to time.

Straight Through Processing (STP)

6.23 Straight Through Processing (STP) is a mechanism that automates the end to end processing of transactions of financial instruments. It involves use of a system to process or control all elements of the work flow of a financial transaction, what are commonly known as the Front, Middle, Back office and General Ledger. In other words, STP allows electronic capturing and processing of transactions in one pass from the point of order origination to final settlement. STP thus streamlines the process of trade execution and settlement and avoids manual entry and re-entry of the details of the same trade by different market intermediaries and participants. Usage of STP enables orders to be processed, confirmed and settled in a shorter time period and in a more cost effective manner with fewer errors.

Chapter I-7

Settlement

7.1 The clearing and settlement mechanism in Indian securities market has witnessed significant changes and several innovations during the last decade. These include use of the state-of-art information technology, clearing corporations to assume counterparty risk, shorter settlement cycle, dematerialisation and electronic transfer of securities, fine tuned risk management system, etc.

7.2 Once the shares have been bought or sold, the transaction is complete only when the person has received the delivery for the shares purchased, or received money for the shares sold. This process of carrying the transactions to its logical conclusion is called “settlement” in stock market parlance. Further, “Pay-In” means funds and securities receivable by Stock Exchange from the broker towards the obligation and “Pay-Out” means funds and securities payable by Stock Exchange to the broker.

7.3 Some Important Terms for usage with reference to the settlement procedure are:

(i) Clearing Corporation or Clearing House - Clearing Corporation or Clearing House (hereinafter referred to as Clearing Corporation (CC)) means the clearing corporation or clearing house of a recognised stock exchange to clear and settle trades in securities. CC is responsible for post trade activities of a stock exchange. Clearing and settlement of trades and risk management are its central functions.

CC clears all trades, determines obligations of members, collects funds/ securities, processes for shortages in funds/ securities, arranges for pay-out of funds/ securities to members, guarantees settlement, and collects and maintains margins/ collateral/ base capital/ other funds. The clearing and settlement operations of the NSE are managed by its wholly owned subsidiary, the National Securities Clearing

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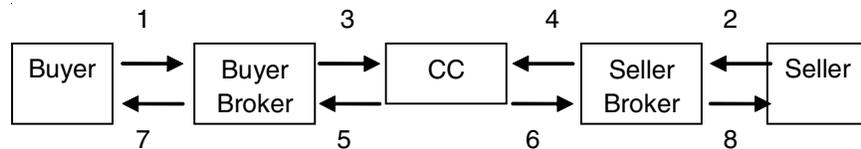
Corporation Limited (NSCCL). The clearing and settlement operations of the BSE are managed by BOI Shareholding Limited, which is a subsidiary of Bank of India and BSE.

- (ii) **Clearing Members** - A member of a clearing corporation or clearing house of the derivatives exchange or derivatives segment of an exchange, who shall clear and settle transactions in securities. In the capital market segment, all trading members of the Exchange are required to become the Clearing Member of the Clearing Corporation. They are responsible for settling their obligations as determined by the CC of the respective exchanges. They have to make available funds and/or securities in the designated accounts with clearing bank/depository participant, as the case may be, to meet their obligations on the settlement day.
- (iii) **Trading Member** - A member of the derivatives exchange or derivatives segment of a stock exchange who settles the trade in the clearing corporation or clearing house through a clearing member. Trading Member can trade on his own behalf and/or on behalf of his clients.
- (iv) **Custodians** - A custodian is an entity appointed by the client for safekeeping the property like, shares, etc. belonging to the original holder. It settles trades assigned to them by trading members. A custodian can act as clearing member but not as trading member. On confirmation from the custodian to settle a particular trade, the CC assigns settlement obligation to that custodian and the custodian is required to settle it on the settlement day. If the custodian rejects the trade, the obligation is assigned back to the trading/clearing member for settlement which is then called DVP trade (Delivery vs. Payment).
- (v) **Clearing Bank** - Clearing bank facilitates the settlement of funds. Every clearing member is required to open a dedicated settlement account with one of the clearing banks. The clearing member makes funds available for the pay-in or receives funds in case of a pay-out in the settlement account maintained with the Clearing Bank.

- (vi) **Depositories** - A depository is an entity where the securities of an investor are held in electronic form. Depositories facilitate the settlement of the dematerialised securities. Every clearing member is required to maintain settlement account with each of the depositories. Clearing Member makes available the required securities on settlement day for the pay-in or receives securities in case of a pay-out in the designated settlement account with the depositories.

Settlement Process

7.4 While the stock exchange provides a platform for trading to its trading members, the Clearing Corporation (CC) determines the funds/securities obligations of the trading members and ensures that clearing members meet their obligations. CC becomes the legal counterparty to the net settlement obligations of every member. CC is obligated to meet all settlement obligations, regardless of member defaults, without any discretion. The diagram hereunder shows the CC acting as legal counterparty:



Explanation

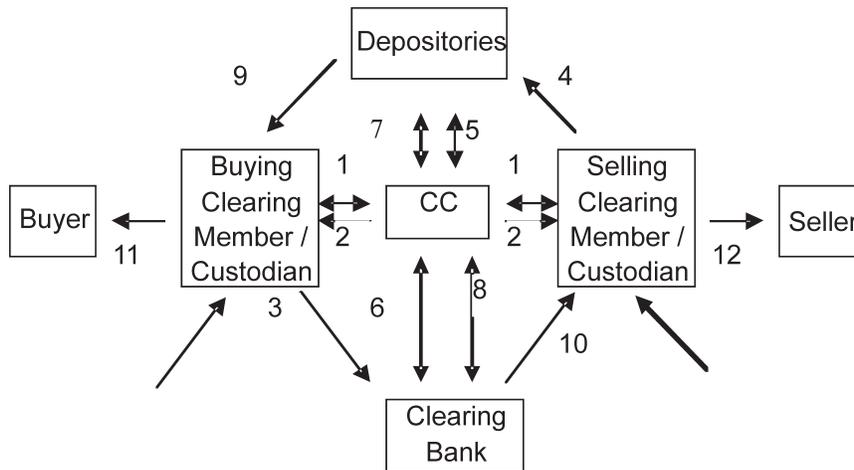
- (1) Buyer interacts with its broker (buyer broker) and gives the funds to the broker.
- (2) Seller interacts with its broker (seller broker) and gives the shares to the broker.
- (3) The Buyer Broker interacts with the Clearing Corporation and makes the pay-in of funds
- (4) The Seller Broker interacts with the Clearing Corporation and makes the pay-in of shares.

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- (5) The movement of Shares from Clearing Corporation to the Buyer Broker on pay-out of shares.
- (6) The movement of Funds from Clearing Corporation to the Seller Broker on pay-out of funds.
- (7) The Buyer Broker makes the delivery of shares to the buyer within one working day after the pay-out is received from the Clearing Corporation.
- (8) The Seller Broker makes the payment of funds to the seller within one working day after the pay out is received from the Clearing Corporation.

7.5 The clearing banks and depositories provide the necessary interface between the custodians/clearing members and CC for settlement of funds/securities. The settlement process is a very critical activity and, hence, it is very necessary that an auditor understands the whole process flow and internal control before commencement of a settlement audit.

7.6 The diagrammatic representation of the Settlement Process in Capital Market segment of Stock Exchange is given hereunder:



Explanation

The Exchange informs the CC on real-time basis relating to the trades of the broker and final trade file is provided by the end of the day.

- (1) CC notifies the consummated trade details to clearing members/ brokers/ custodians who affirm back. Based on the affirmation, CC applies multilateral netting and determines obligations.
- (2) Download of obligation and pay-in advice of funds/securities.
- (3) Instructions to clearing banks to make funds available by pay-in time.
- (4) Instructions to depositories to make securities available by pay-in-time.
- (5) Pay-in of securities (CC advises depository to debit pool/ principal account of custodians/ clearing member and credit its account and depository executes it).
- (6) Pay-in of funds (CC advises clearing banks to debit account of custodians/ clearing members and credit its account and clearing bank executes it).
- (7) Pay-out of securities (CC advises depository to credit pool account of custodians/ brokers and debit its account and depository executes it).
- (8) Pay-out of funds (CC advises clearing banks to credit account of custodians/ brokers and debit its account and clearing bank executes it).
- (9) Depository informs custodians/ brokers through DPs about delivery of securities.
- (10) Clearing banks inform custodians/ brokers about receipt of funds.

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- (11) The buying broker/ custodian makes the delivery of shares to the buyer within one working day after the pay out is received from CC.
- (12) The selling broker/ custodian makes the payment of funds to the seller within one working day after the pay out is received from CC.

Settlement Cycle

7.7 The settlement cycle in the Indian stock market is trade plus two days, i.e., T+2, as per the SEBI directive implementing this new cycle from April 1, 2003. Under rolling settlement, trades done on one day are settled after the specified number of days. So, T+2 will mean that the final settlement of transactions done on the trade day will take place two days after the trade day (excluding Saturday, Sundays, Bank and Exchange Settlement holidays). If there is a shortfall in securities on the pay-in day, then an auction is conducted to meet it. The settlement cycle is summarised as under:

Settlement Cycle in case of Cash Segment

Day	Activity
T	<ul style="list-style-type: none">● Trading on Trading Terminals.● Downloading of statements showing details of transactions and margins at the end of each trading day.● Downloading of provisional securities and funds obligation statements by brokers.
T+1	<ul style="list-style-type: none">● Custodial Confirmation.● Downloading of final securities and funds obligation statements by brokers.
T+2	<ul style="list-style-type: none">● Pay-in of funds and securities.● Pay-out of funds and securities.
T+3	<ul style="list-style-type: none">● Auction on Trading Terminals.

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Day	Activity
T+4	<ul style="list-style-type: none">● Settlement of Auction Trades.

Settlement Cycle in case of Derivatives Segment

T	<ul style="list-style-type: none">● Trading on Trading Terminals.
	<ul style="list-style-type: none">● Downloading of statements showing details of transactions and margins at the end of each trading day.
	<ul style="list-style-type: none">● Downloading of final funds obligation statements by brokers.
T+1	<ul style="list-style-type: none">● Pay-in of funds.● Pay-out of funds.

Chapter I-8

Settlement of Funds

8.1 Settlement of funds constitutes Pay-in of funds and Pay-out of funds.

(i) Pay-in of Funds - Pay-in of funds means funds receivable by Clearing Corporation from the broker. Conversely, it can also be said to be the amount of funds payable by the broker to the Clearing Corporation. Funds can be payable on account of purchases, loss on square off transactions, margins payable to the exchange and other charges debited by the stock exchange.

(ii) Pay-out of Funds - Pay-out of funds means funds payable by the Clearing Corporation to the broker. Conversely, it can also be said to be the amount of funds receivable by the broker from the Clearing Corporation. Funds can be receivable on account of sales, profit on square off transactions, margins released by the exchange and other credits given by the stock exchange. The broker is required to issue cheques to its clients and settle their account within one working day.

8.2 Every broker is required to open generally three types of bank accounts - Settlement Account, Client Account and Own Account.

Settlement Account/ Clearing Account

8.3 A designated Settlement Account/ Clearing Account is required to be opened with any one of the empanelled Clearing Banks. The Settlement Account is to be used exclusively for clearing and settlement operations, i.e., for settling funds and other obligations (e.g., payments of margins, penal charges, etc.) to the CC. Brokers are required to give mandate to the Clearing Bank for debiting and crediting their clearing accounts. The Clearing Bank will debit/credit the clearing account of clearing members as per instructions received from the CC.

8.4 Select banks have been empanelled by the CC for electronic

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transfer of funds. The members are required to maintain accounts with any of these banks. The members are informed electronically of their pay-in obligations of funds. The members make available required funds in their accounts with clearing banks by the prescribed pay-in day. The CC forwards funds obligations file to clearing banks which, in turn, debit the accounts of members and credit the account of the CC. In some cases, the CC runs an electronic file to debit members' accounts with clearing banks and credit its own account. On pay-out day, the funds are transferred by the clearing banks from the account of the CC to the accounts of members as per the member's obligations. In cash segment, the pay-in and pay-out of funds as well as securities take place 2 working days after the trade date (i.e., T+2 rolling settlement basis). In case of F&O segment, the settlement takes place on T+1 basis.

Client Bank Account

8.5 The broker is required to have a designated Client bank account in which all the amount receivable from the client will be deposited and all the amount payable to the client will be paid.

Own Bank Account

8.6 The own account is used by the broker for meeting the expenses of the organisation or for making payments for personal liabilities like, purchase of capital assets, giving of loans, or such other transactions of personal nature. The use of own bank account is not permitted for transactions with clients and for settlement purpose. The brokerage accumulated in client bank account should first be transferred to own bank account and then only withdrawn for own purposes.

Segregation of Funds

8.7 Broker is also required to maintain clear segregation of the client funds and own funds. SEBI has vide Circular no. SMD/SED/Cir/93/23321 dated November 18, 1993 in respect of maintaining a line of segregation between own funds and clients funds, directed

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as under:

“1. It shall be compulsory for all Member brokers to keep the money of the clients in a separate account and their own money in a separate account. No payment for transactions in which the Member broker is taking a position as a principal will be allowed to be made from the client’s account. The above principles and the circumstances under which transfer from client’s account to Member broker’s account would be allowed are enumerated below.

A. Member Broker Keep Accounts

Every member broker shall keep such books of accounts, as will be necessary, to show and distinguish in connection with his business as a member –

- i) moneys received from or on account of and moneys paid to or on account of each of his clients and,
- ii) the moneys received and the moneys paid on Member’s own account.

B. Obligation to Pay Money into “Clients Accounts”

Every member broker who holds or receives money on account of a client shall forthwith pay such money to current or deposit account at bank to be kept in the name of the member in the title of which the word “clients” shall appear (hereinafter referred to as “clients account”). Member broker may keep one consolidated clients accounts for all the clients or accounts in the name of each client, as he thinks fit. Provided that when a Member broker receives a cheque or draft representing in part money belonging to the client and in part money due to the Member, he shall pay the whole of such cheque or draft into the clients account and effect subsequent transfer as laid down in para D (ii).

C. What Moneys to be Paid into “Clients Account”

No money shall be paid into clients account other than –

- i) money held or received on account of clients;
- ii) such money belonging to the member as may be necessary for the purpose of opening or maintaining the account;
- iii) money for replacement of any sum which may by mistake or accident have been drawn from the account in contravention of para D given below;
- iv) a cheque or draft received by the Member representing in part money belonging to the client and in part money due to the Member.

D. What Moneys to be Withdrawn from “Clients Account”

No money shall be drawn from clients account other than–

- i) money properly required for payment to or on behalf of clients or for or towards payment of a debt due to the member from clients or money drawn on client’s authority, or money in respect of which there is a liability of clients to the Member, provided that money so drawn shall not in any case exceed the total of the money so held for the time being for such each client;
- ii) such money belonging to the Member as may have been paid into the client account under para 1C(ii) or 1C(iv) given above;
- iii) money which may by mistake or accident has been paid into such account in contravention of para C above.

E. Right to Lien, Set-off etc., Not Affected

Nothing shall deprive a Member broker of any recourse of right, whether by way of lien, set-off, counter-claim charge

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or otherwise against moneys standing to the credit of clients account.”

8.8 SEBI has vide Circular no. SMD/SED/Cir/93/23321 dated November 18, 1993, further specified that:

- In case of purchases on behalf of client, brokers shall be at a liberty to close out the transactions by selling the securities, in case the clients fails to make the full payment to the broker for the execution of the contract within two days of contract note having been delivered for cash shares and seven days for specified shares or before pay-in day (as fixed by the Stock Exchange for the concerned settlement period), whichever is earlier; unless the client already has an equivalent credit with the Member. The loss incurred in this regard, if any, will be met from the margin money of that client.
- In case of sales on behalf of clients, brokers shall be at liberty to close out the contract by effecting purchases if the client fails to deliver the securities sold with valid transfer documents within 48 hours of the contract note having been delivered or before delivery day (as fixed by the Stock Exchange authorities for the concerned settlement period), whichever is earlier. Loss on the transaction, if any, will be deductible from the margin money of that client.

Cash Dealings

8.9 SEBI vide its circular no. SEBI/MRD/SE/Cir- 33/2003/27/08 dated August 27, 2003, regarding cash transactions between stock brokers and their clients, specifies that the brokers should not accept cash from the client whether against obligations or as margin for purchase of securities and/or give cash against sale of securities to the clients. However, in exceptional circumstances the broker may receive the amount in cash, to the extent not in violation of the Income Tax requirement as may be in force from time to time.

Running Account

8.10 As per the prevalent market practise and for the purpose of convenience, the client may instruct the broker to maintain a running account. Such instruction should be in writing and in that case, the amount may not be paid by the broker within one working day. However, it is suggested that the accounts should be settled on timely and regular basis.

Receipts and Payments of Funds from/to Third Party

8.11 As per the SEBI directives, all payments shall be received/ made by the brokers from/to the clients strictly by account payee crossed cheques/demand drafts or by way of direct credit into the bank account through EFT, or any other mode allowed by the RBI. The broker shall accept cheques drawn only by the clients and also issue cheques in favour of the clients only, for their transaction. The bank account details of the clients should preferably be mapped in the back office at the time of opening the account. This shall facilitate tracking of receipt and payment of funds from other than client's account, i.e., from third party.

Checks and Balances

8.12 Stock Broker is required to prepare bank reconciliation statement on a regular basis, preferably on a daily basis. It should be ensured that unreconciled/pending entries are thoroughly scrutinised, especially those entries which are pending for unreasonably long period. While scrutinising bank reconciliation statement, auditor should also verify that dishonoured cheques of clients are properly accounted and are not pending in bank reconciliation statement.

Chapter I-9

Settlement of Securities

9.1 This chapter deals with settlement of securities in dematerialised form. Settlement of securities constitutes Pay-in of securities and Pay-out of securities.

Pay-in of Securities - Pay-in of securities means securities receivable by Clearing Corporation from the broker. Conversely, it can also be said to be the securities deliverable by broker to the Clearing Corporation. The delivery of securities is made into the Pool/Principal account of the broker by the client and from there the pay-in is made to Clearing Corporation.

Pay-out of Securities - Pay-out of securities means securities deliverable by Clearing Corporation to the broker. Conversely, it can also be said to be securities receivable by broker from the Clearing Corporation. The delivery of securities is made into the Pool account of the broker/ direct pay-out to clients by Clearing Corporation.

9.2 In India, there are two depositories viz., National Securities Depositories Ltd. (NSDL) and Central Depositories Services Ltd. (CDSL) which provide almost instant electronic transfer of securities and more than 99% of turnover is currently settled in the dematerialised form. Every broker is required to open demat accounts with both the depositories and the various types of accounts are:

Type of Account	Depository	Purpose
Pool Account	NSDL	To deliver shares in Pay-in to the CC and to receive shares in Pay-out from the CC.
Pool Account	CDSL	To receive shares in Pay-out from the CC.
Principal Account	CDSL	To deliver shares in Pay-in to the CC.

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Type of Account	Depository	Purpose
CISA Account	CDSL	Shares are automatically transferred from CDSL-Pool Account to CISA Account after one working day from the release of pay-out by CC.
Client Beneficiary Account	NSDL/CDSL	The demat account for holding of client shares or client margin shares can be opened with NSDL or CDSL or with both.
Brokers (Own) Beneficiary Account	NSDL/CDSL	The demat account for holding own shares of the broker can be opened with NSDL or CDSL or with both.

9.3 The provisional statement for securities obligations are sent by CC at the end of the trading day and downloaded by brokers/ clearing members/ custodians. The final securities obligation statement is received on T+1 day by brokers/clearing members/ custodians. The clearing members/ custodians are required to make available the required securities in the settlement (Pool for NSDL/ Principal for CDSL) account by the prescribed pay-in time for securities. In case of NSDL the members need to give instructions to move the securities to the settlement account of CC, whereas in case of CDSL the members need to ensure that the necessary quantity of securities are available in their principal account. As per the schedule determined by the CC, the securities are transferred on the pay-out day by the depository from the settlement account of the CC to the pool account of clearing members/ custodians or directly to the client's demat account (as may be instructed). The pay-in and pay-out of securities is affected on the same day for the same settlements.

Every broker is required to transfer the securities received in the pool account to the account of the client or to their own beneficiary account within one working day. In case of NSDL, if any, securities are lying in the pool account for more than one working day then the broker is penalised by NSDL for the same. However, in case

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of CDSL, all the securities lying in pool account for more than one working day are transferred to the CISA account.

Direct Pay-out to Investors

9.4 SEBI vide its circular no.SMDRP/Policy/Cir-05/2001 dated February 1, 2001 had directed stock exchanges to introduce a settlement system for direct delivery of securities to the investors accounts with effect from April 2, 2001. Accordingly, CC has introduced the facility of direct pay-out to clients' account on both the depositories. It ascertains from each broker, the beneficiary account details of their respective clients who are due to receive pay-out of securities. Broker is required to upload the information using the front-end provided by CC. Based on the information received from brokers, the CC sends pay-out instructions to the depositories to deliver securities directly to demat accounts of clients on the pay-out day. The client receives pay-out to the extent of instructions received from the respective brokers. To the extent of instruction not received, the securities are credited to the pool account of the broker.

Client Beneficiary Account

9.5 Every broker is required to open a designated Client Beneficiary account in which the shares of the client will be kept. SEBI has vided Circular no. SMD/SED/Cir/93/23321 dated November 18, 1993 specified that it shall be compulsory for all member brokers to keep separate accounts for client's securities and to keep such books of accounts, as may be necessary, to distinguish such securities from his/their own securities. The broker shall maintain Register of Securities, client-wise and security-wise, which shall *interalia* provide for the following information:

- (i) date of receipt/ delivery of security
- (ii) quantity received/ delivered
- (iii) party from whom received/ to whom delivered
- (iv) purpose of receipt/ delivery

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The broker is also required to maintain clear segregation of the client shares and own shares. Every client who wishes to trade on the securities market is required to generally provide details of his demat account to the broker at the time of opening of the account. The broker is also required to properly update the back office software with the demat account information of the client.

9.6 SEBI has also issued circular no. SEBI/MRD/SE/Cir- 33/2003/27/08 dated August 27, 2003 laid down that in the case of securities giving/taking delivery of securities in “demat mode” should be directly to/from the “beneficiary account” of the clients except delivery of securities to a recognised entity under the approved scheme of the stock exchange and/ or SEBI. Thus, every broker is required to ensure that the demat shares sold by the client are received only from the demat account as informed by the client. Similarly, in case of purchase by client, the demat shares are to be delivered to the demat account as informed by the client. The broker is required to deliver the client’s shares to the client’s demat account within one working day. A broker may keep the shares with himself if instructed in writing by the client. The broker will then maintain all the client shares in the designated client demat account with adequate client-wise details of the shares. Broker has the right to withhold the shares received in pay-out to the extent of amount recoverable from the client.

Shortage

9.7 When shares are received short from the exchange on pay-out towards buy position of the broker or his client then it is called as shortage of shares received from the exchange. In this case, exchange initiates the auction process and short shares are subsequently delivered on auction settlement day. If the shares could not be received in the auction then the transaction is closed out with monetary compensation. When shares are received short from the client towards his pay-in obligation (sell position) then it is called as shortage of shares received from the client. In this case, the exchange processes the auction and auction charges are recovered from the broker. The broker has to recover the same from the client.

Auction

9.8 Auctions are initiated by the CC on behalf of trading members for settlement related reasons. The main reasons are shortages, bad deliveries and objections. The CC purchases the requisite quantity in the Auction Market and gives them to the buying trading member. The shortages are met through auction process and any price difference on account of auction is recoverable from the seller.

Internal Shortage

9.9 Internal Shortage means one client of the broker delivers short quantity of any scrip against his pay-in obligation and where another client of the same broker has buy position in the same scrip in that particular settlement, thus, leading to internal shortage at broker level. It should be ensured that the shares short delivered are received subsequently and in turn delivered to the buyer. Further, in case of internal shortage, BSE has given option to broker to report the shortage by prescribed time limit and in such case the BSE shall conduct the auction and deliver the shares to the buyer.

Close Out

9.10 In case the CC is not in a position to deliver the shares, then it settles the trade by monetary compensation to the buyer which is recoverable from the seller. Such process is called as Close out. Close out of a transaction takes place in the following cases:

- (i) In case of non-delivery of shares of Trade to Trade (T to T) Transactions
- (ii) In case of no bidder being present in the Auction
- (iii) In case of failed delivery by the bidder in case of an Auction.

9.11 With respect to Close out, SEBI has laid down guidelines which stipulate that “the close out price will be the highest price recorded in that scrip on the exchange in the settlement in which the concerned contract was entered into and upto the date of

auction/close out or 20% above the official closing price on the exchange on the day on which auction offers are called for (and in the event of there being no such closing price on that day, then the official closing price on the immediately preceding trading day on which there was an official closing price), whichever is higher. The auditor should verify the document received from the CC containing the details of the Close out to confirm that the credit/debit has been passed to the correct client and at the correct price.

Square-up/ Square-off/ Intra-day Transaction

9.12 Long (Purchase)/Short (Sale) position can be nullified by creating the reverse position by the end of the trading session and such a transaction are termed as Square-up/Square-off/Intra-day transactions. However, this is not applicable in case of scrips in Trade to Trade (T to T) group.

Document Register or Inward/ Outward Register

9.13 In case of physical delivery of shares, as per Rule 15(1)(g) of Securities Contracts (Regulation) Rules, 1957, every broker is required to maintain a Document register showing full particulars of shares and securities received and delivered. This register contains the particulars of the securities including their distinctive numbers, received from or delivered by a broker from/ to clients. This record lists and identifies every security available with the broker at any given time.

Checks and Balances

9.14 The broker is required to prepare demat reconciliation statement on a regular basis. It is advisable that the reconciliation statement should be prepared on a daily/ weekly/ fortnightly basis, based on the volume and nature of activity of a broker. Auditor should analyse the reason for difference in quantity, if any, between the shares lying in client beneficiary demat account and the shares

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appearing in the books of the broker. Auditor should also verify the ageing analyses statement of the shares lying in the client beneficiary account to ensure that adequate control is exercised over the shares held for long period. Auditor should also ensure that there is proper segregation of duty relating to settlement of securities.

9.15 The following documents are required for the verification of the settlement procedure:

- (i) **Exchange Files** - The broker will receive the following files from the exchange:
 - (a) 'Receiving Client-wise Broker-wise Delivery' Report (RCBDL) file in BSE contains the details of shares delivered directly to the client's demat account by the clearing corporation. It gives details of demat account where the pay-out is credited and also details of securities which have been credited to pool account of the broker.
 - (b) 'Auction Receiving Broker-wise Delivery' Report (ARBDL) file in BSE contains the details of shares received in auction from the clearing corporation by the clearing member.
 - (c) 'Client Allocation Details' (CADT) file in NSE contains the details of the pay-out directly credited to the client's demat account by the clearing corporation. It gives details of demat account where the pay-out is credited and also details of securities, which have been credited to pool account of the broker.
- (ii) **Delivery Statement** - Delivery Statement can be generated scrip-wise or client-wise for various groups (e.g., odd lot, normal, etc.) from the back office software. This report is used to ascertain the quantity of shares receivable and/ or deliverable from/ to the client as well as from/ to CC towards settlement obligation.
- (iii) **Close Out file** - In certain instances the settlement procedure cannot be completed due to non receipt/ non delivery of

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shares to/by the exchange. In such a case a close out file is sent by the exchange providing details of the shares that have been closed out and the amount of credit/ debit given to the broker by the exchange towards the shares that could not be settled (delivered).

- (iv) Transaction cum Holding Statement of the Demat Account** - This statement will provide the details of movements of shares in the demat account of the broker. This statement is a third party confirmation and is given by the DP of the broker. The transaction statements of Pool, Principal and Client Beneficiary Account are required to be obtained. This statement will give the details of the demat account from where the shares have been received or the demat account where the share have been delivered and the balance quantity of shares lying with the broker.
- (v) Details of Demat Account of Clients** - This report is generated from the back office software and gives details of various demat accounts of the client informed to the broker.
- (vi) Settlement Calendar** - The exchanges issue the settlement calendar giving details of trade date, settlement number, pay-in and pay-out dates (settlement dates).

Chapter I-10

Statement of Funds, Securities and Margins

Statement of Accounts for Funds and Securities

10.1 Every broker is required to send a complete 'Statement of Accounts' for both funds and securities in respect of each of its clients in such periodicity not exceeding three months (calendar quarter) within a month of the expiry of the said period. The Statement shall also state that the client shall report errors, if any, in the Statement within 30 days of receipt thereof to the broker. The objective is to reconcile the records of the broker and the clients at regular interval thereby avoiding any disputes between the broker and their clients.

10.2 In case of those brokers who offer trading facility to their clients through internet and provide an access to an on-line accounting viewing and print-out facility, it would be treated as sufficient compliance, if they send the 'Statement of Accounts' by e-mail to such clients. Broker is required to send Statement of Accounts to institutional clients only in case the broker has received funds/ securities from their institutional clients and/or paid funds/ delivered securities to such institutional clients directly and not through custodians.

10.3 It is suggested that Statement of Accounts for funds and securities should be sent directly to the client from the main office instead of routing it through branch or other intermediaries. Sending of Statement of Accounts of funds and securities directly to the clients acts as an external evidence (i.e., confirmation received from third party) and is usually more reliable. In case where the Statement of Accounts for the funds and securities are sent by post/courier, adequate despatch records should be maintained and in case of hand delivery acknowledgement of the client along with date of receipt should be obtained.

Client Margin Information

10.4 The broker is required to send Client Margin related information to their clients on daily basis. Such information may include the following details:

- (i) Client code and name, Trade day (T).
- (ii) Total margin deposit placed by the client upto day T-1 (with break-up in terms of cash, FDRs, BGs and securities).
- (iii) Margin utilised upto the end of day T-1.
- (iv) Margin deposit placed by the client on day T (with break-up in terms of cash, FDRs, BGs and securities).
- (v) Margin adjustments for day T.
- (vi) Margin status (balance with the member/due from the client) at the end of day T.

Collateral Utilisation Statement

10.5 The broker is required to send Collateral Utilisation Statement to their clients on daily basis, which shall *inter alia* include details of collateral deposited, collateral utilised and collateral status (available balance) with break up in terms of cash, Fixed Deposit Receipts (FDRs), Bank Guarantee and securities. The broker should keep the following records:

- (i) Receipt of collateral from client and acknowledgement issued to client on receipt of collateral.
- (ii) Client authorisation for deposit of collateral with the exchange/ clearing corporation/ clearing house towards margin.
- (iii) Record of deposit of collateral with exchange/ clearing corporation/ clearing house.
- (iv) Record of return of collateral to client.
- (v) Credit of corporate action benefits to clients.

The above records should be periodically reconciled with the actual collateral deposited with the broker.

Chapter I-11

Brokerage and Revenue Leakage

11.1 The broker being agent of the client earns brokerage on the value of transaction at the rates agreed between the client and the broker. The brokerage slabs are defined in the client master at the time of opening of the account. The brokerage is then charged by the software as and when the client transacts through the broker. The brokerage is credited to the brokerage account generally either on the “T-Day” (Trading day) or “Settlement Day” (the date on which the trade is settled) as per the system of accounting regularly followed by the broker. It may be noted that the brokerage accounting is a matter of policy as adopted by the management and it should be ensured that the policy is consistently followed by the organisation.

Brokerage Charged to Clients

11.2 It should be ensured that the client is not charged brokerage at the rate exceeding 2.5%. Adequate access controls should be built into the system so as to avoid unauthorised modification of the brokerage master. There should be adequate audit trail for the modification carried out in the brokerage master in the back office accounting system.

Sharing of Brokerage

11.3 In case a client is introduced by an intermediary (sub broker/remisier/authorised person) then a part of the income shall be shared with such intermediary at the rates agreed between the broker and the intermediary. The brokerage sharing slabs are defined in the client master at the time of opening of the account. Adequate access controls should be built into the system so as to avoid unauthorised modification of the brokerage sharing master. The brokerage recovered from the client is then credited to the intermediary’s account (sub broker/remisier/ authorised person) at the agreed rate. The gross figure of brokerage charged from client and brokerage paid to intermediary should be separately reflected

in the Profit & Loss A/c. It should be ensured that brokerage received and paid is not netted-off by the broker in the books of account.

Recoveries from Client

11.4 The broker being agent of the client is entitled to recover the penalties/ charges/ expenses, etc., incurred on behalf of the client subject to terms and conditions mutually decided. The expenses should be recovered as may be mutually decided and, in any case, not exceeding the actual amount incurred by the broker on behalf of the client. The charges could also be specified in the back office accounting software and then the same shall be charged by the system as and when the client transacts.

Disputed Trades

11.5 There could be trades which are disowned by the client as a result of errors of the dealer or on account of disputes. In the regular course of business practice, such trades are transferred to "Office Vandha A/c" (Dispute/ Objection/ Error A/c or by whatever name called) and are subsequently squared off at the earliest. It should be ensured that there are legitimate reasons to transfer such trades to "Office Vandha A/c" and such transfers are backed by appropriate sanctions from the designated authorities. In cases where such trades are not squared up immediately and the positions are carried forward in the books of broker, it should be backed by the required sanctions and the motive thereof should be verified. Analysis of such trades should be conducted to get an overall idea as to the nature and quantum of such errors within the organisation. Errors should be analysed with respect to parameters like, terminals from which the erroneous trades are executed, dealers/branch responsible for such errors, scrip in which errors have occurred, etc. Any balance lying in the "Office Vandha A/c" at the year end may be written-off in the Profit & Loss A/c only after obtaining approval from the appropriate authority.

11.6 The internal auditor may also verify whether any insurance claim has been made against such dealing errors or against any

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other errors specifically covered under the insurance policy. He may further examine the reasons for weaker controls in those areas.

Corporate Benefits

11.7 In case of corporate benefits (Rights/ Bonus/ Dividend) received for the shares held in client beneficiary account on behalf of the client, it should be ensured that such corporate benefits are promptly passed on to the client. It should also be ensured that the distribution of such corporate benefits is just and fair, i.e., they are paid to the correct person and in proportion to the shares held in the client beneficiary account on the record date/book closure date declared by the concerned company. Dividend received on behalf of the client is a liability and should be shown under the head "Current Liabilities". Similarly, the dividend received on account of own shares held as investment/stock-in-trade should be booked as income and transferred to the Profit & Loss A/c.

Chapter I-12

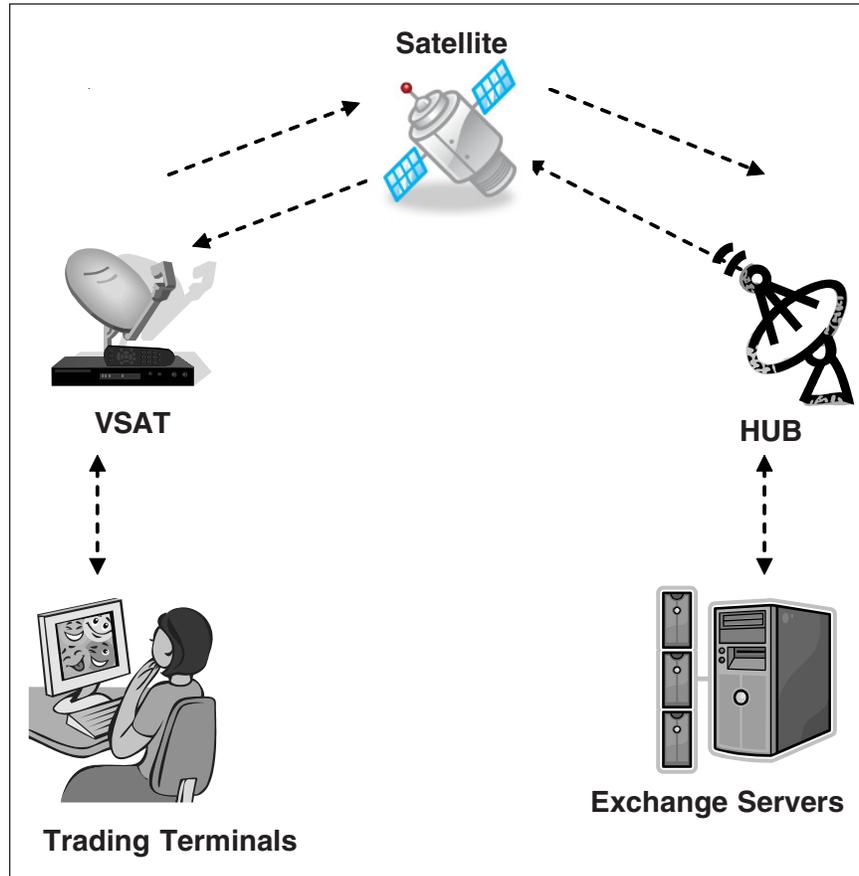
Trading Terminals and Approved Users

12.1 The trading on stock exchanges in India used to take place through open outcry system thereby imposing limits on trading volumes and efficiency. As the system was time consuming, the duration of trading session was restricted to 2 hours a day. Screen based trading system was first introduced in 1994-95 to increase the efficiency, liquidity and transparency in the capital markets. In the screen based online trading system broker can punch into the computer, the quantities of securities and the prices at which he wants to transact and the transaction gets executed as soon as it finds a corresponding sale or buy order from a counter party. The system electronically matches orders on a price/ time priority and, hence, cuts down on time, cost and risk of error, as well as on fraud resulting in improved operational efficiency. It improves the depth and liquidity of the market by removing the geographical barriers of the various market participants. It also provides a perfect audit trail, which helps to resolve disputes by logging in the trade execution process in entirety. Currently, almost 100% trading takes place through electronic order matching system. Technology has brought the trading platform from the trading hall of stock exchanges to the premises of brokers, and further to the door steps of investors through internet.

12.2 Brokers have terminals installed at their premises which are connected through VSATs/leased lines/modems to the mainframe computer of the exchange. An investor informs a broker to place an order on his behalf who in turn enters the order through his terminal which sends signal to the Satellite *via* VSAT/ leased line/ modem. These signals are then directed to mainframe computer of the exchange. The order confirmation message is immediately displayed on the terminal of the broker along with the exchange generated order number. As and when the order matches, a message is broadcasted to the broker along with the exchange

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generated trade number. The diagrammatic representation is given hereunder of this process:



Types of Trading Terminals

12.3 Various types of trading terminals are as follows:

- (i) BOLT TWS stands for “BSE On-Line Trading Terminal Work Station”. This is the front end software provided by the BSE with the use of which brokers can execute trade on the trading platform of BSE. These terminals are installed at the desired location by the exchange at the request of the broker.

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- (ii) NEAT stands for “National Exchange for Automated Trading”. This is the front end software provided by the NSE with the use of which brokers can execute trade on the trading platform of NSE. These terminals are installed at the desired location by the exchange at the request of the broker.
- (iii) IML stands for “Intermediate Message Layer”. BSE offers a facility to brokers by which they can use their own trading front-end software in order to trade on the BSE trading system. This software would be a replacement of the BOLT TWS front-end software otherwise used by brokers to trade on the BSE trading system. Broker can use software customised to meet their specialised needs like, provision of on-line trade analysis, risk management tools, integration of back-office operations, etc. Details of location and users along with other required information is required to be uploaded to the BSE. IML facilitates reduction in operating cost as well as on-line risk management and surveillance of trades.
- (iv) CTCL stands for “Computer to Computer Link”. NSE offers a facility to brokers by which they can use their own trading front-end software in order to trade on the NSE trading system. This software would be a replacement of the NEAT front-end software otherwise used by brokers to trade on the NSE trading system.

Generally, vendors provide facility to view IML and CTCL on single window of the trading terminal.

Internet Trading

12.4 In case Internet trading facility is extended to the client, the client is permitted to execute the trades only for himself, i.e., for the ID through which he has logged in. The broker is required to upload to the exchange, the details of ID (IML/ CTCL) on which the internet trading facility is being used. However, ID uploading is not required in case of internet trading facility, extended to the client on the BSE Webx platform.

Location of Terminals

12.5 The trading terminals can be installed only at the broker's head office, branch office or sub-broker's office. An office shall be considered as branch office only if it is owned, leased or rented by the broker. In case of derivatives segment the terminals can also be installed at the authorised person's office. The location details of the trading terminal should be intimated through the interface provided by the exchange. It should be ensured that trading terminals located at places other than those intimated to the exchange shall be treated as unauthorised extension of the trading terminal. In case the broker intends to carry on PRO trading from multiple locations, he should take the necessary permission from the exchange.

Terminal User

12.6 The terminals can be operated only by the broker (including their employees), sub-broker (including their employees), remisier and authorised person. In case of BSE, remisiers are permitted to operate terminals only at the head office or at the branch office of the broker. However, remisiers are not permitted to operate terminals from their own office or elsewhere. It may be noted that terminals could not be located at the premises of the client nor can it be operated by the client.

12.7 The terminal operators are required to obtain certificate as per the specification of the exchange. In case of BSE cash market segment, terminal operators are required to be BCSM (BSE's Certification in Securities Market) certified. In case of NSE capital market segment, the terminal operators are required to be NCFM (NSE's Certification in Financial Market) certified. For every 5 terminal operators (users) or part thereof, 1 user should obtain the certificate provided all the users are at the same location. In case of multiple locations, the condition shall be applicable to each of the locations. Separate certificate shall be required in case of corporate ID of NSE. In case of F&O segment terminal operator can obtain certificate from any of the institutes approved by the SEBI and such certificate could be used for operating trading terminals of either of the exchanges (BSE or NSE).

IML/ CTCL Compliances

ID Uploading

12.8 The required details of all the Ids created in the IML server of the trading member, for any purpose (*viz.*, administration, branch administration, surveillance, risk management, trading, testing, etc.) and any changes therein, should be immediately uploaded to the BSE. IML user ids created in the server of the broker should be mapped to the 16 digit location ID on a one-to-one basis and the records of the same should be maintained. The details are required to be uploaded from BOLT TWS No.1 and are subsequently available for download at any time during the market hours. The 16 digit id is represented as under:

Particulars	Description
First 6 digits	Pin code of the place where terminal is located
Next 4 digits	Branch Code
Next 3 digits	Terminal Code
Next 1 Digit	Automated Trading code
Next 2 Digits	Vendor Code

For example, digital id 4000230012009001 represents:

400023	0012	009	0	01
6 digit pin code representing that the terminal is located in Fort, Mumbai	4 digit branch code representing the Branch No. 12. This code is allotted by the broker	3 digit terminal code representing the terminal No. 9 at Branch No. 12. This code is allotted by the broker	1 digit Automated trading code representing automated trading is disabled	2 digit vendor code representing that software of vendor No. 1 is used by the broker. This code is provided to the empanelled vendor by the exchange

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12.9 The details of all the Ids created in the CTCL server of the trading member, for any purpose (*viz.*, administration, branch administration, mini-administration, surveillance, risk management, trading, view only, testing, etc.) and any changes therein, should be immediately uploaded to the NSE. CTCL user ids created in the server of the broker should be mapped to the 12 digit location ID on a one-to-one basis and the records of the same should be maintained. The details are required to be uploaded from web based interface - ENIT and are subsequently available for download at any time throughout the day. The 12 digit id is represented as under:

Particulars	Description
First 6 digits	Pin code of the location of terminal
Next 3 digits	Branch Code
Next 3 digits	Terminal Code

System Audit Requirement

12.10 The broker using IML and Internet Trading facility is required to get their systems audited by a qualified systems auditor (ISA/ CISA/ CISSP). The audit is to be carried out for the year ending 31st March and the report is required to be submitted in the prescribed format, latest by 30th June. The audit is not required to be conducted for Internet trading facility extended to the client on the BSE Webx platform.

12.11 The broker using CTCL and Internet Trading facility is required to get their systems audited by a qualified systems auditor (ISA/ CISA/ CISSP). The audit is to be carried out for the year ending 30th June and the report is required to be submitted in the prescribed format latest by 31st July. Where the scope requires the internal auditor to comment on the non compliances/ discrepancies reported by a qualified system auditor then the internal auditor shall give his comments in accordance with Standard on Internal Audit (SIA) 16, “*Using the Work of an Expert*” issued by the Institute of Chartered Accountants of India.

Chapter I-13

Sub-Broker/Remisier/Authorised Person

Sub-Broker

13.1 “Sub-broker” means any person not being a member of a stock exchange who acts on behalf of a stock broker as an agent or otherwise for assisting the investors in buying, selling or dealing in securities through such stock broker. Sub-broker needs to register himself as sub-broker under the stock broker and has to obtain a certificate of registration from the SEBI in accordance with SEBI (Stock brokers and sub-brokers) Rules and Regulations, 1992. SEBI has directed that no broker shall deal with a person who is acting as sub-broker unless he is registered with SEBI, and it shall be the responsibility of the broker to ensure that his clients are not acting in the capacity of a sub-broker unless they are registered with SEBI as a sub-broker.

13.2 Broker of a stock exchange transacting, on behalf of the client, through broker of another stock exchange are to be treated as sub-broker. It is mandatory for such person to obtain a certificate of registration from SEBI to act as a sub-broker.

Regulatory Directives

13.3 Following are the regulatory directives applicable to a sub-broker:

- (i) A sub-broker shall be affiliated only with one broker of an exchange.
- (ii) Director of a corporate broker shall not act as a sub-broker of the same corporate broker.
- (iii) Sub-broker shall not be entitled to commence business unless he has been granted certificate of registration by the SEBI.

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- (iv) A sub-broker shall enter into a tripartite agreement with his clients and with the main broker specifying the scope of rights and obligations of the broker, sub-broker and such client of the sub-broker.
- (v) A sub-broker shall not issue confirmation memos but the broker shall issue contract note directly to the client introduced by his sub-broker.
- (vi) The delivery of securities and payment of funds relating to the transaction shall be made directly between the broker and the client and the same should not be routed through the sub-broker.

Audit Requirement

13.4 As per the requirement of BSE, 20% of the sub-brokers should be inspected every year. In case of NSE, 10% of the active sub-brokers/branches should be inspected every year. For this purpose, an active sub-broker/branch means one whose turnover is above 1/10th of the turnover of the trading member during the previous financial year (*viz*, April to March).

Remisier

13.5 A remisier is a person who is engaged by a broker primarily to solicit business in securities on a commission basis. Rule 216 to 235 of the Rules, Bye-laws and Regulations of the Bombay Stock Exchange Limited (BSE) provides for the appointment and regulation of remisiers. The concept of remisier is prevalent only in BSE. The remisier appointed by the broker is required to be registered with the exchange.

13.6 Remisier should not be an employee of any broker or any organisation other than the broker under whom he is registered. A remisier shall not be or act as a sub-broker anywhere so long as he is registered as a remisier. A remisier shall not act as a remisier for his personal business. Broker shall be responsible to ensure that remisiers do not return the brokerage, directly or indirectly, to the clients introduced by them or to any other person or agent.

