Technical Guide on Internal Audit of Intangible Assets

Celebrating the 60th Year of Excellence

The Institute of Chartered Accountants of India

(Set up by an Act of Parliament)

New Delhi

TECHNICAL GUIDE ON INTERNAL AUDIT OF INTANGIBLE ASSETS

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Edition	:	June, 2009
Committee/ Department	:	Internal Audit Standards Board
E-mail	:	cia@icai.org
Website	:	www.icai.org
ISBN	:	978-81-8441-185-0
Published by	:	The Publication Department on behalf of the Institute of Chartered Accountants of India, ICAI Bhawan, Post Box No. 7100, Indraprastha Marg, New Delhi - 110 002.
Printed by	:	Sahitya Bhawan Publications, Hospital Road, Agra 282 003. June/2009/1500 Copies

FOREWORD

In the knowledge-driven global marketplace, where intangible assets such as intellectual property, brand, customer relationship and talent hold much more value than tangible 'visible' assets such as capital, land, building, factories, etc, India emerges as one of the leading intangible economies. Wealth and growth in modern economies are driven primarily by the astute deployment of intangible assets. Thus, recognition of the role of intangibles in the value chain facilitates better organisational strategy, and more aggressive management of intangible resources.

I am pleased to note that the Internal Audit Standards Board of the Institute is issuing Technical Guide on Internal Audit of Intangible assets. This Guide would help not only the members engaged as internal auditors in gaining profound knowledge about the internal audit of intangible assets, but also to others engaged in other capacities to develop understanding on this area thereby assisting them in playing an important role in efficient and effective management of such assets.

I wish to place my appreciation to CA. Shanti Lal Daga, Chairman, Internal Audit Standards Board, for bringing out this Guide on Internal Audit of Intangible Assets. I am pleased to note that the scope and structure of the Technical Guide is appropriately framed which is well suited to cater the professional needs of the members.

I am sure that the Guide would prove useful to members, in practice and in industry, as well as others in gaining essential knowledge of various critical aspects related to intangible assets.

May 27, 2009
New Delhi

CA. Uttam Prakash Agarwal
President, ICAI

PREFACE

The major driver behind the recent surge in intangible assets is the unique combination of three related economic forces - intensified business competition brought about by the globalisation of trade, the far-reaching deregulation in key economic sectors and the acceleration of information technologies, most recently exemplified by the Internet. The importance of intangible assets is magnified by the fact that they are not restricted only to high technology industries but are also dominant in every well run organisation.

In view of the above, effective management and control of intangible assets is attaining significance and an internal auditor can play a vital role in this area. Leading organisations are looking for the internal audit function to assume a leadership role in assessing and managing their strategic risks, adding value to the organisation and identifying operational improvement opportunities. This Technical Guide on Internal Audit of Intangible Assets has been written with the primary objective of discussing the role that the internal audit function can play in efficient and effective management of intangible assets.

This Guide has been structured into eight chapters which covers all aspects relevant to internal audit of intangible assets. The first chapter provides an introduction on significance of intangible assets. The second chapter provides an overview of the legal framework relating to intangible assets in India with special reference to managerial and internal audit perspectives. The third chapter provides guidance on effective and efficient management of intangible assets. The fourth chapter discusses the overall approach to internal audit of intangible assets. The fifth chapter discusses the approach to internal audit of various internal controls relating to intangible assets. The sixth chapter deals with internal audit of accounting aspects relating to intangible assets. The seventh chapter illustrates the application of the above in internal audit of different types of intangible assets. The eighth chapter contains a fairly comprehensive illustrative internal audit programme for computer software.

At this juncture, I am grateful to Dr. Kamal Gupta, CA. Archana Bhutani, CA. Deepa Agarwal and CA. Shruti Tiwari for squeezing out time out of their professional and personal commitments and preparing the basic draft of this Technical Guide.