Authorised Person

13.7 Broker of NSE can appoint Authorised Person(s), in the Futures & Options (F&O) segment, who is an individual/ registered partnership firm/ body corporate / company as defined under the Companies Act, 1956.

13.8 Following are the regulatory directives applicable to an authorised person:

- (i) The authorised person may introduce clients to the broker for whom they may receive remuneration/commission/ compensation from the broker and not from the clients.
- (ii) The authorised person shall not be allowed to have any trading relationship with the clients. The clients introduced by the authorised person will have a direct relationship with the broker, i.e., the Member Client Agreement, Know Your Client Forms, Risk Disclosure Document, etc., shall be executed between the client and the broker.
- (iii) The authorised person shall not issue contract notes, confirmation memo and/or bills in their name, i.e., the broker shall issue the contract notes and/or bills directly to the clients of the authorised person.
- (iv) The clients introduced by the authorised person would be required to deliver securities and make payments directly to the broker. Similarly, the broker shall deliver securities and make payments directly to the clients.
- (v) The authorised person appointed by the broker is required to be registered with the NSE.
- (vi) The authorised person of F&O segment should be registered as sub-broker in the Capital Market segment under the same broker. Approval for appointment of authorised person in the F&O segment is subject to his registration as a sub-broker by the SEBI in the Capital Market segment through the same broker.

Chapter I-14

Advertisement

14.1 Stock brokers, while issuing advertisements in the media, have to comply with the guidelines for advertisement prescribed by the respective exchanges. The Code of Conduct has been specified in Schedule II of Regulation 7 and 15 of SEBI (Stock Brokers and Sub-brokers) Regulations, 1992. Further, every advertisement issued by BSE broker shall be in conformity with Regulation 17 and Bye-Law 358 of BSE Rules, Bye Laws and Regulations. Similarly, NSE has specified Code of Advertisement which is required to be followed by each member.

14.2 SEBI has advised the Stock Exchanges to ensure that their brokers/sub-brokers do not advertise their business, including in their internet sites, by subsidiaries, group companies etc., in prohibition of the Code of Conduct specified in the Schedule II of the SEBI (Stock Brokers and Sub-brokers) Regulations, 1992. The Code of Conduct in the Regulations requires a broker not to advertise his business publicly, unless permitted by the exchange, and not to resort to unfair means inducing clients from other brokers. Advertisement means and includes any document, pamphlets, circulars, brochures, notice or any research reports, material published, or designed for use in a newspaper, magazine or other periodical, radio, television, telephone or tape recording, video tape, display signs or bill boards, motion pictures, telephone directories (other than routine listings) or other public media, whether in print or audio visual form.

Code of Advertisement

14.3 Some of the salient points with respect to the Code of Advertisement issued by the NSE that are required to be complied by every NSE broker are given hereunder:

- (i) The broker should designate and authorise a person to ensure the correctness of the information given in any advertisement.

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- (ii) The broker issuing any such advertisement should inform the name of such authorised person to the Exchange.
- (iii) The advertisement should be related to the nature of services that the broker can offer. If the broker is engaged in any other business then any advertisement, if permissible for such business, should not indicate the name of the broker as a member of the exchange.
- (iv) The advertisement should be written in clear language and should not be such which may prejudice interest of the investors in general.
- (v) The advertisement should not contain any confusing, misleading or offensive information.
- (vi) It should be free from inaccuracies.
- (vii) The advertisement should not contain a recommendation regarding purchase or sale of any particular share or security of any company. It should not make any promise including guaranteeing of any return to the investing public.
- (viii) The material should not contain anything which is otherwise prohibited.
- (ix) The advertisement shall contain:
 - (a) Name and/or his logo, code of NSE membership;
 - (b) Registration Number allotted by the SEBI.
- (x) The advertisement may be issued, individually or jointly, with other brokers provided that the broker shall not allow its name to be advertised or caused to be published in the advertisement of other brokers, unless such advertisement is issued by it.
- (xi) In the event of suspension of any broker by NSE, the broker so suspended shall not issue any advertisement, either singly

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or jointly, with any other broker during the period of suspension.

- (xii) In the event of any proceeding/action initiated against a broker by a regulatory body other than NSE, NSE reserves the right to direct the trading member to refrain from issuing any advertisement for such a period as it may deem fit.
- (xiii) NSE reserves the right to call for the advertisement and/or such other information/explanation, as it may require, after the publication of the said advertisement. NSE shall have cease and desist powers in this behalf.
- (xiv) The copy of such advertisement should be retained for a period of three years.
- (xv) A copy of the advertisement must be submitted to NSE within 7 days before its issue. If the advertisement is found to violate any provisions of the rules and bye-laws of the Exchange or rules framed by the SEBI on this behalf, the broker shall be subject to disciplinary proceedings by NSE.
- (xvi) These norms will apply to any other investment/consultancy agencies associated with the broker concerned.
- (xvii) The above norms shall also apply to an advertisement, T.V or Cable T.V. or any other such media of audio/ visual nature.
- (xviii) The broker should check with NSE in case of any doubt for advice prior to the issue of any such material or advertisement.
- (xix) The advertisement should not have any adverse reference regarding the reputation of any other broker and also of the exchange. While preparing any advertisement, a broker should keep in mind that any information if found to be incorrect, will affect not only the reputation of the particular broker but also the reputation of the brokers of the exchange, in general, and also on the exchange itself.

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- (xx) In the event of any broker of the exchange having any grievance against any other broker, consequent upon the publication of an advertisement of the other broker, the exchange shall be informed of the same in writing, within a period of seven days from the date of such publication for necessary remedial measure from the exchange.

14.4 Regulation 17 of BSE specifies the guidelines for advertisement by brokers and some of the salient points with respect to the guidelines are given hereunder:

- (i) The content of the advertisements, brochures, etc., should be related only to the nature of services that the broker can offer in respect of sales and purchase of shares and securities only. The advertisement should not contain recommendations regarding purchase or sale of any particular share or security of any company and/or any recommendation regarding any company.
- (ii) The advertisement can be published by a broker, individually or jointly, with other brokers so as to enable small brokers to pool their resources for publicity.
- (iii) The advertisement should mention the name/title as recorded for the membership of the exchange along with the code number allotted by the SEBI. It can also include the names of the sub-brokers affiliated with the broker. The broker should also designate, authorise and name the authorised person in the publication to ensure the correctness of the information given in the advertisement, and prior approval of the exchange should have been obtained in respect of such authorised person. The authorised person will be specifically responsible when two or more brokers jointly advertise for brokerage business.
- (iv) The broker should ensure that any information given in the advertisement must be correct and accurate. It should contain matters of objectivity and ascertainable facts which should be capable of substantiation.

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- (v) Advertisement should not have any adverse reference, direct or indirect, regarding the reputation of the other brokers of the exchange and also of the exchange itself.
- (vi) The advertisement should not contain anything which is otherwise prohibited for publication under the relevant Act, unwarranted, misleading information or make any promises.
- (vii) The advertisement should not include publicity for any party other than the broker himself, and it should not contain any reference to any person, firm or institution except as provided for in Point ii and iii above.
- (viii) The broker should not allow his or his firm's name to be advertised by others or allow his or his firm's name to be published in the advertisement of others, except as provided for in Point (ii) and (iii) above.
- (ix) The broker should submit a copy of the advertisement to the exchange authorities as soon as it is published. The exchange authorities will have the cease and desist powers in this behalf.
- (x) If a broker violates any of the above Regulations for the advertisement, he is liable to be penalised for the same by the exchange authorities and/or the SEBI.
- (xi) If the exchange authorities levy any penalty or take any disciplinary action against the broker, e.g. by way of suspension or declaring him as defaulter etc., then the concerned broker should not advertise during the period of suspension.

Chapter I-15

Margin Trading Facility

15.1 SEBI has, vide circular No.SMD/Policy/Cir-6 dated May 7, 1997, clarified, *inter alia*, that borrowing and lending of funds by a trading member in connection with or incidental to or consequential upon the securities business would not be disqualified under Rule 8(1)(f) and 8(3)(f) of Securities Contracts (Regulation) Rules, 1957.

15.2 SEBI has, vide its circular No. SEBI/MRD/SE/SU/Cir-15/04 dated March 19, 2004, allowed the brokers to provide margin trading facility to their clients, in the cash segment, subject to certain conditions which are as follows:

- (i) **Securities Eligible** - The securities in Group 1 would be eligible for margin trading facility. SEBI vide its circular dated March 11, 2003 has categorised the securities under 3 groups, namely, Group 1, Group 2 and Group 3. The securities having mean impact cost of less than or equal to 1 and having traded on atleast 80% (+/-5%) of the days for the previous eighteen months, have been categorised as Group 1.
- (ii) **Permission** - The brokers wishing to extend the facility of margin trading to their clients would be required to obtain prior permission from the exchange/s where the margin trading facility is proposed to be provided. The exchange shall have the right to withdraw this permission at a later date, after giving reasons for the same.
- (iii) **Eligibility** - Only corporate brokers with a 'Net worth' of at least Rs. 3 crores would be eligible to offer margin trading facility to their clients. The 'Net worth', for the purpose of margin trading facility, would mean "Capital" (excluding preference share capital) plus free reserves less non-allowable assets, i.e., fixed assets, pledged securities, member's card, non-allowable securities, bad deliveries, doubtful debts and advances (including debts and advances

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overdue for more than 3 months or given to associates), pre-paid expenses, intangible assets and 30% of the marketable securities.

- (iv) Agreement** - Stock Broker has to enter into an agreement with each of their clients for margin trading facility before accepting or placing orders on their behalf. SEBI has devised standard format for the Member Client Agreement (model agreement). The broker may modify the agreement only for stipulating any additional or more stringent conditions, provided that no such modification shall have the effect of diluting any of the conditions laid down in the circular No. SEBI/MRD/SE/SU/Cir-15/04 dated March 19, 2004 or in the model agreement.
- (v) Restriction on Client** - A client will be allowed to obtain margin trading facility from one broker per exchange for buying securities in that exchange. To ensure this, it shall be obligatory on the part of every broker to:

 - (a) obtain a declaration from his client whether he has availed of any margin trading facility from any broker in any exchange, or whether his request for margin trading with any broker was rejected, and if so, in both the cases obtain the name of the broker and his registration number; and
 - (b) also verify the details from the concerned broker/s.
- (vi) Due Diligence** - Before providing margin trading facility to a client who has already availed of margin trading facility from another broker in the same exchange, the broker shall ensure that the client has liquidated his outstanding in the margin trading account with the other broker, and obtained a certificate to this effect in writing from that broker.
- (vii) Sources of Funds** - For the purpose of providing the margin trading facility, a broker may use his own funds or borrow from scheduled commercial banks and/ or NBFCs regulated by the Reserve Bank of India (RBI). A broker shall not be permitted to borrow funds from any other source.

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- (viii) The broker shall not use the funds of any client for providing the margin trading facility to another client, even if the same is authorised by the client.
- (ix) **Indebtedness** - At any point of time, the total indebtedness of a broker for the purpose of margin trading shall not exceed 5 times of his net worth.
- (x) **Exposure** - The “maximum allowable exposure” of the broker towards the margin trading facility shall be within the self imposed prudential limits and shall not, in any case, exceed the borrowed funds and 50% of his ‘net worth’. The term “exposure” will mean the aggregate outstanding margin trading amount in the books of the broker for all his clients.
- (xi) **Concentration** - While providing the margin trading facility, the exposure to any single client at any point of time shall not exceed 10% of the broker’s lendable resource (i.e., borrowed funds for the purpose of margin trading + 50% of net worth).
- (xii) **Margin** - The initial and maintenance margin for the client shall be a minimum of 50% and 40% respectively, to be paid in cash. The broker may increase the margin percentage. The “initial margin” would mean the minimum amount, calculated as a percentage of the transaction value, to be placed by the client with the broker before the actual purchase. The broker may advance the balance amount to meet full settlement obligations. “Maintenance margin” would mean the minimum amount, calculated as a percentage of the market value of the securities, calculated with respect to the last trading day’s closing price, to be maintained by the client with the broker.
- (xiii) **Margin Calls** - When the balance deposit in the client’s margin account falls below the required maintenance margin, the broker shall promptly make margin calls. However, no further exposure can be granted to the client on the basis of any increase in the market value of the securities.

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- (xiv) Liquidation of Securities** - The broker may liquidate the securities if the client fails to meet the margin call made by the broker; or fails to deposit the cheques on the day following the day on which the margin call has been made; or where the cheque deposited by the client has been dishonoured. The broker may also liquidate the securities in case the client's deposit in the margin account (after adjustment for mark-to-market losses) falls to 30% or less of the latest market value of the securities, in the interregnum between making of the margin call and receipt of payment from the client.
- (xv) Demat Account** - The broker shall maintain separate client-wise account of the securities purchased on margin trading with depositories and shall enable the client to observe the movement of securities from his account (through internet). The broker shall also maintain a separate record of details, including the sources of funds, used for the purpose of margin trading.
- (xvi) Books of Accounts** - The books of account, maintained by the broker, with respect to the margin trading facility offered by it, shall be audited on a half-yearly basis. The broker shall submit an auditor's certificate to the exchange/s, within one month from the date of the half year ending 31st March and 30th September of a year certifying, *interalia*, the extent of compliance with the conditions of margin trading facility. The broker shall also submit to the stock exchange a half-yearly certificate, as on 31st March and 30th September of each year, from an auditor confirming the net worth as specified above. Such a certificate shall be submitted not later than 30th April and 31st October of the year.
- (xvii) Disclosure** - The broker shall disclose to the stock exchange/s details on gross exposure including name of the client, Unique Identification Number (UIN)/ client code, name of the scrip, quantity, amount funded, etc. If the broker has borrowed funds for the purpose of providing margin trading facility, name of the lender and amount borrowed, on or before 9.00 p.m. for the same day of reporting should also be disclosed.

Chapter I-16

Prevention of Money Laundering

16.1 The Prevention of Money Laundering Act, 2002 (PMLA) has been brought into force with effect from July 1, 2005. As per the provisions of the Act, every banking company, financial institution (which includes chit fund company, a co-operative bank, a housing finance institution and a non-banking financial company) and intermediary (which includes a stock-broker, sub-broker, share transfer agent, banker to an issue, trustee to a trust deed, registrar to an issue, merchant banker, underwriter, portfolio manager, investment adviser and any other intermediary associated with securities market and registered under section 12 of the Securities and Exchange Board of India Act, 1992) shall have to maintain a record of all the transactions; the nature and value of which has been prescribed in the Rules notified under the PMLA. As per Rule 3 of Prevention of Money Laundering Rules, 2005 such transactions include:

- (i) All cash transactions of the value of more than Rs 10 lacs or its equivalent in foreign currency.
- (ii) All series of cash transactions integrally connected to each other which have been valued below Rs 10 lacs or its equivalent in foreign currency, where such series of transactions take place within one calendar month.
- (iii) All cash transactions where forged or counterfeit currency notes or bank notes have been used as genuine, and where any forgery of a valuable security has taken place.
- (iv) All suspicious transactions whether or not made in cash.

16.2 The terms used in the PMLA are defined as under:

- (i) "Intermediary" means a stock-broker, sub-broker, share transfer agent, banker to an issue, trustee to a trust deed, registrar to an issue, merchant banker, underwriter, portfolio manager, investment adviser and any other intermediary

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associated with securities market and registered under section 12 of the Securities and Exchange Board of India Act, 1992.

- (ii) “Proceeds of crime” means any property or assets of every description, whether corporeal or incorporeal, movable or immovable, tangible or intangible and includes deeds and instruments evidencing title to, or interest in, such property or assets, wherever located; The term Money Laundering has been defined in Section 3 of the Act as Whosoever directly or indirectly attempts to indulge or knowingly assists or knowingly is a party or is actually involved in any process or activity connected with the proceeds of crime and projecting it as untainted property shall be guilty of offence of money-laundering.

16.3 SEBI has, vide its circular no. ISD/CIR/RR/AML/1/06 dated January 18, 2006, issued the Guidelines to the intermediaries as specified above, in the context of the recommendations made by the Financial Action Task Force (FATF) on anti-money laundering standards. Compliance with these standards by all intermediaries and the country has become imperative for international financial relationships. It may be noted that these Guidelines lay down the minimum requirements/disclosures to be made in respect of clients. The intermediaries may, according to their requirements specify additional disclosures to be made by the clients to address concerns of money laundering and suspicious transactions undertaken by the clients. SEBI has, vide its circular no. ISD/CIR/RR/AML/1/06 dated January 18, 2006, advised all intermediaries to ensure that a proper policy framework as per the Guidelines on anti-money laundering measures is put into place within one month from the date of the circular. The intermediaries are required to designate an officer as ‘Principal Officer’ who would be responsible for ensuring compliance of the provisions of the PMLA.

Guidelines on Anti-Money Laundering Standards

16.4 The Guidelines on Anti-Money Laundering Standards provides a general background on the subject of money laundering and

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terrorist financing. It summarises the main provisions of the applicable anti-money laundering and anti-terrorist financing legislation in India and provides guidance on the practical implications of the Act. The Guidelines also sets out the steps that a registered intermediary and any of its representatives should implement to discourage and identify any money laundering or terrorist financing activities.

16.5 These Guidelines are intended for use primarily by intermediaries registered under Section 12 of the SEBI Act, 1992. While it is recognised that a “one-size-fits-all” approach may not be appropriate for the securities industry in India, each registered intermediary should consider the specific nature of its business, organisational structure, type of customers and transactions, etc. when implementing the suggested measures and procedures to ensure that they are effectively applied. The overriding principle is that they should be able to satisfy themselves that the measures taken by them are adequate, appropriate and follow the spirit of these measures and the requirements as enshrined in the Prevention of Money Laundering Act, 2002. (PMLA)

16.6 Important points of Guidelines on Anti-Money Laundering Standards are:

- (i) The Anti-Money Laundering program should be approved in writing by the senior management of member and reviewed at frequent intervals.
- (ii) The thrust for the implementation of Anti-Money Laundering Policy is on the following key aspects:
 - (a) Designation of a sufficiently senior person as ‘Principal Officer’ as required under the Prevention of Money Laundering Act, 2002.
 - (b) Customer Due Diligence/KYC Standards.
 - (c) Monitoring of transactions for detecting suspicious transactions.
 - (d) Reporting of suspicious transactions.

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- (e) Ongoing training of employees.
- (f) Audit/Testing of AML Program.
- (iii) Policies and procedures to combat Money Laundering should cover:
 - (a) Communication of group policies relating to prevention of money laundering and terrorist financing to all management and relevant staff that handle account information, securities transactions, money and customer records, etc. whether in branches, departments or subsidiaries;
 - (b) Customer acceptance policy and customer due diligence measures, including requirements for proper identification;
 - (c) Maintenance of records;
 - (d) Compliance with relevant statutory and regulatory requirements;
 - (e) Co-operation with the relevant law enforcement authorities, including the timely disclosure of information; and
 - (f) Role of internal audit or compliance function to ensure compliance with policies, procedures and controls relating to prevention of money laundering and terrorist financing, including the testing of the system for detecting suspected money laundering transactions, evaluating and checking the adequacy of exception reports generated on large and/or irregular transactions, the quality of reporting of suspicious transactions and the level of awareness of front line staff of their responsibilities in this regard.
- (iv) Each registered intermediary should adopt written procedures to implement the anti-money laundering provisions as envisaged under the Anti-Money Laundering Act, 2002. Such

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procedures should include *interalia*, the following three specific parameters which are related to the overall 'Client Due Diligence Process':

- (a) Policy for acceptance of clients;
 - (b) Procedure for identifying the clients; and
 - (c) Transaction monitoring and reporting especially Suspicious Transactions Reporting (STR).
- (v) Classify both the new and existing clients into high, medium or low risk category depending on parameters such as, the customer's background, type of business relationship, transactions, etc. Intermediaries should apply each of the customers due diligence measures on a risk sensitive basis and adopt an enhanced customer due diligence process for high risk categories of customers and *vice-versa*.
- (vi) Registered Intermediaries should ensure that all customer and transaction records and information are available on a timely basis to the competent investigating authorities. Where appropriate, they should consider retaining certain records, e.g. customer identification, account files, and business correspondence, for periods which may exceed that required under the SEBI Act, Rules and Regulations framed under PMLA, 2002, other relevant legislations, Rules and Regulations or Exchange bye-laws or circulars. The records referred in Rule 3 shall be maintained for a period of ten years from the date of cessation of the transactions between the client and the intermediary.
- (vii) Ongoing monitoring of accounts is an essential element of an effective Anti-Money Laundering framework. Such monitoring should result in identification and detection of apparently abnormal transactions, based on laid down parameters. Members should devise and generate necessary reports/alerts based on their clients' profile, nature of business, trading pattern of clients for identifying and detecting such transactions. These reports/alerts should be

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analysed to establish suspicion or otherwise for the purpose of reporting such transactions.

- (viii) The intermediary should exercise independent judgment to ascertain whether new clients should be classified as Client of Special Category (CSC) or not at the time of acceptance and the category should be reviewed regularly. Client of Special Category include the following:
- (a) Non resident clients
 - (b) High net worth clients
 - (c) Trust, Charities, NGOs and organisations receiving donations
 - (d) Companies having close family shareholdings or beneficial ownership
 - (e) Politically exposed persons (PEP) of foreign origin
 - (f) Current/Former Head of State, Current or Former Senior High profile politicians and connected persons (immediate family, close advisors and companies in which such individuals have interest or significant influence)
 - (g) Companies offering foreign exchange offerings
 - (h) Clients in high risk countries (where existence/ effectiveness of money laundering controls is suspect, where there is unusual banking secrecy, countries active in narcotics production, countries where corruption [as per Transparency International Corruption Perception Index] is highly prevalent, countries against which government sanctions are applied, countries reputed to be any of the following – Havens/sponsors of international terrorism, off-shore financial centers, tax havens, countries where fraud is highly prevalent.
 - (i) Non face to face clients

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- (j) Clients with dubious reputation as per public information available, etc.

- (ix) A list of circumstances which may be in the nature of suspicious transactions is given below. This list is only illustrative and whether a particular transaction is suspicious or not will depend upon the background, details of the transactions and other facts and circumstances:
 - (a) Clients whose identity verification seems difficult or clients appear not to cooperate
 - (b) Substantial increase in activity without any apparent cause
 - (c) Large number of accounts having common parameters such as common partners/ directors/promoters/address/ e-mail address/ telephone numbers/introducers or authorised signatories
 - (d) Transactions with no apparent economic or business rationale
 - (e) Sudden activity in dormant accounts
 - (f) Source of funds are doubtful or inconsistency in payment pattern
 - (g) Unusual and large cash deposits made by an individual or business
 - (h) Transfer of investment proceeds to apparently unrelated third parties
 - (i) Multiple transactions of value just below the threshold limit specified in PMLA so as to avoid possible reporting
 - (j) Unusual transactions by CSCs and businesses undertaken by shell corporations, off-shore banks/ financial services, businesses reported to be in the nature of export-import of small items

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- (k) Asset management services for clients where the source of the funds is not clear or not in keeping with the clients apparent standing/business activity
- (l) Clients in high risk jurisdictions or clients introduced by banks or affiliates or other clients based in high risk jurisdictions
- (m) Clients transferring large sums of money to or from overseas locations with instructions for payment in cash
- (n) Purchases made on own account transferred to a third party through off-market transactions through DP Accounts
- (o) Suspicious off-market transactions
- (p) Large deals at prices away from the market
- (q) Accounts used as 'pass through'. Where no transfer of ownership of securities or trading is occurring in the account and the account is being used only for funds transfers/layering purposes
- (r) Trading activity in accounts of high risk clients based on their profile, business pattern and industry segment.

Part II

Chapter II-1

Internal Audit

1.1 With increasing complexities in business, rapid growth and number of regulatory requirements, stock broking activities have undergone a sea change in processes and systems. Effective internal audit provides a tool to ease out all complexities and acts as a fuel to wholesome improvements in systems and processes and, therefore, in growth and sustainability.

1.2 “Preface to the Standards on Internal Audit”, issued by the Institute of Chartered Accountants of India defines the term “Internal Audit” as:

“Internal Audit is an independent management function, which involves a continuous and critical appraisal of the functioning of an entity with a view to suggest improvements thereto and add value to and strengthen the overall governance mechanism of the entity, including the entity’s strategic risk management and internal control system. Internal audit, therefore, provides assurance that there is transparency in reporting, as a part of good governance”

Internal auditing is a valuable resource to executive management and the board of directors (BoD) in accomplishing overall organisational goals and objectives, and simultaneously strengthening internal control and overall governance.

1.3 Internal audit activity evaluates risk exposures relating to the organisation’s governance, operations and information systems, in relation to:

- Effectiveness and efficiency of operations.
- Reliability and integrity of financial and operational information.
- Safeguarding of assets.
- Compliance with laws, regulations, and contracts as well as policies laid down by the management.

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- Accomplishment of objectives and goals of the organisation through ethical and effective governance.

Standards on Internal Audit

1.4 Internal Audit Standards Board of the Institute of Chartered Accountants of India has, till date, issued sixteen Standards on Internal Audit (SIAs) which are as follows:

- SIA 1, Planning an Internal Audit
- SIA 2, Basic Principles Governing Internal Audit
- SIA 3, Documentation
- SIA 4, Reporting
- SIA 5, Sampling
- SIA 6, Analytical Procedures
- SIA 7, Quality Assurance in Internal Audit
- SIA 8, Terms of Internal Audit Engagement
- SIA 9, Communication with Management
- SIA 10, Internal Audit Evidence
- SIA 11, Consideration of Fraud in an Internal Audit
- SIA 12, Internal Control Evaluation
- SIA 13, Enterprise Risk Management
- SIA 14, Internal Audit in an Information Technology Environment
- SIA 15, Knowledge of the Entity and its Environment
- SIA 16, Using the Work of an Expert

These Standards codify the best practices in the field of internal audit. “Framework for Standards on Internal Audit” provides a frame

of reference for the internal audit standards being issued by the Institute.

Basic Principles Governing an Internal Audit

1.5 Standard on Internal Audit (SIA) 2, “Basic Principles Governing an Internal Audit” establishes standards and provides guidance on the general principles governing an internal audit. This Standard explains the principles, namely, integrity, objectivity and independence, confidentiality, due professional care, skills and competence, work performed by others, documentation, planning, evidence and reporting which governs the internal auditor’s professional responsibilities.

Terms of Internal Audit Engagement

1.6 The Terms of engagement defines the scope, authority, responsibilities, confidentiality, limitation and compensation of the internal auditors. Terms of Internal Audit Engagement lay down clarity between the internal auditors and the users of their services for inculcating professionalism and avoiding misunderstandings as to any aspect of the engagement. Standard on Internal Audit (SIA) 8 “Terms of Internal Audit Engagement” provides guidance in respect of terms of engagement of the internal audit activity whether carried out in house or by an external agency. This SIA describes the elements of the terms of engagement, viz., scope, responsibility, authority, confidentiality, limitations, reporting, compensation and compliance with Standards.

1.7 SIA 8 requires that the terms of engagement should indicate areas where internal auditors are expected to make their recommendations and value added comments. It should also clearly mention the responsibility of the auditee vis-à-vis the internal auditor. Further, the management of the auditee is responsible for providing timely and accurate data, information, records, personnel, etc., and for extending co-operation to the audit team.

1.8 In cases, where the internal auditor is appointed based on the requirement of the regulator (SEBI/ Exchanges), then the bases of his appointment should be clearly brought out in the engagement

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letter. The scope of -internal audit as stipulated by the regulator has to be understood and reference of the same also needs to be incorporated in the engagement letter. Limitations on scope, coverage and reporting requirement ,if any, in carrying out the internal audit assignment should be also brought into the letter. The engagement letter should also clearly lay down the requirements as to the manner and frequency of reporting and the list of intended recipients of the internal audit report. A sample copy of the engagement letter for an internal audit of a stock broker is given in **Appendix I**.

Knowledge of the Entity and its Environment

1.9 Standard on Internal Audit (SIA) 15 ‘Knowledge of the Entity and Its Environment’ lays down that in performing an internal audit engagement, the internal auditor should obtain knowledge of the economy, the entity’s business and its operating environment, including its regulatory environment and the industry in which it operates, sufficient to be able to review the key risks and entity-wide processes, systems, procedures and controls. The internal auditor should identify sufficient, appropriate, reliable and useful information to achieve the objectives of the engagement Such knowledge is used by the internal auditor in reviewing the key operational, strategic and control risks and in determining the nature, timing and extent of internal audit procedures.

1.10 Knowledge of the entity’s business is a frame of reference within which the internal auditor exercises professional judgment and using this information appropriately assists the internal auditor in:

- Assessing the risk & identifying the problems
- Planning & performing the internal audit effectively & efficiently
- Evaluating audit evidence
- Providing better service to the client

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1.11 The internal auditor should prepare the flow of events, transactions and processes in the entity on the basis of discussion with key management persons, internal documentation produced by the entity, management policy manual, procedure manuals of accounting and internal control systems, etc. An illustrative flowchart of the business process in a stock broking entity is given as **Appendix II**.

1.12 A number of legislative and regulatory provisions are applicable to a stock broker. Non-compliances with laws and regulations could result in financial consequences for the entity such as, fines, litigation, etc. The internal auditor should obtain sufficient appropriate audit evidence regarding compliance with the provisions of various laws and regulations applicable to the stock broking entity. For the purpose of identifying instances of non-compliance with laws and regulations, the internal auditor should inquire management and, where appropriate, those charged with governance, as to whether the entity is in compliance with such laws and regulations; and also inspect correspondence, if any, with the relevant regulatory authorities. He should also respond appropriately to non-compliance or suspected non-compliance with laws and regulations identified during the audit.

Audit Planning

1.13 After acquiring the knowledge of the business and various laws and regulations applicable to the stock broking industry, in general and to the client in specific, the internal auditor should plan out the internal audit activity. An internal audit plan is a document defining the scope, coverage and resources, including time required for an internal audit over a defined period. Standard on Internal Audit (SIA) 1, "Planning an Internal Audit" requires that the internal audit plan should be based on the knowledge of the entity's business. While developing the internal audit plan, the internal auditor should have regard to the objectives of the internal audit engagement as well as the time and resources required for conducting the engagement. Further, the internal audit plan should be comprehensive enough to ensure that it helps in achieving of the above overall objectives of an internal audit.

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1.14 SIA 1, "Planning an Internal Audit" specifies that the internal audit plan should cover areas such as:

- Obtaining the knowledge of the legal and regulatory framework within which the entity operates.
- Obtaining the knowledge of the entity's accounting and internal control systems and policies.
- Determining the effectiveness of the internal control procedures adopted by the entity.
- Determining the nature, timing and extent of procedures to be performed.
- Identifying the activities warranting special focus based on the materiality and criticality of such activities, and their overall effect on operations of the entity.
- Identifying and allocating staff to the different activities to be undertaken.
- Setting the time budget for each of the activities.
- Identifying the reporting responsibilities.

Sampling

1.15 The internal auditor should design and select an audit sample to perform audit procedures and evaluate sample. Standard on Internal Audit (SIA) 5, "Sampling" lays down that when using either statistical or non-statistical sampling methods, the internal auditor should design and select an audit sample, perform audit procedures thereon, and evaluate sample results so as to provide sufficient appropriate audit evidence to meet the objectives of the internal audit engagement unless otherwise specified by the client. Key steps in the construction and selection of a sample include:

- (i) Determine the objectives of the internal audit
- (ii) Define the population to be sampled
- (iii) Determine the sampling methods

- (iv) Calculate the sample size
- (v) Select the sample.

Documentation

1.16 Standard on Internal Audit (SIA) 3, “Documentation” lays down that internal audit documentation:

- Aid in planning and performing the internal audit.
- Aid in supervision and review of the internal audit work.
- Provide evidence of the internal audit work performed to support the internal auditor’s findings and opinion.
- Aid in third party reviews, where so done.
- Provide evidence of the fact that the internal audit was performed in accordance with the scope of work as mentioned in the engagement letter, SIAs and other relevant pronouncements issued by the Institute of Chartered Accountants of India.

1.17 Internal audit documentation should record the internal audit charter, the internal audit plan, the nature, timing and extent of audit procedures performed, and the conclusions drawn from the evidence obtained. In case the internal audit is outsourced, the documentation should include a copy of the internal audit engagement letter, containing the terms and conditions of the appointment.

Reporting

1.18 The internal auditor’s report should contain a clear written expression of significant observations, suggestions/recommendations based on the policies, processes, risks, controls and transaction processing taken as a whole and managements’ responses.

1.19 Standard on Internal Audit (SIA) 4 “Reporting” lays down the following basic elements of the Internal Audit Report:

- (i) Title;

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- (ii) Addressee;
- (iii) Report Distribution List;
- (iv) Period of coverage of the Report;
- (v) Opening or introductory paragraph;
 - (a) identification of the processes/functions and items of financial statements audited; and
 - (b) a statement of the responsibility of the entity's management and the responsibility of the internal auditor;
- (vi) Objectives paragraph - statement of the objectives and scope of the internal audit engagement;
- (vii) Scope paragraph (describing the nature of an internal audit):
 - (a) a reference to the generally accepted audit procedures in India, as applicable;
 - (b) a description of the engagement background and the methodology of the internal audit together with procedures performed by the internal auditor; and
 - (c) a description of the population and the sampling technique used.
- (viii) Executive Summary, highlighting the key material issues, observations, control weaknesses and exceptions;
- (ix) Observations, findings and recommendations made by the internal auditor;
- (x) Comments from the local management;
- (xi) Action Taken Report – Action taken/ not taken pursuant to the observations made in the previous internal audit reports;
- (xii) Date of the report;
- (xiii) Place of signature; and
- (xiv) Internal auditor's signature with Membership Number.

Chapter II-2

Internal Control Evaluation and Risk Management

Internal Control Evaluation

2.1 Internal control and Risk Management systems are of paramount importance in the activities of the stock brokers. Internal control is the integration of the activities, plans, attitudes, policies, applicable laws and regulations, and efforts of the people of an organisation working together to provide reasonable assurance that the organisation will achieve its objective and mission. The internal audit function constitutes a separate component of internal control with the objective of determining whether other internal controls are well designed and properly operated.

2.2 Standard on Internal Audit (SIA) 12, “Internal Control Evaluation” lays down that the internal auditor should examine the continued effectiveness of the internal control system through evaluation and make recommendations, if any, for improving its effectiveness. The internal auditor should focus towards improving the internal control structure and promoting better corporate governance. The role of the internal auditor encompasses:

- Evaluation of the efficiency and effectiveness of controls
- Recommending new controls where needed – or discontinuing unnecessary controls
- Using control frameworks
- Developing control self-assessment.

2.3 Internal control system extends beyond those matters which relate directly to the functions of the accounting system. Timely accounting entries of clients and exchange settlements, correct and timely reporting of margins, timely pay-in and pay-outs, or other reconciliations, etc. may depict good accounting controls but

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not sound internal controls. The internal auditor should gather fair understanding of control environments such as,

- (i) Management's philosophy and operating style
- (ii) Integrity and ethical values
- (iii) Entity's organisational structure and methods of assigning and reviewing authorities
- (iv) Organisational policies and procedures are in place and in operation, including policies on Risk Management, Prevention of Money Laundering, HR related policies, IT policies, Data Security Policies, etc.
- (v) There is a regular system of reviewing and updating the policies and procedures.

2.4 Internal controls may be either preventive or detective. The internal auditor should ensure that in general, the approval function, the accounting/ reconciling function, and the asset custody function is separated among employees of the entity. When these functions cannot be separated due to small department size, the internal auditor should ensure that a detailed supervisory review of related activities is in practice, as a compensating control activity. The internal auditor should use his professional judgment to assess and evaluate the presence and maturity of entity's internal controls. He should use narratives, flowcharts, questionnaires for obtaining understanding of each department and its business and accounting processes.

2.5 The internal auditor should identify internal control weaknesses that have not been corrected and make recommendations to correct those weaknesses. When internal controls are found to contain continuing weaknesses, the internal auditor should consider whether:

- Management has increased supervision and monitoring;
- Additional or compensating controls have been instituted; and/ or

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- Management accepts the risk inherent with the control weakness.

The internal auditor should communicate significant deficiencies and material weaknesses to management and those charged with governance.

Risk Management

2.6 Risk is an event which can prevent, hinder or fail to further or otherwise obstruct the enterprise in achieving its objective. Risk can cause financial disadvantage, for example, additional cost or loss of funds or assets. It can result in damage, loss of value and/or loss of an opportunity to enhance the entrepreneurial opportunities or activities. It is the probability of occurrence of an event and the financial impact of such occurrence to an enterprise.

2.7 As robust, flawless and seamless manufacturing activities are of paramount importance to the survival of any manufacturing organisation, so is the 'Risk Management' to stock brokers. There may be different types of risks; some of them are as follows:

- (i) Strategic Risk: Risk associated with primary long term objectives and direction for business, revenue models, etc.
- (ii) Credit/ Financial Risks:
 - (a) Relating to clients : Clients' exposure policies and credit policies
 - (b) Relating to enterprises: Process, techniques, instruments, etc used to manage the finance of an enterprise.
- (iii) Process/ Operation risk: Risk associated with on going day-to-day operations of an enterprise
- (iv) Information technology risk : Risk associated with weak Information technology environment and weak controls in IT

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- (v) Regulations Risk: Risk associated with non-compliances of directions, rules and regulations of SEBI, and exchanges.

2.8 Standard on Internal Audit (SIA) 13, “Enterprise Risk Management” specifies that the role of the internal auditor in relation to Enterprise Risk Management is to provide assurance to management on the effectiveness of risk management. Due consideration should be given to ensure that the internal auditor protects his independence and objectivity of the assurance provided. The role of the internal auditor is to ascertain that risks are appropriately defined and managed.

2.9 The scope of the internal auditor’s work in assessing the effectiveness of the enterprise risk management would, normally, include:

- (i) assessing the risk maturity level both at the entity level as well as the auditable unit level;
- (ii) assessing the adequacy of and compliance with the risk management policy and framework; and
- (iii) for the risks covered by the internal audit plan:
 - (a) Assessing the efficiency and effectiveness of the risk response; and
 - (b) Assessing whether the score of the residual risk is within the risk appetite.

Chapter II-3

Auditing in an Information Technology Environment

3.1 Modern day stock broking activities have totally moved to an Information Technology Environment. Trading, operations, settlements and accounting all have become technology based. From computerised accounting the industry has moved far away to computerised procedures, operations, documentations, risk management and controls. The overall objective and scope of an internal audit does not change in an Information Technology environment. However, the use of computer changes the processing, storage, retrieval and communication of financial information and the interplay of processes, system and control procedures. This may affect the internal control systems employed by the entity.

3.2 Standard on Internal Audit (SIA) 14 “Internal Audit in an Information Technology Environment” lays down that the internal auditor should consider the effect of an IT environment on the internal audit engagement, inter alia:

- a) The extent to which IT environment is used to record, compile, process and analyse information; and
- b) The system of internal control in existence in the entity with regard to:
 - The flow of authorised, correct and complete data to processing centre
 - The processing, analysis and reporting tasks undertaken in the installations and
 - The impact of computer based accounting system on the audit trail which would otherwise be expected to exist in an entirely manual system.

3.3 The internal auditor should have sufficient knowledge of the IT system to plan, direct, supervise, control and review the work

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performed. If specialised skills are needed, the assistance of technical expert can also be sought, who may either be the internal auditor's staff or an outside professional. The internal auditor should consider the IT environment in designing audit procedures to review the systems, processes, controls and risk management framework of the entity.

3.4 The internal auditor should review the robustness of the IT environment and consider any weakness or deficiency in the design and operation of any IT control within the entity, by reviewing:

- a) System Audit reports of the entity, conducted by independent Information System auditors;
- b) Reports of system breaches, unsuccessful login attempts, passwords compromised and other exception reports;
- c) Reports of network failures, virus attacks and threats to perimeter security, if any;
- d) General controls like segregation of duties, physical access records, logical access controls;
- e) Application controls like input, output, processing and run-to-run controls; and
- f) Excerpts from the IT policy of the entity relating to business continuity planning, crisis management and disaster recovery procedures.

3.5 A stock broker uses different applications for different processes, sometimes they are integrated and sometimes they are not. The internal auditor should gather information about various applications, its vendor and the process where it is used. There may be various names of application packages but there are basically three main types of files:

- Master files
- Parameters files
- Transaction files

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Normally, master files and parameters files are under the direct supervision and control of senior personnel, whereas, the transactions files are with operational staff. The internal auditor should inquire about supervisory controls on each such files.

3.6 At times, exchanges also direct the stock brokers to get the system audit/ connectivity audits conducted by the experts possessing those skills. The internal auditor should in such cases review the findings of the System/ IT auditor. At times, the stock broker appoints an outsourced agency to control and process the information in IT environment. The internal auditor should review the extent to which the entity's controls provide reasonable assurance regarding the completeness, validity, reliability and availability of the data and the information processed by such outsourced agency.

3.7 The internal auditor should check whether an adequate IT policy is in place and what is the degree of adherence to such policy. He can use checklist format for various IT controls such as, environment control, backups, virus protection controls, access controls, securities levels, etc. He should gather knowledge of access logs, network accounts, remote access, no. of trading terminals, no. of servers, connectivity, etc. If required the internal auditor should perform the system walk-through and compare the results outside the system with independent workings.

3.8 An illustrative checklist of IT controls to be reviewed by the internal auditor is as follows:

Sr. No.	CONTROL PARAMETERS
IT Access Control	
1	There is a structured IT Policy and facility personnel are aware of the applicable policies.
IT Back-up & Recovery	
2	The network has adequately documented backup and recovery procedures/plans/schedules for critical sites.
3	LAN is supported by an uninterruptible power supply (UPS).

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Sr. No.	CONTROL PARAMETERS
4	UPS tested in the last year (to test the batteries)?
5	For disaster-recovery purposes, LAN applications have been prioritized and scheduled for recovery based on importance to the operation.
IT Environmental Controls	
6	Smoke detection and automatic fire-extinguishing equipments installed for adequate functioning and protection against fire hazards
IT Inventory	
7	There is a complete inventory of the following: Hardware: Computers, File Servers, Printers, Modems, Switches, Routers, Hubs, etc. Software: all software for each Computer is logged with licenses and serial numbers.
8	There are written procedures for keeping LAN inventory. And they identify who (title) is responsible for maintaining the inventory report
9	Unused equipment is properly and securely stored
IT Operations	
10	LAN administrator has a backup person
11	LAN administrator monitors the LAN response time, disk storage space, and LAN utilization
12	LAN administrator is experienced and familiar with operation of the LAN facility
IT Physical Security	
13	Alarms installed at all potential entry and exist points of sensitive areas
IT Service Agreements	
14	Vendor reliability considered before purchasing LAN hardware and software

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Sr. No.	CONTROL PARAMETERS
15	Service log maintained to document vendor support servicing
16	LAN hardware and software purchase contracts include statements regarding vendor support and licensing
IT Virus Protection Policy	
17	The level of virus protection established on servers and workstations is determined and the monitoring of infection are being done by IT administration. Virus Application should be updated on a monthly basis. Laptops if issued should be ensured to have secured internet access.

3.9 The internal auditor should document the internal audit plan, nature and extent of audit procedures performed and the conclusion drawn from the evidence obtained. In an internal audit in IT environment, some or all of the audit evidence may be in the electronic form. He should also satisfy himself that such evidence is adequately and safely stored and is retrievable in its entirety as and when required.

Chapter II-4

Internal Audit Checklist

4.1 This chapter contains detailed internal audit checklist on various aspects of stock-broking business.

Books of Accounts, Records and Documents

4.2 The internal auditor should:

- (i) Verify that the books of accounts are maintained exchange-wise separately.
- (ii) Verify that the books of accounts, records and documents as specified in Regulation 17 of SEBI (Stock Brokers and Sub-Brokers) Regulation, 1992 are maintained for a minimum period of 5 years.
- (iii) Verify that all the documents are updated and properly maintained.
- (iv) Verify that the place of maintenance of documents has been intimated to the SEBI.
- (v) Verify that after the closing of any client account all records which relate to the terms and conditions, with respect to the opening and maintenance of such account, are being maintained for a period of 7 years.
- (vi) Verify that where copies of the records/documents have been collected by enforcement agencies during the course of their investigation, the originals of such documents are preserved till the time trial is completed.
- (vii) Verify that the records referred to in Rule 3 of Prevention of Money Laundering Rules are maintained for a period of 10 years from the date of cessation of the transactions between the client and the intermediary.

Client Registration

4.3 The internal auditor should:

- (i) Verify that broker has, when establishing relationship with a new client, taken reasonable steps to assess the background, genuineness, financial soundness and investment objectives of such client. Check whether broker has obtained Member Client Agreement (MCA), Client Registration Form (CRF) and Risk Disclosure Document (RDD) duly signed by the client in the prescribed form at before accepting or placing orders on their behalf.
- (ii) Verify that separate MCA has been executed with the client for trading on different exchanges.
- (iii) Check whether a separate exchange wise Tri-partite Agreement (applicable only in cash segment) is entered between broker, sub-broker and the client.
- (iv) Verify that MCA is executed and adequate amount of stamp duty is paid thereon separately for each exchange.
- (v) Verify that agreement is entered within six months from the date of stamping/franking.
- (vi) Verify that franking is not done after the date of agreement.
- (vii) Verify that broker has obtained CRF, MCA and RDD complete in all respects with all supporting documents.
- (viii) Verify that photograph of client is affixed in 'Individual' CRF and it has been signed by the client. Also, check that photograph affixed is matching with the photograph on proof of identity.
- (ix) Verify whether all supporting documents are obtained from the client like proof of identity, proof of address, bank account(s) proof, demat account(s) proof, financial information proof (if any), PAN card copy, etc.

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- (x) Check that all supporting documents are verified with original and stamp of verification is put (recommended) on all supporting documents and signed by authorised person.
- (xi) Verify whether board resolution has been obtained from all corporate clients permitting trading in equity/ derivatives/ debt and also for authorised signatories.
- (xii) Verify whether upon registration copy of KYC and other documents are delivered to the clients and proof of such delivery/communication is maintained.
- (xiii) Verify whether in person verification has been conducted by the broker's own staff and has affixed the date of verification, name and signature of the official conducting in-person verification, stamp of the broker in the client registration form while registering clients.
- (xiv) Verify that remisier has signed as an introducer in KYC form for the client introduced by him on BSE.
- (xv) Verify that additional clauses/ documents are marked as voluntary (optional) documents in bold.
- (xvi) Verify that at the time of registering a client, the client is informed in writing that only the documents stated as per SEBI model formats are mandatory, and any additional clause or documentation shall be voluntary and at the discretion of the trading member and the client.
- (xvii) Verify that separate docket is prepared for mandatory and voluntary documents.
- (xviii) Verify that additional clauses incorporated in MCA, if any, are not in conflict with any of the clauses in the model document, as also the Rules, Regulations, Articles, Bye-laws, Circulars, etc.
- (xix) Verify that PAN of the client is cross verified with Income Tax Website and it is recommended that proof of the same is maintained for each client.

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- (xx) Verify whether disclosure of proprietary trading by the broker have been given to each of the client (in case of broker having proprietary trading).
- (xxi) Verify that e-mail Id of client and consent letter is obtained in case client has opted for receiving contract notes and other documents through ECN or electronic form.
- (xxii) Verify that every year Annual Accounts and shareholding pattern have been obtained from Non-Individual clients.
- (xxiii) Verify that trade has been done after completion of all formalities related to client registration.
- (xxiv) Verify that financial information provided by the client has been monitored with trading activities of the client.
- (xxv) Verify that client's information has been reviewed periodically and in view of the current trading activity of the client, updation of the client's information is done on an ongoing basis. (Refer Circular No. NSE/INVG/2006/7236 dated March 3, 2006 and BSE Notice No. 20060704-5 dated July 4, 2006)
- (xxvi) Evaluate inventory controls relating to blank KYC documents given to branches/sub-brokers/clients and lying at Head Office of the broker.
- (xxvii) Verify whether control serial number is printed on each KYC docket for better internal controls.
- (xxviii) Verify that internal control procedures are in place for authorisation, verification and acceptance of documents.
- (xxix) Verify that master records in back office software are updated correctly and no discrepancy has been noticed with the details provided in KYC documents.
- (xxx) Verify storage facility of registered KYC documents of clients and ensure that documents are stored in such a way that retrieval of documents is easy and fast.

Unique Client Code (UCC)

4.4 The internal auditor should:

- (i) Verify that Unique Client Code (UCC) has been allotted to all the clients including clients of sub-brokers.
- (ii) Verify that PAN and names of clients as they appear on the PAN card are correctly uploaded on the exchange in respect of all clients.
- (iii) Verify that details of Unique Client Code have been uploaded after completion of all formalities related to Client Registration.
- (iv) Verify that the broker is having a system of mapping of client codes with clients respective PAN and/or Passport No./Driving License No./Voter Card No. in their back offices.
- (v) Verify that the details of Unique Client Code are obtained upfront before entering any order.
- (vi) In case broker has opened different party ledger accounts by allotting various back office client codes, verify that only one Unique Client Code is used for all such accounts or back office client codes. PAN can be the sole identification number for tracking the client opening multiple client codes.

Margins

4.5 The internal auditor should:

For Cash Segment Margins

- (i) Verify whether broker has adopted Risk Management Policy by passing the requisite resolution.
- (ii) Verify whether broker has a prudent system of Risk Management to protect themselves from client default.
- (iii) Verify whether broker has well documented policy of Risk Management and Margin Collection from the client.

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- (iv) Verify that broker has collected margins as specified in risk management policy and no deviation is noticed.
- (v) Verify that in case of deficiency in collection and maintenance of margins as per policy, the same have been reported to the management.
- (vi) Verify whether the required synchronisation exists between margin collection department and risk management department for the purpose of giving exposure to the client.

For Derivative Segment Margins

- (i) Verify that in case of derivatives market, client margin reporting is done on daily basis.
- (ii) Verify whether client margin reporting is done within the time line prescribed by the exchange.
- (iii) Verify whether broker has reported correctly the margin collected from the client in case of derivatives segment.
- (iv) Verify that valuation of collaterals is done correctly. Ensure that unpaid securities are not considered as margin collected.
- (v) Analyse the penalties charged by the exchange to fix up the responsibility of the concerned department.
- (vi) Verify whether penalties charged by the exchange on account of short collection of margins from clients have been recovered from the respective client as per the terms of agreement.
- (vii) Verify that no wrong reporting is done by the broker for client margin reporting in case of derivatives segment.

Register of Transaction (Sauda Book)

4.6 The internal auditor should:

- (i) Verify the process of generating the sauda book including internal controls thereof.

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- (ii) Verify that sauda book reflects all information as per the requirement of the respective exchanges.
- (iii) Compare sauda book and trade files to verify that there are no client code modifications.
- (iv) Compare sauda book and trade files to verify that there are no modification to the market rate.
- (v) Verify that client code modification, if any is done only for genuine reasons and after obtaining necessary internal sanctions and the same have also been intimated to the stock exchange.
- (vi) Verify that there are no cross deals entered into by the broker.
- (vii) Verify that there are no fictitious trades executed by the broker.
- (viii) Verify that there are no cases of front running by the dealer (terminal operator) or the broker.
- (ix) Verify that Principal to Principal trades are executed only after obtaining necessary approvals from the exchange (BSE) and after complying with the exchange directives.
- (x) Verify that no off market trades are executed by the broker.

Contract Note

4.7 The internal auditor should:

- (i) Verify the process of generating the contract notes including internal controls thereof.
- (ii) Verify contract notes have been issued to all the clients.
- (iii) Verify whether correct brokerage is charged to the client.
- (iv) Verify that brokerage is charged to all the clients.

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- (v) Verify that the format of contract note is as prescribed by the respective exchange.
- (vi) Verify that contract notes have been issued to client for shares offered in auction settlement by the clients.
- (vii) Verify whether client code, name and address of the client are mentioned on the contract note.
- (viii) Verify whether contract notes are issued within twenty-four hours of trade.
- (ix) Verify whether PAN of client is printed on contract note where the value of the contract note exceeds Rs. 1 lakh.
- (x) Verify whether contract notes have pre-printed/computerised running serial number initialised on a financial year basis.
- (xi) Verify whether the contract note number, amount, rate etc., on the duplicate contract note matches with details in back office software.
- (xii) Verify that dealing office address is mentioned on the contract notes for trades executed on NSE.
- (xiii) Compare contract notes issued by the broker with trade files to ensure that contract notes are issued to all the clients and no off-market trades are executed by the broker.
- (xiv) Verify whether the brokerage charged to client does not exceeds the maximum limit of 2.5% of the contract price or Rs. 0.25/- per share.
- (xv) Verify whether brokerage charged to client on option contract does not exceed the maximum limit of 2.5% on the premium or Rs. 100/-, whichever is higher.
- (xvi) Verify that brokerage is charged on option contract on the premium amount only and not on the premium plus strike price.

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- (xvii) Verify whether contract note is signed by Director/ Authorised signatory and the name of such Directors/ Authorised signatory is printed on the contract note.
- (xviii) Verify that the board resolution/ power exchange of attorney, as the case may be, to sign the contract notes is submitted to the exchange.
- (xix) Verify whether the duplicate copies of contract notes are preserved as per the exchange guidelines.
- (xx) Verify whether contract notes are acknowledged by clients (date and signature of client should be obtained) in case of hand delivery, and dispatch records are maintained in case where the contract notes are sent by post/ courier.
- (xxi) In case where summary contract notes are issued to clients, verify that details of trades are attached as annexure thereto.
- (xxii) Verify statement of STT is issued to the client on annual (financial year) basis or at such periodicity as required by the client.

Electronic Contract Note (ECN)

4.8 The internal auditor should*:

- (i) Verify the process of generating and uploading the ECN including internal controls thereof.
- (ii) Verify ECN is digitally signed, encrypted and is in non-tamperable form.
- (iii) Ensure the validity of digital signature.
- (iv) Verify that the format of contract note is as prescribed by the respective exchange.
- (v) Verify consent letter of the client/clauses in the MCA to receive ECN specifying the e-mail address.

* These check points are in addition to the points specified under the head "Contract Notes".

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- (vi) Verify acknowledgement of the e-mail has been retained in a soft and non-tamperable form.
- (vii) Verify log report generated by the system at the time of sending the ECN have been maintained for the specified period.
- (viii) Verify the agreement contains clause that informs the client that non-receipt of bounced mail notification by the broker shall amount to delivery of the ECN at the e-mail ID of the client.
- (ix) Verify whether the log report provides the details of the ECN that are not delivered to the client/ e-mails rejected or bounced back.
- (x) Verify that physical contract notes are issued to clients with twenty-four hours, wherever the ECNs have not been delivered to the client or has been rejected (bouncing of mails) by the e-mail ID of the client.
- (xi) Verify that ECNs are simultaneously published on the designated web-site of broker in a secured way by issue of username and password, and also enables relevant access to the clients including the option to print the same.

Straight Through Processing (STP)

- 4.9 The internal auditor should:
- (i) Verify that all the institutional trades executed on the stock exchanges have been processed through the STP.
 - (ii) Verify that contract notes have been signed using digital signatures.
 - (iii) Verify that STP for electronic trade are processed with a common messaging standard ISO 15022.
 - (iv) Verify that log reports have been preserved properly.

Settlement of Funds

4.10 The internal auditor should:

- (i) Verify that proper bank accounts, as required, have been opened and the same are used only for the specified purpose.
- (ii) Verify that separate designated 'Client' bank account is maintained for clients' money.
- (iii) Verify that a clear segregation is maintained for clients' money and the broker's own money.
- (iv) Verify that dishonoured cheques of clients have been properly accounted for and are not pending in Bank Reconciliation Statement.
- (v) Verify that the bank reconciliation are carried out on regular basis and all unreconciled/pending entries are thoroughly scrutinised, especially entries that are pending for unreasonably long period.
- (vi) Verify that the settlement account is properly tallied and all entries, as appearing in the settlement bank statement, are properly accounted in the back office records.
- (vii) Analyse the reason for dishonoured/bounced cheques that have been issued by the broker.
- (viii) Verify that there are no cash dealings made by the broker with the clients except under exceptional circumstances as permitted by the SEBI.
- (ix) Verify that pay-in of funds due from clients is received from the respective clients account only, i.e., it has not been received from third party.
- (x) Verify that pay-out of funds due to clients is made to the respective clients only, i.e., it has not been paid to third party.

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- (xi) Verify that client funds are not used for own purposes.
- (xii) Verify that there are no unauthorised transfer of funds from one client account to another client account, in cases where separate client-wise accounts are maintained by the broker.
- (xiii) Evaluate the alerts generated from the bank reconciliation statement that may lead to frauds like, teaming and lading, etc.
- (xiv) Verify that the credits due to clients are paid to them within one working day after the pay-out has been received from the clearing corporation.
- (xv) Verify that in cases where the pay-out of funds has not been made within the time limit prescribed by the exchange, the instruction from the client to withhold the funds has been received.
- (xvi) Verify that the broker is not involved in fund based activities.
- (xvii) Verify that there is no misutilisation of the client money by the broker.

Settlement of Securities

4.11 The internal auditor should -

- (i) Verify the process of pay-in and pay-out prevailing in the organisation and internal controls thereof.
- (ii) Verify that separate designated 'Client' beneficiary account has been maintained for the purpose of holding client shares.
- (iii) Verify that a clear segregation is maintained of the client shares and own shares.
- (iv) Verify that in case of dematerialised securities, register of securities client-wise and security-wise has been maintained.
- (v) Verify that in case of securities in physical form, Document register or Inward/Outward register has been maintained.

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- (vi) Verify that delivery/ receipt of shares purchased/ sold by the client is to/ from their respective accounts, i.e., no third party shares are received or delivered.
- (vii) Verify that no shares lie in the Pool account of the broker for more than one working day. (This can be cross checked from the transaction statement of CISA Account with the CDSL and from penalty levied by the NSDL.)
- (viii) Verify that the pay-out of shares to the client has been made within one working day of the receipt of pay-out from the exchange.
- (ix) Verify that in cases where the pay-out of securities has not been made within the time limit prescribed by the exchange, the instruction from the client to withhold the securities has been obtained.
- (x) Verify that the client shares have not been used for own purposes.
- (xi) Verify that the shares of one client have not been used for another client.
- (xii) Verify that in case of short delivery of shares by the client, the broker has debited the defaulting client by the auction charges recovered by the exchange for such short delivery of shares.
- (xiii) Verify that close out credit have been properly received and accounted.
- (xiv) Verify that the shares lying in the client beneficiary demat account is regularly reconciled with the client shares as appearing in the records maintained by the broker.
- (xv) Verify that in case of internal shortages, shares are subsequently delivered to the buyer.
- (xvi) Verify that 'Power of Attorney' has been duly executed in case of demat account of clients operated by the broker to honour the pay-in obligation of the client.

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- (xvii) Verify that there is proper segregation of duty relating to settlement of securities and maker checker concept has been implemented.
- (xviii) Analyse the reasons for shares of the clients lying with the broker for a long period.

Statement of Accounts for Funds and Securities

4.12 The internal auditor should:

- (i) Verify that the broker has sent 'Statement of Accounts' for both funds and securities to his clients as well as to the clients of the sub-broker, for every quarter in case of NSE and once at least in 6 months for BSE, within a month of the expiry of the said period.
- (ii) Verify that the error reporting clause has been incorporated in the Statement of Accounts.
- (iii) Verify that the Statement of Accounts returned undelivered are scrutinised to ensure the genuineness of the account.
- (iv) Verify that the Statement of Accounts for funds and securities are sent directly to the client, from the main office instead of routing it through branch or other intermediaries.
- (v) Verify that written consent of the client is obtained in case where the Statement of Accounts has been sent by e-mail.
- (vi) Verify that in case of those brokers who offer trading facility to their clients through internet and provide an access to an on-line accounting, viewing and print-out facility, it would be treated as sufficient compliance, if they send the 'Statements of Accounts' by e-mail to such clients.
- (vii) Verify that the errors reported by the clients are scrutinised to ensure the genuineness of the transaction and appropriate action is taken by the broker.

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- (viii) Verify that in respect of institutional clients, the said requirement is applicable in case the broker pay/ receive funds and receive/ deliver securities from or to the institutional clients directly and not through custodians.
- (ix) Verify that where the statement of accounts for the funds and securities are sent by post/ courier, adequate dispatch records have been maintained and in case of hand delivery, acknowledgement of the client along with date of receipt has been obtained.

Brokerage and Revenue Leakage

4.13 The internal auditor should:

- (i) Verify that revenue is recognised in accordance with Accounting Standard (AS) 9, "Revenue Recognition" issued by the Institute of Chartered Accountants of India. The brokerage can be booked either on completed settlement basis or on financial year basis in accordance with the policy of the broking house.
- (ii) Verify the process of charging of brokerage including internal controls thereof.
- (iii) Verify the process of sharing of brokerage with intermediaries including internal controls thereof.
- (iv) Verify that brokerage earned from clients and shared with intermediaries is not netted-off in the "Brokerage Account".
- (v) Verify that corporate benefits have been promptly passed on to the client.
- (vi) Verify that dividend payable to client is shown under the head Current Liabilities and Dividend on own investment should be shown in Profit and Loss Account.
- (vii) Verify that brokerage slabs are correctly defined in the brokerage masters of the back office accounting software.

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- (viii) Verify adequacy of access controls in the accounting software to avoid unauthorised modification of brokerage in the accounting software.
- (ix) Verify adequacy of audit trails for modification of brokerage in the accounting software.
- (x) Verify the correctness of brokerage shared with the intermediary and also ensure that brokerage is shared only for the clients introduced by the said intermediary.
- (xi) Verify adequacy of access controls to avoid unauthorised modification of sharing of brokerage with intermediaries in the accounting software.
- (xii) Verify adequacy of audit trails for modification in sharing of brokerage with intermediaries in the accounting software.
- (xiii) Verify that expenses/fines/penalties, etc., incurred on behalf of clients are recovered subject to the provisions of agreement entered between the broker and the client (e.g., stamp paper charges, franking charges, transaction charges levied by the exchange, etc.).
- (xiv) Verify authorisation of losses incurred for trades transferred to “Own A/c” or “Office Vandha A/c” on account of dispute with the client.
- (xv) Verify that trades transferred to “Office Vandha A/c” is squared up as per the organisation’s policies and in case where the trades have not been squared up verify the sanctions thereof to carry forward such trades in the books of accounts.
- (xvi) Analysis of trades transferred to “Office Vandha A/c” is conducted to get an overall idea as to the nature, quantum of such errors and internal controls prevailing in the organisation.
- (xvii) Verify that balance lying in the “Office Vandha A/c” is written-off in the Profit and Loss A/c at the year end.

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- (xviii) Verify whether insurance claim has been made against dealing errors.
- (xix) Verify that corporate benefits are passed on to correct client and in proportion to the shares held in the client beneficiary account on the record date.

Trading Terminals

4.14 The internal auditor should:

BSE Terminals

- (i) Verify that trading terminals are installed only at the member-broker's office, branch offices, sub-brokers' offices. (An office is considered as branch office only if it is owned, leased or rented by the broker.)
- (ii) Verify terminals are operated by brokers/employees of broker/sub-broker/employees of sub-broker.
- (iii) Verify that remisier is operating terminal from brokers' office only.
- (iv) Verify that the required details of all the Ids created in the IML server of the trading member, for any purpose (*viz.*, administration, branch administration, surveillance, risk management, trading, testing, etc) and any changes therein, have been uploaded to the exchange.
- (v) Verify that all the IML user ids created in the IML server of the trading member has been mapped to 16 digits Location ID on one-to-one basis and a record of the same is maintained.
- (vi) Verify that all the terminal users are BCSM certified as per the requirement of exchange.
- (vii) Verify that all the terminal users have obtained the required certificate from any of the SEBI approved institutes.

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- (viii) Verify that System audit is conducted as per the exchange requirement and the audit report has been submitted by due date.

NSE Terminals

- (i) Verify that trading terminals are located only in the main/branch offices of the broker or in the office of the sub-broker or in the office of authorised person for F&O segment.
- (ii) Verify that trading terminals are managed either by an authorised employee or by a registered sub-broker and in case of terminals located at branches, branch office is managed and supervised by the trading member's own employee or by a registered sub-broker.
- (iii) Verify that the required details of all the CTCL ids created in the CTCL server of the trading member, for any purpose (*viz.*, administration, branch administration, mini-administration, surveillance, risk management, trading, view only, testing, etc) and any changes therein, have been uploaded as per the requirement of the Exchange.
- (iv) Verify that all the CTCL user ids created in the CTCL server of the trading member have been mapped to 12 digit codes on a one-to-one basis and a record of the same has been maintained.
- (v) Verify that all the terminal users are NCFM certified as per the requirement of exchange.
- (vi) Verify that all the terminal users have obtained the required certificate from any of the SEBI approved institutes.
- (vii) Verify that the required certificate is obtained by the person operating the Corporate ID.
- (viii) Verify that System audit is conducted, as per the exchange requirement, and the audit report has been submitted by due date.

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- (ix) Verify that no former trading member or a user of such trading member have been appointed as user by the broker without the approval of the exchange.

Sub-Broker

4.15 The internal Auditor should:

- (i) Verify sub-broker's certificate of registration from SEBI (Stock Broker and Sub-broker) Regulation, 1992.
- (ii) Verify brokerage is shared with the sub-broker only after the date of the registration.
- (iii) Verify that in case of BSE 20% of the sub-brokers have been inspected every year and in case of NSE 10% of the active sub-brokers have been inspected every year.
- (iv) Verify that no Director of a corporate broking house is acting as sub-broker of the same broking house.
- (v) Verify tripartite agreement is executed between broker, sub-broker and client in case of clients introduced by sub-broker.
- (vi) Verify that contract note is issued only by the broker and no sub-broker is issuing confirmation memos to its clients.
- (vii) Verify that delivery of securities and the payment of funds relating to the client's transaction are made directly between a broker and the client introduced by sub-broker.

Remisier

4.16 The internal auditor should:

- (i) Verify that the business with remisier is commenced only after registering the remisier with the BSE.
- (ii) Verify that no brokerage is shared with remisier for his personal business.

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- (iii) Verify that remisier is not an employee of any other broker.
- (iv) Verify that remisier is not a sub-broker with any other broker of any exchange.
- (v) Verify that contract note is issued only by the broker and no remisier is issuing confirmation memos to its clients.
- (vi) Verify that remisier has not been allotted the terminals at places other than head office or branch office of the broker.
- (vii) Verify that the remisier has not refunded the brokerage, directly or indirectly, to the clients introduced by him or to any other person or agent.
- (viii) Verify that the remisier has not issued contract notes, confirmation memo and/or bills to the clients in their name.
- (ix) Verify that the clients introduced by the remisier have delivered securities and made payments directly to the broker and *vice-versa*.

Authorised Person

4.17 The internal auditor should:

- (i) Verify that the business with authorised person is commenced only after registering the authorised person with the NSE.
- (ii) Verify that authorised person is not an employee of any other broker.
- (iii) Verify that contract note is issued only by the broker and no authorised person is issuing confirmation memos to its clients.
- (iv) In case where the application of authorised person, is subsequently rejected by the SEBI verify that no further dealings are carried on with the authorised person.
- (v) Verify that the authorised person has not issued contract notes, confirmation memo and/or bills to the clients in their name.

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- (vi) Verify that the clients introduced by the authorised person have delivered securities and made payments directly to the broker and *vice-versa*.

Advertisement

4.18 The internal auditor should:

- (i) Verify that the advertisement is issued in accordance with the Regulation 17 and Bye-Law 358 of BSE Rules, Bye-Laws and Regulations, 1957 and/or in accordance with the Code of Advertisement specified by NSE.
- (ii) Verify that the broker has not issued an advertisement unless it has been permitted by the stock exchange.
- (iii) Verify that the advertisement does not contain any recommendation regarding purchase or sale of any particular share or security of any company and/ or any recommendation regarding any company.
- (iv) Verify that the advertisement specifies the name/title as recorded for the membership of the Exchange along with the registration number allotted by SEBI.
- (v) Verify that all information given in the advertisement is correct and accurate.
- (vi) Verify that the advertisement does not include publicity for any party other than the broker himself and it does not contain any reference to any person, firm or institution.
- (vii) Verify that the broker has submitted a copy of the advertisement to the Membership Department of the Exchange authorities as soon as it is published in case of advertisement published by a BSE broker.

Margin Trading Facility

4.19 The internal auditor should:

- (i) Verify whether prior permission of the exchange has been

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obtained for the purpose of providing Margin Trading Facilities to the clients and letter from exchange has been received allowing broker to provide margin trading facilities to their clients.

- (ii) Verify whether broker has taken adequate care and exercised due diligence before providing margin trading facility to any client.
- (iii) Verify that broker has allotted Unique Client Code to the client by obtaining necessary supporting documents.
- (iv) Verify that broker has obtained a declaration from the client stating whether he has availed of any margin trading facility from any broker in any exchange, or whether his request for margin trading with any broker was rejected and, if so, verify that, in both the cases, the name of the broker and his registration number details has been obtained.
- (v) In case client has availed margin trading facility from any other broker in any exchange then check that whether broker has verified the details from the concerned broker/s.
- (vi) Verify that before providing margin trading facility to a client who has already availed of margin trading facility from another broker in the same exchange, the broker has ensured that the client has liquidated his outstanding in the margin trading account with the other broker, and obtained a certificate to this effect in writing from that broker.
- (vii) Verify that broker has provided margin trading facility to clients only in cash segment.
- (viii) Verify that broker has provided margin trading facility to clients only in 'Group 1' Securities.
- (ix) Verify that broker has entered into an agreement with his client for providing the margin trading facility on the lines of the model agreement prescribed by the SEBI (Ref. SEBI circular No. SEBI/MRD/SE/SU/Cir-15/04 dated March 19, 2004).

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- (x) Verify whether broker has modified the agreement for stipulating additional or more stringent conditions. In this case, verify whether any additional clause or conditions has the effect of diluting any of the conditions laid down in the model agreement.
- (xi) Verify that broker has used his own funds or borrowed funds from scheduled commercial banks and/or NBFCs regulated by RBI for the purpose of providing margin trading facility, and broker has not used borrowed funds from any other source for the purpose of providing margin trading facility.
- (xii) Verify that at any point of time, the total indebtedness of the broker for the purpose of margin trading has not exceeded five times of his net worth.
- (xiii) Verify that the “maximum allowable exposure” of the broker towards the margin trading facility is within the self imposed prudential limits and has not, in any case, exceeded the borrowed funds and 50% of his “net worth”.
- (xiv) Verify that broker has no concentration on any single client. In any case, the exposure to any single client at any point of time has not exceeded 10% of the broker’s lendable resource (i.e., borrowed funds for the purpose of margin trading + 50% of net worth).
- (xv) Verify that broker has adhered to the requirements relating to initial margin and maintenance margin.
- (xvi) Verify that broker has promptly made margin calls to his clients, in case balance deposit in the client’s margin account falls below the required maintenance margin, and no further exposure is granted to such client on the basis of any increase in the market value of the securities.
- (xvii) Verify that broker has liquidated securities of the client in the following conditions only:
 - (a) if the client fails to meet the margin call made by the broker; or

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- (b) fails to deposit the cheques on the day following the day on which the margin call has been made; or
 - (c) where the cheque deposited by the client has been dishonored; or
 - (d) in case the client's deposit in the margin account (after adjustment for mark-to-market losses) falls to 30% or less of the latest market value of the securities.
- (xviii) Verify that broker has maintained separate client-wise accounts of the securities purchased on margin trading with depositories and enabled the client to observe the movement of securities from his account (through internet).
- (xix) Verify that the broker has also maintained a separate record of details (including the sources) of funds used for the purpose of margin trading.
- (xx) Verify that the books of accounts, maintained by the broker, with respect to the margin trading facility offered by it have been audited on a half-yearly basis.
- (xxi) Verify that the broker has submitted an auditor's certificate to the exchange/s, within one month from the date of the half year ending 31st March and 30th September of the year certifying, *inter alia*, the extent of compliance with the conditions of margin trading facility.
- (xxii) Verify that the broker has submitted to the stock exchange a half-yearly certificate, as on 31st March and 30th September of each year, from an auditor confirming the net worth, within one month from the date of the half year ending 31st March and 30th September of the year.
- (xxiii) Verify that the broker has disclosed to the stock exchange/s details on gross exposure including name of the client, Unique Identification Number (UIN)/client code, name of the scrip, quantity, amount funded, etc. (as per the format prescribed by SEBI vide its Circular No. SEBI/MRD/SE/SU/Cir-15/04 dated March 19, 2004) and if the broker has borrowed funds

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for the purpose of providing margin trading facility, name of the lender and amount borrowed, on or before 9.00 pm for the same day of reporting.

Prevention of Money Laundering

4.20 The internal auditor should:

- (i) Verify whether proper policy framework as per the Guidelines on anti-money laundering measures is put into place.
- (ii) Verify whether the above referred policy is approved by Board of Directors.
- (iii) Verify whether an officer has been appointed as 'Principal Officer'.
- (iv) Verify whether such appointment of 'Principal Officer' is intimated to the Office of the Director-FIU, New Delhi.

One Time / Periodical Compliances

- (i) Verify whether proper record of transactions prescribed under Rule 3 are maintained.
- (ii) Verify whether the following information in respect of transactions referred to in Rule 3 are maintained and preserved:
 - (a) nature of the transactions;
 - (b) amount of the transaction and the currency in which it was denominated;
 - (c) date on which the transaction was conducted; and
 - (d) parties to the transaction.
- (iii) Verify whether an internal mechanism has been evolved for proper maintenance and preservation of such records and information in a manner that allows easy and quick retrieval of data as and when requested by the competent authorities.

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- (iv) Verify whether such records as are sufficient to permit reconstruction of individual transactions (including the amounts and types of currencies involved, if any) have been maintained so as to provide, if necessary, evidence for prosecution of criminal behaviour.
- (v) Verify whether the policies and procedures on prevention of money laundering and terrorist financing are regularly reviewed to ensure their effectiveness.
- (vi) Verify whether review is done by the person who is different from the person who has framed such policies and procedures.

Ongoing/ Continuous Compliance

- (i) Verify whether the following information has been maintained for the purpose of satisfactory audit trail:
 - (a) beneficial owner of the account;
 - (b) volume of the funds flowing through the account for selected transactions;
 - (c) origin of the funds;
 - (d) form in which the funds were offered or withdrawn, e.g., cash, cheques, etc.;
- (ii) identity of the person undertaking the transaction;
- (iii) destination of the funds; and
- (iv) form of instruction and authority.

Customer Due Diligence

- (i) Verify whether Customer Due Diligence Process has been conducted.
- (ii) Verify whether records of the identity of clients have been maintained.

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- (iii) Verify whether sufficient information in order to identify persons who beneficially own or control securities account has been obtained.
- (iv) Verify whether beneficial ownership and control has been identified, i.e., which individual(s) ultimately own(s) or control(s) the customer and/or the person on whose behalf a transaction is being conducted.
- (v) Verify whether customer's identity has been verified using reliable, independent source documents, data or information.
- (vi) Verify whether ongoing due diligence and scrutiny has been conducted.

Policy for Acceptance of Clients

- (i) Verify whether customer acceptance policy has been defined.
- (ii) Verify whether safeguard has been taken while accepting the clients that no account is opened in a fictitious or benami name or on an anonymous basis.
- (iii) Verify whether documentation requirement and other information in respect of different classes of clients depending on perceived risk and having regard to the requirement of the Prevention of Money Laundering Act, 2002, Guidelines issued by RBI and SEBI from time to time have been collected.
- (iv) Verify whether identity of the client is verified for known criminal records or is not banned in any other manner, whether in terms of criminal or civil proceedings by any enforcement agency worldwide.
- (v) Verify whether failure by prospective client to provide satisfactory evidence of identity have been noted and reported to the higher authority.

Client Identification Procedure

- (i) Verify whether the client identification procedure has been formulated on lines of the applicable legal framework.
- (ii) Verify whether client identification procedure is implemented properly.
- (iii) Verify whether Customer Due Diligence has been conducted on a risk sensitive basis depending on the type of customer business relationship.
- (iv) Verify whether customers are identified as per risk sensitive basis.

Monitoring of Transactions

- (i) Verify whether regular monitoring of transactions is done for ensuring effectiveness of the Anti-Money Laundering procedures.
- (ii) Verify whether special attention has been given to all complex, unusually large transactions/patterns which appear to have no economic purpose.
- (iii) Verify whether compliance cell or department has randomly examined a selection of transaction undertaken by clients to comment on their nature, i.e., whether they are in the suspicious transactions or not.

Suspicious Transaction Monitoring and Reporting

- (i) Verify whether transaction of suspicious nature or any other transaction notified is reported to the appropriate law authority.
- (ii) Verify whether suspicious transactions are also regularly reported to the higher authorities/head of the department.
- (iii) Verify whether the cash transaction report (CTR) (wherever applicable) for each month is submitted to FIU-IND by 15th of the succeeding month.

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- (iv) Verify whether the Suspicious Transaction Report (STR) is submitted within 7 days of arriving at a conclusion that any transaction, whether cash or non-cash, or a series of transactions integrally connected are of suspicious nature.
- (v) Verify whether the Principal Officer has recorded his reasons for treating any transaction or a series of transactions as suspicious. Verify whether there is any undue delay in arriving at such a conclusion.

Training to Staff and Hiring Policies

- (i) Verify whether the content of PML Guidelines is understood by all staff members' Verify whether appropriate training has been provided to staff.
- (ii) Verify whether staff members' awareness and vigilance to guard against money laundering and terrorist financing has been developed.
- (iii) Verify whether adequate screening procedures are in place to ensure high standards when hiring employees.

Audit/ Testing of Anti-Money Laundering Program

- (i) Verify whether the audit is conducted periodically to test Anti-Money Laundering Program adequacy to meet the compliance requirements.
- (ii) Verify whether the audit/testing is conducted by member's own personnel not involved in framing or implementing the AML program or it is done by a qualified third party.
- (iii) Verify whether the report of such an audit/testing is placed before the senior management for making suitable modifications/improvements in the AML program.

Procedural Compliances

- (i) Verify whether KYC is complete in all respects before opening any client account.

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- (ii) Verify whether Branch/Relationship Managers are instructed to verify all original documents with copies of the same which form part of supporting to KYC.
- (iii) Verify whether any account is opened without Introducer details and signature. If yes, whether any employee of the organisation has taken interview of the client.
- (iv) Verify whether any guidelines has been given to branches for the following:
 - (a) No Cash transactions
 - (b) No Third Party Cheque or Securities to be accepted
 - (c) Number of Demand Draft to be accepted
 - (d) POA with Photo Identity and address proof
 - (e) Income Proof of HNI Clients
- (v) Verify whether KYC Profile for risk sensitive clients including HNI is updated on periodical basis.
- (vi) Verify whether following transactions are monitored and reported to Principal Officer:
 - (a) Client whose identity verifications seems difficult or client appears not to co-operate in providing details.
 - (b) Clients in high risk jurisdictions
 - (c) Substantial increase in volume without apparent cause
 - (d) Large number of accounts having common parameters such as, common partners/directors/ promoters/address/ e-mail address/telephone numbers/introducers or authorised signatories.
 - (e) Unusually large cash deposits made by an individual or business

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- (f) Client is willing to accept uneconomic terms without apparent reason
- (g) Transaction inconsistent with legitimate business activity
- (h) Transaction inconsistent with the normal pattern of client's investment activity
- (i) Client is financially capable of transactions he has asked for
- (j) Activity of the client is resumed after being in-operative for more than 3 months
- (k) High value payments made from bank accounts not notified in KYC form
- (l) Transfer of large number of securities from demat accounts not notified in KYC form or not pertaining to client
- (m) Multiple transactions of value just below the threshold limit specified in PMLA so as to avoid possible reporting
- (n) Purchases made on own account transferred to a third party through off-market transactions through DP Accounts.

Others

4.21 The internal auditor should:

Notice Board and SEBI Registration Certificate

- (i) Verify that Notice Board in the format prescribed by NSE and BSE is displayed in Main Office and branch office (or any other offices where the trading terminals are located) and the registered Sub-broker's office.
- (ii) Verify that Notice Board is displayed at prominently visible locations and in a permanent manner.

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- (iii) In case of BSE Broker, verify that a list of general Do's and Don'ts for the investors to follow while investing/trading in the stock markets is prominently displayed.
- (iv) Verify that a copy of SEBI Registration Certificate is prominently displayed in all offices of the member.
- (v) Verify that SEBI Registration Certificate issued to the sub-broker is prominently displayed at all sub-broker's offices.

Trading Through Other Stock Broker

4.22 The internal auditor should:

- (i) Verify that stock broker has dealt with broker/ sub-brokers of the same exchange either for proprietary trading or for trading on behalf of clients. If yes, verify that whether prior permission of the exchange has been obtained in this regard.
- (ii) Verify that stock broker has dealt with broker/ sub-brokers of the other exchange for proprietary trading. If yes, verify whether prior intimation has been given to parent stock exchange of the stock broker about name of such other stock broker or sub broker.
- (iii) In case stock broker has dealt with broker/ sub-brokers of the other exchange for executing trades on behalf of clients, then verify it has been done after obtaining necessary registration with SEBI as sub-broker of such other broker in the other stock exchange.

Block Deal

4.23 The internal audit should:

- (i) Verify that details of block deal are executed perfectly and within the time lines prescribed by the exchange.
- (ii) Verify that stock broker has verified indicative report of block deals and reported mismatch, if any, to the exchange within half an hour of receiving the return file.

Bulk Deal

4.24 The internal auditor should:

- (i) Verify the process of tracking of bulk deal(s) in respect of all transactions in scrip where total quantity of shares bought/sold by a single client in a day is more than 0.5% of the number of equity shares of the company listed on Exchange.
- (ii) Verify that stock broker has disclosed to exchange in respect to all transactions in scrip where total quantity of shares bought/sold by a single client in a day is more than 0.5% of the number of equity shares of the company listed on Exchange.
- (iii) Verify that proper disclosure as per the format of the Exchange has been made.
- (iv) Ensure that disclosure has been made within the time lines prescribed by the exchange.

Proprietary Account Trading

4.25 The internal auditor should:

- (i) Verify that stock broker has intimated the place or location alongwith terminal details to the exchange in case stock broker wants to avail of the facility of placing orders on 'Pro-Account' from his default location.
- (ii) Verify that stock broker has taken permission of the exchange for the facility of 'Pro-Account' trading from location other than default location or on CTCL Terminals.
- (iii) Ensure that the undertaking has been submitted to the exchange in the prescribed format for availing the facility of proprietary trading from location other than default location and it is taken on the adequate amount of stamp paper.
- (iv) Verify that no client trade has been executed by the stock broker from 'Pro-Account' enabled trading terminals (including CTCL Terminals) located at other than default location.

Disclosure of Proprietary Trading to Clients

4.26 The internal auditor should:

- (i) In case broker does proprietary trading, verify that broker has disclosed to his clients about proprietary trading upfront to his clients at the time of entering into the member client agreement.
- (ii) In case of broker commencing trade on proprietary account, verify that broker has informed to all his clients about proprietary trading before carrying out any trading on pro account.

Compliance Officer

4.27 The internal auditor should:

- (i) Verify that the appointment of compliance officer has been intimated to the stock exchange.
- (ii) Verify that any change in the compliance officer has been intimated to the stock exchange.
- (iii) Verify whether the roles and responsibilities of the compliance officer have been defined by the management and the same have been adhered to.

Investor Greivance

4.28 The internal auditor should:

- (i) Verify that an exclusive e-mail Id for registering complaints of clients is designated.
- (ii) Verify that all complaints received from investors are recorded in complaints register with adequate details.

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Appendix-I

Illustrative Internal Audit Engagement Letter for a Stock Broking Entity

It is an illustrative internal audit engagement letter for a stock broking entity drafted on the basis of SIA 8, “*Terms of Internal Audit Engagement*” issued by the Institute of Chartered Accountants of India. It may vary according to individual requirements and circumstances relevant to the engagement.

<on the letter head>

Date:

Place:

To,

<Board of Directors> or

Mr./Mrs.<Name of appropriate representative of Board of Directors>

<Designation>

Dear Sir/Madam,

Sub: Internal Audit Engagement Letter

This is with reference to your letter dated _____ appointing us to conduct internal audit of M/s ABC as per the scope agreed.(If the appointment is in accordance with the circular no. MIRSD/ DPSIII/ Cir-26/08 dated August 22, 2008 issued by the Securities and Exchange Board of India, the same is to be mentioned)

Internal Audit of Stock Brokers

This letter is to confirm our understanding of the terms and objectives of the engagement and the nature and limitations of the services, we will provide.

Scope and Objectives

Normally the scope and objective of an internal audit differs from broker to broker based on their individual requirements. At the same time the place from which audit needs to be conducted (head office/ branches, etc) also may be specified at the time of internal audit. In such cases the scope is required to be drafted keeping in the mind the requirements of an internal audit assignment. At times, such internal audit assignments have been mandated due to requirement of the regulators (SEBI), then the scope as given in the relevant circular / notification of the regulator should be covered hereunder.

Period:

The audit assignment will be for the period covering from _____ to _____ and shall be deemed to have been renewed for such subsequent periods unless terminated

Responsibility:

The management would be responsible for regular compliance of circulars and guidelines issued by the SEBI and the respective stock exchanges.

As part of our normal procedures, we may request you to provide timely and accurate data, information, records, personnel, etc., and to cooperate with the audit teams. The internal audit will be conducted on test basis and on the basis of the information and explanation provided by you. However, having regard to the test nature of an audit, persuasive rather than conclusive nature of audit evidence together with inherent limitations of any accounting and internal control system, there is an unavoidable risk that even some material misstatements, resulting from fraud, and to a lesser extent error, if either exists, may remain undetected.

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Report:

Our Audit Report shall contain the following information:

- Executive Summary.
- Detailed Audit Observations, covering our Observations, Recommendations and Annexures of Evidences.
- Presentation to Management and Audit Committee.

(In case if the audit report format has been agreed between the auditor and the auditee or if it is prescribed by any regulator/s, the same needs to be covered.)

Fees:

The fees for the assignment for the above period is estimated as Rs. _____ excluding statutory levies and other out of pocket expenses.

Resources Required:

- Access to all the data, record, employees required for the effective performance of internal audit.
- Computers with access to company ERP, E-mail and other systems with printing facility with adequate stationary.
- As part of our normal procedures, we may request you to provide written confirmations of any information or explanations given to us orally during the course of our work.

Confidentiality Clause:

We shall maintain confidential all the information collected as part of the engagement and shall not disclose them unless until necessary as per the regulations of the land of assignment. In case of need to disclose the information, we shall take the permission of the client coordinator before disclosing.

Internal Audit of Stock Brokers

Termination Clause:

The assignment can be terminated by either parties by giving a notice in advance of at least 1 month. Thereafter the information/ documentation collected shall be returned back to the client.

Please sign and return the attached copy of this letter to indicate that it is in accordance with your understanding of the arrangements for the assignment.

XYZ and Co.

Chartered Accountants

Signature

(Name of the Member)

Designation

Membership No.

Address :

Date:

Acknowledged on behalf of _____ (name of the Organisation)

Signature

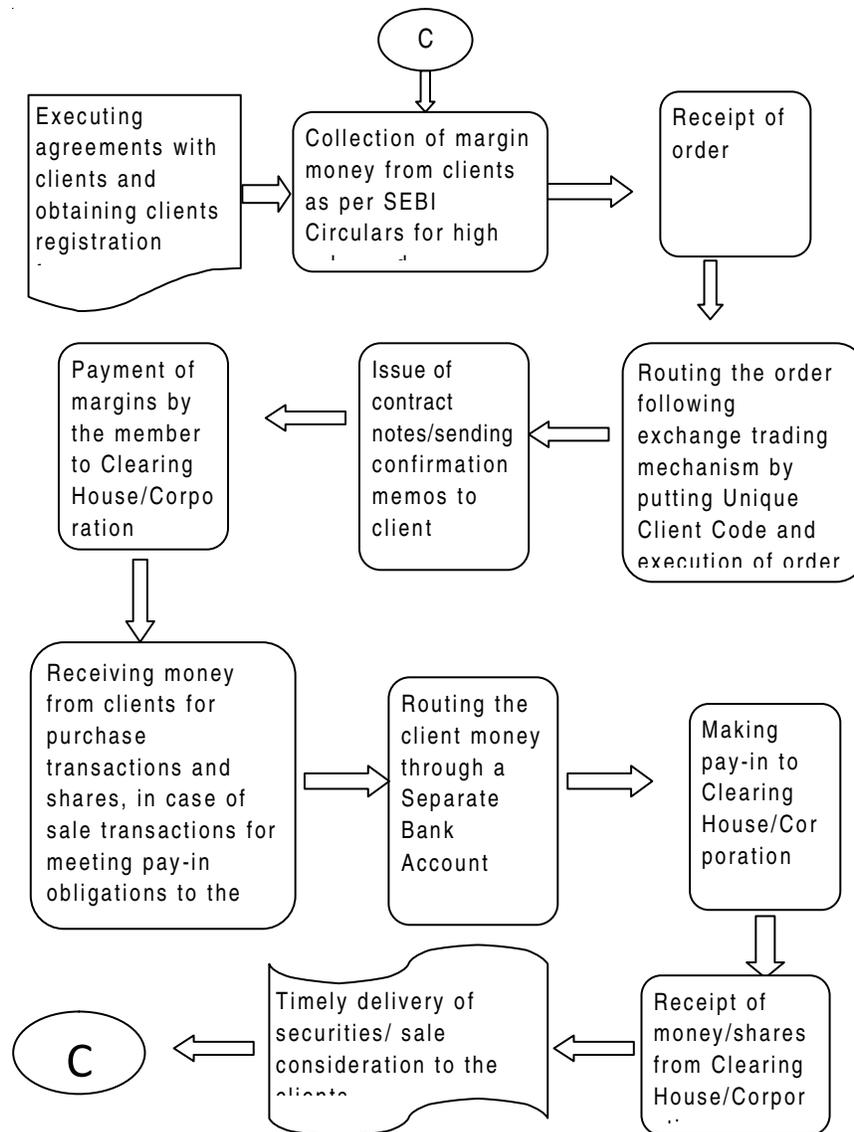
Name and Designation

Date:

Address:

Appendix-II

Illustrative Flowchart of the Business Process of a Stock Broking Entity



Appendix - III

Indicative Compliance Due Dates for Stock Brokers

(The compliance due dates given below are only an indicative list and is subject to changes made by Exchange / SEBI from time to time.)