I also wish to thank CA. Uttam Prakash Agarwal, President and CA. Amarjit Chopra, 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. Rajkumar S. Adukia, CA. Ved Jain, CA. Abhijit Bandyopadhyay, CA. Bhavna G Doshi, CA. Pankaj I. Jain, CA. Sanjeev K. Maheshwari, CA. Mahesh P. Sarda, CA. S. Santhanakrishnan, CA. S. Gopalakrishnan, CA. Vijay K. Garg, Shri Manoj K. Sarkar and Shri K. P. Sasidharan for their vision and support. I also wish to place on record my gratitude for the co-opted members on the Board, *viz.*, CA. N. K. Aneja, CA. Verendra Kalra, CA. M. Guruprasad, CA. Dilip Kumar Vadilal Shah and CA. K. S. Sundara Raman as also special invitees on the Board, *viz.*, CA. K. P. Khandelwal, CA. S. Sundarraman, CA. Ravi H. Iyer, CA. Rajiv Dave, CA. Pawan Chagti, CA. Ram Mohan Johri and CA. Arindam Guha for their devotion in terms of time as well as views and opinions to the cause of the professional development. I also wish to place on record the efforts put in by CA. Jyoti Singh, Secretary, Internal Audit Standards Board and CA. Arti Aggarwal, Senior Executive Officer, for their inputs in giving final shape to the publication.

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

June 10, 2009
Hyderabad

CA. Shanti Lal Daga
Chairman,
Internal Audit Standards Board

CONTENTS

Chapter 1

Significance of Intangible Assets

1.1 The last few decades have witnessed a rapid and radical transformation of major economies around the world from predominantly manufacturing economies to service-oriented and knowledge-based economies. The end of the cold war, acceptance of the philosophy of globalisation almost throughout the world and advances in telecommunication and information technology (IT) have brought service sector to a place of prominence in most world economies. Even in the case of manufacturing concerns, the increasing competition has resulted in a much greater emphasis being placed on search for new and improved materials and manufacturing processes, innovative products, and greater customer satisfaction. In this changed scenario, tangible assets (plant and machinery, buildings, furniture and fixtures, office equipment, etc.) and financial assets (debtors, financial investments, etc.), the traditional drivers of a business entity's performance have been joined by another class of assets, *viz.,* the intangible assets. Intangible assets are customer-centric or technology- or market-based and include diverse items such as, computer software; copyrights in respect of such items as motion pictures, sound recordings, plays, books and designs; know-how; patents; licences; brand equity; customer databases; distribution networks; non-compete agreements; experienced staff exclusivity; and special rights such as service-concession agreements. Knowledge-based intangible assets are sometimes also referred to as intellectual capital.

1.2 The increasing significance of intangible assets has manifested itself in a number of ways as would be evident from the following:

- A study carried out a few years back estimated that by 2007, intangible assets will account for more than 90 percent of the value of the Global 2000 enterprises, up from 20 percent in 1978 and 70 percent in 1998.

- A recent study of trends in total market capitalisation of Standard & Poor (S&P) 500 companies in the US concluded that the percentage of intangible assets to total market capitalisation had grown over the last three decades or so as shown by the following table:

Trend in Standards or the Year	Book value of intangible assets as percentage of total market capitalisation
1975	16.8
1985	32.4
1995	68.4
2005	79.7

- Closer home, as per the Department of Industrial Policy and Promotion of the Government of India statistics, the filing of patent applications in India increased from 4,824 in the year 1999-2000 to 28,882 in the year 2006-07, i.e., by approximately 500%.

- Likewise:

  - As against only 8,010 registrations in the year 1999-2000, 13 times more trademarks (1,09,361) were registered in the year 2006-07.

  - 3.38 lakh trademark certificates were issued between the years 2004-05 and 2006-07 whereas only 1.65 lakh trademarks were registered in 64 years up to and including the year 2003-04.

  - 39 Geographical Indication Products have been registered since September, 2003. These include Darjeeling Tea, Chanderi Saree, Solapur Chaddar, Mysore Silk and Kullu Shawl.

  - The filing of applications for designs increased from 2,874 in the year 1999-2000 to 5,372 in the year 2006-07.

Given the above scenario, it will not be incorrect to conclude that the success of a modern entity no longer depends just upon its production facilities and financial capital but also on intangible assets.

Systems of Managing Intangible Assets and its Benefits

1.3 While the significance of intangible assets has increased in the recent times, organisational systems and processes for accounting, controlling and managing them have not kept pace with the changing economic realities. Consequently, the largest portion of business entities' economic activities, with which they create value for stakeholders, is not captured and managed systematically. Since intangible assets are not visible, their importance can easily be, and often is, overlooked.

1.4 Effective management of intangible assets can enable an entity to extract as much value from them as possible, such as in the form of:

- Revenue derived from new licensing opportunities;
- Cost savings derived from increased productivity;
- Cost savings from reduced maintenance and filing fees;
- Minimising loss of revenue from unauthorised use/sale of intangible assets of the entity by unscrupulous employees and external parties; and
- Avoidance of penalties against unauthorised use of intangible assets by others.