Sr. No.	Particulars	Periodicity	Submission to	Due Date
1.	Annual Returns	Yearly	BSE	On or before 31 st October
2.	Annual Returns	Yearly	NSE	<p>For the member having financial year ending 31st March:</p> <p>On or before 31st October</p> <p>For the member having financial year ending other than 31st March:</p> <p>Within a period of 6 months from the end of their respective financial year.</p>
3.	Net worth Certificate	Half Yearly	NSE and BSE	Within 3 months of the end of half year
4.	Annual Compliance Report	Yearly	NSE	Within 3 months from the end of accounting year
5.	Temporary Client Funding	Report Monthly	NSE	Within 7 days from the end of the month
6.	Temporary Client	Monthly	BSE	Within 7 days from the end of the month or as

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Sr. No.	Particulars	Periodicity	Submission to	Due Date
	Funding Report			the date prescribed by BSE from time to time
7.	Intimation of Change in Compliance Officer	On Change	NSE and BSE	Immediately
8.	Intimation of Change in Principal Officer (PMLA)	On Change	FIU – India	Immediately
9.	Proof of Insurance cover	Yearly	NSE and BSE	On or before 31 st July
10.	Statement of Accounts for Funds and Securities	Quarterly	Clients of NSE	Within a month of the expiry of the period not exceeding three months
11.	Statement of Accounts for Funds and Securities	Half Yearly	Clients of BSE	Within 30 days from the end of the half year
12.	Submission of SSL certificate for IBT services	Yearly	NSE and BSE	On or before 31 st July
13.	System Audit Report	Yearly	NSE and BSE	On or before 31 st July
14.	Net worth Certificate for MTF (Margin Trading Facility)	Half Yearly	NSE and BSE	Within one month from the date of half year ending i.e. 31 st March and 30 th September

Internal Audit of Stock Brokers

Sr. No.	Particulars	Periodicity	Submission to	Due Date
15.	Compliance Certificate in case of MTF	Half Yearly	NSE and BSE	Within one month from the date of half year ending i.e. 31 st March and 30 th September
16.	Unique Client Code details	Daily	NSE and BSE	Prior to commencement of trading on the exchange
17.	F&O Client Margin Reporting	Daily	NSE and BSE	Within two working days from the trade date
18.	Issue of Contract Notes	Daily	Clients	Within 24 hours from the trade
19.	Payout of Funds to clients	Daily	Clients	On T+2 day by 9:30 A.M.
20.	Payout of Securities to clients	Daily	Clients	On T+2 day by 9:30 A.M.
21.	Trading Terminal Details	—	NSE and BSE	Prior to activation of trading terminal

Appendix - IV

Indicative Fines and Penalties – BSE

[List of indicative penalty in respect of violations observed during inspections or otherwise in Cash segment, Derivative and Debt segment as prescribed by BSE (vide BSE Notice no. 20080307 - 8 dated March 07, 2008)]

No.	Details of contravention	Penalty (Fine in Rupees)
I - Dealings with Clients		
1	Client Registration:	
	(a) Documents not executed	Rs.10,000/- per client
	(b) Inclusion of contravening clauses/ omission of material details (c) otherwise not in the prescribed format	Rs.10,000/- Advice
2	Non-maintenance of Books of Accounts, Records and Documents including non maintenance of Client-wise Accounts for Funds/ Securities Mis-utilisation of clients' funds or securities	Rs.50,000/-
3	Bank and Demat Account Operations:	
	(a) Separate Clients Bank or Demat Account not maintained for clients' transactions	Rs.10,000/-
	(b) Pay-in/ Pay-out not received from / delivered to respective clients' accounts	In excess of 2% of number of instances, fine of Rs.10,000/- Otherwise, Advice

Internal Audit of Stock Brokers

No.	Details of contravention	Penalty (Fine in Rupees)
	(c) Non-segregation of Own and Clients' Funds or Securities	In excess of 2% of number of instances, fine of Rs.10,000/-Other-wise, Advice
	(d) Delay in release of payout of Funds/ Securities to clients	In excess of 2% of number of instances, fine of Rs.10,000/- Otherwise, Advice
	(e) Delayed/ Non payment of Dividend (Delay in Excess of 90 days)	0.5 % of the amount (Rs.10,000/- if amount is not known)
4	Excess Brokerage Charged	TM to be advised to refund the excess brokerage charged to the constituents and fine of Rs.50,00/- or Excess Brokerage whichever is higher. If not charged at all – Advice
5	Use of Multiple Codes for Client or Own Trades	Advice
6	Contract Note related contraventions: (a) Non issue/ delay in issue/ issued with material discrepancies or contract notes not signed by Authorised Signatory or Duplicates or Copies/ Proof of dispatch of contract notes not maintained Non-compliances related to Spot Transaction	Rs.10,000/-

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No.	Details of contravention	Penalty (Fine in Rupees)
	(b) Otherwise not as prescribed Non-compliances related to STP system	Advice
7	Quarterly Statement of Accounts for funds or securities not sent	In excess of 2% of number of clients, fine of Rs10,000/- Other discrepancies - Advice
8	Cash dealings with clients	Fine of 0.1% of the value in excess of Rs 10 lakhs. Otherwise - Advice
9	Non-disclosure of trading on own account to clients Exclusive Email-ID for investors' complaints not created or not displayed	Advice
10	Transfer of Trades/ Errors at the time of order entry	In excess of 2% of number of orders executed, fine of 0.1% of the value of trades transferred
11	Margin Trading related contraventions:	
	(a) Agreement not executed with clients	Rs.5,000/- per client
	(b) Margin Trading facility in scrips other than permitted	Rs.10,000/-
	(c) Short collection of margin in excess of 20%	Rs.10,000/-
	(d) Other procedural contraventions	Rs.10,000/-

Internal Audit of Stock Brokers

No.	Details of contravention	Penalty (Fine in Rupees)
II - Dealings with Intermediaries		
1	Dealing with Unregistered	Rs.1,00,000/- per Unregistered Intermediary.Further, member is to be advised to ensure that the entities stop dealing as unregistered intermediaries and be directed to withdraw the terminal(s), if any, allotted to such entities, immediately. In addition to monetary fine, suspension of the trading membership may also be considered depending upon the gravity of the violation, in cases where instances of dealings with more than 5 Unregistered Intermediaries are observed.
2	Doing business for/ through other TMs or sub-brokers of other TMs without prior approval of the Exchange	Rs.10,000/- for dealing with member of same Exchange. With brokers/ sub-brokers of other Exchanges - Advice

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No.	Details of contravention	Penalty (Fine in Rupees)
3	Inspection of active Sub-Brokers/ Branches not done Sharing of Brokerage/ Commission, except as permitted under the Bye-Laws of the Exchange. Non-compliances by Subsidiaries of Regional Exchanges.	Advice
III - Trading System and Office Management		
1	Operation of Trading Terminals by persons other than an Approved User/ Person	Advice
2	Allowing Trading Terminals to be operated by persons without BCFM Certification	Advice
3	(a) Unauthorised extension of BOLT or IML Terminal/ Commencement of Internet trading without prior approval	Rs.50,000 per terminal. If trading terminals are observed to be used for carrying out illegal trading activity, suspension of the trading membership may also be considered depending upon the gravity of the violation.
	(b) Errors in upload of Terminal details to the Exchange	In excess of 5 terminals, fine of Rs 5,000/- per terminal
4	Non-display of Notice Board or SEBI Registration Certificate	Rs.10,000/-

Internal Audit of Stock Brokers

No.	Details of contravention	Penalty (Fine in Rupees)
5	Non-appointment of Compliance Officer	Rs.10,000/-
6	Execution of trades on own account from locations other than those permitted	Rs.10,000/-
7	Evasion of margin by entering wrong client code	0.3% of the value of trades or Rs.25,000/- whichever is higher.
8	Not following the Advertisement Code of the Exchange	Rs.5,000/-
9	Non-compliance with PMLA Requirements	Rs.10,000/-
10	Books of Accounts, Registers, Records and Documents not in prescribed format/ not maintained properly or not submitted for inspection	Advice
11	Post Compliance Inspection: (a) Submitting wrong Compliance Certificate	Rs.15,000/-
	(b) Repeated violations observed in both, last normal inspection and post compliance inspection and where member was warned.	Fines prescribed for violations observed in routine inspection.
	(c) Repeated violations observed in both, last routine inspection and post compliance inspection and where penalty was levied	Twice the amount of penalty levied in routine inspection.
IV - Margin reporting requirement (Derivative segment)		
1	% of factual wrong reporting of margin collection from constituents to total margin reported as collected.	

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No.	Details of contravention	Penalty (Fine in Rupees)
	Upto 5%	Warning
	> 5% and upto 10%	0.5% of wrongly reported amount
	> 10% and upto 25%	2% of the wrongly reported amount
	> 25% and upto 50%	2% of the wrongly reported amount and suspension from trading for 1 day
	> 50%	2% of the wrongly reported amount and suspension from trading for 5 days
2	'% of (margin available but not properly accounted for/ received from third parties) to total margin reported as collected.	
	Upto 5%	Advice
	> 5% and upto 10%	0.5% of the wrongly reported amount, subject to maximum of Rs 25,000/-
	> 10% and upto 25%	0.75% of the wrongly reported amount, subject to maximum of Rs 50,000
	> 25% and upto 50%	1% of the wrongly reported amount,

Internal Audit of Stock Brokers

No.	Details of contravention	Penalty (Fine in Rupees)
		subject to aximum of Rs 75,000/-
	> 50%	1.25% of the wrongly reported amount, subject to maximum of Rs 1,00,000/-

Note:- All the requisite records, if available/maintained by the trading members in electronic form, shall be considered as compliance.

Appendix – V

Indicative Fines and Penalties – NSE

[List of indicative penalty in respect of violations observed during inspections or otherwise in Capital Market, F&O and Wholesale Debt Market segments as prescribed by NSE vide Circular No. NSE/INSP/2007/9971 dated December 27, 2007)]*

No.	Details of contravention	Penalty (Fine in Rupees)
I – Dealings with Clients		
1	Client registration documents:	
	(a) not executed	10000/- per client
	(b) inclusion of contravening clauses/ omission of material details	10000/-
	(c) otherwise not in the prescribed format	Advice
2	Client-wise accounts for funds/ securities not maintained	50000/-
3	Bank and demat account operations:	
	(a) Separate clients bank or demat account not maintained	10000/-
	(b) Pay-in/ Pay-out not received from/ delivered to respective clients	In excess of 2% of number of instances, fine of Rs. 10000/- Otherwise, advice
	(c) Non-segregation of own and clients' funds or securities	In excess of 2% of number of instances, fine of Rs. 10000/- Otherwise, advice
	(d) Delay in release of payout of funds/ securities	In excess of 2% of number of instances,

Internal Audit of Stock Brokers

No.	Details of contravention	Penalty (Fine in Rupees)
	(e) Delayed/ non-payment of dividend (delay in excess of 90 days)	fine of Rs. 10000/- Otherwise, advice 0.5 % of the amount (Rs. 10000/- if amount not known)
4	Excess brokerage charged	TM to be advised to refund the excess brokerage charged to the constituents and fine of the excess brokerage or Rs. 5000/- whichever is higher
5	Use of multiple codes for a client or own trades	Advice
6	Contract notes related contraventions: (a) Issued with material discrepancies/ Duplicates or copies or proof of dispatch of contract notes not maintained	10000/-
	(b) otherwise not as prescribed	Advice
7	Quarterly statement of accounts for funds or securities not sent	In excess of 2% of number of clients, fine of Rs.10000/- Other discrepancies - Advice
8	Cash dealings with clients	0.1% of the value in excess of Rs. 10 lakhs Otherwise - Advice
9	Non-disclosure of trading on own account to clients/ Exclusive	Advice

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No.	Details of contravention	Penalty (Fine in Rupees)
	E-mail ID for investors' complaints not created or not displayed	
10	Transfer of trades/ errors at the time of order entry	In excess of 2% of number of orders executed, fine of 0.1% of value of trades transferred
11	Margin trading related contraventions: (a) Agreement not executed with clients (b) Margin trading facility in scrips other than permitted (c) Short collection of margin in excess of 20% (d) Other procedural contraventions	5000/- per client 10000/- 10000/- 10000/-
II - Dealings with Intermediaries		
1	Dealing with unregistered intermediaries in CM segment/ intermediaries in F&O segment	100000/- per unregistered intermediary TM to be advised to ensure that the entities stopped dealing as unregistered intermediaries and directed to withdraw the terminal(s), if any, allotted to such entities immediately In addition to monetary fine, suspension of the trading membership

Internal Audit of Stock Brokers

No.	Details of contravention	Penalty (Fine in Rupees)
		may also be considered depending upon the gravity of the violation, in cases where dealings with more than 5 unregistered intermediaries (in the CM segment) and/ or intermediaries (in the F&O segment) are observed
2	Doing business for/ through other TMs or sub-brokers of other TMs without prior approval of the Exchange	10000/- With brokers/ sub-brokers of other exchanges - Advice
3	Inspection of active sub-brokers/ branches not done	Advice
III - Trading system and office management		
1	Operation of terminals by persons other than an approved user/ person	Advice
2	Allowing trading terminals to be operated by persons without NCFM certification	CM - Advice F&O - Rs 1000/- per terminal
3	(a) Unauthorised extension of NEAT terminal/ Non-upload of CTCL details to the Exchange/ Upload of CTCL details with incorrect terminal location	50000/- per terminal In cases where non-upload of details of more than five CTCL terminals are observed and such CTCL terminals are also observed to be operated by entities

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No.	Details of contravention	Penalty (Fine in Rupees)
		acting as unregistered intermediaries in the CM segment or as intermediaries in the F&O segment and/ or such terminals are observed to be used for carrying out illegal trading activity, suspension of the trading membership may also be considered depending upon the gravity of the violation
	(b) Errors in upload of CTCL details	In excess of 5 terminals, Rs 5000/- per terminal
4	Non-display of notice board or SEBI registration certificate	10000/-
5	Non-appointment of compliance officer	10000/-
6	Execution of trades on own account from locations other than those permitted by the Exchange	10000/-
7	Evasion of margin	0.3% of the value of trades s.t. a minimum of Rs 25000/-
8	Not following the advertisement code of the Exchange	5000/-

Internal Audit of Stock Brokers

No.	Details of contravention	Penalty (Fine in Rupees)
9	Non-compliance with PMLA requirements	10000/-
10	Books of accounts, registers, records and documents not in prescribed format / not maintained properly	Advice
IV - Margin reporting requirement (F&O segment)		
(a) % of factual wrong reporting of margin collection from constituents to total margin reported as collected is :		
	Upto 5%	Warning
	> 5% and upto 10%	0.5% of wrongly reported amount
	> 10% and upto 25%	2% of the wrongly reported amount
	> 25% and upto 50%	2% of the wrongly reported amount and suspension from trading for 1 day
	> 50%	2% of the wrongly reported amount and suspension from trading for 5 days
(b) % of (margin available but not properly accounted for / received from third parties) to total margin reported as collected is :		
	Upto 5%	Advice
	> 5% and upto 10%	0.5% of the wrongly reported amount, (Subject to a

Compendium of Industry Specific TG on Internal Audit

No.	Details of contravention	Penalty (Fine in Rupees)
		maximum of Rs 25,000/-)
	> 10% and upto 25%	0.75% of the wrongly reported amount,(Subject to a maximum of Rs 50,000)
	> 25% and upto 50%	1% of the wrongly reported amount, (Subject to a maximum of Rs 75,000/-)
	> 50%	1.25% of the wrongly reported amount,(Subject to a maximum of Rs 1,00,000/-)

Note: Above penalties are subject to changes made by Exchange/ SEBI from time to time.

Appendix – VI

Commonly Observed Irregularities/ Violations/ Deficiencies

The following are the commonly observed irregularities/violations / deficiencies relating to various areas:

Books of Accounts, Records and Documents

- (a) The documents are not kept at location as intimated to the Securities Exchange Board of India.

Client Registration

- (a) Execution of Member Client Agreement otherwise than in the prescribed format or execution of common Member Client Agreement for more than one Exchange.
- (b) Non-execution of Member Client Agreements/ Tripartite Agreements prior to execution of trades for the clients.
- (c) Not updation of the client's registration forms including the financial details of the clients on a periodic basis.
- (d) Non-segregation of mandatory and non-mandatory (voluntary/ optional) documents for registration of clients.
- (e) Wrong category of Client Registration Form is used for registering a client, e.g., Individual client category of form is used for registering Non-individual category of client.
- (f) In- person verification has not been carried out and/ or stamp of the members who has done in-person verification has not been affixed.
- (g) All supporting documents are not verified with original and/ or stamp of verification on all supporting documents is not affixed along with the signature of an authorised person.
- (h) PAN of the client is not cross verified with Income Tax Website or proof of the same is not maintained.

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- (i) Board resolution has not been obtained while opening of corporate clients and/or board resolution authorizing trading in derivatives segment has not been obtained.

Unique Client Code

- (a) Allotting multiple client codes to clients.
- (b) Not uploading the correct and complete details of the clients including the PAN details in the UCC database of the Exchange.
- (c) Execution of trades before uploading the unique client code to the exchange.

Margins

- (a) Wrong margin has been reported to exchange in case of derivatives segment.
- (b) In case of derivatives segment, unspecified scripts have been considered as margin shares while reporting to the exchange and proper hair cuts as applicable have not been levied while valuing the shares held as margins.

Register of Transactions (Sauda Book) and Contract Note

- (a) Not having pre-printed/ computerized running serial number on a financial year basis.
- (b) Not issuing contract note in the prescribed format.
- (c) Contract notes have been issued for trades which have not been executed on the platform of the stock exchange/ contract notes have been issued for fictitious trades not executed at the exchange.
- (d) The dealing office address is not printed on the contract notes for trades executed on the NSE.
- (e) Contract notes have been signed by unauthorised signatories.

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- (f) Client codes have been modified/ contract notes have been issued in name of clients other than those as registered with the exchange.
- (g) Not issuing/ dispatching the contract notes within 24 hours of execution of trades.
- (h) Brokerage has been charged to the clients in excess of the limit as specified by the exchange.
- (i) Details of the trades are not attached in case of trades for which summary contract notes have been issued.
- (j) Non-issuance of statement of STT on an annual basis at the end of the financial year.
- (k) Physical contract notes have not been issued to clients within 24 hours where the ECNs have not been delivered or has been rejected (bouncing of mails) by the E-mail ID of the client.
- (l) In case where ECNs are issued, the contract note has not been simultaneously published on the designated web-site of broker.
- (m) In case of Option, brokerage charged to clients exceeding 2.5% of premium or Rs. 100/- per lot.

Settlement of Fund

- (a) Not maintaining a separate Client Bank Account for client's funds.
- (b) Client Bank Account is not designated as a Client Account by including words "Client" in the title of the Client Bank Account.
- (c) Using Client Bank Account for meeting expenses or for non-specified purposes/ own purpose.
- (d) Not routing client's funds through the Client Bank Account.

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- (e) The funds are received from/ paid to the clients other than from/ to the account as informed by them to the broker as their own account.
- (f) Accepting cash from clients whether against obligations or as margins for purchase of securities and/or give cash against sale of securities to clients.

Settlement of Securities

- (a) Not maintaining a separate beneficiary account for securities of clients retained by the broker.
- (b) Not maintaining client wise segregation of securities retained in the client beneficiary account.
- (c) Receipt and delivery of securities from a demat account other than the demat account of the client in whose account transaction has been executed and contract issued.

Statements of Account for Funds and Securities

- (a) Not sending Statement of Account for funds and securities to the clients at least once in every quarter within a month of the expiry of the said period.
- (b) Delay in sending the statement of account of funds and securities.
- (c) Issuing statement of account of funds and securities without error reporting clause requiring the client to report errors within 30 days of receipt thereof to the Trading Member.
- (d) Not maintaining records of dispatch/ confirmation of the clients.

Brokerage and Revenue Leakage

- (a) Non-payment/delay in payment of dividend received on account of securities of clients lying with the broker are not transferred to the respective clients.
- (b) The corporate benefits are not passed to correct client.

Trading Terminals

- (a) Trading terminals allotted at locations other than the registered office/ branch office of the Trading Member or the offices of the sub-brokers.
- (b) Location and user details of trading terminals are not correctly uploaded to the Exchange.
- (c) Indicating offices as Branch Offices that are neither leased/ licensed/ rented nor owned by the Trading Member.
- (d) Location of pro-account trading terminals is not informed to the exchange or pro-transactions are entered through unauthorised pro-trading terminals.
- (e) The CTCL/ IML terminals are not mapped to their 12/16 digits location Id respectively.
- (f) Executing pro-account trades from multiple locations without prior approval of the exchange.
- (g) Executing trades for another member of the Exchange without prior approval of the exchange.

Sub-broker/ Remisier/ Authorised Person

- (a) Brokerage is shared with un-registered sub-broker/ remisier.
- (b) Brokerage is shared prior to the registration of the person as a sub-broker/ remisier.
- (c) Inspection of the sub-brokers has not been carried out by the broker.

Advertisement

- (a) The advertisement has been issued for business promotion without the permission of the stock exchange.

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Margin Trading Facility

- (a) Prior permission of the exchange has not been obtained before providing margin trading facilities to the clients.
- (b) The broker has used borrowed funds from unauthorised sources for the purpose of providing margin trading facility.

Prevention of Money Laundering

- (a) The broker has not complied with the requirements of appointing a principal officer and intimating the same to Financial Intelligence Unit (FIU).
- (b) The broker has not adopted a framework for implementation of Anti Money Laundering Policies.
- (c) The broker does not have a proper reporting of the cash and suspicious transactions to the Financial Intelligence Unit (FIU).

Notice Board and SEBI Registration Certificate

- (a) Non-display of notice board and SEBI registration certificates at all offices of the broker/ office of the sub-broker.
- (b) The notice board is not made in the format as prescribed by the exchange or does not have all the information as required to be specified on the notice board.

Other Observations

- (a) Dealing with more than one member of another Exchange for proprietary trading.
- (b) The information regarding block/ bulk deals have not been provided to the exchange.
- (c) Not having a prudent system of risk management which is well documented and made accessible to the clients and the exchanges as and when required.
- (d) Not maintaining Investors Grievance Register.

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- (e) Not designating an E-mail ID exclusively for the purpose of registering complaints by investors and display such E-mail IDs and other relevant details prominently on their websites and in the various materials/ pamphlets/ advertisement campaigns initiated by them for creating investor awareness.
- (f) Change in shareholding pattern without prior approval of the exchange.
- (g) Change in Directors without prior approval of the exchange.

Appendix - VII

List of Important BSE/SEBI Rules, Bye-Laws, Regulations and Circulars

Sr. No.	Particulars	Reference
Books of Accounts, Records and Documents		
1	Books of accounts to be maintained.	<ul style="list-style-type: none"> ● Reg. 17(1) if the SEBI (Stock Brokers and Sub Brokers) Rules, 1992 and ● Rule 15 of SC (R) Rules, 1957
2	Maintenance of books of accounts, records and documents	<ul style="list-style-type: none"> ● Exchange Notice No.20050805-20 dated August 5, 2005 and ● Exchange Notice No. 20051227-18 dated December 27, 2005.
Client Registration		
3	Client Registration Forms and Client database (Uniform Documentary Requirements for trading) Member Client Agreement FormatUniform Risk Disclosure Document Model Tripartite Agreement Broker – sub-broker Agreement	<ul style="list-style-type: none"> ● Exchange Notice No. 20040827-11 dated August 27, 2004
4	Disclosure of Proprietary Trading	<ul style="list-style-type: none"> ● Exchange Notice No. 20031125-7 dated November 25, 2003
5	The client information is periodically reviewed and updated on an ongoing basis in view of the current trading activity of the client.	<ul style="list-style-type: none"> ● Exchange Notice No. 20060303-20 dated March 3, 2006, ● Exchange Notice No. 20060704-5 dated July 04, 2006 and ● Exchange Notice No. 20061120-9 dated November 20, 2006.

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Sr. No.	Particulars	Reference
6	Segregation of mandatory and voluntary documents/ clauses in the client registration docket	<ul style="list-style-type: none"> ● Exchange Notice No. 20060704-6 dated July 04, 2006.
7	Dispatch of copy of Client Registration documents along with UCC and Email ID of the client.	<ul style="list-style-type: none"> ● Exchange Notice No. 20080624-8 dated June 24, 2008.
8	In-person' verification of Clients by Stock Brokers	<ul style="list-style-type: none"> ● Exchange Notice No. 20080707-3 dated July 07, 2008.
9	Remisier to sign as an Introducer in KYC Form	<ul style="list-style-type: none"> ● Exchange Notice No. 20080801-2 dated August 01, 2008.
Unique Client Code		
10	Entering correct\ unique client codes while placing the orders in the system and mapping the client code with PAN\ Passport etc. in the back office and entering the client details on BOLT	<ul style="list-style-type: none"> ● Exchange Notice Nos. 93424/2001 dated July 23, 2001 and ● Exchange Notice No. 20040128-3 dated January 28, 2004.
11	Transfer of trades executed for one client to another client or own account to client account or <i>vice-versa</i>	<ul style="list-style-type: none"> ● Exchange Notice No. 101502/2001 dated October 12, 2001.
Trading Terminals		
12	Installation of BOLT Terminals other than at members' registered offices, branch offices and registered sub-brokers office.	<ul style="list-style-type: none"> ● Exchange Notice No. 104616/2001 dated November 12, 2001.
13	"Pro-account" trading terminal	<ul style="list-style-type: none"> ● Exchange Notice No. 20030909-1 dated September 9, 2003.
14	BOLT Terminal operation by Remisier	<ul style="list-style-type: none"> ● Exchange Notice No. 20040205-13 dated February 5, 2004.

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Sr. No.	Particulars	Reference
15	Registering/Uploading of IML/TWS location information	<ul style="list-style-type: none"> ● Exchange Notice No.20050808-26 dated August 8, 2005, ● Exchange Notice No. 20050930-13 dated September 30, 2005 and ● Exchange Notice No. 20051004-13 dated October 04, 2005.
16	Uploading of Location information for Internet Trading ID	<ul style="list-style-type: none"> ● Exchange Notice No.20070531-8 dated May 31, 2007.
17	TWWS/IML Registration on BOLT and FAQ's on the same	<ul style="list-style-type: none"> ● Exchange Notice No. 20050823-20 dated August 23, 2005.
18	BSE's Certification on Securities Market (BCSM) for users of BOLT TWS / IML Terminals	<ul style="list-style-type: none"> ● Exchange Notice No. 20070522-25 dated May 22, 2007.
19	Direct Market Access Facility	<ul style="list-style-type: none"> ● Exchange Notice No. 20080417-24 dated April 17, 2008.
Margin and Risk Management		
20	Comprehensive Risk Management Framework for the Cash Market.	<ul style="list-style-type: none"> ● Exchange Notice No. 20050304-9 dated March 04, 2005.
Contract Note		
21	Issue of contract notes.	<ul style="list-style-type: none"> ● Bye-law – 219 and ● Exchange Notice No. 5116/93 dated November 11, 1993.
22	Contract Note format prescribed by the Exchange.	<ul style="list-style-type: none"> ● Appendix B to Regulation 14, ● Exchange Notice No. 20060627-18 dated June 27, 2006 and ● Exchange Notice No. 20021109-9 dated November 9, 2002.

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Sr. No.	Particulars	Reference
23	Electronic Contract Notes – Additional Conditions	<ul style="list-style-type: none"> ● Exchange Notice No. 20050909-13 dated September 9, 2005.
24	Signature on Contract Notes and numbering of Contract Notes	<ul style="list-style-type: none"> ● Exchange Notice No. 4914/96 dated August 13, 1996 and ● Exchange Notice No.5419/96 dated September 14, 1996.
25	Board Resolution / Power of Attorney for signing of Contract Notes to be submitted to the Exchange	<ul style="list-style-type: none"> ● Exchange Notice No.1024/98 dated March 20, 1998.
26	Issue of contract notes within 24 hours.	<ul style="list-style-type: none"> ● Bye-law – 247A
27	Acknowledge on contract notes. Proof of delivery in case of dispatch through courier or post	<ul style="list-style-type: none"> ● Exchange Notice No. 4914/96 dated August 13, 1996.
28	Duplicates of the contract notes issued to be maintained. Counter foils to be maintained with adequate details.	<ul style="list-style-type: none"> ● Exchange Notice No. 4850/97 dated December 10, 1997.
29	Details of the trade to be attached in case of issue of consolidated contract notes	<ul style="list-style-type: none"> ● Exchange Notice No. 4646/97 dated November 29, 1997
30	Provision for printing of PAN of the member and / or PAN of the constituents, wherever the value of contract exceeds Rs. 1 lakh.	<ul style="list-style-type: none"> ● Exchange Notice No. 20020931-4 dated September 30, 2002.
31	Compulsory PAN in Derivatives	<ul style="list-style-type: none"> ● Exchange Notice No.20050926-11 dated September 26, 2005.
32	Compulsory PAN in Cash Markets	<ul style="list-style-type: none"> ● Exchange Notice No. 20061215-19 dated December 15, 2006.
33	Permanent Account Number (PAN) to be the sole identification	<ul style="list-style-type: none"> ● Exchange Notice No. 20070626-28 dated June 26, 2007.

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Sr. No.	Particulars	Reference
	number for all transactions in the securities market	
34	Brokerage to be charged	● Regulation 14
35	Commission terms for remisiers and sharing of Brokerage	● Exchange Notice No. 20051207-10 dated December 07, 2005.
Straight Through Processing (STP)		
36	Mandatory use of STP system for all Institutional trades executed on the Stock exchanges	● Exchange Notice No. 20040420-12 dated April 20, 2004.
37	STP and use of exchange allotted Unique Client Codes	● Exchange Notice No. 20040705-10 dated July 5, 2004.
Off Market Transactions		
38	Contract notes to be issued for trades not executed through the BOLT	● Exchange Notice No. 24512/99 dated September 2, 1999.
39	Issue of contract note for transactions in securities not listed/ permitted on the Exchange	● Bye-law – 26.
40	Written consent to be taken from the client for entering into a principal to principal transaction	● Bye-law - 199 and ● Exchange Notice No. 4914/96 dated August 13, 1996.
41	Contract notes to be issued in Form B for entering into principal to principal transactions	● Exchange Notice No. 4914/96 dated August 13, 1996.
42	Transactions done on a spot basis to be reported to the Exchange	● SEBI Circular No. SMD/RCG/CIR/(BRG)/293/95 Dated March 14, 1995.
43	Transactions done on a spot basis is to be reported to the Exchange within the prescribed time limit	● SEBI Circular No. SMD/RCG/CIR/(BRG)/293/95 Dated March 14, 1995.

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Sr. No.	Particulars	Reference
44	Transaction done on a spot basis to be settled within the prescribed time limit	<ul style="list-style-type: none"> ● Section 2(i) of the SCRA, 1956
Client Monies		
45	Client's funds to be routed through designated 'Client Account'	<ul style="list-style-type: none"> ● Bye-law – 247A
46	Segregation of own and client transactions in separate bank accounts	<ul style="list-style-type: none"> ● Exchange Notice No. 7031/94 dated December 6, 1994
47	Clients Account not to be used for non-specified purposes	<ul style="list-style-type: none"> ● Exchange Notice No.4850/97 dated December 10, 1997
48	Client account not to be used for own/ misuse of funds / unauthorized transfer of funds from one client's account to another client's account. Payments of funds to clients Payment of dividend/ reconciliation of dividend account	<ul style="list-style-type: none"> ● Exchange Notice No. 20020917-2 dated September 17, 2002.
49	Transaction with Clients in Cash (Mode of Payment)	<ul style="list-style-type: none"> ● Exchange Notice No. 20020917-2 dated September 17, 2002, ● Exchange Notice No. 20030903-5 dated September 3, 2003 and ● Exchange Notice No. 20050324-21 dated March 24, 2005.
Clients' Securities		
50	Securities due to the clients transferred to the members' beneficiary account.	<ul style="list-style-type: none"> ● Bye-law – 247A
51	Securities due to one client transferred to another client OR Securities due to the clients	<ul style="list-style-type: none"> ● Exchange Notice Nos. 7031/94 dated December 6, 1994

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Sr. No.	Particulars	Reference
	used for meeting the pay-in-obligation of the member/ other client	
52	Delay in delivery of securities to clients	<ul style="list-style-type: none"> ● Exchange Notice No.4850/97 dated December 10, 1997 and ● Exchange Notice No. 20020917-2 dated September 17, 2002.
53	Deliver / Receive securities other than from respective Clients Beneficiary Account or under approved scheme	<ul style="list-style-type: none"> ● Exchange Notice No. 20030903-5 dated September 3, 2003.
54	Statement of accounts for funds/ securities to be sent to the clients	<ul style="list-style-type: none"> ● Exchange Notice No. 20020906-3 dated September 6, 2002, ● Exchange Notice No. 20030114-9 dated January 14, 2003 and ● Exchange Notice No. 20080527-6 dated May 27, 2008.
55	Client Margin Information to clients on daily basis	<ul style="list-style-type: none"> ● Exchange Notice No. 20080211-19 dated February 11, 2008.
56	Statement of Collateral Utilisation to clients on daily basis	<ul style="list-style-type: none"> ● Exchange Notice No. 20080421-32 dated April 21, 2008.
Dealing with Intermediaries		
57	Registration of Remisiers	<ul style="list-style-type: none"> ● Exchange Notice No. 2628/97 dated June 9, 1997
58	Sharing Commission \ brokerage only after registering such persons as remisiers with the Exchange	<ul style="list-style-type: none"> ● Bye-law – 218(a), ● Rule 216 – Rule 235, ● Exchange Notice No. 2628/97 dated June 9, 1997 and ● Exchange Notice No. 20031006-21 dated October 6, 2003.
59	Registration of sub-brokers	<ul style="list-style-type: none"> ● Exchange Notice No. 62311/2000 dated September 14, 2000.

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Sr. No.	Particulars	Reference
60	Members of other Exchanges routing orders of their clients through BOLT, to be registered as Sub-brokers with SEBI	<ul style="list-style-type: none"> ● Exchange Notice No. 54809/2000 dated July 1, 2000.
61	Affiliation of sub-brokers with members	<ul style="list-style-type: none"> ● Exchange Notice No. 200300288-3 dated February 28, 2003.
Bulk Deals		
62	Bulk Deals Disclosures	<ul style="list-style-type: none"> ● Exchange Notice No. 20040216-10 dated February 16, 2004 and ● Exchange Notice No. 20040311-7 dated March 11, 2004.
63	Bulk Deals reporting through DUS software	<ul style="list-style-type: none"> ● Exchange Notice No. 20040722-11 dated July 22, 2004.
Block Deals		
64	Modalities for Block Deal	<ul style="list-style-type: none"> ● Exchange Notice No. 20051108-28 dated November 8, 2005.
65	Disclosure of Trade details of Block Deals	<ul style="list-style-type: none"> ● Exchange Notice No. 20051108-29 dated November 8, 2005.
Client Funding		
66	Information regarding Client Funding by Members	<ul style="list-style-type: none"> ● Exchange Notice No. 20041029-13 dated October 29, 2004, ● Exchange Notice No. 20050824-16 dated August 24, 2005 and ● Exchange Notice No. 20051216-8 dated December 16, 2005.
67	Penalty Norms for not uploading client funding details	<ul style="list-style-type: none"> ● Exchange Notice No.2006022111 dated February 21, 2006.
Prevention of Money Laundering		
68	Provisions relating to Prevention of Money Laundering and Appointment of Principal Officer	<ul style="list-style-type: none"> ● Exchange Notice No. 20060120-6 dated January 20, 2006,

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Sr. No.	Particulars	Reference
		<ul style="list-style-type: none"> ● Exchange Notice No. 20060321-15 dated March 20, 2006, ● Exchange Notice No. 20070330-27 dated March 30, 2007, ● Exchange Notice No. 20070831-28 dated August 31, 2007 and ● Exchange Notice No. 20081222-21 dated December 22, 2008.
Margin Trading		
69	Margin Trading	<ul style="list-style-type: none"> ● Exchange Notice No. 20040402-31 dated April 2, 2004 and ● SEBI Circular No. SEBI/MRD/SE/SU/Cir-16/04 dated March 31, 2004.
70	Penalty norms for not uploading client funding details	<ul style="list-style-type: none"> ● Exchange Notice No. 20070919-1 dated September 19, 2007.
Securities Transaction Tax (STT)		
71	Securities Transaction Tax (STT)	<ul style="list-style-type: none"> ● Exchange Notice No.20060929-22 dated September 29, 2006,
		<ul style="list-style-type: none"> ● Exchange Notice No. 20040927-13 dated September 27, 2004, ● Exchange Notice No. 20041005-7 dated October 5, 2004 and ● Exchange Notice No.20050520-14 dated May 20, 2005.
Submission of Audit Report, Audited Accounts and Net worth Certificate		
72	Maintenance of minimum Net worth requirements	<ul style="list-style-type: none"> ● Exchange Notice No. 20030905-1 dated September 5, 2003
73	Submission of Audit Report, Annual Accounts and Net worth Certificate	<ul style="list-style-type: none"> ● Exchange Notice No. 20040524-10 dated May 24, 2004.

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Sr. No.	Particulars	Reference
Others		
74	Done business on behalf of suspended/ defaulter/ expelled members without obtaining prior permission of the Exchange	<ul style="list-style-type: none"> ● Bye-Law 358 (vi)
75	Incomplete/ Non-maintenance of registers (Register of Securities/ Register of Transactions/ Register of Complaints/ Dividend ledger/ Margin Deposit Book)	<ul style="list-style-type: none"> ● Exchange Notice No. 4850/97 dated December 10, 1997.
76	Involved in Fund-based activities	<ul style="list-style-type: none"> ● Rule 8(1)(f) and 8(3)(f) of SC(R) Rules, 1957 and ● SEBI Circular No. SMD/POLICY/ CIR-6/97 dated May 7, 1997.
77	Member/ Partners/ Designated Directors involved in business other than securities business	<ul style="list-style-type: none"> ● Rule 8(1)(f) of the SC (R) Rules, 1957.
78	Appointment of Compliance Officer	<ul style="list-style-type: none"> ● Exchange Notice No. 20021001-5 dated October 1, 2002.
79	Advertisement Code	<ul style="list-style-type: none"> ● Regulation 17, ● Bye-law 358 (xi) and ● Exchange Notice No. 104615/ 2001 dated November 12, 2001.
80	Review of norms relating to trading by members/ sub-brokers	<ul style="list-style-type: none"> ● Exchange Notice No. 20040117-8 dated January 17, 2004.
81	Display of Notice – Board (Compliance Requirements for Trading Members)	<ul style="list-style-type: none"> ● Exchange Notice No. 20050902-21 dated September 2, 2005.
82	System Audit Requirements and Submission of System Audit Report, Network Diagram and SSL Certificate	<ul style="list-style-type: none"> ● Exchange Notice No. 20070517-26 dated May 17, 2007.

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Sr. No.	Particulars	Reference
83	Manipulation of Order Book	● Exchange Notice No. 20070323-26 dated March 23, 2007.
84	Tagging of Demat Accounts of Trading Members	● Exchange Notice No. 20070628-19 dated June 28, 2007.
85	Common irregularities/deficiencies observed by the Exchange during the course of Inspection of Trading Members	● Exchange Notice No. 20070906-10 dated September 06, 2007.
86	Submission/ Compliance Requirements	● Exchange Notice No. 20070906-13 dated September 06, 2007.
87	Provisions relating to Internet Trading Facilities	● SEBI Circular No. SMDRP/Policy/Cir-6/00 dated January 31, 2000
88	Exclusive email ID for investors to register their complaints	● Exchange Notice No. 20070131-11 dated January 31, 2007.
Penalty Norms		
89	Penalty Norms – Cash Segment	● Exchange Notice No. 20060602-7 dated June 2, 2006.
90	Penalty Norms for Non-registration of Client codes/ Execution of trades without uploading PAN details of clients in Cash segment.	● Exchange Notice No. 20061229-26 dated December 29, 2006.
91	Penalty scheme for not uploading IML/ BOLT TWS location details to the exchange	● Exchange Notice No. 20070517-22 dated May 17, 2007.
92	Penalty Norms of Department of Investor Services	● Exchange Notice No. 20071217-2 dated December 17, 2007.
93	Penalty Norms for Mandatory Insurance Cover	● Exchange Notice No. 20071206-9 dated December 6, 2007.
94	Revision of penalty structure for non-registration of client codes	● Exchange Notice No. 20080307-7 dated March 07, 2008.

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Sr. No.	Particulars	Reference
	along with PAN details in the UCC database of the exchange	
95	List of indicative penalty in respect of violations observed during inspections or otherwise in Cash segment, Derivative and Debt segment	<ul style="list-style-type: none">● Exchange Notice No. 20080307-8 dated March 07, 2008.
Internal Audit		
96	Internal Audit for Stock Brokers/ Clearing Members	<ul style="list-style-type: none">● Exchange Notice No. 20080825-2 dated August 25 2008 and● Exchange Notice No. 20081022-30 dated October 22, 2008.

Appendix - VIII

List of Important NSE Rules, Bye-Laws, Regulations and Circulars

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
Books of Accounts, Records and Documents			
1	Maintenance of Books of Accounts, Records and Documents	<ul style="list-style-type: none"> ● Regulation 6 of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Regulation 6 of NSE Trading Regulations
2	Maintenance of Register of Securities - client wise and security wise	<ul style="list-style-type: none"> ● Regulation 6.1.3A (e) of the NSE Trading Regulations ● Circular No. NSE/ INSP/4986 dated April 16, 2004 	<ul style="list-style-type: none"> ● Regulation 17(1) of SEBI (Stock brokers and sub-brokers) Regulations, 1992 ● Circular No. NSE/ INSP/4986 dated April 16, 2004
Client Registration			
3	Execution of Member Client Agreements	<ul style="list-style-type: none"> ● Regulation 4.3.1 of NSE Trading Regulations ● Circular No. SEBI/ MIRSD/DPS – 1/Cir – 31/2004 dated August 26, 2004, ● Circular No. NSE/ INSP/5387 dated August 27, 2004, ● Circular No. NSE/ INSP/ 7657 dated July 5, 2008, and ● Circular No. NSE/ INSP/ 10872 dated June 23, 2008 	<ul style="list-style-type: none"> ● Regulation 4.3.1 of NSE Trading Regulations ● Circular No. SEBI/ MIRSD/DPS – 1/ Cir – 31/2004 dated August 26, 2004, ● Circular no. NSE/ INSP/5387 dated August 27, 2004, ● Circular No. NSE/ INSP/ 7657 dated July 5, 2008, and ● Circular no. NSE/ INSP/ 10872 dated June 23, 2008

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Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
4	Client registration forms (KYC)	<ul style="list-style-type: none"> ● Circular No. CNSE/ MEMB/0245 dated May 2, 1997, ● Circular No. NSE/ MEMB/0280 dated June 24, 1997 and ● Circular No. NSE/ INSP/ 5387 dated August 27, 2004 	<ul style="list-style-type: none"> ● Regulation 4.3.2 of NSE Trading Regulations
5	Risk Disclosure Document (RDD)	<ul style="list-style-type: none"> ● Circular No. NSE/ CMTR/ 4468 dated October 8, 2003 and ● Circular No. NSE/ INSP/ 5387 dated August 27, 2004 	<ul style="list-style-type: none"> ● Regulation 4.3.3 of NSE Trading Regulations
6	Segregation of Mandatory and voluntary documents/ clauses in the client registration docket	<ul style="list-style-type: none"> ● Circular No. NSE/ INSP/ 7657 dated July 5, 2006 	<ul style="list-style-type: none"> ● NSE/INSP/7657 dated July 5, 2006
7	Execution of Internet Trading Agreements with clients	<ul style="list-style-type: none"> ● Circular No. NSE/ CMT/ 1532 dated March 16, 2000 	<ul style="list-style-type: none"> ● Circular No. NSE/ F&O / 1877 dated August 24, 2000
8	The client information is periodically reviewed and updated on an ongoing basis in view of the current trading activity of the client.	<ul style="list-style-type: none"> ● Circular No. NSE/ INVG/ 2006/7236 dated March 3, 2006 	<ul style="list-style-type: none"> ● Circular No. NSE/ INVG/ 2006/ 7236 dated March 3, 2006
9	Dispatch of copy of Client Registration documents along with UCC and email id of the client.	<ul style="list-style-type: none"> ● Circular No. NSE/ INSP/ 10872 dated June 23, 2008 	<ul style="list-style-type: none"> ● Circular No. NSE/ INSP/ 10872 dated June 23, 2008

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Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
10	In-person' verification of Clients by Stock Brokers	<ul style="list-style-type: none"> ● Circular No. NSE/ INSP/ 10938 dated July 04,' 2008 	<ul style="list-style-type: none"> ● Circular No. NSE/ INSP/ 10938 dated July 04, 2008
Unique Client Code			
11	Allotment of UCC	<ul style="list-style-type: none"> ● Circular No. NSE/ INVG/ 2002/3690 dated October 18, 2002 	<ul style="list-style-type: none"> ● Circular No. NSE/ INVG/ 2002/3690 dated October 18, 2002
12	Mapping of the client codes with UCC	<ul style="list-style-type: none"> ● Regulation 6.1.4 of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Regulation 6.1.5 of NSE Trading Regulations
13	UCC and PAN details of clients	<ul style="list-style-type: none"> ● Regulation 3.14 of Capital Market Trading Regulations, ● Circular No. NSE/ INVG/ 2006/7673 dated July 13, 2006, ● Circular No. NSE/ INVG/ 2006/7944 dated September 28, 2006 and ● Circular No. NSE/ INVG/ 2006/8056 dated October 27, 2006 	<ul style="list-style-type: none"> ● Circular No. NSE/ INVG/ 2005/6690 dated September 23, 2005
14	Allotment of Trading Client Code	<ul style="list-style-type: none"> ● Circular No. NSE/ INSP/ 2007/9859 dated December 4, 2007 and ● Circular No. NSE/ INVG/ 2004/5487 dated September 30, 2004 	<ul style="list-style-type: none"> ● Circular No. NSE/ INSP/ 2007/9859 dated December 4, 2007 and ● Circular No. NSE/ INVG/ 2004/5487 dated September 30, 2004

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Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
15	Unique Client Code – Non Submission Charges	<ul style="list-style-type: none"> ● Circular No. NSE/ INVG/ 2006/8152 dated November 30, 2006 ● Circular No. NSE/ INVG/ 2006/7117 dated January 31, 2006 and ● Circular No. NSE/ INVG/ 2006/8310 dated December 29, 2006 	<ul style="list-style-type: none"> ● Circular No. NSE/ INVG/ 2006/8152 dated November 30, 2006 ● Circular No. NSE/ INVG/ 2006/7117 dated January 31, 2006 and ● Circular No. NSE/ INVG/ 2006/8310 dated December 29, 2006
Trading Terminals			
16	Trading terminals are operated by the respective approved users/ approved persons only.	<ul style="list-style-type: none"> ● Circular No. NSE/ MEMB/1591 dated April 20, 2000 	<ul style="list-style-type: none"> ● Circular No. NSE/ MEMB/ 1591 dated April 20, 2000
17	Neat terminals have been extended/ CTCL terminals have been installed with the approval of the Exchange and required information in respect of all the CTCL terminals (including view only/ admin/ test/ etc) have been uploaded to the Exchange	<ul style="list-style-type: none"> ● Circular No. NSE/ MEMB/1591 dated April 20, 2000; ● Circular No. NSE/ MEMB/3574 dated August 29, 2002; ● Circular No. NSE/ MEMB/3635 dated September 25, 2002; ● Circular No. NSE/ MEMB/5664 dated 15th December 2004 and all related circulars issued w.r.t. the same 	<ul style="list-style-type: none"> ● Circular No. NSE/ MEMB/1591 dated April 20, 2000; ● Circular No. NSE/ MEMB/ 3574 dated August 29, 2002; ● Circular No. NSE/ MEM/ 3635 dated September 25, 2002; ● Circular No. NSE/ MEMB/5664 dated 15th December 2004 and all related circulars issued w.r.t. the same

Compendium of Industry Specific TG on Internal Audit

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
18	Own trading is carried out at permitted locations only. Trades on own account have been executed under PRO code only and client trades have not been executed through terminal earmarked for executing PRO trades	<ul style="list-style-type: none"> ● Circular No NSE/ CMTR/ 4460 dated October 3, 2003 	<ul style="list-style-type: none"> ● Circular No NSE/ F&O/ 4464 dated October 3, 2003
19	Disclosure of OWN trading	<ul style="list-style-type: none"> ● Circular No NSE/ INVG/2003/ 4590 dated November 25, 2003 	<ul style="list-style-type: none"> ● Circular No NSE/ INVG/ 2003/4590 dated November 25, 2003
20	NEAT/ CTCL users are NCFM certified	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/3740 dated. November 13, 2002 and ● Circular No NSE/ MEMB/7992 dated October 10, 2006 	<ul style="list-style-type: none"> ● Regulation 2.2.10 (e) of NSE Trading Regulations
21	Direct Market Access Facility	<ul style="list-style-type: none"> ● Circular No NSE/ CMTR/ 10537 dated April 3, 2008 and ● Circular No NSE/ CMTR/ 10548 dated April 4, 2008 	<ul style="list-style-type: none"> ● Circular No NSE/ FAOP/ 10538 dated April 3, 2008 and ● Circular No NSE/ CMTR/ 10548 dated April 4, 2008
Margins and Risk Management System			
22	Margins and Risk management Systems	<ul style="list-style-type: none"> ● Circular No NSE/ CMPT/ 5868 dated February 24, 2005 	<ul style="list-style-type: none"> ● NSCCCL Circular No NSCC/F &O/ C&S/ 97 dated February 1, 2002

Internal Audit of Stock Brokers

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
23	Margin Collection from Clients	—	<ul style="list-style-type: none"> ● Circular No NSE/ INSP/10367 dated February 28, 2008
Contract Notes			
24	Issue of Contract notes	<ul style="list-style-type: none"> ● Regulation 3.5.1, 3.5.2 and 3.5.3 of NSE Trading Regulations ● Circular No NSE/ CMT/ 001 dated October 28, 1994; ● Circular No NSE/ CMT/ 005 dated December 12, 1994, ● Circular No NSEIL / LEGAL/7036 dated January 5, 2006 and ● Circular No NSE/ INSP/ 7330 dated March 30, 2006 	<ul style="list-style-type: none"> ● Regulation 3.6 of NSE Trading Regulations ● Circular No NSEIL/ LEGAL/7037 dated January 5, 2006 and ● Circular No NSE/ INSP/73 March 29 and 30, 2006
25	Maintenance of copies/ duplicates of Contract Notes	<ul style="list-style-type: none"> ● Regulation 6.1.17 of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Regulation 6.1.18 of NSE Trading Regulations
26	Issue of Electronic Contract Notes (ECN)	<ul style="list-style-type: none"> ● Circular No NSE/ CMT/2279 dated January 30, 2001 and ● Circular No NSE/ INSP/ 6623 dated September 9, 2005 	<ul style="list-style-type: none"> ● NSE/CMT/2279 dated January 30, 2001 and ● Circular No NSE/ INSP/ 6623 dated September 9, 2005
27	Transfer of trades from one client to another	<ul style="list-style-type: none"> ● NSCC Circular No NSCC/CM/ C&S/207 dated August 31, 2001 	<ul style="list-style-type: none"> ● Regulation 3.6.1 of NSE Trading Regulations

Compendium of Industry Specific TG on Internal Audit

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
28	Transfer of trades from own account to another client and vice versa	<ul style="list-style-type: none"> ● NSCCL Circular No. NSCC/CM/ C&S/207 dated August 31, 2001 	<ul style="list-style-type: none"> ● Regulation 3.6.1 of NSE Trading Regulations
Straight Through Processing (STP)			
29	Mandatory use of STP system for all institutional trades	<ul style="list-style-type: none"> ● Circular No NSE/ INVG/ 2004/ 5216 dated June 30, 2004 	<ul style="list-style-type: none"> ● Circular No NSE/ INVG/ 2004/ 5216 dated June 30, 2004
Off Market Transactions			
30	No off market deals have been executed	<ul style="list-style-type: none"> ● Circular No NSE/ CMT/ 1230 dated October 8, 1999 	<ul style="list-style-type: none"> ● Regulation 3.6.1 of NSE Trading Regulations
Banking Operations			
31	Segregation of client funds and own funds	<ul style="list-style-type: none"> ● Regulation 6.1.5 (a) of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Regulation 6.1.6.1 of NSE Trading Regulations
32	Separate client bank account and it's operations	<ul style="list-style-type: none"> ● Regulation 6.1.5 (b) of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Regulation 6.1.6.1 of NSE Trading Regulations
33	No transfer/ withdrawal from clients' account	<ul style="list-style-type: none"> ● Regulation 6.1.5 (c) of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Regulation 6.1.6.2 of NSE Trading Regulations
Dealings With Clients			
34	Funds/ securities of clients have not been improperly used	<ul style="list-style-type: none"> ● Regulation 4.5.3 (e) of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Regulation 4.5.3 (e) of NSE Trading Regulations
35	Brokerage has been charged separately and indicated separately, in the contract note.	<ul style="list-style-type: none"> ● Regulation 3.6.3 of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Regulation 3.6.1 of NSE Trading Regulations

Internal Audit of Stock Brokers

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
36	Rate of Brokerage	<ul style="list-style-type: none"> ● Regulation 3.6.2 of NSE Trading Regulations and ● Circular No NSE/CMT/ 001 dated October 28, 1994. 	<ul style="list-style-type: none"> ● Circular No NSE/F&O/ 1688 dated 08/06/2000; ● Circular No NSE/F&O/ 2596 dated 05/06/2001; ● Circular No NSE/FAOP/ 5978 dated March 30, 2005 and ● Circular No NSE/INSP/ 8338 dated January 5, 2007
37	Payout of funds/ securities	<ul style="list-style-type: none"> ● Regulation 4.4.15 of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Regulation 4.4.15 of NSE Trading Regulations
38	Early Pay-in of Funds	<ul style="list-style-type: none"> ● Circular No NSE/CMPT/10603 dated April 17, 2008 	
39	Dispatch of statement of accounts for funds/ securities (with error reporting clause)	<ul style="list-style-type: none"> ● Regulation 6.1.5 (d) of NSE Trading Regulations and ● Circular No NSEIL/LEGAL/6806 dated October 24, 2005 	<ul style="list-style-type: none"> ● Circular No NSCC/F&O/ C&S/132 dated October 8, 2002 and ● Circular No NSEIL/LEGAL/7410 dated April 21, 2006
40	No cash dealings are undertaken	<ul style="list-style-type: none"> ● Circular No NSE/INSP/ 4377 dated September 1, 2003 	<ul style="list-style-type: none"> ● Circular No NSE/INSP/4377 dated September 1, 2003
41	Pay-in of funds and securities due from clients are received from the respective clients only	<ul style="list-style-type: none"> ● Circular No NSE/INSP/ 4377 dated September 1, 2003 	<ul style="list-style-type: none"> ● Circular No NSE/INSP/ 4377 dated September 1, 2003

Compendium of Industry Specific TG on Internal Audit

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
42	Payout of funds and securities due to the clients are made to the respective clients only	<ul style="list-style-type: none"> ● Circular No NSE/ INSP/ 4377 dated September 1, 2003 	<ul style="list-style-type: none"> ● Circular No NSE/ INSP/ 4377 dated September 1, 2003
43	Separate client beneficiary account and its operations	<ul style="list-style-type: none"> ● Regulation 6.1.5 (f) of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Regulation 6.1.6.2 (v) of NSE Trading Regulations
44	Client Margin Information to clients on daily basis	<ul style="list-style-type: none"> ● Circular No. NSE/ INSP/ 10239 dated February 11, 2008 	<ul style="list-style-type: none"> ● Circular No. NSE/ INSP/ 10239 dated February 11, 2008
45	Statement of Collateral Utilisation to clients on daily basis	<ul style="list-style-type: none"> ● Circular No NSE/ INSP/ 10605 dated April 21, 2008 	<ul style="list-style-type: none"> ● Circular No NSE/ INSP/ 10605 dated April 21, 2008
Dealings with Intermediaries			
46	No dealings are done through un-registered intermediaries	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/ 0275 dated June 12, 1997 and ● Circular No NSE/ MEMB/ 2284 dated January 31, 2001 	<ul style="list-style-type: none"> ● Clause 12 (1) of SEBI Act, 1992
47	Sharing of brokerage with another Trading Member of the Exchange or an employee of another Trading Member or a person with whom Trading Members are forbidden to do business	<ul style="list-style-type: none"> ● Clause 33 (a) of Chapter IX of Byelaws of the Exchange 	<ul style="list-style-type: none"> ● Bye Law 33(a) of Chapter IX of the Bye laws of the Exchange and ● Circular No NSE/ MEMB/ 4082 dated April 10, 2002 and ● Circular No NSE/ MEMB/ 6378 dated July 14, 2005
48	Sharing of brokerage/ transacted business	<ul style="list-style-type: none"> ● Rule 5 of Chapter IV of Rules of the 	<ul style="list-style-type: none"> ● Rule 5 of Chapter IV of Rules of the

Internal Audit of Stock Brokers

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
	with suspended or expelled or defaulting Trading Members	Exchange	Exchange
49	Inspection of Sub brokers/ Branches	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/ 275 dated 12/06/1997 and ● Circular No NSEIL/ INSP/ 3685 dated 17/10/2002 	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/ 275 dated 12/06/1997 and ● Circular No NSEIL/ INSP/3685 dated 17/10/2002
50	Registration of Authorised Person in F&O Segment	—	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/ 6882 dated 21/11/2005, ● Circular No NSE/ MEMB/ 6769 dated October 14, 2005 and ● Circular No NSE/ MEMB/ 9655 dated 22/10/2007
Bulk Deals			
51	Bulk Deal Reporting	<ul style="list-style-type: none"> ● Circular No NSE/ CMTR/ 4808 dated February 16, 2004 and ● Circular No NSE/ CMTR/ 7864 dated September 13, 2006 	—
Block Deals			
52	Block Deal Execution	<ul style="list-style-type: none"> ● Circular No NSE/ CMTR/ 6846 dated November 8, 2005 and ● Circular No NSE/ CMTR/ 7864 dated September 13, 2006 	—

Compendium of Industry Specific TG on Internal Audit

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
Client Funding			
53	Client Funding Reporting	<ul style="list-style-type: none"> ● Circular No NSE/ CMTR/ 6963 dated December 19, 2005, ● Circular No NSE/ CMTR/ 6962 dated December 19, 2005, ● Circular No NSE/ CMTR/ 6373 dated July 13, 2005 and ● Circular No NSE/ CMTR/ 8454 dated January 31, 2007 	—
Prevention of Money Laundering			
54	Adopted written procedures to implement the anti money laundering provisions and Appointment of Principal Officer	<ul style="list-style-type: none"> ● Circular No NSE/ INVG/ 2006/ 7102 dated January 25, 2006 and ● Circular No NSE/ INVG/ 2006/33 dated March 24, 2006 	<ul style="list-style-type: none"> ● Circular No NSE/ INVG/ 2006/ 7102 dated January 25, 2006 and ● Circular No NSE/ INVG/ 2006/33 dated March 24, 2006
55	Master Circular on PMLA	● Circular No NSE/ INVG/ 2009/11798 dated December 22, 2008	● NSE/INVG/ 2009/ 11798 dated December 22, 2008
Margin Trading			
56	Provisions relating to Margin Trading Facility	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/4972 dated April 7, 2004; ● Circular No NSE/ CMTR/ 5420 dated September 9, 2004; 	● N.A.

Internal Audit of Stock Brokers

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
		<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/5917 dated March 11, 2005; ● Circular No NSE/ MEMB/4973 dated April 7, 2004 and ● Circular No NSE/ CMTR/ 5914 dated March 10, 2005 	
Securities Transaction Tax (STT)			
57	Securities Transaction Tax (STT)	<ul style="list-style-type: none"> ● Circular No NSE/ INSP/ 8108 dated November 16, 2006, ● Circular No NSCCL/ LEGAL/5482 dated September 30, 2004 and ● Circular No NSE/ F&A/ 5757 dated January 13, 2005 	<ul style="list-style-type: none"> ● Circular No NSE/ INSP/ 8108 dated November 16, 2006, ● Circular No NSCCL/ LEGAL/5945 dated March 17, 2005 and ● Circular No NSE/ FandA/5757 dated January 13, 2005
Submission of Annual Returns and Net worth Certificate			
58	Submission of Annual Returns	<ul style="list-style-type: none"> ● Circular No NSE/ COMP/9307 dated August 10, 2007 	<ul style="list-style-type: none"> ● Circular No NSE/ COMP/ 9307 dated August 10, 2007
59	Submission of Half Yearly Networth Certificate	<ul style="list-style-type: none"> ● Circular No NSE/ COMP/9788 dated November 20, 2007 and ● Circular No NSE/ MEMB/6928 dated December 06, 2005 	<ul style="list-style-type: none"> ● Circular No NSE/ COMP/9788 dated November 20, 2007 and ● Circular No NSE/ MEMB/ 6928 dated December 06, 2005

Compendium of Industry Specific TG on Internal Audit

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
Others			
60	Involved in fund based activities/ financing clients	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/261 dated May 27, 1997 and ● Circular No NSE/ INSP/ 6938 dated December 9 2005 	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/ 261 dated May 27, 1997
61	Change in share holding/ profit sharing pattern of the corporate/ firm only with prior approval of the Exchange.	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/00310 dated July 23, 1997 and the Membership Undertaking 	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/ 00310 dated July 23, 1997 and the Membership Undertaking
62	Change in directors/ partners of the corporate/ firm only with prior approval of the Exchange.	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/4299 dated July 25, 2003 	<ul style="list-style-type: none"> ● Circular No NSE/ MEMB/ 4299 dated July 25, 2003
63	Advertisements	<ul style="list-style-type: none"> ● Rule (5)(h) of Chapter IV of the Rules of the Exchange 	<ul style="list-style-type: none"> ● Rule (5)(h) of Chapter IV of the Rules of the Exchange
64	Dealing through or on behalf of another trading member/ sub-broker of the same exchange with prior approval of the Exchange in writing	<ul style="list-style-type: none"> ● Bye Law 7 of Chapter VII of the Bye laws and ● Regulation 2.1.11 of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Bye Law 7 of Chapter VII of the Bye laws and ● Regulation 2.1.16 of NSE Trading Regulations
65	Dealing through or on behalf of another trading member/ sub-broker of the another exchange	<ul style="list-style-type: none"> ● Regulation 2.1.12 of NSE Trading Regulations 	<ul style="list-style-type: none"> ● Regulation 2.1.16 of NSE Trading Regulations

Internal Audit of Stock Brokers

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
	after intimating the name of such broker/ sub-broker to the Exchange		
66	Dealings on behalf of client with a broker of another Exchange after registration as a sub-broker	● Regulation 2.1.12 of NSE Trading Regulations	● Regulation 2.1.16 of NSE Trading Regulations
67	Display of Notice Board	● Circular No NSE/ MEMB/1591 dated April 20, 2000 and	● Circular No NSE/ MEMB/ 1591 dated April 20, 2000 and
68	Display of SEBI registration certificate	● Circular No NSE/ MEM/ 6706 dated September 28, 2005	● Circular No NSE/ MEM/ 6706 dated September 28, 2005
69	Intimation of Branch office	● Circular No NSE/ MEMB/1591 dt. April 20, 2000	● Circular No NSE/ MEMB/1591 dt. April 20, 2000
70	Compliances with respect to dealings by branches, intermediaries, etc.	● Regulation 4.1.1 of NSE Trading Regulations	● Regulation 4.1.1 of NSE Trading Regulations
71	Appointment of Compliance officer	● Circular No NSE/ INSP/ 6334 dated July 6, 2005	● Circular No NSE/ INSP/ 6334 dated July 6, 2005
72	Record of all written complaints of constituents have been maintained	● Circular No NSE/ MEMB/3441 dated June 14, 2002	● Circular No NSE/ MEMB/3441 dated June 14, 2002
73	Provisions relating to Internet trading facility	● Regulation 6.1.15 of NSE Trading Regulations	● Regulation 6.1.16 of NSE Trading Regulations
74	Exclusive e-mail ID for investors to	● Circular No NSE/ CMT/ 1424 dated	● Circular No NSE/ F&O/ 1877 dated

Compendium of Industry Specific TG on Internal Audit

Sr. No.	Particulars	For Capital Market of NSE	For Future and Option Segment of NSE
	register their complaints	January 31, 2000	August 24, 2000
75	Tagging of demat accounts of trading / clearing members	● Circular No NSE/ MEMB/8352 dated January 09, 2007	● Circular No NSE/ MEMB/8352 dated January 09, 2007
76	Placement of orders at prices significantly away from market price	● Circular No NSE/ INSP/ 9090 dated June 28, 2007	● Circular No NSE/ INSP/ 9090 dated June 28, 2007
77	Consolidated Circular - Inspection Department	● Circular No NSE/ INVG/ 2007/8719 dated March 23, 2007	—
78	Compliance Hand Book	● Circular No NSE/ INSP/ 11324 dated September 18, 2008 ● Circular No NSE/ INSP/ 11532 dated October 23, 2008	● Circular No NSE/ INSP/ 11324 dated September 18, 2008 ● Circular No NSE/ INSP/ 11532 dated October 23, 2008
Penalty norms			
79	Penalty Norms - CM and F&O	● Circular No NSE/ INSP/ 2007/9971 dated December 27 2007	● Circular No NSE/ INSP/ 2007/9971 dated December 27, 2007
80	Penalty for Mandatory Insurance Cover	● Circular No NSE/ COMP/9109 dated July 03, 2007	—
Internal Audit			
81	Internal Audit for Stock Brokers/ Clearing Members	● Circular No NSE/ INSP/ 11172 dated August 22, 2008 and ● Circular No NSE/ INSP/ 11537 dated October 23, 2008	● Circular No NSE/ INSP/11172 dated August 22, 2008 and ● Circular No NSE/ INSP/ 11537 dated October 23, 2008

Reference

As the new circulars and notifications are frequently issued by the Regulators, it is necessary that an internal auditor should possess an updated knowledge on the compliances and other regulations relating to the stock brokers. Circulars issued by Regulatory Authorities are hosted on their websites. These websites may be visited for availing the advantage of updating on various issues on capital market.

- Securities and Exchange Board of India - www.sebi.gov.in.
- National Securities Exchange of India Limited - www.nseindia.com.
- Bombay Stock Exchange of India Limited - www.bseindia.com.

Stop Press

I. Circular on Internal Audit of Stock Brokers/ Trading Members/Clearing Members issued by NSE

NATIONAL STOCK EXCHANGE OF INDIA LIMITED INSPECTION DEPARTMENT CIRCULAR

DOWNLOAD REF.NO: NSE/INSP/12174

Circular No. NSE/INSP/2009/76 Dated: 25th March 2009

To,

All Trading Members and Clearing Members

Sub: Internal Audit of stock brokers / trading members / clearing members

This is further to our circular NSE/INSP/2008/70 (download reference no. NSE/INSP/11172) dated August 22, 2008 and NSE/INSP/2008/74 (download reference no. NSE/INSP/11537) 23rd October, 2008 wherein all trading members / clearing members were directed to carry out complete internal audit on a half yearly basis by independent qualified Chartered Accountants or Company Secretaries or Cost and Management Accountants. It was also informed that the first internal audit period would be from October 1, 2008 to March 31, 2009.

Further based on SEBI's letter no. MIRSD/DPS-I/PG/158174/09 dated March 23, 2009, the applicability, scope / guidelines of audit, format of audit report and the time limit for submission of audit report have been finalized and enclosed herewith as Annexure I, II and III.

In view of the above all trading members / clearing members are required to ensure to complete internal audit on a half yearly basis by chartered accountants, company secretaries or cost and management accountants who are in practice and who do not have any conflict of interest.

Internal Audit of Stock Brokers

All members are requested to ensure compliance with the above.

For any clarifications, members may contact any of the following officials:

Name	Board Lines 2659 8100 – 8114	Direct No
Mr. Hansen Cardoza	Extn. : 5123	26598196
Mr. Parameshwaran	Extn. : 5124	
Ms. Sania Surve	Extn. : 5128	

For **National Stock Exchange of India Ltd.**

C N Upadhyay

Asst. Vice-President- Inspection Dept

Encl: As above

Annexure I

Internal Audit for Stock Brokers

I. Applicability

Trading members (Stock brokers) and Clearing members are required to appoint an internal auditor for carrying out internal audit of their operations in all segments of the Exchange in which they are enabled for trading /clearing (wherein atleast a one/single trade have been executed or cleared by them) and submit exchange wise report on half yearly basis. The first half year period would start from October 01, 2008.

II. Who Can Conduct Internal Audit

Internal audit is required to be carried out by any Chartered Accountant, Company Secretary or Cost and Management Accountant who is in practice and who do not have any conflict of interest.

III. Scope/Purpose of Audit

The purpose of audit should be:

- (a) to ensure that the books of account, records and documents are being maintained in the manner required under Securities Exchange Board of India Act, 1992, Securities Contracts (Regulation) Act, 1956, SEBI (Stock brokers and Sub-brokers) Regulations, 1992, Securities Contracts (Regulation) Rules, 1957, circulars issued by SEBI, agreements, Bye laws of the Exchanges, data security and insurance in respect of operations of trading member/clearing members.
- (b) to ascertain whether adequate internal control systems, procedures and safeguards have been established and are being followed by the intermediary to fulfill its obligations under Securities and Exchange Board of India Act, 1992, Securities Contracts (Regulation) Act, 1956, SEBI (Stock brokers and Sub-brokers) Regulations, 1992, Securities Contracts (Regulation) Rules, 1957, circulars issued by SEBI, agreements, Bye laws of the Exchanges, data security and

Internal Audit of Stock Brokers

insurance in respect of operations of trading member/clearing members.

- (c) to ascertain whether any circumstances exist which would render the intermediary unfit or ineligible for dealing in securities market.
- (d) to ascertain whether the provisions of the securities laws and the directions and/or circulars issued there under by SEBI/Exchanges are being complied with.
- (e) to ascertain, whether the provision of stock exchange, Bye-laws, notices, circulars, instructions or orders issued by stock exchanges are being complied with.
- (f) to inquire suo motu into such matters as may be deemed fit by the auditor in the interest of investors or the securities market.

IV. Submission of Internal Audit Report

Internal auditor would submit the audit report to the Proprietor/ Partners/Board of respective trading/clearing member who would place the report before its Board of Directors/proprietor/partners and shall forward the same along with para-wise comments to respective stock exchange within 3 months of the end of half year period. The audit report may be combined across segments and activity (trading/clearing) for respective Exchange.

V. Non-Compliance Relating to Internal Audit by The Members

Non-submission of internal audit report as per the aforesaid guidelines shall be treated as non-compliance and appropriate action may be initiated against the concerned members. Where, in the opinion of the Exchange, the quality of the reporting is not satisfactory or the audit is not carried out in accordance with the aforesaid guidelines, the Exchange reserves the right to advise the concerned members to change the auditors and/or submit revised reports.

Annexure II

Areas to be Covered in Internal Audit and Areas on which Comments Needs to be Incorporated in the Report are given below

1. Client Registration and Documentation	
Execution of Know Your Client(KYC), Member Constituent Agreement(MCA)/Tripartite Agreement(TPA) and Risk Disclosure Document (RDD) – checks and balances in place	Whether KYC, MCA/TPA, RDD are executed in the prescribed formats and the same is executed before execution of trades <i>for the client</i> ?
Verification of formats of KYC, MCA/TPA and RDD and attachments including proof of identity and address, as prescribed by NSE/ SEBI	Whether UCC is allotted to the client & the same is uploaded to the Exchange <i>with PAN</i> ?
Verification that Contradictory clauses are not mentioned in KYC, MCA,TPA and RDD	Whether all fields in KYC including client's financial details are filled in properly?
Systems and procedures put in place by member for verification of PAN before opening account	Whether proper proof of identity, PAN and proof of address are taken with KYC form?
Procedure followed by the member for informing UCC to the clients & uploading to the Exchange	Whether any contravening clauses are included in MCA/TPA?
Mechanism to ensure financial details of clients	Whether in person verification of clients is done by the employees of the trading member only?
Procedure adopted for in person verification of clients	Whether date of verification, name and signature of the official who has done in-person verification and the member's stamp incorporated in the client registration form?

Internal Audit of Stock Brokers

Procedure adopted by relationship managers, if any, for procuring new clients	<p>Whether copies of all the documents executed by client are given to the respective clients?</p> <p>Whether change in address, bank account or demat account is carried out on receipt of written request along with documentary proof from the respective client?</p> <p>Whether client details including financial details are reviewed periodically and updated?</p>
Delivery of copies of client registration documents to the clients	
Storage of client registration documents and retrieval mechanism	
Procedure adopted for obtaining clients' consent for electronic contract notes	
Periodic review of client related information and updation of the same in system	
Verification of RDD/KYC/MCA/TPA of different types of clients	
Acquaintance procedure for new clients	
<p><i>Exchange regulatory references Circulars- Download no. NSE/INSP/11324 dated 18-Sep-08, Download no. NSE/INVG/7236 dated 3-Mar-06</i></p> <p><i>SEBI references</i></p> <ul style="list-style-type: none"> ● <i>SEBI/MIRSD/DPS-1/Cir-31/2004, dated August 26, 2004 & Regulation 7 D</i> ● <i>MIRSD/DPS III / 130466 / 2008 dated July 02, 2008</i> ● <i>MRD/DoP/Cir- 05/2007 dated April 27, 2007</i> ● <i>SMDRP/Policy/Cir-39/2001 dated July 18, 2001.</i> ● <i>MRD/DoP/SE/Cir- 35/2004 dated October 26, 2004</i> 	

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2. Order Management and Risk Management Systems	
Procedure adopted for receipt of orders from clients	<p>Whether checks are in place to ensure that no unauthorized orders are executed from any of the terminals?</p> <p>Whether control reports like orders executed away from market price, client-wise / scrip-wise / terminal-wise volumes / exposures are generated to monitor any manipulation or unwarranted activity?</p> <p>In case of dormant accounts, are there any checks in place to ensure that incase the account is reactivated whether it is operated by the respective client only?</p> <p>Whether initial and other margins are collected from respective clients in the prescribed form of funds, fixed deposit receipts, bank guarantees and approved securities with appropriate haircut ?</p> <p>Whether the member has a proper system for reporting the correct client margin collection to NSCCL, in Derivatives segment?</p> <p>Verify whether the margin reported by the member to the Exchange in Derivates segment is actually collected and available in the books of accounts of the member. In case of any irregularity observed, mention the instances wherein wrong reporting of margin collected from clients/trading members was observed.</p>
Mechanism for order management and execution	
Procedure adopted for setting Limits at client level / Terminal level/Dealer level	
Policy on Margin collection mechanism and the modes of margin money	
Procedure adopted for reporting of client margin collection to clearing corporation	
Review of process adopted for monitoring/recovery of long outstanding debit balances	
Procedure adopted for calculation and reporting client funding	
Procedure for monitoring institutional trades not routed through custodians	
Procedure adopted for providing Direct Market Access (DMA) facility	

Internal Audit of Stock Brokers

	<p>Whether Risk Management System (RMS) includes policy on margin collection from clients/trading member and the RMS is documented?</p> <p>Whether proper systems are in place to ensure timely collection for pay-in from the respective client as per settlement schedule?</p> <p>Whether proper monitoring mechanism is in place to review long outstanding debit balances in clients' account and recovery of the same?</p> <p>Whether member has reported details of client funding, if any, to the exchange within prescribed time limit?</p> <p>What are the sources of funds in case client funding is observed?</p> <p>Whether all institutional trades are routed through custodians by following Straight Through Processing?</p> <p>What are the reasons for institutional trades not being routed through custodians?</p> <p>Whether any specific pattern is observed for the same?</p> <p>Whether member has obtained prior approval from the exchange before providing terminal to the clients under DMA facility?</p> <p>Whether member has complied with regulatory requirements related to. DMA?</p>
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Compendium of Industry Specific TG on Internal Audit

<p>Exchange's regulatory references Circulars- Download no. NSE/INVG/7236 dated 3-Mar-06, Download no. NSE/MEMB/261 dated 27-May-97, Download no. NSE/INSP/11324 dated 18-Sep-08, Download no. NSE/CMPT/6610 dated 06-Sep-05, NSE/CMPT/6653 dated 16-Sep-05, Download NSE/CMTR/10537 dated 3-Apr-08, Download no. NSE/CMTR/6732 dated 04-Oct-05, Download no. NSE/ CMTR/6963 dated 19-Dec-05, Download no. NSE/CMPT/11276 dated 10-Sep-08 SEBI references</p> <ul style="list-style-type: none"> ● MRD/DoP/SE/Cir-07/2005 dated February 23, 2005 ● MRD/DoP/SE/Cir- 17/2005 dated September 02, 2005 	
<p>3. Contract Notes, Client Margin details and Statement of Accounts</p>	
Procedure adopted for issuance of contract notes	Whether contract note are sent within 24 hours of execution of trades and margin details are sent daily to respective clients and proof of delivery / dispatch is maintained?
Verification of format of contract notes issued	
Verification of copy of contract note with Proof of dispatch/register of despatch/logs maintained	Whether all prescribed details including name and signature of authorised signatory, dealing office details and brokerage are contained in contract note?
Adherence to electronic contract note norms, if applicable	
Procedure adopted for sending statement of accounts	In case contract notes and margin details are sent in electronic form, whether log is maintained? Whether trail of bounced mails is maintained and physical delivery is ensured in case of bounce mails?
Contents & periodicity of statement of accounts of funds and securities	
Procedure adopted for sending margin details to clients	Whether member has complied with regulatory requirements related to. Electronic contract notes (ECN)?
Procedure for maintaining acknowledgement/proof of delivery of contract notes/statement of accounts/margin details to the clients	
	Whether complete statement of accounts for funds and securities are issued on a quarterly basis to

Internal Audit of Stock Brokers

	clients, with error reporting clause? Whether proof of sending the same is maintained?
Exchange's regulatory references Circular Download no. NSE/INSP/11324 dated 18-Sep-08	
SEBI references	
<ul style="list-style-type: none"> ● <i>Clause B(2) of Code of conduct for Stock Brokers specified under Regulation 7</i> ● <i>SMD-1/23341 dated November 18, 1993</i> ● <i>SMD (B)/104/22775/93 dated October 29, 1993</i> ● <i>SMD/MDP/CIR/043/96 dated August 5, 1996</i> ● <i>MRD/DoP/SE/Cir-20/2005 dated September 08, 2005</i> ● <i>SEBI/DNPD/143542 /Cir-43/08 dated November 06, 2008</i> 	
4. Dealing with Clients' Funds and Securities	
Verification of details of cash receipts from/payments to clients, if any, observed during the audit period are to be given (mentioning any specific branch involved).	Whether cash dealings with clients are done by branches/sub brokers? Whether banker's cheque/ demand draft are accompanied with written request from the respective client?
Verification of internal controls adopted by the member while accepting banker's cheque/ demand draft from clients	Whether pay-in or pay-out is received from or delivered to respective clients only?
Procedure for ensuring that receipts and payment of funds/securities are from/to respective client only	Whether client's funds/ securities are transferred to respective clients within one working day of payout from Exchange?
Periodic Reconciliation of books of accounts	Whether any instance of misutilisation of clients' funds or securities is observed? If yes, give complete details of such instances
Verification of following books of accounts/records	Whether any instances were observed wherein pay-in/ pay out was received from/ made to account other than the respective client account?
<ul style="list-style-type: none"> - Register of Securities - Bank Statements 	

Compendium of Industry Specific TG on Internal Audit

	<p>Whether there are any systems in place to ensure compliance in this regard by the member?</p> <p>Whether collaterals of clients were pledged with banks/ other entities for raising funds? If yes, details of such instances observed are to be given.</p> <p>Whether funds raised by pledging client securities were utilised for respective client only? List of instances to be provided in case of non-utilisation of proceeds for respective client?</p> <p>Whether bank book and register of securities are in alignment with bank statements and transaction statements provided by banks and depositories?</p> <p>Whether dividend and other corporate benefits received on behalf of clients is paid/credited/ passed on to the respective clients account?</p>
<p><i>Exchange's regulatory Circular Download no. NSE/INSP/11324 dated 18-Sep-08 and CM and F&O Regulations.</i></p> <p><i>SEBI references</i></p> <ul style="list-style-type: none"> ● <i>SEBI Circular No. SEBI/MRD/SE/Cir- 33/2003/27/08 dated August 27, 2003</i> ● <i>SMD/POLICY/Cir -06 /03 dated February 12, 2003</i> ● <i>Code of conduct for Stock Brokers specified under Regulation 7 of SEBI (Stock Brokers and Sub brokers) Regulations, 1992.</i> ● <i>MRD/DoP/SE/Cir- 11/2008 dated April 17, 2008</i> 	
<p>5. Banking and Demat Account Operations</p>	
<p>Procedure for segregation of own and clients' funds and securities (in separate accounts)</p>	<p>Whether member maintains separate bank account for client funds and own funds. Also whether</p>

Internal Audit of Stock Brokers

<p>Internal controls for use of client bank and client beneficiary accounts only for authorized purposes.</p>	<p>member maintains separate beneficiary account for clients securities and own securities?</p>
<p>Verification of client's bank account and constituent beneficiary accounts</p>	<p>Whether clients funds and securities are segregated from own funds and securities?</p> <p>Are there any instances of use of constituent beneficiary account or client bank account for other than authorized purposes? In case of any irregularity observed, mention the instances in detail.</p>
<p><i>Exchange's regulatory references Circular Download no. NSE/INSP/11324 dated 18-Sep-08 and CM and F&O Regulations.</i></p> <p><i>SEBI reference</i></p> <ul style="list-style-type: none"> ● <i>SEBI Circular No. SMD-1/23341 dated November 18, 1993.</i> 	
6. Terminal Operations and Systems	
<p>Procedure and policy adopted by member before allotment of trading terminals</p>	<p>Whether terminals are provided by the member in its head office, branch office or the office of sub broker?</p>
<p>Verification of terminals and its users, at the audit place.</p>	<p>Whether any unauthorized terminal is observed to be allotted? If yes, give complete details.</p>
<p>Verification of certification of the approved users.</p>	<p>Whether periodic audit of systems and software is conducted by certified system auditor?</p>
<p>Due diligence adopted for password security</p>	<p>Whether terminals are operated by approved persons/approved users with valid NCFM certification?</p>
<p>Procedure in place for audit of systems and software</p>	<p>Whether correct User name, login id, terminal location are reported to the Exchange?</p>
<p>Periodic updating of version and back up mechanism</p>	<p>Whether internal controls are in place to ensure that the certification of approved users has not expired?</p>
<p>System adopted for data storage, security and access</p>	<p>Whether internal controls are in place to ensure that the certification of approved users has not expired?</p>
<p>Verification of logs from server</p>	<p>Whether internal controls are in place to ensure that the certification of approved users has not expired?</p>

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	<p>Whether prior permission is obtained by member for providing CTCL?</p> <p>Whether member has complied with applicable provision of CTCL?</p> <p>Whether updated version of software is used?</p> <p>Whether back up facilities are in place and followed?</p> <p>Whether broker has got his system audit done & submitted the system audit report to the Exchange within prescribed time limit? Whether sufficient system for data security is in place?</p>
<p><i>Exchange's regulatory references –Download no. NSE/CMTR/6552 dated 24-Aug-05, download no. NSE/FAOP/6553 dated 24-Aug-05, download no. NSE/MEMB/3574 dated 29-Aug-02, NSE/MEMB/3635 dated 25-Sep-02, download no NSE/MEM/3740 dated 13-Nov-02 and NSE/MEM/7992 dated 10-Oct-06, download no. NSE/CMTR/7634 dated 28-Jun-06, download no. NSE/CMTR/6128 dated 10-May-05, download no. NSE/CMTR/8089 dated 10-Nov—06</i></p> <p><i>SEBI references</i></p> <ul style="list-style-type: none"> ● <i>SMDRP/Policy/Cir-49/2001 dated October 22, 2001</i> ● <i>SEBI/MRD/SE/15958/2003 August 22, 2003</i> 	
<p>7. Management of Branches / Sub Brokers and Internal Control</p>	
<p>System and Policy followed for opening / closing of branch</p>	<p>Whether survey is conducted by the member for opening / closing of branches?</p>
<p>Procedure adopted to inform the same to clients</p>	<p>In case of closure, whether advance notice of the same is sent to clients? Proof of the same.</p>
<p>Periodicity and procedure adopted for inspection of branches / sub brokers</p>	<p>Whether there is monitoring mechanism to identify sudden increase / decrease in client level turnover from any specific branch?</p>
<p>Reporting mechanism and mode of informing the inspection</p>	<p>Whether there is monitoring mechanism to identify sudden increase / decrease in client level turnover from any specific branch?</p>

Internal Audit of Stock Brokers

observations to branches / sub brokers	<p>Whether periodic inspection of branch / sub broker is conducted and reports are maintained?</p> <p>What is the follow-up mechanism?</p> <p>Whether unregistered intermediation is observed?</p> <p>Whether the member has shared commission/ brokerage with entities with whom trading members are forbidden to do business/ another trading member/ employee in the employment of another trading member?</p> <p>Whether internal controls exists and are sufficient to cover the risks at the members end?</p> <p>Whether Stock broker indemnity policy with standard cover/clauses has been taken?</p>
Follow up action plan	
Policy of fixing of roles and responsibilities of officials in head office, branches and sub-brokers office	
Process laid out so as to prevent unregistered intermediation	
Documentation of Internal controls and Comments on Internal controls in place	
Verification of Stock broker indemnity insurance policy	
Sharing of commission/brokerage	
<p><i>Exchange's regulatory references – Circular no. NSE/INSP/11324 dated 18-Sep-08 and CM and FO Rules and Byelaws of the Exchange</i></p> <p><i>SEBI references</i></p> <ul style="list-style-type: none"> ● Section 12 of SEBI Act ● SEBI Circular No. SMD/Policy/CIR-3/98 dated January 16, 1998 ● Circular No. Sub-Brok/Cir/02/2001 dated January 15, 2001 ● Regulation 18 B of SEBI (Stock Brokers and Sub-Brokers) Rules, 1992 ● SMD/POLICY/CIRCULAR/3- 97 dated March 31, 1997. 	
8. Investor Grievance Handling	
Mechanism to monitor complaints lodged with branches/Sub brokers	<p>What is the system to report complaints received by branches / sub brokers to the head office?</p> <p>Whether complaints are received from specific branch/sub broker?</p>
Maintenance of complaints register	
Redressal mechanism for complaints registered against the member	

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Comment on complaints pending for long period	<p>Whether complaints register includes complete details of investor complaints?</p> <p>What is the procedure adopted to resolve complaints?</p> <p>Whether specific action plan is framed by the member in respect of long pending complaints?</p> <p>Whether designated email id for investor grievance is created and informed to the investors?</p> <p>What is the periodicity of monitoring investor complaints?</p> <p>Whether complaints of substantial amount is escalated to the top management?</p>
Verification of investor grievance register and email id	
Internal control for verification of complaints received through the designated email –id	
<p><i>Exchange’s regulatory references - Circular NSE/MEMB/8352 dated 9-Jan-07, Circular no. NSE/INSP/5387 dated 30-Aug-04</i></p> <p><i>SEBI references</i></p> <ul style="list-style-type: none"> ● <i>Clause 1(d) of Regulation 12A</i> ● <i>MRD/DoP/Dep/SE/Cir-22/06 dated December 18, 2006</i> 	
<p>9. Maintenance of Books of Accounts</p>	
Prescribed books of accounts, registers and records are maintained Exchange wise, with the required details and for the stipulated period as per regulatory requirement	Whether prescribed books of accounts, registers and records are maintained Exchange wise, with the required details and for the stipulated period as per regulatory requirement?
Verification of books of accounts and other records	Whether register of securities is maintained client wise-scrip wise?
Ledger Scrutiny	Whether exchange wise separate books of accounts are maintained?
Internal controls on the process for taking approval of the Exchange Analysis of financial reports	Whether member has dealt with suspended/ defaulter/ expelled members and entities prohibited from accessing market?

Internal Audit of Stock Brokers

	<p>Whether prior approval has been obtained by member for change in shareholding/directors/constitution?</p> <p>Whether prior approval has been obtained in case the member has dealt with another member of the Exchange?</p> <p>Whether member has intimated the Exchange in case of they have dealt with member of another stock exchange?</p> <p>Whether advertisements are issued after prior permission of the Exchange?</p> <p>Whether member maintains and update client master in its back office?</p> <p>Whether financial reports of the member has been analysed? Comments on the same.</p>
<p><i>Exchange's regulatory references download circular no. NSE/INSP/11324 dated 18-Sep-08 and CM and F&O Regulations.</i></p> <p><i>SEBI references</i></p> <ul style="list-style-type: none"> ● <i>Rule 15 of Securities Contract Regulation (Rule) 1957</i> ● <i>Regulation 17(1) of SEBI (Stock Brokers and Sub brokers) Regulations, 1992</i> ● <i>SEBI/MRD/SE/Cir-15/2005 dated August 4, 2005</i> ● <i>SEBI/MIRSD/Cir-06/2004 dated January 13, 2004</i> ● <i>Rule 4 (c) of SEBI (Stock Brokers and Sub Brokers) Rules, 1992</i> ● <i>MIRSD-DR 1/SRP/Cir- 43/28408 /04 dated December 15, 2004</i> ● <i>MIRSD/MSS/Cir- 30/ 13289/03 dated July 09, 2003</i> ● <i>Clause C(4) & C (5) of Regulation 7</i> ● <i>Circular No. SMDRP/Policy/Cir-49/2001 dated October 22, 2001</i> 	

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10. Systems & Procedures pertaining to Prevention of Money Laundering Act, PMLA, 2002	
Customer acceptance policy and customer due diligence measures	<p>What is the process adopted by member to verify the identity the customer and/or the person on whose behalf a transaction is being conducted ?</p> <p>Whether any account was opened in fictitious name/benami account?</p> <p>What checks and balances are in place to ensure that the identity of the client does not match with any person having criminal background or is not banned in any other manner?</p> <p>What are the factors of Risk perception having regards to client's location, address, nature of business activity, trading turnover and the manner of making payments so that the clients can be classified in to "High Risk", " Medium Risk", " Low Risk" category?</p> <p>Whether details of appointment of Principal Officer and change in Principal officer, if any, is intimated to FIU-India?</p> <p>Whether member has adopted and implemented written guidelines prescribed under PMLA, 2002 ?</p> <p>Whether member has adequate system to generate alerts for suspicious transactions?</p> <p>As per provisions of Prevention of Money Laundering Act, 2002 whether record of transactions, it's nature and it's value are maintained?</p>
Walk through of the process	
Process of generation and monitoring alerts	
System in place that allows continuous monitoring of transactions	
Process for identifying STR (Suspicious Transaction Report) and reporting the same to FIU-India	
Processes for verification of alerts with KYC details	

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<p><i>Exchange's regulatory references Circular download no. NSE/INVG/7102 dated 25-Jan-06 and NSE/INVG/7307 dated 24-Mar-06 and NSE/INVG/11798 dated 22-Dec-08 and NSE/INVG/11928 dated 22-Jan-09)</i></p> <p><i>SEBI references</i></p> <ul style="list-style-type: none"> ● <i>ISD/AML/CIR-1/2008 dated December 19, 2008</i> 	
<p>11. Transfer of trades</p>	
<p>Procedure and system adopted for Transfer of Trades in the back office</p>	<p>Whether any trades were transferred from one client code to another client code or from client code to pro or vice-versa in the back office of the member?</p> <p>Whether any pattern was observed in case transfer of trades carried out at member's back office?</p>
<p>Verification of trade files downloaded by the Exchange with sauda register/back-office file of member (based on which contract notes are generated)</p>	
<p>Internal controls for transfer of trades</p>	
<p><i>Exchange's regulatory references – CM and F&O regulations</i></p> <p><i>SEBI references</i></p> <ul style="list-style-type: none"> ● <i>SEBI/MRD/SE/Cir- 32/2003/27/08 dated August 27, 2003</i> 	
<p>12. Margin Trading</p>	
<p>Verification of agreements</p>	<p>Whether member has obtained specific approval from the exchange, in case he is providing margin trading facility to his clients?</p> <p>Whether member has complied with regulatory requirements related to margin trading?</p>
<p>Records of funding</p>	
<p><i>Exchange's regulatory references Circular download NSE/MEM/4972 Dated 7-Apr-04</i></p> <p><i>SEBI references</i></p> <ul style="list-style-type: none"> ● <i>SEBI/MRD/SE/SU/Cir-15/04 dated March 19, 2004</i> 	

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13. Proprietary Trading	
Verification of ids enabled for pro	If member is doing pro trading, whether member has disclosed this information to his clients?
Process for approval of Exchange	
	If member is doing pro trading from multiple locations, whether member has obtained prior approval from the Exchange in this regard?
<p><i>Exchange's regulatory references - Circular NSE/CMTR/4540 Dated 6-Nov-03 and Exchange Circular NSE/CMTR/4460 Dated 3-Oct-03</i></p> <p><i>SEBI references</i></p> <ul style="list-style-type: none"> ● <i>SEBI/MRD/SE/Cir- 32/2003/27/08 dated August 27, 2003</i> ● <i>SEBI/MRD/SE/Cir- 42 /2003 dated November 19, 2003</i> 	
14. Internet Trading	
Process of approval from Exchange	Whether member has obtained specific approval from the exchange, in case he is providing internet trading facility to his clients?
Verification of internet agreements	
Procedure followed for user id and password	Whether member has complied with regulatory requirements related to internet trading?
Internal controls for internet trading	
	Whether broker has got his system audit done & submitted the system audit report to the Exchange within prescribed time limit?
<p><i>Exchange's regulatory references Circular download no. NSE/CMTR/1532 dated 16-Mar-00</i></p> <p><i>SEBI references</i></p> <ul style="list-style-type: none"> ● <i>SMDRP/POLICY/Cir-06/2000 dated January 31, 2000</i> 	
15. Operations of Professional Clearing member/ Members clearing trades of other trading members	
Verification of execution of trading - clearing member (TM-CM)	Verification of execution of trading -clearing member (TM-CM)

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<p>agreements/Custodial Participant agreements</p>	<p>agreements/Custodial Participant agreements Whether TM-CM agreements are executed in prescribed formats with trading member?</p>
<p>Verification of issuance of statement of accounts to trading members/custodial participants</p>	<p>Whether Clearing member custodial participant agreements are executed in prescribed formats?</p>
	<p>Verification of issuance of statement of accounts to trading members/custodial participants</p> <p>Whether statement of accounts has been sent to trading member/ custodial participants/?</p> <p>Whether clearing members had collected appropriate and adequate margins in prescribed forms from respective trading members?</p> <p>Whether Margin collection reported to Exchange is in accordance with margins actually collected from trading member?</p> <p>Whether exposure allowed to trading members were based on requisite margins available with the clearing member?</p> <p>Whether interest is charged to the trading member? If yes, what is the basis of interest with complete details like percentage of interest, periodicity of interest charged</p>
<p><i>Exchange's regulatory references - Circular no. NSE/CMPT/11276 dated 10-Sep-08</i></p>	
<p>16. Securities Lending & Borrowing Scheme</p>	
<p>Process of approval from Exchange</p>	<p>Whether member has obtained specific approval from the exchange?</p>

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Verification of SLBS agreement	Whether member has complied with regulatory requirements related to SLBS ?
<i>Exchange's regulatory references - Circular no NSE/CMPT/10146 dated 28-Jan-08, NSE/CMPT/10593 dated 17-Apr-08 and NSE/CMPT/11757 dated 12-Dec-08, NSE/CMPT/10146 dated 30-Jan-08</i>	
SEBI references	
● MRD/DoP/SE/Cir- 31 /2008 dated October 31, 2008	

Points to be noted:

The guidelines prescribed hereunder do not limit the scope of the internal audit. The points mentioned are only indicative in nature and not exhaustive. It however, does not limit the scope of the internal audit. This has been prepared based on the regulatory requirement (as per relevant acts, rules, regulations and circulars) which keep on developing from time to time. The auditors should peruse them and update the scope of the audit.