1.5 There are a number of examples of how some leading companies have reaped the benefits of effective management of their intangible assets.

- Dow Chemical Company, by aligning its intellectual assets with business strategies, reduced its annual costs for obtaining and maintaining patents by $1.5 million. By reducing its patents portfolio from 12,000 patents to 8,500

patents between 1993 and 1999, Dow saved an estimated $40 million in maintenance taxes.

- IBM has increased patent licensing royalty revenues 3,300% from $30 million in 1990 to $1 billion. This recurring revenue stream represents 1/9th of IBM's pre-tax profits and equates to $20 billion in product sales revenue.

- Philips Electronics, which receives a significant amount of income from licensing, increased licensing revenue by 45%.

- Within the first six months of its new IP licensing strategy, British Telecom generated close to $14 million in new licensing revenue by data mining its patents portfolio and unlocking new sources of revenue.

Entities' Concern with Intangible Assets

1.6 The concern of different types of entities with intangible assets differs.

- For entities that are engaged in innovation, research and development, artistic or literary activities (e.g., those engaged in pharmaceutical research, computer software or hardware development, motion picture or music companies, etc.), one of the utmost concern is to safeguard the intellectual property against loss, destruction, unauthorised use, etc. To such entities, intangible assets like patents, copyrights, trademarks, trade secrets, industrial designs, know-how, and geographical indications are likely to be far more valuable than any of their tangible or financial assets.

- Other entities, that are users rather than creators of intangible assets, are concerned, *inter alia*, with ensuring that their resources deployed in intangible assets like, computer software, special processes, designs, know-how, formulas are put to an efficient use and are adequately protected.

Besides, with the increasing awareness about the need for protection of intellectual property rights, it is also a major concern of such entities that they do not inadvertently infringe the

provisions of laws such as the Patents Act 1970, the Copyright Act 1957, the Trade Marks Act 1999, or the Designs Act 2000.

Special Features of Intangible Assets

1.7 One of the reasons for the general lack of effective management systems for intangible assets is that many of such assets are not recognised in books of account since they do not meet the criteria for their recognition as assets in financial statements. Common examples of intangible assets that remain completely unrecognised as assets in accounting are internally generated goodwill, brands, mastheads, publishing titles, customer lists, etc. Many entities in the drugs and pharmaceuticals industry charge off the entire expenditure on development of new formulations as expenses in the profit and loss account in the year of incurrence, even though some of the development projects may eventually succeed. Even where internally-generated assets are recognised as intangible assets, the stringent rules governing their recognition and measurement result in only a portion of the total cost incurred on related research and development activities being recognised as asset, with the remaining expenditure being charged off as expense in the profit and loss account in the year of incurrence. While there are good reasons underlying the rules of accounting that govern recognition and measurement of intangible assets, from an economic and managerial perspective, items not recognised as intangible assets in accounting may be as (or even more) valuable as those so recognised. Likewise, the true worth of many of the intangible assets may far exceed the amount at which they are reflected in the financial statements.

1.8 Effective management and control of intangible assets (whether or not so recognised in accounts) requires appropriate and adequate management processes to be applied at all stages in the life cycle of an intangible asset, starting from the stage of planning its acquisition or in-house development till its eventual expiration or disposal. For example, at the preliminary stage of a computer software project, an entity is likely to be confronted with the following issues:

(a) Make strategic decisions to allocate resources between alternative projects. For example, whether programmers

should develop a new payroll system or direct their efforts toward correcting existing problems in an operating payroll system.

(b) Determine the performance requirements and systems requirements for the proposed computer software project.

(c) Explore alternative means of achieving specified performance requirements. For example, should the entity make or buy the software.

(d) Determine whether the technology needed to achieve performance requirements exists.

(e) Select a consultant to assist in the development and/or installation of the software.

Once the preliminary project stage is over and acquisition or in-house development of the computer software starts, management systems and processes are needed, among others, to ensure timely availability of requisite resources of right quality and in sufficient quantity, and monitoring the actual progress against budgets or other pre-determined targets in terms of time, consumption or use of resources, performance parameters, etc. Similarly, once the acquisition or development of the software is complete, management systems and processes need to ensure, among others:

(a) availability of the software on a continuing basis including resolution of problems in its functioning and periodic upgrades;

(b) availability of other resources to operate the software such as, computer and network systems and qualified personnel;

(c) efficient utilisation of software;

(d) preventing authorised access to, or use of, the software as well as its accidental loss or destruction;

(e) Complying, on a continuing basis, with contractual, legal and regulatory requirements relating to ownership and operation of the software.

Scope and Structure of the Technical Guide

1.9 As the above discussion shows, effective management and control of intangible assets is a vast subject. The scope of this Technical Guide is confined to discussing the role that the internal audit function can play in this regard. Internal audit is an independent management function, which involves a continuous and critical appraisal of the functioning of an entity with a view to suggesting improvements thereto and adding value to and strengthening the overall governance mechanism of the entity, including the entity's risk management and internal control system**.** Thus, through its appraisal of management processes concerning intangible assets, internal audit can be of great assistance in efficient and effective management of such assets.

1.10 The Technical Guide has been divided into eight chapters, including the present one:

Chapter 1 deals with the significance of intangible assets in the current economic scenario.

Chapter 2 provides an overview of the legal framework relating to intangible assets in India with special reference to managerial and internal audit perspectives. The provisions of the laws relating to intangible assets are of direct and critical importance to management since failure to comply with them may mean loss of legal rights over valuable intangible assets or stringent penal consequences.

Chapter 3 focusses on how an entity can manage its intangible assets efficiently and effectively. In the context, the chapter discusses the management processes relating to:

- Acquisition/development of intangible assets
- Identifying and recording intangible assets
- Safeguarding intangible assets
- Optimising the deployment/use of intangible assets
- Mitigating risks related to litigation.

Chapter 4 seeks to discuss the overall approach to internal audit of intangible assets, including objectives and scope, methodology, reporting and follow-up. This chapter highlights the fact that the objectives and scope of internal audit of intangible assets would be determined primarily by the perceptions of those responsible for governance and management of an entity. However, the objectives and scope have to be sufficiently wide to enable an entity to effectively discharge its legal and regulatory responsibilities.

Chapter 5 discusses the approach to internal audit of various internal controls relating to intangible assets. Thus, this chapter focuses on how an internal auditor can evaluate the internal control environment and other components of internal control.

Chapter 6 deals with approach to internal audit of accounting aspects relating to intangible assets. In this context, the requirements of Accounting Standard 26, Intangible Assets, are quite significant and are, therefore, analysed in this chapter.

Chapter 7 discusses the application of the above in internal audit of different types of intangible assets.

Chapter 8 contains a fairly comprehensive illustrative internal audit programme for computer software, covering all relevant aspects, to serve as a basic reference for development of appropriate internal audit programmes for different kinds of intangible assets and under different situations.

Chapter 2

An Overview of Legal Framework Relating to Intangible Assets

2.1 An asset, by definition, is a resource controlled by an entity. The control of a resource by an entity ensures that economic benefits arising from use, sale, etc. of the resource flow to the entity. Control of intangible resources often poses a much bigger challenge than control of tangible resources primarily due to the fact that for many intangible resources, the ability of an entity to obtain economic benefits from their exploitation depends on its ability to prevent others from accessing or using them. For example, an entity's ability to benefit from its brand depends on its ability to prevent others from using its brand name. Similarly, the ability to benefit from computer software developed for sale depends on the ability to prevent others from making or using unauthorised copies of the software.

2.2 The need for according protection to inventors, developers, owners, etc. of resources of the above kind has long been recognized in most countries, including India. Consequently, most countries have enacted specific laws to protect many of the intellectual and market-related resources of individuals and entities from unauthorized access, use or sale. Besides, treaties have also been reached at an international level to provide cross-border protection in respect of such resources. An example is the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) which is an international agreement administered by the World Trade Organization that sets down minimum standards for regulation of many forms of intellectual property. Specifically, TRIPS contains requirements that national laws must meet in respect of intellectual property, including the rights of producers of intangible assets e.g., sound recordings, computer software, geographical indications, industrial designs, integrated circuit layout-designs, patents, trademarks, etc. Thus, TRIPS lays down a set of minimum standards which are required to be complied with by member countries.

2.3 In India, the first legal initiative towards protection of intangible resources was taken almost a century back by the enactment of the Patents and Designs Act, 1911, followed soon by the enactment of the Indian Copyright Act, 1914. Presently, the legislation for protection of intangible resources consists principally of the following:

- Copyright Act, 1957
- Patents Act, 1970
- Trade Marks Act, 1999
- Designs Act, 2000

Besides, there are also some other enactments such as the Geographical Indications of Goods (Registration and Protection) Act, 1999 and the Semi-conductor Integrated Circuits Layout Design Act, 2000 that seek to provide protection in respect of the specified kind of intangible resources.