The report shall also include the following:

1. If any major significant deviations and deviations of recurring nature are observed, the same should be reported separately in the covering page of the audit report. If auditors observations are in the nature of a deviation or a recommendation, the member's response should be sought and recorded in the report.
2. Comments by auditor on the status of compliance in respect of deviations reported in the last audit report,
3. Improvements brought about in the operations between the last audit and the current audit.
4. In case the member has been inspected in the relevant half year by the Exchange/ SEBI, comments by the auditor on whether the member has complied with the observations made in Exchange/ SEBI inspection report are to be included in the audit report.

Internal Audit of Stock Brokers

5. A statement by the auditor that the provisions of SCRA 1956, SEBI Act 1992, SEBI (Stock Brokers and Sub-brokers) Regulations 1992, SCRR 1957, Rules, Bye laws, Regulations, circulars of SEBI, agreements, Bye laws of Exchange/ Clearing Corporation, date security and insurance have been covered in the audit.
6. Auditor shall specifically declare about direct / indirect interest in or relationship with the member or its share holders/ directors/ partners/ proprietors/ management if any and also confirm that they do not perceive any conflict of interest in such relationship/ interest while conducting internal audit of the said member.
7. Membership number allotted by the affiliated professional body should be quoted at the bottom of the report as provided in the format.
8. Observations in the report should be quantified giving instance wise details, details of segment and activity (trading or clearing) for which such violations are observed.

Annexure III

Certificate for Internal Audit

We have examined the relevant books of accounts, records and documents maintained by M/s. _____, (name of the trading/clearing member) bearing SEBI registration number _____) a member of the National Stock Exchange of India Limited / Bombay Stock Exchange Ltd / MCX-Stock Exchange /other Stock Exchange, for the following segments to fulfill the internal audit requirement as prescribed by SEBI vide Circulars dated 22 August 2008 & 21 October 2008, for the half year ended_____.

Segment (Cash Segment/ Derivatives Segment/ Debt Segment /Currency Derivatives/Securities Lending & Borrowing segment)	Activity (Trading/Clearing/ Trading and Clearing)	SEBI registration number

The purpose of this Audit is to examine that the processes, procedures followed and the operations carried out by the Trading Member/Clearing Member are as per the applicable Acts, Rules, Regulations, Bye-laws and Circulars prescribed by SEBI and the stock exchange(s).

We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of this Internal Audit. In our opinion proper books of accounts, records and documents, as per the regulatory requirement have been maintained by the member, so far as it appears from examination of the books.

We have conducted the audit within the framework provided by SEBI/Stock Exchange for the purpose of this Internal Audit.

To the best of our knowledge and belief and according to the information and explanations given to us, no material fraud/ non-

Internal Audit of Stock Brokers

compliance/ violation by the Member is observed during the course of this Audit.

Based on the scrutiny of relevant books of accounts, records and documents , we certify that the Member has complied with the relevant provisions of SEBI Act, 1992, Securities Contracts (Regulation) Act 1956, Securities Contracts (Regulation) Rules 1957, SEBI (Stock Brokers and Sub-Brokers) Regulations, 1992 and various circulars of SEBI. The Member has complied with the Rules, Bye laws, Regulations of NSE/ BSE/ MCX-SE and various circulars issued by the Stock Exchange and Clearing Corporation/ Clearing House.

We declare that we do not have any direct/ indirect interest in or relationship with the member or its share holders/ directors/ partners/ proprietors/ management and also confirm that we do not perceive any conflict of interest in such relationship/ interest while conducting internal audit of the said member.

In our opinion and to the best of our information and according to the explanations given to us by the proprietor/partner (s)/director (s)/ compliance officer, the Report provided by us as per the Annexure and subject to our observations, which covers the entire scope of the Audit, is true and correct.

Company Secretary/ Cost and Management Accountant/ Chartered Accountant

(Seal & Signature)

(Name of the Proprietor / Partner)

Membership no. / CP. No.

Place:-

Date:-

II. Circular on Internal Audit of Stock Brokers/Trading Members/Clearing Members issued by BSE

Notice no : 20090325-22
Notice date : Wednesday, March 25, 2009
Subject : Internal Audit of stock brokers/ trading members/clearing members
Segment Name: General

Contents :

To,

The Members

This is further to Exchange Notice no. 20080825-2 dated August 25, 2008 and Notice no. 20081022-30 dated October 22, 2008 wherein all the stock brokers/trading members/clearing members were directed to carry out complete internal audit on a half yearly basis by chartered accountants, company secretaries or cost and management accountants who are in practice and who do not have any conflict of interest. It was also informed that, the first internal audit period would be from October 1, 2008 to March 31, 2009.

Further, on the basis of SEBI letter no. MIRSD/DPS-I/PG/158174/09 dated March 23, 2009, the applicability, scope/guidelines of audit, format of audit report, audit certificate and the time limit for submission of audit report are finalised and given as Annexure 1, 2 and 3.

All stock brokers/trading members/clearing members are advised to ensure compliance with the above requirements.

Members are advised to submit the Audit Reports to Dept. of Surveillance & Supervision (Inspection Cell) on 24th floor of the Exchange.

Internal Audit of Stock Brokers

In case of any queries / clarification, the members may contact the under mentioned officials on Tel:022-22721233/34

Name of the Officials	Intercom No.
Ms. Neha Malviya	8898
Ms. Anita Gorhe	8095
Ms. Parul Kothari	8196
Mr. Mitesh Thakkar	8880

P. K. Ramesh
General Manager
Surveillance & Supervision

Yogesh Bambardekar
Asst. Gen. Manager
Surveillance & Supervision

Annexure - 1

Internal Audit for Stock Brokers/ Trading Members/Clearing Members

Applicability

Trading Members (Stock Brokers) and Clearing members are required to appoint an internal auditor for carrying out complete internal audit in all segments of the Exchange in which they are enabled for trading/clearing (wherein atleast a one/single trade have been executed or cleared by them) and submit a report to the Exchange on half yearly basis. The first half year period would start from October 01, 2008.

Who can Conduct Internal Audit

Internal audit is required to be carried out by any Chartered Accountant, Company Secretary or Cost and Management Accountant who is in practice and who does not have any conflict of interest.

Scope/ Purpose of Audit

The purpose of audit should be :

- (a) to ensure that the books of account, records and documents have been maintained in the manner required under Securities Exchange Board of India Act, 1992, Securities Contracts (Regulation) Act, 1956, SEBI (Stock brokers and Sub-brokers) Regulations, 1992, Securities Contracts (Regulation) Rules, 1957, circulars issued by SEBI & Exchange, Bye laws of the Exchange including agreements, data security and insurance in respect of operations of trading member/clearing member.
- (b) to ascertain whether adequate internal control systems, procedures and safeguards have been established and are being followed by the intermediary to fulfill its obligations under Securities and Exchange Board of India Act, 1992, Securities Contracts (Regulation) Act, 1956, SEBI (Stock brokers and Sub-brokers) Regulations, 1992, Securities

Internal Audit of Stock Brokers

Contracts (Regulation) Rules, 1957, circulars issued by SEBI & Exchange, Bye laws of the Exchanges and with respect to data security and insurance in respect of operations of trading member/clearing member.

- (c) to ascertain whether any circumstances exist which would render the intermediary unfit or ineligible for dealing in securities market.
- (d) to ascertain whether the provisions of the securities laws and the directions and/or circulars issued there under by SEBI/Exchange have been complied with
- (e) to ascertain, whether the provision of Bye-laws, notices, circulars, instructions or orders issued by stock exchanges have been complied with
- (f) to inquire suo motu into such matters as may be deemed fit by the auditor in the interest of investors or the securities market

Submission of Internal Audit Report

Internal auditor would submit the audit report to the Proprietor/ Partners/ Board of respective trading/ clearing member who would place the report before its Board of Directors/ proprietor/ partners and shall forward the same along with para-wise/ point wise comments to respective stock exchanges within 3 months from the end of the relevant half year audit period. The audit report may be combined across segments and activity (trading/clearing) for respective Exchanges.

Non-compliance relating to Internal Audit by the Members

Non-submission of internal audit report as per the aforesaid guidelines shall be treated as non-compliance and suitable disciplinary action may be initiated against the concerned member/s. Where, in the opinion of the Exchange, the quality of the reporting is not satisfactory or the audit is not carried out in accordance with the aforesaid guidelines, the Exchange reserves the right to advise the concerned member/s to change the auditors and/ or submit revised reports.

Annexure - 2

Areas to be Covered in Internal Audit and Areas on which Comments Needs to be Incorporated in the Report are given below

1. Client Registration and Documentation	
Execution of KYC, MCA/TPA, and RDD – checks and balances in place	Whether KYC, MCA/TPA, RDD are executed in the prescribed formats & the same is executed before execution of trades for the client?
Verification of formats of KYC, MCA/TPA and RDD and attachments including proof of identity and address, as prescribed by SEBI/BSE	Whether UCC is allotted to the client & the same is uploaded to the Exchange with PAN
Verification that Contradictory clauses are not mentioned in KYC, MCA/TPA and RDD	Whether all fields in KYC including client's financial details are filled in properly?
Systems and procedures put in place by member for verification of PAN before opening account	Whether proper proof of identity, PAN and proof of address are taken with KYC form?
Procedure followed by the member for informing UCC to the clients & uploading to the Exchange	Whether any contravening clauses are included in MCA/TPA?
Mechanism to ensure financial details of clients	Whether in person verification of clients is done by the employees of the trading member only?
Procedure adopted for in person verification of clients	Whether date of verification, name and signature of the official who has done in-person verification and the member's stamp incorporated in the client registration form?
Procedure adopted by relationship managers, if any, for procuring new clients	Whether copies of all the documents executed by client are given to the respective clients?
Delivery of copies of client registration documents to the clients	Whether change in address, bank account or demat account is carried out on receipt of written request
Storage of client registration documents and retrieval mechanism	

Internal Audit of Stock Brokers

Procedure adopted for obtaining clients' consent for electronic contract notes	<p>along with documentary proof from the respective client?</p> <p>Whether client details including financial details are reviewed periodically and updated?</p>
Periodic review of client related information and updation of the same in system	
Verification of RDD/KYC/MCA/TPA of different types of clients	
Acquaintance procedure for new clients	
<p>SEBI circular no. SMDRP/Policy/Cir-39/2001 dated July 18, 2001</p> <p>SEBI circular no. SEBI/MIRSD/DPS-1/Cir-31/2004, dated August 26, 2004 & Regulation-7 D</p> <p>SEBI circular no. MRD/DoP/SE/Cir- 35/2004 dated October 26, 2004</p> <p>SEBI circular no. MRD/DoP/Cir- 05/2007 dated April 27, 2007</p> <p>MIRSD/DPS-III / 130466 / 2008 dated July 02, 2008</p> <p>Exchange Notice No.20040827-11 dated August 27, 2004</p> <p>Exchange Notice No. 20060704-6 dated July 04, 2006</p> <p>Exchange Notice No. 20080624-8 dated June 24, 2008</p> <p>Exchange Notice no.20080707-3 dated July 07, 2008</p> <p>Exchange Notice no.20080801-2 dated August 01, 2008</p>	
<p>2. Order Management and Risk Management Systems</p>	
Procedure adopted for receipt of orders from clients	<p>Whether checks are in place to ensure that no unauthorized orders are executed from any of the terminals?</p> <p>Whether control reports like orders executed away from market price, client-wise/scrip-wise/terminal-wise volumes / exposures are generated to monitor any manipulation or unwarranted activity?</p> <p>In case of dormant accounts, are</p>
Mechanism for order management and execution	
Procedure adopted for setting Limits at client level / Terminal level/Dealer level	
Policy on Margin collection mechanism and the modes of margin money	
Procedure adopted for reporting of	

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<p>client margin collection to Clearing House</p>	<p>there any checks in place to ensure that in case the account is reactivated whether it is operated by the respective client only?</p>
<p>Review of process adopted for monitoring / recovery of long outstanding debit balances</p>	<p>Whether initial and other margins are collected from respective clients in the prescribed form of funds, fixed deposit receipts, bank guarantees and approved securities with appropriate haircut?</p>
<p>Procedure adopted for calculation & reporting client funding</p>	<p>Whether the member has a proper system for reporting the correct client margin collection, in Derivatives segment?</p>
<p>Procedure for monitoring institutional trades not routed through custodians</p>	<p>Verify whether the margin reported by the member to the Exchange in Derivatives segment is actually collected and available in the books of accounts of the member. In case of any irregularity observed, mention the instances wherein wrong reporting of margin collected from clients/trading members was observed.</p>
<p>Procedure adopted for providing Direct Market Access (DMA) facility</p>	<p>Whether Risk Management System (RMS) includes policy on margin collection from clients/trading member and the RMS is documented?</p>
	<p>Whether proper systems are in place to ensure timely collection for pay-in from the respective client as per settlement schedule?</p>
	<p>Whether proper monitoring mechanism is in place to review long outstanding debit balances in clients' accounts and recovery of the same?</p>

Internal Audit of Stock Brokers

	<p>Whether member has reported details of client funding, if any, to the exchange within prescribed time limit?</p> <p>What are the sources of funds in case client funding is observed?</p> <p>Whether all the institutional trades are routed through custodians by following Straight Through Processing (STP) ?</p> <p>What are the reasons for institutional trades not being routed through custodians? Whether any specific pattern is observed for the same?</p> <p>Whether member has obtained prior approval from the exchange before providing terminal to the clients under DMA facility?</p> <p>Whether member has complied with regulatory requirements related to. DMA?</p>
<p>SEBI circular no. MRD/DoP/SE/Cir-07/2005 dated February 23, 2005</p> <p>SEBI circular no. MRD/DoP/SE/Cir-17/2005 dated September 02, 2005</p> <p>Exchange Notice no. 20040420-12 dated April 20, 2004.</p> <p>Exchange notice no. 20080417-24 dated April 17, 2008.</p> <p>Exchange Notice No. 20051216-8 dated December 16, 2005</p>	
<p>3. Contract Notes, Client Margin details and Statement of Accounts</p>	
<p>Procedure adopted for issuance of contract notes</p>	<p>Whether contract notes are sent within 24 hours of execution of trades and margin details are sent daily to respective clients and proof of delivery / dispatch is maintained?</p>
<p>Verification of format of contract notes issued</p>	<p>Whether all prescribed details including name and signature of</p>
<p>Verification of copy of contract note with Proof of dispatch/register of</p>	<p>Whether all prescribed details including name and signature of</p>

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dispatch/logs maintained	<p>authorised signatory, dealing office details and brokerage are contained in contract note?</p> <p>In case contract notes and margin details are sent in electronic form, whether log is maintained?</p> <p>Whether trail of bounced mails is maintained and physical delivery is ensured in case of bounce mails?</p> <p>Whether member has complied with regulatory requirements related to. Electronic Contract Notes(ECN)?</p> <p>Whether complete statement of accounts for funds and securities are issued on a quarterly basis to clients, with error reporting clause?</p> <p>Whether proof of sending the same is maintained?</p>
Adherence to electronic contract note norms, if applicable	
Procedure adopted for sending statement of accounts	
Contents & periodicity of statement of accounts of funds and securities	
Procedure adopted for sending margin details to clients	
Procedure for maintaining acknowledgement / proof of delivery of contract notes/statement of accounts/margin details to the clients	
<p>Clause B(2) of Code of conduct for Stock Brokers specified under Regulation 7</p> <p>SMD-1/23341 dated November 18, 1993</p> <p>SMD (B)/104/22775/93 dated October 29, 1993</p> <p>SMD/MDP/CIR/043/96 dated August 5, 1996</p> <p>MRD/DoP/SE/Cir-20/2005 dated September 08, 2005</p> <p>SEBI/DNPD/143542 /Cir-43/08 dated November 06, 2008</p> <p>Exchange Notice No.20080527-6 dated May 27, 2008</p> <p>Bye-Law 247A of the Rules, Bye-laws & Regulations of the Exchange</p> <p>Exchange Notice No. 20060627-18 dated June 27, 2006</p> <p>Exchange Notice No. 20050909-13 dated September 09, 2005</p> <p>Exchange Notice No. 20080211- 19 dated February 11, 2008</p>	
<p>4. Dealing with Clients' Funds and Securities</p>	
Verification of details of cash receipts from / payments to clients,	Whether cash dealings with clients are done by branches / sub

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<p>if any, observed during the audit period are to be given (mentioning any specific branch involved).</p>	<p>brokers?</p>
<p>Verification of internal controls adopted by the member while accepting banker's cheque / demand draft from clients</p>	<p>Whether banker's cheque / demand draft are accompanied with written request from the respective client? Whether pay-in or pay-out is received from or delivered to respective clients only?</p>
<p>Procedure for ensuring that receipts and payment of funds/securities are from/to respective client only</p>	<p>Whether any instances were observed wherein pay-in / pay out was received from / made to account other than the respective client account? Whether systems are in place to ensure compliance in this regard by the member?</p>
<p>Periodic Reconciliation of books of accounts</p>	<p>Whether collaterals of clients were pledged with banks / other entities for raising funds? If yes, details of such instances observed are to be given.</p>
<p>Verification of following books of accounts/records</p> <ul style="list-style-type: none"> - Register of Securities - Bank Statements - Depository accounts maintained by member - Client ledgers - Cash Book - Bank Book- Details of records of client securities pledged, if any. - Underlying for any overdraft/loan account. 	<p>Whether funds raised by pledging client securities were utilised for respective client only? List of instances to be provided in case of non-utilisation of proceeds for respective client? Whether client's funds / securities are transferred to respective clients accounts within one working day of after the pay-out of the settlement?</p>
	<p>Whether any instance of misutilisation of clients' funds or securities is observed? If yes, give complete details of such instances. Whether bank book and register of securities are in alignment with bank statements and transaction statements provided by banks and depositories?</p>

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	Whether dividend and other corporate benefits received on behalf of clients is paid/credited/ passed on to the respective clients account?
SEBI circular no. SEBI/MRD/SE/Cir- 33/2003/27/08 dated August 27, 2003 Code of conduct for Stock Brokers specified under Regulation 7 of SEBI (Stock Brokers and Sub brokers) Regulations, 1992. SEBI circular no. MRD/DoP/SE/Cir-11/2008 dated April 17, 2008 Exchange Notice No.20030903-5 dated September 03, 2003	
5. Banking and Demat Account Operations	
Procedure for segregation of own and clients' funds and securities (in separate accounts)	Whether member maintains separate bank accounts for clients funds & own funds. Also, whether maintains separate beneficiary accounts for clients' securities & own securities? Whether clients funds and securities are segregated from own funds and securities? Are there any instances of use of client beneficiary account or client bank account for unauthorised purposes? In case of any irregularity observed, mention the instances in detail.
Internal controls for use of client bank and client beneficiary accounts only for authorized purposes.	
SEBI circular no. SMD/SED/CIR/93/23321 dated November 18, 1993. Bye-Law 247A of the Rules, Bye-laws & Regulations of the Exchange	
6. Terminal Operations and Systems	
Procedure and policy adopted by member before allotment of trading terminals	Whether terminals are provided by the member in his head office, branch office or the office of sub broker? Whether any unauthorized terminal is observed to be allotted? If yes,
Verification of terminals and its users, at the audit place.	
Verification of certification of the approved users.	

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Due diligence adopted for password security	<p>give complete details. Whether periodic audit of systems and software is conducted by certified systems auditor?</p> <p>Whether terminals are operated by approved persons/approved users with valid BCSM certification?</p> <p>Whether correct User name, login id, terminal location are reported to the Exchange?</p> <p>Whether internal controls are in place to ensure that the certification of approved users has not expired?</p> <p>Whether prior permission is obtained by member for providing IML?</p> <p>Whether member has complied with applicable provision of IML?</p> <p>Whether updated version of software is used?</p> <p>Whether back up facilities are in place and followed?</p> <p>Whether broker has got his system audit done & submitted the system audit report to the Exchange within prescribed time limit?</p>
Procedure in place for audit of systems and software	
Periodic updating of version and back up mechanism	
System adopted for data storage, security and access	
Verification of logs from server	
SEBI circular no. SMDRP/Policy/Cir-49/2001 dated October 22, 2001 SEBI/MRD/SE/15958/2003 August 22, 2003 Exchange Notice No.20070517-26 dated May 17, 2007	
7. Management of Branches / Sub Brokers and Internal Control	
System and Policy followed for opening / closing of branch	Whether survey is conducted by the member for opening / closing of branches?
Procedure adopted to inform the same to clients	In case of closure, whether advance notice of the same is sent to clients? Proof of the same.
Periodicity and procedure adopted	

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for inspection of branches/ sub brokers	<p>Whether there is monitoring mechanism to identify sudden increase / decrease in client level turnover from any specific branch?</p> <p>Whether periodic inspection of branch / sub broker is conducted and reports are maintained?</p> <p>What is the follow-up mechanism?</p> <p>Whether unregistered intermediation is observed?</p> <p>Whether the member has shared commission/brokerage with entities with whom trading members are forbidden to do business / another trading member / employee in the employment of another trading member?</p> <p>Whether internal controls exists and are sufficient to cover the risks at the members end?</p> <p>Whether Stock broker indemnity policy with standard cover/clauses has been taken?</p>
Reporting mechanism and mode of informing the inspection observations to branches / sub brokers	
Follow up action plan	
Policy of fixing of roles and responsibilities of officials in head office, branches and sub-brokers office	
Process laid out so as to prevent unregistered intermediation	
Documentation of Internal controls and Comments on Internal controls in place	
Verification of Stock broker indemnity insurance policy	
Sharing of commission/ brokerage	
Section 12 of SEBI Act	
SEBI circular no. SMD/SED/RCG/270/96 dated January 19, 1996 SEBI circular no. SMD/Policy/CIR-3/98 dated January 16, 1998 SEBI circular no. Sub-Brok/Cir/02/2001 dated January 15, 2001 Regulation 18B of SEBI (Stock Brokers and Sub-Brokers) Regulations, 1992 SEBI circular no. SMD/POLICY/CIRCULAR/3- 97 dated March 31, 1997. Exchange Notice No.20080612-3 dated June 12, 2008 Exchange Notice No.20080716 – 10 dated July 16, 2008.	
8. Investor Grievance Handling	
Mechanism to monitor complaints lodged with branches/sub-brokers	<p>What is the system to report complaints received by branches / sub brokers to the head office?</p>
Maintenance of complaints register	

Internal Audit of Stock Brokers

<p>Redressal mechanism for complaints registered against the member</p>	<p>Whether complaints are received from specific branch/sub-broker?</p>
<p>Comment on complaints pending for long period</p>	<p>Whether complaints register includes complete details of investor complaints?</p>
<p>Verification of investor grievance register and email id</p>	<p>What is the procedure adopted to resolve complaints?</p>
<p>Internal control for verification of complaints received through the designated email-id</p>	<p>Whether specific action plan is framed by the member in respect of long pending complaints?</p> <p>Whether designated email id for investor grievances is created and informed to the investors ?</p> <p>What is the periodicity of monitoring investor complaints?</p> <p>Whether complaints of substantial amount is escalated to the top management ?</p>
<p>SEBI circular no. MRD/DoP/Dep/SE/Cir-22/06 dated December 18, 2006 Clause 1(d) of Regulation 12A Exchange Notice No.20070131-11 dated January 31, 2007</p>	
<p>9. Maintenance of Books of Accounts</p>	
<p>Prescribed books of accounts, registers and records are maintained Exchange wise, with the required details and for the stipulated period as per regulatory requirement</p>	<p>Whether prescribed books of accounts, registers and records are maintained Exchange wise, with the required details and for the stipulated period as per regulatory requirement?</p>
<p>Verification of books of accounts and other records</p>	<p>Whether exchange wise separate books of accounts are maintained?</p>
<p>Internal controls on the process for taking approval of the Exchange</p> <p>Analysis of Financial Reports</p>	<p>Whether member has dealt with any suspended /defaulter /expelled member and/or prohibited entity?</p> <p>Whether prior approval has been obtained by member for change in shareholding/directors/constitution?</p>

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	<p>Whether prior approval has been obtained in case the member has dealt with another member of the Exchange?</p> <p>Whether member has intimated the Exchange in case of they have dealt with member of another stock exchange?</p> <p>Whether advertisements are issued after prior permission of the Exchange?</p> <p>Whether member maintains and updates client master in its back office? Whether financial reports of the member has been analysed? Comments on the same.</p>
<p>Rule 15 of Securities Contract Regulation Rules 1957</p> <p>Regulation 17(1) & 18 of SEBI (Stock Broker Sub-broker) Regulation 1992</p> <p>Rule 4 (c) of SEBI (Stock Brokers and Sub Brokers) Rules, 1992 Clause C(4) & C (5) of Regulation 7</p> <p>SEBI Circular No. SMDRP/Policy/Cir-49/2001 dated October 22, 2001</p> <p>SEBI circular no. MIRSD/MSS/Cir-30/ 13289/03 dated July 09, 2003</p> <p>SEBI circular no. SEBI/MIRSD/Cir-06/2004 dated January 13, 2004</p> <p>SEBI circular no. MIRSD-DR 1/SRP/Cir-43/28408/04 dated December 15, 2004</p> <p>SEBI circular no. SEBI/MRD/SE/Cir-15/2005 dated August 4, 2005</p> <p>Exchange Notice No. 20040117-8 dated January 17, 2004</p>	
<p>10. Systems and Procedures pertaining to Prevention of Money Laundering Act (PMLA), 2002</p>	
<p>Customer acceptance policy and customer due diligence measures</p> <p>Walk through of the process</p>	<p>What is the process adopted by member to verify the identity of the customer and/or the person on whose behalf a transaction is being conducted ?</p>

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<p>Process of generation and monitoring alerts</p> <hr/> <p>System in place that allows continuous monitoring of transactions</p> <hr/> <p>Process for identifying STR (Suspicious Transaction Report) and reporting the same to FIU-India filed</p> <hr/> <p>Processes for verification of alerts with KYC details</p>	<p>Whether any account was opened in fictitious name/benami account ?</p> <p>What checks and balances are in place to ensure that the identity of the client does not match with any person having criminal background or is not banned in any other manner?</p> <p>What are the factors of Risk perception having regard to client's location, address, nature of business activity, trading turnover and the manner of making payments so that the clients can be classified in to "High Risk", " Medium Risk", " Low Risk" category?</p> <p>Whether details of appointment of Principal Officer and change in Principal officer, if any is intimated to FIU-India?</p> <p>Whether member has adopted and implemented written guidelines prescribed under PMLA, 2002?</p> <p>Whether member has adequate system to generate alerts for suspicious transactions?</p> <p>As per provisions of Prevention of Money Laundering Act, 2002 whether record of transactions, its nature and its value are maintained?</p>
<p>SEBI circular no. ISD/CIR/RR/AML/1/06 dated January 18, 2006</p> <p>SEBI circular no. ISD/CIR/RR/AML/2/06 dated March 20, 2006</p> <p>SEBI circular no. ISD/AML/CIR-1/2008 dated December 19, 2008</p> <p>SEBI letter no. ISD/SR/AK/AML/150847/2009 dated January 15, 2009</p> <p>Exchange Notice no.20060321-15 dated March 21, 2006</p> <p>Exchange Notice No.20081222-21 dated December 22, 2008</p> <p>Exchange Notice No.20090122-9 dated January 22, 2009</p>	

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11. Transfer of Trades	
Transfer of trades in the back office	Whether any trades were transferred from one client code to another client code or from client code to pro or vice-versa in the back office of the member? Whether any pattern was observed in case, transfer trades carried out at member's back office
Verification of trade files downloaded by the Exchange with sauda register/back-office file of member (based on which contract notes are generated)	
Internal controls for transfer of trades	
SEBI circular no. SEBI/MRD/SE/Cir-32/2003/27/08 dated August 27, 2003 Exchange Notice No.20030329-1 dated March 29, 2003	
12. Margin Trading	
Verification of agreements	Whether member has obtained specific approval from the exchange, in case he is providing margin trading facility to his clients? Whether member has complied with regulatory requirements related to margin trading?
Records of funding	
SEBI circular no. SEBI/MRD/SE/SU/Cir-15/04 dated March 19, 2004 Exchange Notice No.20040402-31 dated April 02, 2004	
13. Proprietary Trading	
Verification of ids enabled for pro	If member is doing pro trading, whether member has disclosed this information to his clients? If member is doing pro trading from multiple locations, whether member has obtained prior approval from the Exchange in this regard?
Process for approval of Exchange	
SEBI circular no. SEBI/MRD/SE/Cir-32/2003/27/08 dated August 27, 2003 SEBI letter no. SEBI/MRD/SE/Cir-42/2003 dated November 19, 2003 Exchange Notice No. 20031125-7 dated November 25, 2003 Exchange Notice No. 20030909-1 dated September 09, 2003	

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14. Internet Trading	
<p>Process of approval from Exchange</p> <p>Verification of internet agreements</p> <p>Procedure followed for user id and password</p>	<p>Whether member has obtained specific approval from the exchange, in case he is providing internet trading facility to his clients?</p> <p>Whether member has complied with regulatory requirements related to internet trading?</p> <p>Internal controls for internet trading</p> <p>Whether broker has got his system audit done & submitted the system audit report to the Exchange within prescribed time limit?</p>
<p>SEBI Circular no. SMDRP/POLICY/CIR-06/2000 dated January 31, 2000</p> <p>Exchange Notice No. 47315 /2000 dated April 17, 2000</p>	
15. Operations of Professional Clearing Member/ Members Clearing Trades of other Trading Members	
<p>Verification of execution of trading -clearing member (TM-CM) agreements/Custodial Participant agreements</p>	<p>Whether TM-CM agreements are executed in prescribed formats with trading member?</p> <p>Whether Clearing member custodial participant agreements are executed in prescribed formats ?</p>
<p>Verification of issuance of statement of accounts to trading members/custodial participants</p>	<p>Whether statement of accounts has been sent to trading member/ custodial participants/?</p> <p>Whether clearing members had collected appropriate and adequate margins in prescribed forms from respective trading members?</p> <p>Whether Margin collection reported to Exchange is in accordance with margins actually collected from trading member ?</p> <p>Whether exposure allowed to trading members were based on</p>

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	<p>requisite margins available with the clearing member?</p> <p>Whether interest is charged to the trading member? If yes, what is the basis of interest with complete details like percentage of interest, periodicity of interest charged</p>
16. Securities Lending and Borrowing Scheme	
Process of approval from Exchange	Whether member has obtained specific approval from the exchange?
Verification of SLBS agreement	Whether member has complied with regulatory requirements related to SLBS ?
<p>SEBI circular no. MRD/DoP/SE/Dep/Cir- 14 /2007 dated the December 20, 2007SEBI circular no. MRD/DoP/SE/Cir- 31 /2008 dated October 31, 2008Exchange notice no. 20071224-10 dated December 24, 2007Exchange notice no. 20080128-3 January 28, 2008Exchange notice no. 20080130-38 dated January 30, 2008Exchange notice no. 20080417-23 dated April 17, 2008Exchange notice no. 20081223-15 dated December 23, 2008</p>	

Points to be noted:

The guidelines prescribed hereunder do not limit the scope of the internal audit. The points mentioned are only indicative in nature and not exhaustive. This has been prepared based on the regulatory requirement (as per relevant acts, rules, regulations and circulars) which keep on developing from time to time. The auditors should peruse them and update the scope of the audit.

The report shall also include the following:

1. If any major significant deviations and deviations of recurring nature are observed, the same should be reported separately in the covering page of the audit report. If auditors observations are in the nature of a deviation or a recommendation, the member's response should be sought and recorded in the report.

Internal Audit of Stock Brokers

2. Comments by auditor on the status of compliance in respect of deviations reported in the last audit report,
3. Improvements brought about in the operations between the last audit and the current audit.
4. In case the member has been inspected in the relevant half year by the Exchange / SEBI, comments by the auditor on whether the member has complied with the observations made in the Exchange/SEBI inspection report are to be included in the audit report.
5. A statement by the auditor that the provisions of SCRA 1956, SEBI Act 1992, SEBI (Stock Brokers and Sub-brokers) Regulations 1992, Rules, Bye laws, Regulations and circulars of SEBI, agreements, Bye laws of Exchange, circulars of Clearing House, data security and insurance have been covered in the audit.
6. Auditor shall specifically declare about direct/ indirect interest in or relationship with the member or its share holders/ directors/ partners/ proprietors/ management, if any and also confirm that they do not perceive any conflict of interest in such relationship/ interest while conducting internal audit of the said member.
7. Membership number allotted by the affiliated professional body should be quoted at the bottom of the report as provided in the format.
8. Observations in the report should be quantified giving instance wise details, details of segment and activity (trading or clearing) for which such violations are observed.

Annexure - 3

Certificate for Internal Audit

We have examined the relevant books of accounts, records and documents maintained by M/s. _____, (name of the trading/clearing member) bearing SEBI registration number _____) a member of the National Stock Exchange of India Limited / Bombay Stock Exchange Ltd. / MCX-Stock Exchange /other Stock Exchange, for the following segments to fulfill the internal audit requirement as prescribed by SEBI vide circulars dated August 22, 2008 & October 21, 2008, for the half year ended_____.

Segment (Cash Segment/ Derivatives Segment/ Debt Segment /Currency Derivatives/Securities Lending & Borrowing segment)	Activity (Trading/Clearing/ Trading and Clearing)	SEBI registration number

The purpose of this audit is to examine that the processes, procedures followed and the operations carried out by the Trading Member/Clearing Member are as per the applicable Acts, Rules, Regulations, Bye-laws and Circulars prescribed by SEBI and the Stock Exchange.

We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of this internal audit. In our opinion proper books of accounts, records & documents, as per the regulatory requirement have been maintained by the member, so far as it appears from examination of the books.

We have conducted the audit within the framework provided by SEBI/Stock Exchange for the purpose of this internal audit.

To the best of our knowledge and belief and according to the information and explanations given to us, no material fraud / non-

Internal Audit of Stock Brokers

compliance /violation by the member is observed during the course of this audit.

Based on the scrutiny of relevant books of accounts, records and documents, we certify that the member has complied with the relevant provisions of SEBI Act, 1992, Securities Contracts (Regulation) Act 1956, Securities Contracts (Regulation) Rules 1957, SEBI (Stock Brokers and Sub-Brokers) Regulations, 1992 and various circulars of SEBI. The member has complied with the Rules, Bye-laws, Regulations of BSE/ NSE/ MCX-SE and various circulars issued by the Stock Exchange and Clearing Corporation/ Clearing House.

We declare that we do not have any direct/ indirect interest in or relationship with the member or its directors/ partners/proprietors/ management and also confirm that we do not perceive any conflict of interest in such relationship/ interest while conducting internal audit of the member.

In our opinion and to the best of our information and according to the explanations given to us by the proprietor/ partner(s)/director(s)/ compliance officer, the Report provided by us as per the Annexure and subject to our observations, which covers the entire scope of the audit, is true and correct.

Company Secretary/ Cost and Management Accountant/ Chartered Accountant

(Seal & Signature)

(Name of the Proprietor / Partner)

Membership no. / CP. No.

Place:-

Date:-

I-5

**TECHNICAL GUIDE ON
INTERNAL AUDIT OF
SUGAR INDUSTRY**

Foreword

India has been known as the original home of sugar and sugarcane. It is the world's second largest sugar producer and consumer. The Indian sugar industry is a key driver of rural development, supporting India's economic growth. The industry is inherently inclusive supporting over millions of farmers and their families, along with workers and entrepreneurs of hundreds of mills, apart from a host of wholesalers and distributors spread across the country.

By products, productivity improvements combined with price risk management tools and international trade Indian sugar industry can aim to improve profitability and reduce cyclicalities. A strong, skilful and independent internal audit function is fundamental to achieve these objectives. Internal audit adds value to the overall organizational performance by providing quality assurance that result in improved operational efficiencies, strengthened internal controls and improve effectiveness of risk management, control and governance processes.

I am happy to note that Internal Audit Standards Board of the Institute is issuing this "Technical Guide on Internal Audit of Sugar Industry" that primarily deals with the operational as well as internal audit aspects relevant to Indian sugar industry.

At this juncture, I congratulate CA. Rajkumar S. Adukia, Chairman, Internal Audit Standards Board and other members of the Board for bringing out publication on such an important topic of national relevance.

I am sure that this Technical Guide, like other publications of the Board, would be warmly received and appreciated by the members and other interested readers.

April 22, 2010
New Delhi

CA. Amarjit Chopra
President, ICAI

Preface

Sugar industry is of significant importance to the Indian economy. While consumption has been growing historically, the production has been cyclical. At present, the sugar industry is regulated across the value chain. The key stakeholders of sugar industry, i.e., farmers, millers, consumers and the government have shared goals of achieving high economic growth, minimizing risks, enhancing farmer miller relationships, meeting growing domestic demand and contributing to the nation's food and energy needs.

Factors, such as, cyclical in the business, cane procurement, manufacturing and sales processes, dependency on the monsoon differentiate the sugar industry from any other industry. Internal audit can go a long way in helping sugar industry in improving their operating efficiency, increasing value for money and finally, their competitiveness, both in the domestic as well as in international markets. Given the changing dynamics of the business landscape as well as emerging technology tools to augment internal audit activities, internal auditors must commit themselves to ongoing education and skill development.

Through this Technical Guide, an attempt has been made by the Internal Audit Standards Board to help the readers to understand the basic operations undertaken in sugar industry and the detailed procedures to be undertaken by the internal auditor in respect of various areas. The Guide has been divided into seven chapters. Chapter 1 is introductory in nature and describes objective and scope of the Technical Guide. Chapter 2 provides the overview of the sugar industry in India. Chapter 3 discusses the major legislations governing the sugar industry. Chapter 4 explains the various processes involved in sugar industry, such as, sugarcane development and procurement, manufacturing of sugar, and sales and marketing of sugar. Chapters 5 deals with the overall approach of internal audit with reference to Standards on Internal Audit, and the procedures to be undertaken by the internal auditor with regard to peculiar aspects related to sugar industry. Chapter 6 provides

Compendium of Industry Specific Internal Audit Guides

guidance regarding internal audit of key processes such as, cane survey, procurement process, manufacturing process, sales and marketing process of sugar and also of distillery products. Chapter 7 deals with important internal control aspects related to sugar industry. The Guide also includes the glossary of terms for explaining the technical terms peculiar to the sugar industry.

At this juncture, I am grateful to CA. Amit Gupta and Shri Anurag Agarwal for squeezing time out of their pressing preoccupations to share their wealth of knowledge and experience with us and preparing the basic draft of the Guide.

I also wish to thank CA. Amarjit Chopra, President and CA. G. Ramaswamy, Vice President for their continuous support and encouragement to the initiatives of the Board. I must also thank my colleagues from the Council at the Internal Audit Standards Board, viz., CA. Naveen N.D. Gupta, CA. Nilesh S. Vikamsey, CA. Atul C. Bheda, CA. K. Raghu, CA. J. Venkateswarlu, CA. Abhijit Bandyopadhyay, CA. Ravindra Holani, CA. Charanjot Singh Nanda, Shri K.P. Sasidharan, Shri Prithvi Haldea and Shri Sidharth Birla for their vision and support. I also wish to place on record my gratitude for the coopted members on the Board, viz., CA. Sushil Gupta, CA. Smita Satish Gune, CA. Nagesh Dinkar Pinge, CA. Sumant Chadha and CA. Deepak Wadhawan as also special invitees on the Board, viz., CA. Sanjay Kumar Agarwal, CA. Vinod Jain, CA. Anuj Goyal, CA. Pankaj Tyagee, CA. K.S. Sundara Raman and CA. Ravi H. Iyer for their devotion in terms of time as well as views and opinions to the cause of the professional development. I also appreciate efforts put in by CA. Jyoti Singh, Secretary, Internal Audit Standards Board and her team of officers, viz., CA. Arti Aggarwal and CA. Gurpreet Singh, Senior Executive Officers, for their inputs in giving final shape to the publication.

I am confident that this well researched publication would provide a ready reference tool for the members and other interested readers while undertaking the assignment of internal audit of sugar industry.

April 27, 2010
Mumbai

CA. Rajkumar S. Adukia
Chairman
Internal Audit Standards Board

Glossary

Ash	<p>The following two types of ash are commonly referred to in sugar production:</p> <ul style="list-style-type: none">• Carbonated Ash - This is ash residue which remains after burning at 650 degrees Celsius.• Sulphated Ash - This is ash residue from a sample treated with sulphuric acid which remains after burning at 650 degrees Celsius.
Attenuation Index	<p>This is part of the ICUMSA sugar rating process, and refers to how much light absorbance a solution has. It is tested at a specific wavelength and expressed in terms of that wavelength.</p>
Bagacillo	<p>Little bagasse particles removed from pre-clarification juices or final bagasse.</p>
Bagasse	<p>The residue left behind sugar cane crushing is referred to as bagasse. There are various types of bagasse obtained after various stages in the milling, diffusing and dewatering stages of sugar production. Bagasse obtained after the first mill is called first mill bagasse and depending on how many milling stages the sugar cane goes through, there may be second mill bagasse, third mill bagasse, etc. Post diffusion stage, the bagasse is known as diffuser bagasse and the very last type of bagasse made after the dewatering stage is known just as</p>

	bagasse, or some people may refer to it as final bagasse.
Bagasse Extract	Bagasse is a liquid fraction which is decanted from the bagasse after it has been blended with water in the cold digester.
Boiling House	Where juices are taken after carbonization or phosphorization to be boiled down.
Boiling House Recovery	A percentage ratio describing how much pol is recovered in the form of sugar from the mixed juice.
Brix	This refers to measurement of the ratio of the mass of dissolved sugar to the mass of water in an aqueous solution.
Brix-Free Water	Brix-Free water is water that is present in cane and bagasse, but which is not available for the dissolving of sucrose in the cane. It is estimated that in dry cane fiber, there is approximately 25% brix-free water. This water is, generally, removed by heating the fiber and evaporating it away.
Bulk Density	It is simply a measurement of how dense a material is.
Cane to Sugar Ratio	A measurement which describes how many tons of cane are required to produce one ton of sugar.
Cold Digester	A piece of equipment which disintegrates cane or bagasse in water to create a homogenous solution. It is used for analytical procedures.
Crystal Content	A measurement describing the mass of crystalline sugar present in a liquid.

Internal Audit of Sugar Industry

Cush-Cush	This is the material that is removed from the mill juice when it is strained.
DAC Extract	It is the liquid fraction that is decanted from the cane once it has been blended with water in the cold digester.
DAC Factors	<p>There are following two types of DAC factors:</p> <ul style="list-style-type: none">• Brix Factor - This is the percentage ratio of the total brix in the mixed juice and the final bagasse to the total brix in the cane.• Pol Factor - The percentage ratio of total pol in the mixed juice, and the final bagasse to the total pol in the cane.
Dextran	A form of glucose created by microbial activity. This is, generally, destroyed during the carbonisation process.
Dry Substance	It describes the material which is left after a substance has been dried in a consistent fashion.
Escribed Volume	This is a measurement of how much material can be described by a pair of mill rolls in a specified length of time. It is, generally, described in meters per second.
Extraction	A measurement of the percentage ratio of sucrose in mixed juice compared to sucrose in sugar cane.
Fiber	It is the solid part of the sugar cane which cannot be dissolved. It is also known as natural fiber.

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Filter Cake	It is the material which is removed via filtration during the sugar refining process.
Gums	Polysaccharide precipitate which can be made by treating sugar liquor with acidified ethyl alcohol.
Imbibition	This is a process in which water (or in some cases sugar juice) is put on bagasse to dilute the juice in the bagasse.
Insoluble Solids	The material present in the mixed sugar juice which does not dissolve and must be removed by sedimentation and/or filtration. In many cases this material will collect at the bottom of the subsidiers and can be removed.
Intermixed Cane	This term arises from the method of carrying sugarcane, which is to place many differing consignments on one carrier. Cane from various consignments mixes together to make a blend of cane that possesses properties that are not representative of any one of the consignments.
Invert Sugar	When sucrose is hydrolyzed then invert sugar is produced. This is a sugar mixture which is half glucose and half fructose.
Java Ratio	Java ratio is the percentage ratio of the percentage of pol in cane to the percentage of pol in the first juice.
Juice	<ul style="list-style-type: none">• Absolute Juice - This juice only exists hypothetically and is the mass of sugar cane minus the mass of fiber. It is not possible to ever completely extract all the sugar and liquid present in the cane.

Internal Audit of Sugar Industry

- Clarified Juice - It is the juice which has been clarified.
- Diffuser Juice - It is the juice removed from sugar cane or bagasse diffusers.
- First Expressed Juice - The first juice which is extracted by the first two rollers.
- First Mill Juice - The first juice extracted from the first mill.
- Last Expressed Juice - The last juice extracted by the last rollers.
- Last Mill Juice - The last juice extracted from the last mill.
- Mixed Juice - The juice that is pumped to the juice scales from the extraction plant.
- Press Water - The liquid removed when diffuser bagasse is dewatered.
- Primary Juice - The combined juices prior to treatment.
- Residual Juice - The juice present in bagasse apart from the juice in first bagasse.
- Secondary Juice - It is the diluted juice which is mixed with primary juice to make mixed juice.
- Undiluted Juice - All the juice in the cane. Once again, this is fairly hypothetical as it is not possible to remove all juice in a useful fashion.

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Magma	The mixture of sugar crystals and warm sugar liquor which is created in the first stage of the refining process.
Massecuites	Crystals and mother liquor which are removed from a vacuum pan as a liquid mixture. There are various grades of Massecuites determined by their purity.
Milling Loss	A measurement describing the percentage ratio of pol (sucrose content) in bagasse compared to fiber in bagasse.
Molasses	A thick, dark, sweet, highly viscous substance separated from sugar at the beginning of the refining process.
Mud or Press Mud	This term refers to the sludge type material that is cleaned from the lower regions of the subsidiers. This is made up of liquid and insoluble substances.
Non-Pol	A term used to describe the brix minus any pol (sugar content).
Non-Pol Ratio	This describes the amount of non-pol in sugar, the non pol in final molasses, and the non-pol in mixed juice.
Non-Sucrose	A term which describes the portion of the dry substance which is not sucrose.
Normal Mass	The normal mass of sucrose should be 26,000g. This is determined by calculating the mass of dry sucrose which when dissolved in 100 cubic centimeters of water at 20 degrees Celsius, and then read in a tub 200mm long, reads 100 degrees on the saccharimeter scale.
Nutch Sample	A sample of molasses removed prior to the curing of the massecuite.

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Overall Recovery	A measurement which describes how much pol is recovered in sugar compared to the sucrose in sugar cane.
Pol	The sucrose content when expressed as a percentage. Most refined sugar has a very high pol, generally between 99% – 100%. This measurement is called “pol” because it is determined by the polarization method.
Polysaccharides	A complex carbohydrate molecule where many saccharide molecules are bonded together.
Preparation Index	This is the percentage ratio of brix in ruptured cells as compared to the total amount of brix in the cane.
Purity	This is the ratio of pol to brix. This term, essentially, describes the quantity of pure sucrose present in a sugar sample.
Reducing Sugars	These are sugars used in the reduction of Fehlings solution.
Reducing Sugar/ Ash Ratio	This describes the ratio of reducing sugar compared to sulphated ash.
Reducing Sugar/ Pol Ratio	This describes the ratio of reducing sugar to pol.
Safety Factor	This is a value which describes the “keeping quality” of fresh raw sugar which has a pol of less than 99%.
Saturated Solution	A saturated solution is one in which no more sugar crystals can dissolve or can be crystallized.
Solubility	The ability of a substance (referred to as a solute in many cases) to dissolve in a solution.

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Solubility Coefficient of Sucrose	A measurement which describes the solubility of sucrose in a sample solution when compared to the solubility of sucrose in pure water under the same temperature conditions.
Sucrose	The form of sugar that is refined from sugarcane and sugar beet.
Sugar	The common term which is most often used to describe sucrose.
Sugarcane	A tall, fibrous plant which naturally contains high levels of sucrose, and some glucose and fructose (though these are removed in the refining process). Sugarcane is scientifically classified as being a grass and is a member of the genus <i>Saccharum</i> .
Supersaturation Coefficient of Sucrose	This is the ratio which compares the quantity of sucrose present in a sample with the potential solubility of sucrose in the sample under constant conditions.
Syrup	In sugar production, this term refers to concentrated juice which has a brix between 60 and 70 percentage.
Wash	This is a term which can be used to describe the liquor which is removed after washing, and the liquor removed from magma.

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Chapter 1

Introduction

Objective

1.1 India is the second largest producer of sugar in the world and there are around 637 sugar factories (as on 31.12.2009) operating in India. Indian sugar industry comprises of mix of private and co-operative units and is highly regulated by Central and State government bodies. Most of the private players are listed on stock exchanges and, hence, it becomes important for them to have strong internal audit function so as to strengthen overall governance/controllorship mechanism.

1.2 There are several aspects which differentiates Sugar Industry from any other normal manufacturing industry. Some of the peculiar aspects are as follows:

- Cyclicity in the business
- Sugarcane procurement and governing regulations
- Manufacturing process
- Sales pattern (mostly unorganised despite huge consumption)

Considering these peculiar aspects, it is important that any internal auditor conducting internal audit of a sugar industry should clearly understand the details of these processes so as to be able to conduct effective internal audit.

Scope

1.3 This Technical Guide covers the detailed view and risks associated with key processes of sugar industry so that internal auditors can develop the understanding of the processes and, accordingly, plan audits in sugar industry. The processes explained here are generic and one may come across several variations in different organisations. This publication should be used only as guidance and internal auditors should not restrict themselves to information provided here.

Chapter 2

Overview of Indian Sugar Industry

2.1 In India, sugar is mainly produced from sugarcane, believed to have been discovered thousands of years ago in New Guinea. From there it spread to South-east Asia and India. Gradually, the process for pressing the sugarcane to extract juice and boiling it to obtain sugar came into existence.

2.2 In the year 1950-51, the Government of India made serious efforts for industrial production of sugar. The Government projected the license and installment capacity for the sugar industry in its Five Year Plans. Sugar and Sugarcane became essential commodities under the Essential Commodities Act, 1955. The Government has since then been following a policy of partial control and dual pricing for sugar. Under this policy, a certain percentage of sugar produced by sugar factories is requisitioned by the Government as compulsory levy at a price fixed by the Government in every sugar season for distribution in the Public Distribution System (PDS). The non-levy (free sale) sugar is allowed to be sold as per the quantity released by the Government under the free sale sugar release mechanism.

2.3 The Government took steps to decontrol the sugar industry in phase-wise manner by reducing levy quota from 40% prior to 2000 to currently 10% limit. To safeguard the interest of sugarcane growers, Essential Commodities Act, 1955, was amended in June, 2003. As per this amended Act, no producer, importer or exporter of sugar was empowered to sell or otherwise dispose of or deliver any kind of sugar except under and in accordance with the direction issued by the Government.

2.4 Sugar was approved for futures trading in May, 2001. Currently, three national exchanges, viz., National Commodity and Derivatives Exchange Ltd. (NCDEX), Mumbai, Multi Commodity Exchange Ltd., (MCX), Mumbai, National Multi Commodity

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Exchange (NMCE), Ahmedabad and E sugar India Ltd., Mumbai and E-Commodities Ltd., Delhi have been given recognition for futures trading in sugar. Except, E-Commodities Ltd., Delhi, futures trading in sugar is taking place in all other exchanges.

Types of Sugar

2.5 Majority of the commercially manufactured sugar is white granulated sugar, which is then classified as extra coarse, coarse, standard, fine, or extra fine granulated. Other types of sugar, such as brown sugar, are produced with a slight variance from that of white sugar. Brown sugar is made by retaining much of the molasses during processing.

Candy sugar, used mainly by the brewing industry, consists of very large white crystals of sugar. Liquid sugar is made chiefly from cane sugar, while cubed sugar is processed by moulding granular sugar with a sugary liquid to help cement the crystals together.

Sugarcane Pricing

2.6 The Central Government fixes the Statutory Minimum Price (SMP) of sugarcane in terms of Clause 3 of the Sugarcane (Control) Order, 1966, for each sugar season. The SMP is fixed on the basis of the recommendations of the Commission for Agricultural Costs and Prices (CACCP) and after consulting the State Governments and associations of sugar industry and cane growers. The SMP is fixed having regard to the following factors:

- (a) Cost of production of sugarcane;
- (b) Return to the growers from alternative crops and the general trend of prices of agricultural commodities;
- (c) Availability of sugar to consumers at a fair price;
- (d) Price at which sugar produced from sugarcane is sold by sugar producers; and
- (e) Recovery of sugar from sugarcane.

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2.7 A Supreme Court ruling in May 2004, upheld the right of State Governments having a specific legislation for this purpose, to fix sugarcane prices over and above the SMP declared by the Centre. The Supreme Court ruling was in response to a Special petition filed by Government of UP challenging an interim order of Allahabad High Court delivered in December, 1996, which stated that State Governments were not legally permitted to fix cane prices paid by the mills to the farmers. This order gave legitimacy to State Advisory Price (SAP) announced by UP Government.

2.8 In October, 2009, the Centre amended the Essential Commodities Act, 1955, through an Ordinance providing for fixing the levy price of sugar on a 'fair and remunerative price' to be announced by the Centre. The move raised serious concerns in the sugar industry which supplies one-fifth of its sugar production at a levy price, markedly lower than the open market price to support the public distribution system. In 2009-2010, sugar industry is set to supply 20 per cent of its production at a levy price of about Rs 13.50 a kg, fixed in 2003-04, against an open market price of about Rs 45 a kg in January, 2010. This represents a loss of revenue potential of a few thousand crore rupees to the sugar mill owners/shareholders.

Fair Price

2.9 The Ordinance came into effect from October 21, 2009, and makes the amendments effective from October 1, 1974. As per this amendment, levy price of sugar would be computed based on a 'fair and remunerative price' for sugarcane that would be fixed by the Centre. The objective is to put in place a uniform norm to determine the levy price of sugar and ensure that when the State Governments hike the price of sugarcane, they bear the additional cost of levy on sugar as a result of the higher sugarcane price. The Ordinance takes effect from 1974 when the levy pricing of sugar has been a subject of controversy resulting in legal proceedings.

2.10 Till now, the Centre announced a statutory minimum price (SMP) for sugarcane to which the State Governments added an additional component of State Advised Price (SAP) to augment

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farmers' income. The levy price for sugar took into account the SAP to compute the of same, apart from the impact of provisions in the Sugarcane Control Order, 1966, which provides for an additional cane price at the end of the sugar season.

The Ordinance amends the Essential Commodities Act, 1955, that the levy price of sugar is based on the fair and remunerative price fixed for sugarcane by the Centre, manufacturing cost of sugar, duty or taxes paid, and securing reasonable returns on the capital employed in producing sugar. The levy price will not take into account the SAP or the additional price of sugarcane as provided under the Sugarcane Control Order, 1966.

Structure of Sugar Industry

2.11 The sugar industry in India is mainly divided into organised and unorganised sector. Sugar factories belong to the organized sector and those who produce traditional sweeteners (Gur and khandsari) fall into unorganized sector. Sugar factories can be further classified into co-operative, private and public sectors. There are around 637 sugar factories (as on 31.12.2009) operating in India with a collective sugarcane crushing capacity of about 21.39 million tonnes per day. These factories are spread majorly in sugarcane growing states, *viz.*, Uttar Pradesh, Maharashtra, Gujarat, Tamil Nadu, Karnataka and Andhra Pradesh. Uttar Pradesh alone accounts for 32% of the overall sugar production in the nation and Maharashtra's contribution is 28%.

2.12 The most peculiar aspect of sugar industry is its being seasonal in nature and cyclical variations as demonstrated below:

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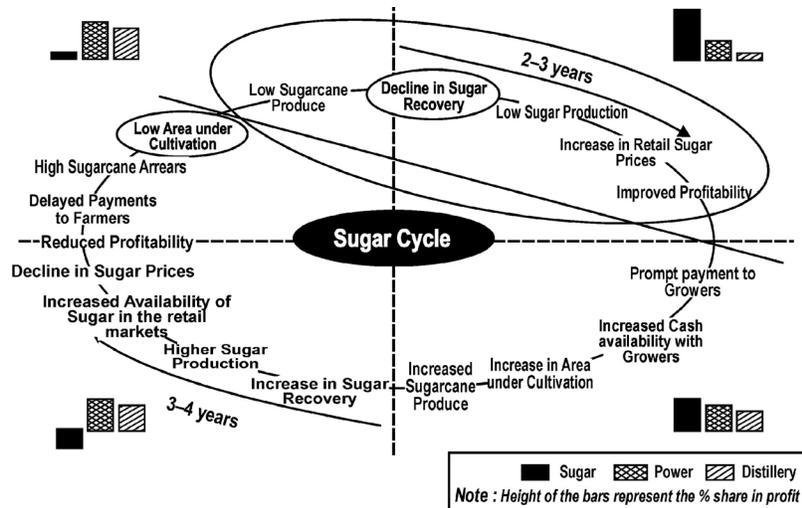


Figure 1: Sugar Cycle

2.13 Due to this, the sugar industry goes through a period of loss (when excess sugarcane is produced) and profit (when there is shortage of sugarcane). The cycle time normally ranges from 4 to 5 years. To reduce the effect of this cycle, now-a-days most of the new units are set-up with a cogeneration of power and distillery unit, so that they can be profitable even when sugar unit is making loss. The integrated aspect of sugar industry is depicted below:

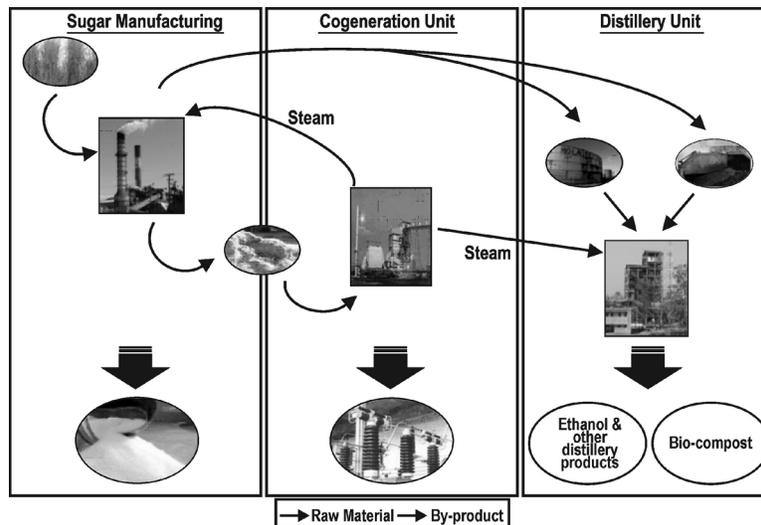


Figure 2: Overview of Integrated Sugar Industry

Chapter 3

Major Legislations

3.1 The major legislation and policies concerning the sugar industry in India are as follows:

- (i) The Essential Commodities Act, 1955
- (ii) Sugar Control Order, 1966
- (iii) Sugarcane Control Act, 1966
- (iv) Levy Sugar Supply (Control) Order, 1979
- (v) Sugar (Packing and Marking) Order, 1970
- (vi) Sugar Export Promotion Act, 1958
- (vii) Sugar Cess Act, 1982
- (viii) Sugar Development Fund Act, 1982 and 2002
- (ix) Levy Sugar Price Equalization Fund Act, 1976
- (x) Molasses Control Order, 1961 and Decontrol, 1993
- (xi) Excise and Custom Rules
- (xii) State Sugar Policies
- (xiii) Power Purchase Agreements
- (xiv) Environment Norms by State Pollution Control Boards.

The Essential Commodities Act, 1955

3.2 This Act provides, in the interest of the general public, for the control of the production, supply and distribution of, and trade and commerce, in certain commodities. Sugar being an essential commodity is subject to the regulations under this Act. The Central

Internal Audit of Sugar Industry

Government may by order provide for regulating or prohibiting the production, supply and distribution thereof and trade and commerce therein for essential commodities, if it is of the opinion that it is necessary or expedient so to do for:

- Maintaining or increasing the supply of essential commodity;
- Securing their equitable distribution and availability at fair prices; and
- Securing any essential commodity for the defence of India or the efficient conduct of military operations.

3.3 Violation to this Act allows for following:

- Seizure/Confiscation of commodity by district collector (Section 6)
- Penalties for contravention of the provisions of any order made under Section 3 (Section 7)
- Power to recover certain amounts as arrears of land revenue (Section 7A)
- Make every offence punishable under this Act as cognizable and non-bailable (Section 10)

In February 2002, the Government removed the restriction on storage and movement of sugar and licensing requirement. Further in 2003, Government amended the Act by inserting clause 3(D) and 3(E) for validating the regulated release mechanism. The new amendment empowers Government to issue directions to implement the regulated release mechanism policy of the Government effectively.

3.4 On October 21, 2009, an Ordinance was promulgated to amend the Essential Commodities Act, 1955. This Ordinance had following two provisions:

- (a) It added an Explanation to Section 3 of the Principal Act, stating that the Central Government, while procuring levy sugar, would not pay any price in excess of that calculated

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on the basis of the Minimum Price (SMP) for sugarcane set by the Central Government. This Explanation comes into effect from 1974. The Supreme Court has ruled that the price of levy sugar should include the additional price as indicated in Section 5A of the Sugarcane Control Order, 1966 (known as the Bhargava formula) and the State Advisory Price (SAP) set by State Governments. This amendment negated the judgment.

- (b) The Ordinance also amended the price to be paid to sugar producers by the Central Government for procuring levy sugar. It specified that the price of sugar will be based on the “Fair and Remunerative Price (FRP)” fixed for sugarcane, and will include the manufacturing cost, duties, taxes and reasonable rate of return. Earlier the price was based on the Minimum Price (SMP) for sugarcane, and included the other costs and return. The FRP will be announced by the Central Government, similar to the earlier system of SMP. The Ordinance clarified that the Central Government would not pay any price in excess of that based on FRP for sugarcane.

Sugar Control Order, 1966

3.5 Sugar Control Order empowered the Central Government or State Government or any officer or authority of a State Government with the following powers:

- **Power to regulate production of sugar:** The Central Government may, by order published in the official Gazette, direct that no sugar shall be manufactured from sugarcane except and in accordance with the conditions specified in a license issued in this behalf, whether on payment of a fee or otherwise. Clause 3 deals with the power to regulate production of sugar through the grant of license (though the sugar industry has since been deleted from the list of industries requiring compulsory licensing under the provisions of the Industries (Development and Regulation) Act, 1951). A minimum distance of 15 km would continue to be observed between an existing sugar mill and a new mill. The entrepreneurs would be required to file an Industrial

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Entrepreneur Memoranda (IEM) with the Secretariat of Industrial Assistance in the Ministry of Industry.

- **Power to restrict sale, etc. of sugar by producer**
- **Power to issue direction to producers and dealers**
- **Sugar attached by government officers, etc., not to be sold without directions**
- **Power to regulate movement of sugar**
- **Power to regulate quality of sugar:** The Central Government may prescribe the quality of sugar in terms of Indian Sugar Standard Grades to which all or kind of sugar should conform at the time of delivery in pursuance of the direction issued to a producer under clause (f) of sub-section (2) of section (3) of the Essential Commodities Act, 1955 or clause (5) of this order.
- **Power to call for information, etc:** The Central Government or any person authorized in this behalf by the Central Government may with a view of securing compliance with this order, or to satisfy itself that any order or direction issued under this order is complied with.
- **Power to inspection, entry, search, sampling, seizure, etc.**
- This Act was amended in 1999, to bring both sugar imports and importers under the purview of this order. Further restrictions related to stock holdings and other formalities have been removed with effective from July, 2000. The Government has also abolished the turnover limits of 30 days applicable to recognize the dealers with effective from August, 2001.

Sugarcane Control Act, 1966

3.6 Sugarcane (Control) Order, 1966 provides for:

- **Price (SMP) for sugarcane purchased by sugar mills during each sugar season (Clause 3):** Clause 3(1) and

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3(2) deal with fixation of the Statutory Minimum Price having regard to following six criteria:

- ◆ Cost of production of sugarcane;
 - ◆ Return to grower from alternative crops and the general trend of prices of agricultural commodities;
 - ◆ Availability of sugar to the consumer at a fair price;
 - ◆ Price at which sugar produced from sugarcane is sold by the producer of sugar;
 - ◆ Recovery of sugar from sugarcane; and
 - ◆ Realization from by-products such as molasses, bagasse, etc.
- Payment of interest at 15% per annum on amounts due beyond 14 days of delivery of sugarcane at factory gate (Clause 3(3A)).
 - Clause 3(7) deals with deposits to be made with the District Collector, within three months of close of a sugar year, amounts of cane price unpaid or lying unclaimed with the factory on the last day of the sugar year.
 - **Payment of additional cane price to the growers (Clause 5A):** Clause 5-A provides for payment of additional cane price in accordance with the formula contained in the Second Schedule to the Sugarcane (Control) Order, 1966. This formula (generally referred to as 'the Bhargava Formula') is meant to enable the farmer to get a remunerative price for the cane supplied after 1-10-1974, by sharing the profits arising out of excess realization with the producer sugar factory.
 - **Regulation of distribution and movement of sugarcane (Clause 6):** Clause 6 deals with the power of Government to regulate distribution and movement of sugarcane such as, fixation of 'reserved area' for a sugar factory, grower, directing the cane supplier and sugar factory to enter into an

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agreement, prohibiting or restricting the export of sugarcane from any area without a permit, etc.

- **Licensing of power crushers and khandsari units and regulation.**
- **Issue of directions to producers of khandsari sugar (Clause 8).**
- **Power to call for information, etc. from producers (Clause 9).**
- **Power to entry, search and seizure (Clause 9A).**
- **Delegation of powers conferred by the Sugar (Control) Order, 1966 to any officer or authority of the Central or State Government.**

3.7 In October, 2009 the Central Government issued an Order to amend the Sugarcane Control Order, 1966. The Amendment Order replaced the “minimum price” by “fair and remunerative price”. It included a seventh factor “(g) reasonable margin to the growers of sugarcane on account of risk and profits”. It added Clause 3B which required that the state governments should bear the incremental cost if it fixes SAP higher than FRP. It also deleted Clause 5A and the Second Schedule; sugar mills shall not pay an additional price based on the Bhargava formula.

3.8 The key implications from this amendment can be summarised as follows:

- (i) The Central Government shall pay a price for levy sugar based solely on the FRP that it sets for sugarcane. It will not take into account any higher price paid or payable for sugarcane by sugar mills.
- (ii) The FRP will include a reasonable margin to the sugarcane grower for risk and profit.
- (iii) If a State Government fixes a price for sugarcane (such as SAP) which is higher than FRP, it will have to pay the difference between SAP and FRP to the sugarcane grower.

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- (iv) The sugar mills will not share its excess profits with the sugarcane growers, as mandated by the Bhargava Formula.

Later Government agreed to drop Clause 3B vide Sugarcane Control Amendment Order, 2010, which implied sugar mills will pay higher of FRP or SAP. However, other things remained status quo.

Levy Sugar Supply (Control) Order, 1979

3.9 Levy Sugar Supply (Control) Order, 1979, provides for powers to issue direction to producer or dealer for supply of levy sugar requisitioned by the Central Government through an order made with reference to Section 3(2) (f) of the E.C. Act, 1955. Month-to-month release orders for delivery of levy sugar are issued in exercise of the powers conferred by this Order.

Sugar (Packing and Marking) Order, 1970

3.10 Sugar (Packing and Marking) Order, 1970 provides markings to be indicated on sugar bags. Unless otherwise permitted by Central Government, sugar is required to be packed in A-twill jute bags conforming to Indian Standard Specifications. Sugar meant for the purpose of export and small consumer packs of 5 kg and less have been exempted from the compulsory use of jute bags.

Sugar Export Promotion Act, 1958

3.11 The Sugar Export Promotion Act, 1958, which casts an obligation on all sugar mills in the country to export, has been repealed by an Ordinance which, however, has not been subsequently converted into an Act within the stipulated time. With the de-canalization of exports, it is no longer mandatory for all manufacturers of sugar to export. Export can be made voluntarily. However, resorting to export of sugar, would not exempt any sugar mill either from its obligation to supply levy sugar which is requisitioned by the Government in terms of Section 3(2) (f) of the EC Act, 1955, or to effect sale of sugar in open market in compliance of the month to month release orders issued by the Government.

Sugar Cess Act, 1982

3.12 The Sugar Cess Act, 1982 was enacted to provide for the imposition of a cess on sugar for the development of sugar industry and for matters connected therewith. The Act empowers the Central Government to levy the cess, by way of a duty of excise, on sugar which will help to generate funds for supplementing financial assistance for rehabilitation and modernization of sugar factories and for development of sugarcane and research activities connected therewith. The Sugar Cess Rules, 1982 (which were made under the Act) provide for the manner of accounting reports and returns to be furnished by sugar factories, maintenance of accounts, etc. An amount equivalent to the proceeds of the duty of excise levied and collected under the Act, reduced by the cost of collection as determined by the Central Government shall be credited to the Sugar Development Fund formed under Section 3 of the Sugar Development Act, 1982.

Sugar Development Act, 1982 and 2002

3.13 The object of the Sugar Development Fund, 1982 (briefly the SDF Act) is the formation of the Sugar Development Fund to be applied for the purpose of rendering financial assistance through loans at concessional rates for rehabilitation and modernization of sugar factories as well as for sugarcane development, and for encouraging research aimed at development of sugar industry by making grant. The Fund shall also be applied for defraying expenditure for the purpose of building up and maintenance of buffer stock of sugar with a view to stabilize price of sugar.

3.14 In May 2002, the SDF Act was enabled to provide concessional loans to sugar mills for the establishment of ethanol plants and power cogeneration units, to defray the expenditure on internal transport and freight charges on export shipments of sugar. In February, 2005, the centre announced a 5% point reduction in rate of interest on loans disbursed to Sugar mills from the SDF from 9% to 2% points below the bank rate to 4%.

Sugar Development Funds Rules, 1983

3.15 The Sugar Development Fund Rules, 1983 were made in exercise of the powers conferred by Section 9 of the SDF Act, 1982, to provide for:

- the manner in which any loss or grants out of the Fund and the terms and conditions thereof;
- the manner and the form in which applications are to be made;
- the composition of the committee and the procedure to be followed by it in the discharge of its functions; and
- the form in which and the period within which statistical and other information may be furnished by sugar factories.

From 1st November, 1982, the amount of cess payable by sugar factories is Rs. 14/- per quintal of sugar.

Levy Sugar Price Equalization Fund Act, 1976

3.16 The Levy Sugar Price Equalization Fund Act, 1976 (briefly LSPEF Act) was enacted to provide for the establishment, in the public interest, of a Fund to ensure that the price of levy sugar may be uniform throughout India and for matters connected therewith or incidental thereto.

The LSPEF Act provides for establishment of a fund called the Levy Sugar Price Equalization Fund (briefly LSPEF) into which shall be created:

- the amounts representing all excess realizations made by the producers either before or after the commencement of the Act; and
- the amounts of loans advanced or grants made, if any, by the Central Government for carrying out the objects of the Fund.

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3.17 The Fund shall be administered by the Central Government (Section 3). Money remaining unclaimed for a period of six months from the date on which they are credited shall vest in the Central Government and shall be utilized, having regard to the interests of consumers of levy sugar as a class and the need to ensure that the retail issue price of levy sugar is uniform throughout the country (Section 8).

3.18 The LSPEF Act also empowers the Central Government to recover excess realizations made by sugar factories as 'Arrears of Land Revenue' (Section 11). Penal provisions, prescribing imprisonment or fine or both, in respect of defaulting sugar mills in the matter of crediting excess realizations are also contained in the Act (Section 13).

3.19 Section 16 of the Act provides for power to make rules. In exercise of such power, the Levy Sugar Price Equalization Fund Rules, 1977, were made, to provide for the manner of:

- (i) crediting moneys to the Fund;
- (ii) accounting and transactions of the Fund;
- (iii) inviting applications from buyers for refund; and
- (iv) utilisation of the Fund by the Central Government, etc. besides prescription of forms for various purposes in terms of the LSPEF Act.

The Act was amended in 1984 to provide for certain modifications in the principal Act, with a view to obviating litigations on the subject in the light of the experience gained during the administration of the LSPEF Act, 1976.

Molasses Control Order, 1961 and Decontrol, 1993

3.20 The prices and distribution of molasses and prices of alcohol were regulated by the Central Government under the Molasses Control Order, 1961 and the Ethyl Alcohol (Price Control) Order, 1971 respectively up to 10th June, 1993. These orders have since

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been rescinded. Both these Orders were issued under Section 18(G) of the Industries (Development and Regulation) Act, 1951.

3.21 The rationale for this policy was that distilleries should obtain molasses at reasonable prices and thereby supply alcohol at controlled prices to chemical units based on alcohol. Implementation of these Orders was with the State Governments. The prices under these Orders were revised from time to time. Inter-State allocations were done by the Molasses Controllers of the States concerned. The Department of Chemicals and Petrochemicals in Central Government used to make Inter-State allocations of molasses and alcohol from surplus States to deficit States, on a non-statutory basis, on the advice of the Central Molasses Board (CMB) consisting of the Excise Ministers of all State/Union Territories and the representatives of the concerned Industry Associations.

3.22 This regime of controls was inhibiting the free movement of molasses and was not keeping with the economic liberalization programme of the Government which was initiated during the early nineties. There were also reports about inordinate delays in obtaining allocations and consequent wastage of molasses. The downstream users of molasses were also not able to fully utilize their capacity. Taking all these factors into account and with a view to falling in line with the liberalization policy of the Central Government in other sectors of economy, the Molasses Control Order, 1961 and the Ethyl Alcohol (Price Control) Order, 1971 were rescinded on 10th June, 1993.

State Sugar Policies

3.23 Most of the states have some parallel regulations similar to Central Government which is binding on all the Sugar producers in the state. Uttar Pradesh being the largest producer of Sugar/ Sugarcane, following are some of the major acts existing in Uttar Pradesh:

1. **UP Sugarcane Regulation of Supply and Purchase Act, 1953:** It contains provisions for tagging a percentage of advances given by banks for payment of cane price, together with interest thereon, by the Collector, on the basis of recovery

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certificate issued by the Cane Commissioner, as if it were an arrear of land revenue. Similar provisions also exist in State legislations of Madhya Pradesh, Andhra Pradesh, Bihar and Tamil Nadu. It also contains provisions for penalties for contravention which include fines and imprisonment.

This Act further empowers State Governments to reserve certain area for each mills through a reservation order and farmer is also bound to supply to the factory which has been assigned his corresponding area.

2. **The UP Sugarcane Supply and Purchase Order, 1954**
3. **The UP Sugarcane (Purchase Tax) Act, 1961**
4. **The UP Restriction of Sugarcane Purchase Order, 1966**
5. **The UP Vacuum Pan Sugar Factories Licensing Order, 1966**
6. **The UP Khandsari Sugar, Sugar Manufacturing Licensing Order.**

Power Purchase Agreements

3.24 The purchase of excess power generated in the cogeneration unit is regulated by power purchase agreement between State Electricity Boards and the factory. These agreements may vary over tenure of 10 years or more depending on the incentives provided to the factories in setting up the unit.

Environmental Norms by State Pollution Control Board

3.25 Sugar factories, Cogeneration Units and Distilleries are subject to strict environment norms pertaining to discharge of waste streams, which depends on the installed capacity. All corresponding clearances have to be obtained from State Pollution Control Board.

Chapter 4

Key Processes in Sugar Industry

4.1 This chapter explains the underlying business processes in sugar manufacturing. The key processes in sugar industry are shown below in the “Sugar Business Value Chain”:

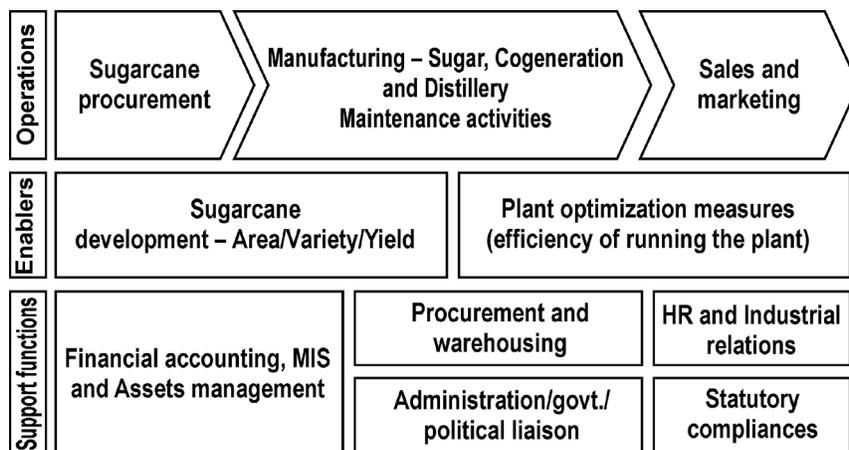


Figure 3: Sugar Business Value Chain

Sugarcane Development and Procurement

4.2 Given the huge competition for cane following capacity expansion of most of the mills, a mills’ efforts in terms of cane development activities has a key bearing on cane availability. Hence cane development and procurement department is one of the key departments for any sugar factory.

4.3 Typically, factories co-ordinate with about 25,000 to 1,00,000 growers/farmers for procurement of sugarcane. Since area allotted to factory is fixed by the Government so as to ensure consistent supply of cane, it becomes all the more important to develop harmonious and good relations with these growers so that they do not switch to alternate cash crops.

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Hence, generally as cane development initiatives a factory might come up with the following measures:

- Distribution of seeds at subsidized rate/free to cane growers.
- Distribution of loans for seed and irrigation facilities.
- Distribution of agricultural supplements.
- Distribution of fertilizers, insecticides and pesticides.
- Conducting general awareness through village meetings.

4.4 The Government also carries out some of these initiatives through various Cane Societies set up by them. These societies are co-operative in nature and bridge the gap between the factory and the growers. Normally, in states where these societies exist, a grower need to first become member of these societies in order to supply cane to the factory.

The process of cane procurement starts almost 6 to 7 months in advance starting with survey process. It is highly regulated by state government and every phase is monitored closely.

These phases have been discussed in the following paragraphs which would help in carrying out effective internal audit.



Figure 4: Key Steps in Cane Procurement

Cane Survey

4.5 Cane Survey is the process conducted by team of Sugar Mill's member and Co-operative society member (or Government Representative) to assess the amount of cane grown by the growers. Typically, sugarcane crops take about 10 months to 13 months to mature. The survey is carried out close to 5 months before the start of the crushing season, i.e., when the crop has

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reached almost half of its life. In survey following are the key things to be recorded:

- (i) Grower's Name
- (ii) Father's Name
- (iii) Village
- (iv) Crop Type (Plant/ Ratoon)
- (v) Crop Variety
- (vi) Crop Season (Autumn/ Spring)
- (vii) Measurement of all four sides of field
- (viii) Total Plot Area

It takes about 2 months for one factory to complete the survey of all the villages. Once survey is completed it is fed in the software (if used, else done manually), then the village-wise 'Display' list is generated.

4.6 The display list of a village needs to be displayed in the village with prior intimation of date of display to the villagers. During the display stage, growers can identify any changes or, alternatively, give their consent on the survey of their fields. After display there is window of specified days where a grower can submit an application for any changes in the society, before the survey is finalized.

Calendaring

4.7 After finalization of display, Calendaring is done on the basis of bonding with the grower. Bonding is the quantity of cane that Sugar Mill agrees to purchase from the grower and is based on the following parameters:

- ***In case of normal yield:*** The current year yield is based on the average yield data provided by the Cane Commissioner or average 2 years supply by the farmer whichever is lower is taken as the yield.

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- **General increase:** Increasing trend is allowed based on the information provided by the society.
- **Additional increase:** If some farmer expects exceptional increase in the yield, additional increase would be entered in the system based on the request of the farmer to the Society and its evaluation.

4.8 Depending upon daily crushing requirement, a calendar is prepared by the Sugar Mill as per the Bonding Policy ('Satta Niti'), issued by the State Government. General principles of the policy are as follows:

- Farmers can be divided into three categories based on land: Small farmer (0 – 1 Hectare); Marginal farmer (1 – 2 Hectares); Big Farmer (2-5 Hectares).
- Based on supply, farmers are divided into two categories: Small (up to 60 quintals); Medium (greater than 60 quintals).
- Only 85% of the production can be bonded for any farmer, subject to average quantity supplied by him in the last two years.
- Ratoon crop need to be bought within 45 days from start of factory, whereas plant crop need to be bought within 45 days from February.
- Bonding with farmer is subject to a cap of 750 qtls, 1500 qtls and 3500 qtls for small, marginal and big farmers.

These principles are liable to change from time to time and, accordingly, the internal auditor should refer to the latest Policy issued by the Government. Once a calendar is prepared then it is given to growers of that area.

Supply Ticket/ Purchy

4.9 Once the crushing season starts, mill personnel generate supply ticket specifying grower, grower name, variety, quantity to be supplied and supply date, and send it to the societies. Respective

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societies are responsible for distribution of supply tickets to growers, on the basis of which cane can be supplied to the Sugar Mill.

Payments

4.10 Post supply of the cane, payment is transferred to grower’s bank account on fortnightly basis or as directed by the Government. The mill is allowed to make deductions on account of any loans given to grower before making the payment.

Cane Out-centers

4.11 Cane out-centers are set up by the mill as directed by the Government, for the convenience of the growers.

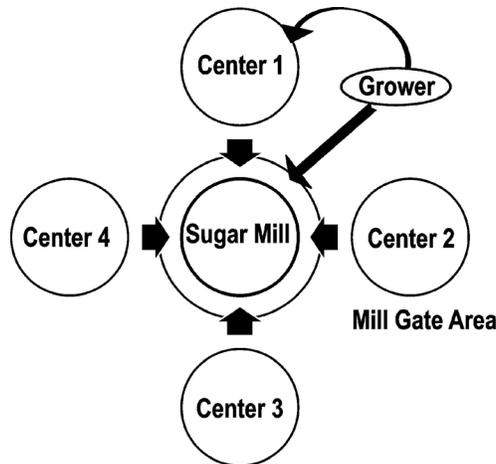


Figure 5: Procurement through Mill Gate and Out-centers

A grower can supply cane either at the mill gate or at the out-centers. Sugarcane needs to be crushed within 24 hours of harvesting, else it starts deteriorating (driage of cane, resulting in reduced recovery of sugar from the sugarcane). The distance of out-center from the mill can vary from 10 kms to around 70 kms or more. Hence, there is need for out-centers so that cane can reach factory/mill at the earliest. Out-center should maintain facilities of weighing bridge and labour for loading and unloading the cane.

Manufacturing

4.12 Sugar industry is energy intensive industry, therefore, apart from sugarcane, steam and electricity are essential for running the mill. For this reason, most of the sugar mills have a cogeneration unit for supply of steam and electricity.

Sugar Unit

4.13 Sugar Mill consists of the following three major areas:

- Milling Section
- Boiling House
- Dryer House

Though milling section and dryer house are continuous processes, boiling house processes mainly occur in batches. Thus, we can term sugar industry as semi-continuous. It takes about 2 to 3 days to complete the whole cycle from cane milling to packing. These lags should be kept in mind while analyzing any production related data. The norms set up by the management and benchmarking with other sugar industries should be referred to evaluate manufacturing process of sugar unit, so as to provide reasonable value addition to the management.

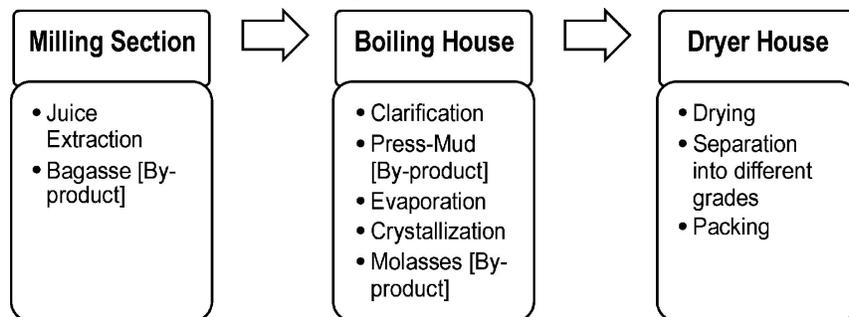


Figure 6: Overview of Sugar Manufacturing

Milling Section

4.14 Sugarcane is cut into pieces, chopped and fed to mills for extraction of juice. Sucrose (Sugar content), being perishable in

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nature, starts decomposing right from this stage. It becomes important to add certain chemicals at milling stage to prevent the degradation. Cane is passed through sets of 3 or 4 mills so as to have maximum extraction, before discarding the fiber content as bagasse. Sugar content and moisture are two key parameters for which bagasse needs to be monitored at regular intervals. Bagasse so generated can be directly fed to boiler of cogeneration unit or stored in the yard for use later on. Bagasse is also consumed by the paper industry and can be sold in the open market. The juice extracted in the milling section is sent to clarifiers for further processing.

Boiling House

4.15 The first process of boiling house is clarification. This involves adding chemicals to the juice to remove dirt and other impurities. These impurities are then discarded as press mud which can be used as fertilizer. Clear juice so produced is further concentrated by evaporation through application of steam.

4.16 Through the centrifuge, molasses is discarded as by-product. The molasses from first set is subject to about three more sets of evaporators and centrifuges before being discarded as molasses, so as to extract maximum amount of sugar. The key parameter to be noted in molasses is the amount of sugar content in molasses, so as to ensure efficiency of boiling house.

The concentrated juice is sent for crystallization through centrifugal vacuum pans or any alternate methods. The sugar crystals are then sent to dryer house.

Dryer House

4.17 Sugar crystals are dried in dryer house and passed through grader so that it can be separated into different grades depending upon the size of the crystals. Quality of the sugar being packed is determined on the basis of ICUMSA (International Commission for Uniform Methods of Sugar Analysis). An ICUMSA rating is an international unit for expressing the purity of the sugar in solution, and is directly related to the color of the sugar. Whiter the sugar, lower is its ICUMSA value. Apart from these three processes,

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there may be additional refining processes to meet the specific customer requirements.

Effluent Treatment Plant (ETP)

4.18 Sugar industries have very stringent guidelines for treatment and disposal of effluent discharged prescribed by State Pollution Control Board (SPCB). A NOC needs to be obtained / renewed from SPCB depending upon the capacity of mill to crush the cane per day before the start of the season. Operational efficiency of ETP should be closely monitored.

Cogeneration Unit

4.19 Cogeneration unit consist of following three major areas:

- Reverse Osmosis (RO) Plant
- Boiler
- Turbine

RO Plant

4.20 Water is required for production of steam; however ground water cannot be directly used as it contains minerals which can damage the boiler when water is converted to steam. Accordingly, it is very important to treat this water in a RO plant or Demineralization of water. The cost of treatment is quite high, hence it is important to check that steam in the process is condensed and used, so as to minimize the amount of make-up water from RO plant. Normally, different factories fix norms/ standards for make-up water so as to measure efficiency of the production process.

Boiler

4.21 There are different types of boilers used in the sugar industry. The type of boiler is determined by the type of fuel used and its capacity to produce steam. Normally, bagasse-fed boilers are very common, but there is an increasing trend to use multiple fuel boilers, so that in off-season alternative cheaper fuels can be used

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to produce electricity. By products from the boiler are boiler ash and flue gas, for which there are prescribed standards by pollution control board so as to minimize damage to the environment.

Turbine

4.22 Steam generated from the boiler is passed in turbine to produce electricity, before being sent to sugar unit. Electricity, thus, generated is used in-house and any excess generation can be sold to State Electricity Boards.

A cogeneration unit cannot be run in off-season because if sugar plant is not running, steam generated will have to be vented in atmosphere, which will cause pollution. Hence, these days' cogeneration units have installed condenser units so that steam can be condensed back to water in off-season.

Distillery Unit

4.23 The key raw material for distilleries is molasses and steam. Molasses is first fermented in fermentation tank by the application of yeast. Fermentation is the process by which sugar content in the molasses is converted to alcohol. Fermented liquid is then passed through several distillation columns to draw the products as per the requirement.

Distillery is highly regulated by the excise laws and all the raw material and finished product are closely monitored by the excise officer [this being a prime raw material for local and branded liquor].

Sales and Marketing – Sugar

4.24 Sales and marketing in sugar industry is highly regulated by various laws as discussed in Chapter 2 earlier. Sales of sugar is controlled by Sugar Orders released by Directorate of Sugar every month. These orders are available at website of Department of Food and Public Administration. A sample order has been shown in **Appendix 1**. On a weekly basis, any sales made needs to be reported to Directorate of Sugar in prescribed format (Performa II) which is given in **Appendix 2**.

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4.25 Some of the key channels through which sugar is sold are:

- Sugar handling agents
- Purchase of levy sugar by government and its various agencies
- Sugar trading on commodity exchanges
- Sale to industrial users
- Retail sale.

Sugar Handling Agents

4.26 Maximum amount of free sugar is sold through network of agents spread across the country. To save on the transportation cost, major amount of sugar sale happens in local or nearby markets. Agents bridge the gap between retail stockist and sugar producer and work on commission basis. Most of the sugar is sold on ex-factory basis through the agents.

Purchase of Levy Sugar by Government and its Various Agencies

4.27 Sugar producer needs to sell levy quota to various government agencies or government for sale through public distribution system (*in line with the Government notification*).

Sugar Trading

4.28 Sugar is traded at the commodity exchanges in India namely, National Commodity and Derivatives Exchange Ltd, Multi Commodity Exchange of India Ltd and National Multi Commodity Exchange of India Ltd.

Sale to Industrial Users

4.29 In certain food processing industries like, beverages, hotels, etc. there is huge demand for high quality sugar. Mill owners produce desired quality of refined sugar for these industrial users.

Retail Sale

4.30 Mill owners also have the option of doing retail sale of sugar (again subject to regulatory requirements such as those mentioned in Chapter 2 or otherwise as prevailing in the country). This requires building up marketing capability/value chain so as to ensure returns commensurate with the increased cost of production and marketing overheads.

Sales and Marketing – Others

4.31 This includes the sale of Electricity, Distillery products and by-products like Bagasse, Molasses and Press-mud.

- (a) Electricity - Sale of electricity can be either in-house consumption at the plant or township, or transfer to Grid.
- (b) Distillery products - Sale of distillery products is regulated by excise laws in India. Currently, it is sold to breweries or chemical manufacturers. In India, though Government has prescribed certain timelines for blending of ethanol with petrol, it is still not mandatory. Once it is done mandatorily, it will give a boost to demand of alcohol.
- (c) Molasses - Again highly controlled by Government due to its usage in local hooch manufacture, wherever, mill owners have not put up their own distilleries, it is being sold either to other distilleries or to alternate users like, hooch manufacturers or breweries, etc.
- (d) Bagasse - Due to its requirement in boiler running coupled with high cost of transportation, it is being sold by the mill owners to different industrial users (usually on as is where is basis).
- (e) Press-mud - It is usually provided free of cost or at a nominal price to the farmers/growers by the mill owners as part of cane development activities.

Chapter 5

Internal Audit Process

5.1 With the integration of separate business processes (sugar manufacturing, cogeneration and distillery) and continuously evolving regulatory requirements, the sugar industry in India has undergone a sea change in processes and systems. Effective internal audit provides a tool to ease out complexities and acts as a fuel to wholesome improvement in systems and processes and, therefore, in growth and sustainability.

5.2 “*Preface to the Standards on Internal Audit*”, issued by the Institute of Chartered Accountants of India defines the term “Internal Audit” as follows:

“Internal Audit is an independent management function, which involves a continuous and critical appraisal of the functioning of an entity with a view to suggest improvements thereto and add value to and strengthen the overall governance mechanism of the entity, including the entity’s strategic risk management and internal control system. Internal audit, therefore, provides assurance that there is transparency in reporting, as a part of good governance”

5.3 Internal audit is a valuable resource to executive management and the board of directors (BoD) in accomplishing overall organizational goals and objectives, and simultaneously strengthening internal control and overall governance. Internal audit activity evaluates risk exposures relating to the organization’s governance, operations and information systems, in relation to:

- Effectiveness and efficiency of operations.
- Reliability and integrity of financial and operational information.
- Safeguarding of assets.
- Compliance with laws, regulations, and contracts as well as policies laid down by the management.

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- Accomplishment of objectives and goals of the organization through ethical and effective governance.

Standards on Internal Audit

5.4 Internal Audit Standards Board of the Institute of Chartered Accountants of India has, till date, issued seventeen Standards on Internal Audit (SIAs) which are as follows:

- SIA 1, Planning an Internal Audit
- SIA 2, Basic Principles Governing Internal Audit
- SIA 3, Documentation
- SIA 4, Reporting
- SIA 5, Sampling
- SIA 6, Analytical Procedures
- SIA 7, Quality Assurance in Internal Audit
- SIA 8, Terms of Internal Audit Engagement
- SIA 9, Communication with Management
- SIA 10, Internal Audit Evidence
- SIA 11, Consideration of Fraud in an Internal Audit
- SIA 12, Internal Control Evaluation
- SIA 13, Enterprise Risk Management
- SIA 14, Internal Audit in an Information Technology Environment
- SIA 15, Knowledge of the Entity and its Environment
- SIA 16, Using the Work of an Expert
- SIA 17, Consideration of Laws and Regulations in an Internal Audit

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These Standards codify the best practices in the field of internal audit. *“Framework for Standards on Internal Audit”* promotes professionalism in the internal audit activity and comprises of four components, viz., the Code of Conduct, the Competence Framework, the Body of Standards and the Technical Guidance.

Basic Principles Governing an Internal Audit

5.5 Standard on Internal Audit (SIA) 2, *“Basic Principles Governing an Internal Audit”* establishes standards and provides guidance on the general principles governing an internal audit. This Standard explains the principles, viz., integrity, objectivity and independence, confidentiality, due professional care, skills and competence, work performed by others, documentation, planning, evidence and reporting which govern the internal auditor’s professional responsibilities.

Terms of Internal Audit Engagement

5.6 The terms of internal audit engagement define the scope, authority, responsibility, confidentiality, limitations, reporting, compliance with standards and compensation of the internal auditors. The terms of internal audit engagement lay down clarity between the internal auditors and the users of their services for inculcating professionalism and avoiding misunderstanding as to any aspect of the engagement.

5.7 Standard on Internal Audit (SIA) 8 *“Terms of Internal Audit Engagement”* provides guidance in respect of terms of engagement of the internal audit activity whether carried out in house or by an external agency. SIA 8 requires that the terms of engagement should indicate areas where internal auditors are expected to make their recommendations and value added comments. It should also clearly mention the responsibility of the auditee vis-à-vis the internal auditor. Further, the management of the auditee is responsible for providing timely and accurate data, information, records, personnel, etc., and for extending co-operation to the internal audit team.

5.8 Engagement letter should clearly state the scope that will be covered, along with quarters/period when the internal audit will be

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conducted. Sugar Industry is seasonal in nature with calendar of activities spread throughout the year, therefore, the period in which specific process is to be covered should accordingly be planned. Suitable period for covering key areas is as follows:

- (i) Cane Development – (July/August – once the cane survey has finished)
- (ii) Cane Procurement – during the crushing season
- (iii) Manufacturing – during the crushing season
- (iv) Off-season Maintenance – just after finish of crushing season
- (v) Sales – throughout the year

5.9 It may be noted that length of sugar season varies in different parts of India. Timelines/period indicated above will depend upon occurrence of the event with respect to sugar crushing season. Care should be taken to develop internal audit plan such that all supporting processes get covered in respective periods. Engagement letter should clearly state the implications of doing online audits so that internal auditor can provide some value addition to the management. Hence, it is very important to conduct the internal audits in aforesaid periods.

5.10 Limitations on scope, coverage and reporting requirement, if any, in carrying out the internal audit assignment should also be brought into the letter. The engagement letter should also clearly lay down the requirements as to the manner and frequency of reporting and the list of intended recipients of the internal audit report.

Knowledge of the Entity and its Environment

5.11 Standard on Internal Audit (SIA) 15 *“Knowledge of the Entity and Its Environment”* lays down that ***in performing an internal audit engagement, the internal auditor should obtain knowledge of the economy, the entity’s business and its operating environment, including its regulatory environment and the industry in which it operates, sufficient to be able to***

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review the key risks and entity-wide processes, systems, procedures and controls. The internal auditor should identify sufficient, appropriate, reliable and useful information to achieve the objectives of the engagement. Such knowledge is used by the internal auditor in reviewing the key operational, strategic and control risks and in determining the nature, timing and extent of internal audit procedures.

5.12 *Knowledge of the entity's business is a frame of reference within which the internal auditor exercises professional judgment in reviewing the processes, controls and risk management procedures of the entity. Understanding the business and using this information appropriately assists the internal auditor in:*

- *Assessing risks and identifying key focus areas.*
- *Planning and performing the internal audit effectively and efficiently.*
- *Evaluating audit evidence.*
- *Providing better quality of service to the client.*

The internal auditor should prepare the flow of events, transactions and processes in the entity on the basis of discussion with key management persons, internal documentation produced by the entity, management policy manual, procedure manuals of accounting and internal control systems, etc. In Chapter, detailed process maps of key processes in sugar industry are given.

Audit Planning

5.13 After acquiring knowledge of the business and various laws and regulations applicable to the sugar industry, in general and to the client in specific, the internal auditor should plan out the internal audit activity. An internal audit plan is a document defining the scope, coverage and resources, including time required for an internal audit over a defined period.

5.14 Standard on Internal Audit (SIA) 1, *“Planning an Internal Audit”* requires that ***the internal audit plan should be based on***

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the knowledge of the entity's business. While developing the internal audit plan, the internal auditor should have regard to the objectives of the internal audit engagement as well as the time and resources required for conducting the engagement. Further, the internal audit plan should be comprehensive enough to ensure that it helps in achieving of the overall objectives of an internal audit. SIA 1, "Planning an Internal Audit" specifies that **the internal audit plan should cover areas such as:**

- **Obtaining the knowledge of the legal and regulatory framework within which the entity operates.**
- **Obtaining the knowledge of the entity's accounting and internal control systems and policies.**
- **Determining the effectiveness of the internal control procedures adopted by the entity.**
- **Determining the nature, timing and extent of procedures to be performed.**
- **Identifying the activities warranting special focus based on the materiality and criticality of such activities, and their overall effect on operations of the entity.**
- **Identifying and allocating staff to the different activities to be undertaken.**
- **Setting the time budget for each of the activities.**
- **Identifying the reporting responsibilities.**

5.15 As mentioned earlier, specific care should be taken to design the internal audit plan in sugar industry. Figure below represents key activity timelines to be kept in mind while preparing the internal audit plan.

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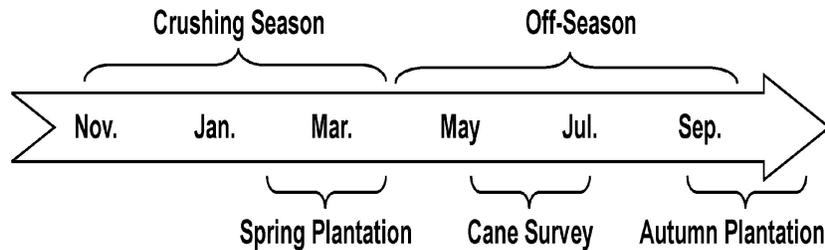


Figure 7: Sugar Industry Timeline

Sampling

5.16 The internal auditor should design and select an audit sample to perform audit procedures and evaluate sample. Standard on Internal Audit (SIA) 5, “*Sampling*” lays down that **when using either statistical or non-statistical sampling methods, the internal auditor should design and select an audit sample, perform audit procedures thereon, and evaluate sample results so as to provide sufficient appropriate audit evidence to meet the objectives of the internal audit engagement unless otherwise specified by the client.** Key steps in the construction and selection of a sample include:

- Determine the objective of the internal audit;
- Define the population to be sampled;
- Determine the sampling methods;
- Calculate the sample size;
- Select the sample.

Documentation

5.17 Standard on Internal Audit (SIA) 3, “*Documentation*” lays down that *internal audit documentation*:

- *Aid in planning and performing the internal audit.*
- *Aid in supervision and review of the internal audit work.*

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- *Provide evidence of the internal audit work performed to support the internal auditor's findings and opinion.*
- *Aid in third party reviews, where so done.*
- *Provide evidence of the fact that the internal audit was performed in accordance with the scope of work as mentioned in the engagement letter, SIAs and other relevant pronouncements issued by the Institute of Chartered Accountants of India.*

5.18 Internal audit documentation should record the internal audit charter, the internal audit plan, the nature, timing and extent of audit procedures performed, and the conclusions drawn from the evidence obtained. In case the internal audit is outsourced, the documentation should include a copy of the internal audit engagement letter, containing the terms and conditions of the appointment.

Reporting

5.19 The internal auditor's report should contain a clear written expression of significant observations, suggestions/recommendations based on the policies, processes, risks, controls and transaction processing taken as a whole and managements' responses. Standard on Internal Audit (SIA) 4 "Reporting" lays down the following basic elements of the Internal Audit Report:

- *Title;*
- *Addressee;*
- *Report Distribution List;*
- *Period of coverage of the Report;*
- *Opening or introductory paragraph;*
 - ◆ *identification of the processes/functions and items of financial statements audited; and*

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- ◆ *a statement of the responsibility of the entity's management and the responsibility of the internal auditor;*
- *Objectives paragraph - statement of the objectives and scope of the internal audit engagement;*
- *Scope paragraph (describing the nature of an internal audit):*
 - ◆ *a reference to the generally accepted audit procedures in India, as applicable;*
 - ◆ *a description of the engagement background and the methodology of the internal audit together with procedures performed by the internal auditor; and*
 - ◆ *a description of the population and the sampling technique used.*
- *Executive Summary, highlighting the key material issues, observations, control weaknesses and exceptions;*
- *Observations, findings and recommendations made by the internal auditor;*
- *Comments from the local management;*
- *Action Taken Report – Action taken/ not taken pursuant to the observations made in the previous internal audit reports;*
- *Date of the report;*
- *Place of signature; and*
- *Internal auditor's signature with Membership Number.*

Internal Control Evaluation

5.20 Internal control and Risk Management systems are of paramount importance for the processes in sugar industry. Any lapse of internal control can lead to huge losses. Internal control is the integration of the activities, plans, attitudes, policies, applicable laws and regulations, and efforts of the people of an organization

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working together to provide reasonable assurance that the organization will achieve its objective and mission. The internal audit function constitutes a separate component of internal control with the objective of determining whether other internal controls are well designed and properly operated.

5.21 Standard on Internal Audit (SIA) 12, “*Internal Control Evaluation*” lays down that ***the internal auditor should examine the continued effectiveness of the internal control system through evaluation and make recommendations, if any, for improving its effectiveness. The internal auditor should focus towards improving the internal control structure and promoting better corporate governance.*** The role of the internal auditor encompasses:

- *Evaluation of the efficiency and effectiveness of controls.*
- *Recommending new controls where needed – or discontinuing unnecessary controls.*
- *Using control frameworks.*
- *Developing control self-assessment.*

5.22 Internal control system extends beyond those matters which relate directly to the functions of the accounting system. Timely accounting entries of clients and exchange settlements, correct and timely reporting of margins, timely pay-in and pay-outs, or other reconciliations, etc. may depict good accounting controls but not sound internal controls. The internal auditor should gather fair understanding of control environments such as:

- Management’s philosophy and operating style.
- Integrity and ethical values.
- Entity’s organizational structure and methods of assigning authority and responsibility.
- Organisational policies and procedures are in place and in operation, including policies on Risk Management, Prevention of Money Laundering, HR related policies, IT policies, Data

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Security Policies, etc.

- There is a regular system of reviewing and updating the policies and procedures.

5.23 Internal controls may be either preventive or detective. The internal auditor should ensure that, in general, approval function, accounting function, and asset custody function is separated among employees of the entity. When these functions cannot be separated due to small department size, the internal auditor should ensure that a detailed supervisory review of related activities is in practice, as a compensating control activity. The internal auditor should use his professional judgment to assess and evaluate the presence and maturity of entity's internal controls. He should use narratives, flowcharts, questionnaires for obtaining understanding of each department and its business and accounting processes. The internal auditor should identify internal control weaknesses that have not been corrected and make recommendations to correct those weaknesses. When internal controls are found to contain continuing weaknesses, the internal auditor should consider whether:

- Management has increased supervision and monitoring;
- Additional or compensating controls have been instituted; and/or
- Management accepts the risk inherent with the control weakness.

The internal auditor should communicate significant deficiencies and material weaknesses to management and those charged with governance.

Enterprise Risk Management

5.24 Risk is an event which can prevent, hinder or fail to further or otherwise obstruct the enterprise in achieving its objective. Risk can cause financial/operational disadvantage, for example, additional costs or lesser availability of raw material. It is the product of probability of occurrence of an event and the financial impact of such occurrence to an enterprise.

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5.25 Following different types of key risks are associated with the sugar industry:

- ***Strategic Risks:*** Risk associated with the primary long-term purpose, objectives and direction of the business, capex expansion, etc. Since cane area allocated to each factory is fixed by the State Government, one should keep in mind option of new factories coming in the adjoining areas, thereby reducing catchment area for the factory.
- ***Credit/Financial Risks:***
 - ◆ Relating to payments to growers : Working capital management.
 - ◆ Relating to enterprises: Process, techniques, instruments, etc., used to manage the finance of an enterprise.
 - ◆ Non-recoverable loans given to growers.
 - ◆ Customer bad debt/recovery from government agencies.
- ***Process/Operational Risk:*** Risk associated with ongoing day-to-day operations of an enterprise.
- ***Information Technology Risk:*** Risk associated with weak information technology environment and weak controls.
- ***Regulatory Risk:*** Risk associated with non-compliance of directions, rules and regulations of the Central and State government.
- ***Uncontrollable Risk:*** Climatic conditions like, excessive rainfall, drought, etc.

5.26 Standard on Internal Audit (SIA) 13, “Enterprise Risk Management” specifies that *the role of the internal auditor in relation to enterprise risk management is to provide assurance to management on the effectiveness of risk management. Due consideration should be given to ensure that the internal auditor protects his independence and objectivity of the assurance provided.*

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The role of the internal auditor is to ascertain that risks are appropriately defined and managed. The scope of the internal auditor's work in assessing the effectiveness of the enterprise risk management would, normally, include:

- assessing the risk maturity level both at the entity level as well as the auditable unit level;
- assessing the adequacy of and compliance with the risk management policy and framework; and
- for the risks covered by the internal audit plan:
 - ◆ Assessing the efficiency and effectiveness of the risk response; and
 - ◆ Assessing whether the score of the residual risk is within the risk appetite.

Auditing in an IT Environment

5.27 In a sugar industry large amount of data is involved. Typically, a factory might be dealing with close to 50,000 to 1 lakh growers, and so it becomes essential to deploy IT resources to facilitate the process. Further most of the companies have multiple units. Thus, the use of ERP to manage processes across various units is very common these days. The overall objective and scope of an internal audit does not change in an Information Technology environment. However, the use of computer changes the processing, storage, retrieval and communication of information and the interplay of processes, systems and control procedures. Thus, this would affect the internal control systems employed by the entity.

5.28 Standard on Internal Audit (SIA) 14 "*Internal Audit in an Information Technology Environment*" lays down that ***the internal auditor should consider the effect of an IT environment on the internal audit engagement, inter alia:***

- **the extent to which IT environment is used to record, compile, process and analyse information; and**

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- **the system of internal control in existence in the entity with regard to:**
 - ◆ **the flow of authorised, correct and complete data to the processing centre;**
 - ◆ **the processing, analysis and reporting tasks undertaken in the installation; and**
 - ◆ **the impact of computer-based accounting system on the audit trail which would otherwise be expected to exist in an entirely manual system.**

5.29 The internal auditor should have sufficient knowledge of the IT system to plan, direct, supervise, control and review the work performed. If specialized skills are needed, the assistance of technical expert can also be sought, who may either be the internal auditor's staff or an outside professional. The internal auditor should consider the IT environment in designing audit procedures to review the systems, processes, controls and risk management framework of the entity. The internal auditor should review the robustness of the IT environment and consider any weakness or deficiency in the design and operation of any IT control within the entity, by reviewing:

- System audit reports of the entity, conducted by independent information system auditors;
- Data integrity of manual records vis-à-vis system's records;
- Validation of statutory reports generated against manual records kept with cane department;
- General controls like segregation of duties, physical access records, logical access controls;
- Application controls like input, output, processing and run-to-run controls; and
- Excerpts from the IT policy of the entity relating to business continuity planning, crisis management and disaster recovery procedures.

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5.30 The internal auditor should check whether an adequate IT policy is in place and also the degree of adherence to such policy. He can use checklist format for various IT controls such as, environment control, backups, virus protection controls, access controls, securities levels, etc. If required, the internal auditor should perform the system walk-through and compare the results outside the system with independent workings.

5.31 The internal auditor should document the internal audit plan, nature and extent of audit procedures performed and the conclusion drawn from the evidence obtained. In an internal audit in IT environment, some or all of the audit evidence may be in the electronic form. He should satisfy himself that such evidence is adequately and safely stored and is retrievable in its entirety as and when required.

Consideration of Laws and Regulations

5.32 As discussed in detail in Chapter 2, there are number of laws and regulations which govern the sugar industry. Since sugar is an essential commodity and distillery products are used in alcohol industry, so the government at regular intervals releases orders to control the supply and demand gap. Standard on Internal Audit (SIA) 17, “*Consideration of Laws and Regulations in an Internal Audit*” deals with the internal auditor’s responsibility to consider laws and regulations when performing an internal audit. For the purposes of this SIA. “*Non-compliance*” means *acts of omission or commission by the entity, either intentional or unintentional, which are contrary to the prevailing laws or regulations. Such acts include transactions entered into by, or in the name of, the entity, or on its behalf, by those charged with governance, management or employees. Non-compliance does not include personal misconduct (unrelated to the business activities of the entity) by those charged with governance, management or employees of the entity.*

5.33 *The effect on the functioning of an entity of laws and regulations varies considerably. Those laws and regulations, to which an entity is subject to, constitute the legal and regulatory framework. The provisions of some laws or regulations have a direct effect on the financial statements in that they determine the*

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reported amounts and disclosures in an entity's financial statements. Other laws or regulations are to be complied with by management or set the provisions under which the entity is allowed to conduct its business but do not have a direct effect on an entity's financial statements. Some entities operate in heavily regulated sectors (such as banking, non-banking finance, insurance, telecom, etc.). Others are subject only to the many laws and regulations that relate generally to the operating aspects of the business (such as those related to environment, occupational safety and health). Non-compliance with laws and regulations may result in fines, litigation or other consequences for the entity that may have a material effect on not only the reporting framework of the financial statements but also on the functioning of the entity and which in extreme cases may impair their ability to continue as a going concern itself.

5.34 The key objectives of the internal auditor with respect to consideration of laws and regulations in an internal audit are as follows:

- *To obtain sufficient appropriate audit evidence regarding compliance with the provisions of those laws and regulations generally recognized to have a direct effect on the determination of material amounts and disclosures in the financial statements.*
- *To perform specified audit procedures to help identify instances of non-compliance with other laws and regulations that may have a significant impact on the functioning of the entity; and*
- *To respond appropriately to non-compliance or suspected non-compliance with laws and regulations identified during the internal audit.*

5.35 In conducting an internal audit of an entity, the internal auditor takes into account the applicable legal and regulatory framework. Owing to the inherent limitations of an internal audit, there is an unavoidable risk that some non-compliance with laws and regulations and consequential material misstatements in the financial statements may not be detected, even though the internal

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audit is properly planned and performed in accordance with the SIAs. In the context of laws and regulations, the potential effects of inherent limitations on the internal auditor's ability to detect non-compliance are greater for such reasons as the following:

- There are many laws and regulations, relating principally to the operating aspects of an entity that typically do not affect the financial statements and are not captured by the entity's information systems relevant to financial reporting.
- Non-compliance may involve conduct designed to conceal it, such as collusion, forgery, deliberate failure to record transactions, management override of controls or intentional misrepresentations being made to the internal auditor.
- Whether an act constitutes non-compliance is ultimately a matter for legal determination by a court of law.

Ordinarily, the further removed non-compliance is from the events and transactions captured or reflected in the entity's information systems relevant to financial reporting, the less likely the internal auditor is to become aware of it or to recognise the non-compliance.

5.36 *SIA 17 distinguishes the internal auditor's responsibilities in relation to compliance with two different categories of laws and regulations as follows:*

- (a) The provisions of those laws and regulations generally recognized to have a direct effect on the determination of material amounts and disclosures in the financial statements such as tax and laws regulating the reporting framework; and
- (b) Other laws and regulations that do not have a direct effect on the determination of the amounts and disclosures in the financial statements, but compliance with which may be fundamental to the operating aspects of the business, to an entity's ability to continue its business, or to avoid material penalties (for example, compliance with the terms of an operating license, compliance with regulatory solvency

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requirements, or compliance with environmental regulations). Non-compliance with other laws and regulations may result in fines, litigation or other consequences for the entity, the costs of which may need to be provided for in the financial statements, or may even have a significant impact on the operations of the entity, but are not considered to have a direct effect on the financial statements, as described in paragraph (a). Non-compliance with laws and regulations that have a significant impact on the operations of the entity may cause the entity to cease operations, or call into question the entity's continuance as a going concern.

5.37 SIA 17 lays down differing requirements for each of the above categories of laws and regulations:

- For the category referred to in paragraph (a), the internal auditor's responsibility is to obtain sufficient appropriate audit evidence, in accordance with the Standard on Internal Audit (SIA) 10, "Internal Audit Evidence", about compliance with the provisions of those laws and regulations.
- For the category referred to in paragraph (b), the internal auditor's responsibility is limited to undertaking specified audit procedures to help identify non-compliance with those laws and regulations that may have a significant impact on the functioning of the entity.

Chapter 6

Understanding Key Process Audits

Cane Survey/Pre-procurement Process

6.1 A typical cane survey process map is given below:

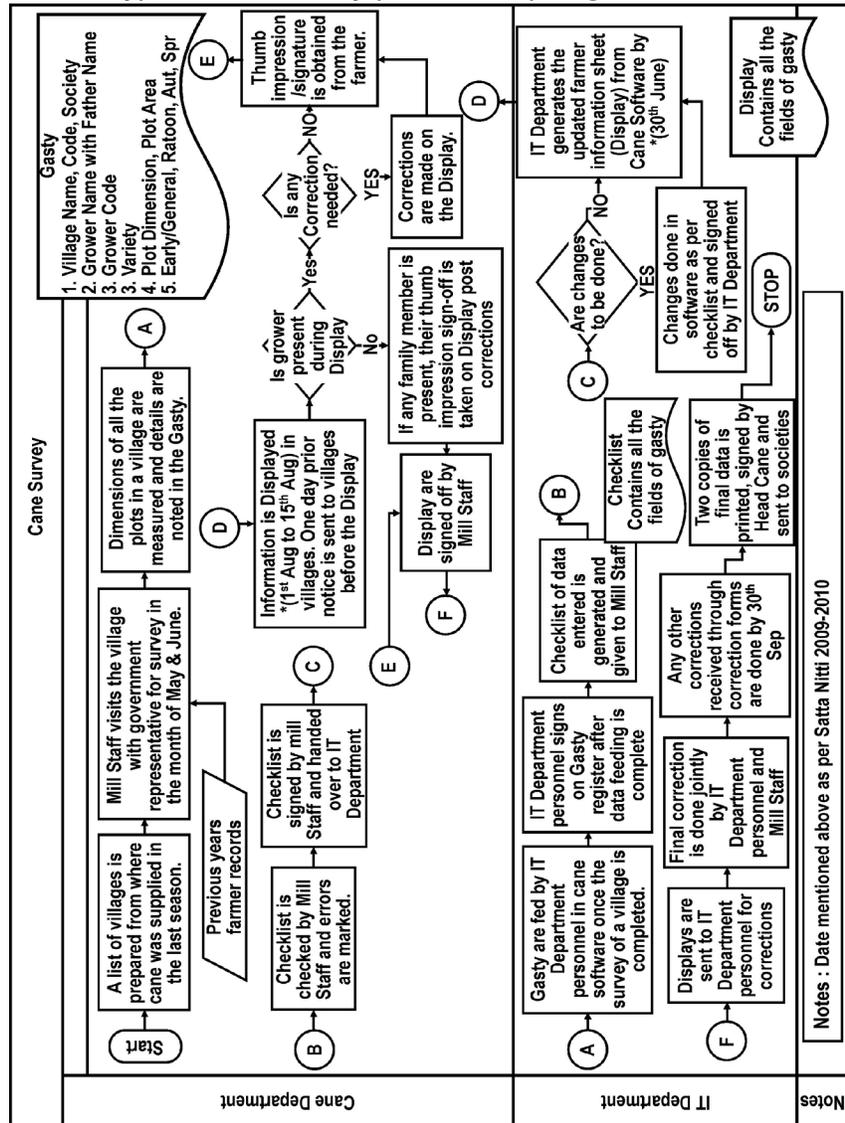


Figure 8: Cane Survey Process

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6.2 Key risks and their implications pertaining to cane survey process are as follows:

Risks	Implications
(i) Incomplete Cane Survey: As discussed in Chapter 4, certain fields need to be captured during the cane survey. Surveyor might not be capturing some of the fields.	(i) Grower dissatisfaction/ cane not procured.
(ii) Incorrect information captured in survey.	(ii) Grower dissatisfaction.
(iii) Unauthorised changes in the survey data: Once survey is done, it is signed off by surveyor and government representative who is part of the survey. Hence, any changes to the survey needs to be duly authorised.	(iii) Statutory Non-compliance/Favorable treatment given to some growers may upset other growers.
(iv) Non-adherence to timelines.	(iv) Fine by state government.
(v) Data entry errors: Survey data is fed into software and there are chances of manual errors in feeding the data.	(v) Grower dissatisfaction/ cane not procured.
(vi) Unauthorised addition / deletion of growers from the records.	(vi) Favorable treatment given to some growers may upset other growers.
(vii) Duplicate grower codes existing in the data.	(vii) Non-recovery of loans/ Incorrect planning for procurement.
(viii) Unauthorised/Incorrect bonding being done with growers: As described in Chapter 4, bonding for supply of cane is done with each farmer as directed by cooperative / cane societies. To favor a grower there is risk of changing the data in software without proper authorisation.	(viii) Statutory Non-compliance.

Sugarcane Procurement Process

6.3 The process map for procurement process is given below:

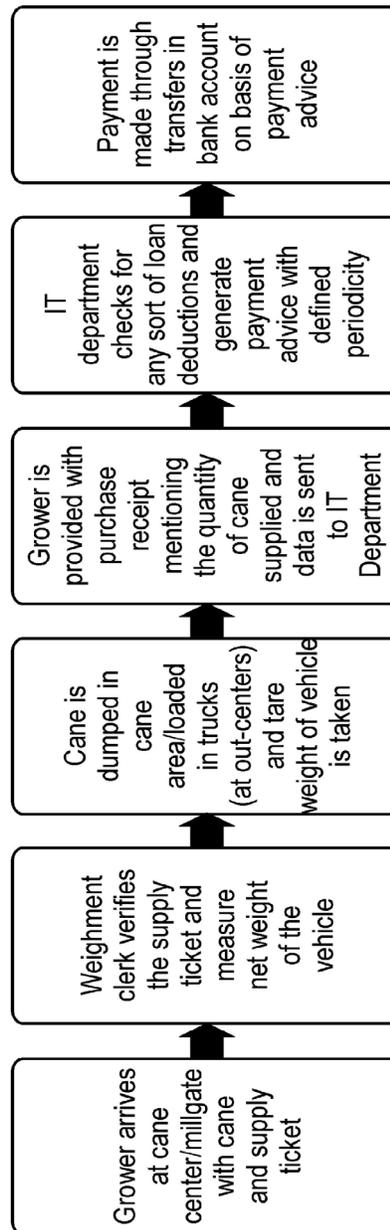


Figure 9: Sugarcane Procurement Process

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6.4 The following key risks and implications are associated with cane procurement:

Risks	Implications
(i) Cane being purchased from unauthorised/fictitious growers.	(i) Statutory Non-compliance.
(ii) Incorrect recording of purchase.	(ii) Incorrect payments.
(iii) Lower variety being purchased as higher variety.	(iii) Excess payments.
(iv) Excess loss being shown as driage while transporting cane from out-centers to mill.	(iv) Reduction in recovery/ Excess payments.
(v) Biased distribution of supply tickets.	(v) Grower dissatisfaction/ Fine by state government.
(vi) Clerks at out-centers doing incorrect weighment.	(vi) Statutory Non-compliance.
(vii) Supply on fictitious supply tickets.	(vii) Fraud/Incorrect payments.
(viii) Payment being done to growers without adjusting for loans.	(viii) Financial Loss.
(ix) Delays in transfer of cane from out-centers to mill due to lack of logistics planning.	(ix) Reduction in recovery due to excess driage.
(x) Improper planning in distribution of supply ticket leading to excess/ shortage of cane on various days.	(x) Loss in recovery/ increased cost of production.

Manufacturing Process

6.5 Manufacturing process has been explained in detail in Chapter 3. Some key risks in these processes are as follows:

- Operational inefficiencies;
- Statutory non-compliances;
- Non-compliance to Environment, Health and Safety (EHS) standards;

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- Incorrect/excess over time being booked;
- Incorrect excise records;
- Excessive break-downs/downtime of plant; and
- Incorrect cost accounting.

Sales and Marketing Process – Sugar

6.6 The process map of sales process through sugar handling agents is given below:

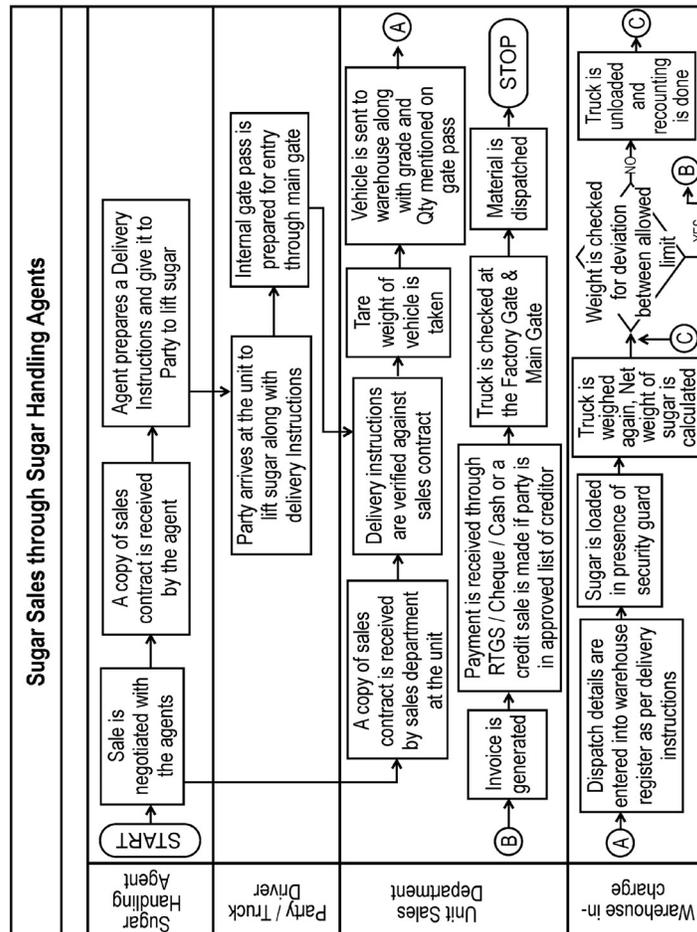


Figure 10: Sales of Sugar through Sugar Handling Agents

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6.7 The key risks and implications pertaining to sales process are as follows:

Risks	Implications
(i) Sales expenses incurred are in excess of budget.	(i) Budget overrun.
(ii) Unauthorised orders/transactions are executed.	(ii) Financial loss if payments are not received.
(iii) Units are unaware of the orders they are required to deliver.	(iii) Delays in dispatch.
(iv) Loss due to non-payment by customers/ bad debt.	(iv) Financial loss.
(v) Delay in processing of orders might lead to late delivery penalty.	(v) Financial loss.
(vi) Segregation of duties conflict.	(vi) Unauthorised transactions.
(vii) Duplication of processing of orders - lack of controlling on processing dispatch orders.	(vii) Financial loss.
(viii) Delay in processing of invoice - incompleteness of recording.	(viii) Bad debts/delay in payments.
(ix) Transactions are not recorded in an appropriate period.	(ix) Statutory Non-compliance.
(x) Incorrect processing of discount transactions.	(x) Loss of discount.
(xi) Incomplete/incorrect processing of accounts.	(xi) Financial loss.
(xii) Incorrect bank accounts disclosure.	(xii) Statutory Non-compliance.
(xiii) Incorrect provisioning of doubtful debts.	(xiii) Statutory Non-compliance.
(xiv) Incorrect/unauthorised write off of accounts.	(xiv) Financial loss.
(xv) Customer complaints feedback/ resolution not present.	(xv) Customer dissatisfaction.

Sales and Marketing Process – Distillery Products

6.8 The key risks pertaining to sales process are as follows:

Risks	Implications
(i) Unauthorised orders/transactions are executed.	(i) Financial loss, if payments are not received.
(ii) Units are unaware of the orders they are required to deliver.	(ii) Delays in dispatch.
(iii) Loss due to non-payment by customer/bad debt.	(iii) Financial Loss.
(iv) Delay in processing of orders might lead to late delivery penalty.	(iv) Financial Loss.
(v) Duplication of processing of orders - lack of controlling on processing dispatch orders.	(v) Financial Loss.
(vi) Delay in processing of invoice - incompleteness of recording.	(vi) Bad debts/delay in payments.
(vii) Transactions are not recorded in an appropriate period.	(vii) Statutory Non-compliance.
(viii) Incomplete/incorrect processing of accounts.	(viii) Statutory Non-compliance.
(ix) Incorrect bank accounts disclosure.	(ix) Statutory Non-compliance.
(x) Incorrect provisioning of doubtful debts.	(x) Statutory Non-compliance.
(xi) Incorrect/unauthorised write-off of accounts.	(xi) Financial Loss.
(xii) Availability of central excise permits with the buyers.	(xii) Statutory Non-compliance.

Chapter 7

Internal Controls

7.1 This chapter contains illustrative lists of internal controls which an internal auditor should refer while reviewing a particular process; however Internal Auditors should not limit themselves to these lists only.

Cane Survey/ Pre-procurement Process

7.2 Internal auditor should ensure that the following controls are operating effectively in cane survey/pre-procurement process:

- Whether a detailed listing has been prepared for all the villages to be surveyed.
- Is all relevant information being captured in the survey?
- Are all changes in the survey register duly authorised?
- What are the controls to deal with data entry errors? A sample checking should be done for effectiveness of these controls.
- Whether audit log is being maintained for all the changes in data fed into IT System.
- Are all the timelines specified by the government being adhered to?
- Whether proper verification process exists, before adding/ deleting any grower code to database.
- Whether relevant documents are being obtained from grower before addition?
- Whether any check is being done to identify duplicate grower codes in the data?
- Has the bonding been done as per the directions from the government?

Sugarcane Procurement Process

7.3 Internal Auditor needs to ensure that the following controls are operating effectively in cane procurement process:

- Have the sugarcane been purchased from growers not listed in growers list?
- Have some large payments been made to certain growers or family members of same growers?
- Do multiple growers have same bank account details?
- Check for records of calibration of weighing bridges.
- Check for serial numbering of purchase receipt at the out-centers.
- Check for the cancellation process of any wrong receipt, or if any receipt has been left blank.
- Check whether the tickets on which supply has been made have been issued by mill or society.
- Check if cane has been purchased in excess quantity than that mentioned on supply ticket, beyond tolerable limit.
- Check for the process of verification of cane variety on receipt of the same at mill gate or out-center.
- Reconcile purchase records of the out-center with receipt at the mill gate. Check if proper root causing has been done for any major variations.
- Check for time lag between purchases of cane at out-centers and receipts at mill-gate to see it is not too high.
- Check if root causing has been done for failure rate in supply tickets if it is beyond certain threshold.
- Reconcile payments made with supplies.

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- Check if payments had been made to growers without adjusting for loans.
- Check for any large payments made in cash and analyse the reasons for the same.
- Verify transporter contracts and payments.

Manufacturing Process

7.4 Various controls that should be checked by an internal auditor are as follows:

- Actual to budgeted comparison for various efficient norms set by the management. Some key parameters to look at are:
 - ◆ Power/steam consumption per quintal of cane crushed.
 - ◆ Recovery ratio.
 - ◆ Sugar losses in bagasse and molasses.
 - ◆ Fuel consumption per unit of electricity generated (Power Plant).
 - ◆ Steam generated per quintal of fuel consumed (Power Plant).
 - ◆ Percentage of make-up water (Power Plant).
 - ◆ Steam/power consumption in Distillery.
- Statutory compliances with respect to operation of machineries like, boiler, vacuum pans, etc. and other clearances from the government.
- Environment, Health and Safety standards are adhered to in day to day functioning, running of ETP plant, disposal of boiler ash, flue gas and spent wash.

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- Log books are being filled properly and are also capturing deviations.
- Recording of overtime by the workers.
- Recording of finished goods is as per excise rules.
- Control over gunny bags movement.
- Segregation of duties between production and quality.
- Root cause analysis for any break downs.
- Trend analysis with previous year results.
- Planning with regards to off-season and season maintenance schedule.
- Cost/budget of maintenance (year to year comparison).
- Whether annual maintenance contracts have been entered for key machineries.
- In case of power plant and distillery are separate entities, whether bagasse, sugar and molasses have been transferred at arm's length principle?
- Whether overheads have been allocated properly while accounting for cost of manufacturing?

Sales and Marketing Process – Sugar

7.5 Internal auditors needs to ensure that following controls are operating effectively in sales and marketing process:

- Check for budgeting the expenses for sales.
- Check if all the expenses are duly processed, accounted and approved as per DOA.
- Check if all expenses including the ones which are in excess of budget, are duly approved as per DOA.

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- Check for sample of transactions that proper DOA has been followed in the sales contract.
- Check for the debit on agents for bad debts.
- Check for management's approval process for processing non-standard terms and conditions/orders.
- Check that data is processed with supporting documents.
- Review of process of intimating orders details to units on time.
- Review of process application controls related to order processing. Review list of order processed on a sample basis with the approval document for authorisation and compare the same with credit limit terms of customers.
- Check process of transfer of order entry data details for shipping/material dispatching department and to the invoicing department. Compare all the information for completeness and correctness and do 3-way match.
- Check appropriate approvals for all order modifications.
- Review the segregation of duties to avoid chances of overriding activities/controls.
- Review the process of dispatch orders and the process of controlling by issuing dispatch order numbers, etc.
- Review the process of material dispatched and the scheduled time to process invoice for the same.
- Review the cash/bank receipts transactions for recording in appropriate period. Check for delay in recording the transaction.
- Review the process of recording cash/bank collection in books and the control of review to avoid any recording or processing error.

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- Ensure that the collections are accounted for in the correct customer account.
- Review the process of cheque collection and timely processing the same for collection.
- Review the process of discount to customers. Review on a sample basis the discount given along with details of approval and correctness for the same.
- Ensure that the discounts are accounted in the correct customer accounts.
- Check that the credit notes are issued for appropriate reasons.
- Check the process of reviewing the accounts receivable details. Review aging of accounts receivable and the action taken for collection of the same.
- Review the process of reconciling Subsidiary Ledger- General Ledger (SL-GL) reconciliation on a periodic basis. Compare the same with standard policy. Check on a sample basis reconciliation for the same.
- Review bank accounts reconciliations. Ask for bank account as per books of accounts and the bank statement. Verify the bank balances from banks and check for pending unresolved/ unclear transactions.
- Review the standard policy of provisioning of doubtful debts and the actual provision made. Compare the same with standard policy. Also check the authorisation/approval for the same.
- Review the standard policy of account's write- off. Compare the actual write off details with the standard policy and also check the authorisation/approval for the same as per DOA.
- Check for existence of process for resolution of customer's complaints.

Sales and Marketing Process – Distillery Products

7.6 In case of distillery products, following controls should also be checked by internal auditors to ensure proper functioning:

- Check for sample of transactions that proper DOA has been followed in sales contract.
- Check for the debit on agents for bad debts.
- Check management's approval process for processing non-standard terms and conditions/orders.
- Check that data is processed with supporting documents.
- Review of process of intimating orders details to units on time.
- Review of process application controls related to order processing. Review list of order processed on a sample basis with the approval document for authorisation and compare the same with credit limit terms of customers.
- Check process of transfer of order entry data details for shipping/material dispatching department and to the invoicing department. Compare all the information for completeness and correctness and do 3-way match.
- Check appropriate approvals for all order modifications.
- Review the process of dispatch orders and the process of controlling by issuing dispatch order numbers, etc.
- Review the process of material dispatched and the scheduled time to process invoice for the same.
- Review the cash/bank receipts transactions for recording in appropriate period. Check for delay in recording the transaction.

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- Review the process of recording cash/bank collection in books and the control of review to avoid any recording or processing error.
- Ensure that the collections are accounted for in the correct customer account.

Appendix 1

Copy of Non-Levy Sugar Order for Month of February 2010

Government of India
Ministry of Consumer Affairs, Food & Public Distribution
Department of Food and Public Distribution
(DIRECTORATE OF SUGAR)

Krishi Bhavan, New Delhi-110001

Dated the 29.01.2010.

No.SC-II/2009-10/FS/O/February, 2010/N

ORDER

In exercise of the powers conferred by Clause under Sub-section (3E) of the Essential Commodities Act'1955 {incorporated in the Essential Commodities (Amendment) Act, 2003 (No.37 of 2003 dated 02.06.2003) read with the provisions of the Sugar (Control) Order, 1966 and the Notification of the Govt. of India in the erstwhile ministry of Agriculture and Irrigation (Department of Food) GSR 462 (E)/Ess.Com./Sugar dated the 30th July, 1979, I, Sanjay Kumar, Deputy Director (Cost), Directorate of Sugar, Ministry of Consumer Affairs, Food & Public Distribution, hereby direct that the producers/ owners of the sugar factories shall sell in India in open market from their respective factories the specified quantity of non-levy sugar as mentioned in column no. 4 of the following table, during the month of February, 2010, out of the production of the year 2009-10 (October, 2009 to September, 2010) or 2008-09 sugar season or earlier sugar seasons. In case any lapsed quantity of sugar of earlier season is also available, the same may also be sold but an equivalent quantity of sugar out of 2009-10 season's production be retained till a final decision in this regard is taken by

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the Government. This will be subject to the conditions listed in this order as per the details below:

Sl. No.	Plant	Plant Name	Qty. in M.T
1.	00101		
2.	00102		
3.	00201		
4.	00301		
5.	00401		
This table has been modified and is mere representative of actual order			
6.	00701		
7.	04701		

CONDITIONS FOR THE SALE OF SUGAR

1. The sugar to be sold shall conform to ISS Grade specifications. The sales invoice issued in respect of sugar shall indicate the name and full address of the consignee. The producer may use a quantity as he may consider necessary out of the quota released for the purpose of manufacturing sugar products/food products in which sugar is used in a factory owned by him.
2. There will be no restriction on Inter-State movement of the sugar including movement to Bhutan.
3. The clearance of normal free sale entitlement as well as additional free sale on account of incentives shall be made at the normal rate of excise duty.
4. The mill in whose case incentive under 1987 scheme have been granted on deferment basis at their request will not be entitled for the excise duty rebate.

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5. The delivery/ dispatch of the above-mentioned quantity of sugar shall commence with effect from 1.02.2010 and delivery/dispatch of the entire quantity shall be completed by 28.02.2010. **Further the sugar factory shall sell/deliver and dispatch entire released quantity for the month of February, 2010 within the prescribed validity period in the order, i.e., upto 28.02.2010, subject to the condition that, the sale and dispatch of non-levy quota released for the month of February, 2010, shall be made on fortnightly basis, in two equal installments and any quantity which remains unsold/ undespached in each fortnight would stand converted into levy stock. The sugar mills are also required to report actual sale and dispatch of sugar each fortnight which should reach the Directorate of sugar within 7 days i.e by 22nd of the month and 7th of the following month.**
6. Violation of the condition No. 5 would constitute an offence and shall be punishable under the Essential Commodities Act, 1955, as amended from time to time.
7. Each company shall furnish a statement, latest by the 7th day of the following month, showing factory - wise, season-wise quantities sold against this Order.

(xxxx)

Deputy Director (Cost)

Copy to :

1. The Central Excise Officer concerned.
2. State Governments/Union Territory concerned.
3. The Senior Technical Officer, Central Economic Intelligence Bureau, Deptt. of Revenue, Ministry of Finance, 1st floor, B-Wing, Janpath Bhavan, New Delhi –

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4. ISMA/Federation/E&V Cell.
5. Principal Information Officer, Press information Officer, New Delhi.

Ministry's website (i) <http://fcamin.nic.in>

(ii) www.contact@esugarindia.com

(xxxx)

Deputy Director (Cost)

& - Quota withheld due to non-payment of SDF dues.

% - Quota withheld due to non- Payment of Govt. Dues.

+ - Quota withheld due to excess of Non-Levy (Free Sale) Sugar.

! quota withheld due to non-submission of Utilization certificate.

\$ Quota withheld due to non delivery of levy sugar

Appendix 2

Performa II for Weekly Return

(This is a sample format prescribed by government and is liable to change from time to time)

Revised format of Performa-II (Periodicity: Weekly)

1. Plant short Name -
2. Plant Code-
3. Weekending

(Figures In Tonnes)

Period xx.xxx.20xx to xx.xxx.20xx During the Week Todate

4. Cane Crushed
 - (a) Gate
 - (b) Out station (Road/Rail)
 - (c) Total
5. Sugar Produced
 - (a) From Cane
 - (b) By Reprocessing unmarketable old sugar
 - (c) From Imported Raw Sugar
 - (d) Total
 - (e) Recovery % of sugar on cane
6. No. of hours worked
7. Loss of sugar in reprocessing
 - (a) New
 - (b) Imported Raw Sugar

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(c) Old

(d) Total

8. Levy Sugar despatches

Release Order No.	Date	Released Quantity	In favour of operated States (States Name)	FCI Quantity
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9. Freesale Despatches

Release Order No.	Date	Released Quantity	In favour of operated States (States Name)
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10. Export Despatches

Release Order No.

1. Levy

2. Free

11. Miscellaneous despatches during the week

Release Order No.

(a) Gate Sale

(b) A.P.O.

(c) A.P.E.D.A.

12. Total Despatches out of production

(a) Earlier Season

(b) Current Season

13. Stock of Sugar

(a) Opening Stock

(b) Closing Stock

Tonnes BISS Sugar Sent for Reprocessing is Included in Todate Despatch.