2.4 This chapter is devoted to discussing the salient features of the four principal enactments listed above. This is followed by a brief look at the recent trends in legislative and judicial view of intellectual property rights in India. Consistent with the purpose and scope of this Technical Guide, the ensuing discussion focuses on provisions that deal with the rights and obligations arising under the particular enactment and the effects of non-compliance with its provisions and that are, therefore, of direct relevance from an internal audit perspective. However, this discussion is meant only to provide an overview and, therefore, reference must be made to the complete law for guidance on any practical issue.

Copyright Act, 1957

2.5 The Copyright Act, 1957 is an independent self-contained law on the subject of copyright. It seeks to protect the rights of the developers/owners/authors of literary and artistic works (including computer programmes) and the like. It also seeks to meet the country's obligations as a signatory to international treaties. From

the point of view of the internal auditor, this Act is significant to identify:

(a) an entity's legal rights relating to its copyrights. Action can be initiated if there is a misuse of a copyright belonging to the entity; and

(b) legal consequences to which the entity would be exposed if either through oversight or due to slack controls, the entity infringes the copyrights of others.

Meaning of 'Work' and 'Copyright'

2.6 A copyright is in respect of a particular *work*. The term 'work' is defined under the Act as follows:

(a) a literary, dramatic, musical or artistic work;
(computer programmes and computer databases are included in the definition of literary work)

(b) a cinematograph film;

(c) a sound recording.

2.7 The term 'copyright' is defined in Section 14 of the Act as the exclusive right subject to the provisions of this Act, to do or authorise the doing of any of the acts as specified in the Act in respect of a work or any substantial part thereof. The definition lays down that in the case of a literary, dramatic or musical work, not being a computer programme, this exclusive right relates to the following:

(i) to reproduce the work in any material form including the storing of it in any medium by electronic means;

(ii) to issue copies of the work to the public not being copies already in circulation;

(iii) to perform the work in public, or communicate it to the public;

(iv) to make any cinematograph film or sound recording in respect of the work;

(v) to make any translation of the work;

(vi) to make any adaptation of the work;

(vii) to do, in relation to a translation or an adaptation of the work, any of the acts specified in relation to the work in sub-clauses (i) to (vi).

Similarly, in the case of a computer programme, the definition specifies the exclusive right:

(i) to do any of the acts specified above[1];

(ii) to sell or give on commercial rental or offer for sale or for commercial rental any copy of the computer programme, provided that such commercial rental does not apply in respect of computer programmes where the programme itself is not the essential object of the rental.

Likewise, the Act also specifies what constitutes copyright in respect of an artistic work, cinematograph film and sound recording.

Owner of 'Copyright'

2.8 The right to reproduce the work, issue copies to public (not being already in circulation), perform the work in public, make any film or sound recording, translation, adoption or sell or give on commercial rental are exclusive rights of the owner, which if infringed, attract serious penal consequences. Section 17 of the Act provides that subject to the provisions of this Act, the author of a work shall be the first owner of the copyright therein. It is provided that, in the case of a work made in the course of the author's employment under a contract of service or apprenticeship, the employer shall, in the absence of any agreement to the contrary, be the first owner of the copyright therein.

2.9 Copyright is a property right (as opposed to a personal right) which can be assigned by the owner to any person, either wholly

[1] As specified in the case of a literary, dramatic or musical work, not being a computer programme.

or partially and, either generally or subject to limitations, and either for the whole term of the copyright or any part thereof. However, in case of the assignment of copyright in any future work, the assignment shall take effect only when the work comes into existence.

Licences

2.10 Section 30 empowers the owner of a copyright to grant to any other person any interest in his exclusive rights in writing, i.e., by granting a licence. The licence may relate to an existing work or a future work; in the latter case, however, the licence takes effect only when the work comes into existence.

Term of Copyright

2.11 Chapter V of the Act, comprising Sections 22 to 29, lays down the term of copyright in different kinds of work. Accordingly, the term of copyright is broadly as follows:

- Published literary, dramatic, musical or artistic work or computer programmes – within life time of the author and until sixty calendar years following the year in which the author dies;

- Photographs, cinematograph films, sound recordings – sixty calendar years following the year of publication.

International Copyright

2.12 Section 40 of the Act empowers the Central Government to extend copyright to foreign works. Accordingly, the Central Government may, by order published in the Official Gazette, direct that all or any of the provisions of the Act shall apply:

(a) to works first published in any territory outside India to which the order relates in like manner as if they were first published within India;

(b) to unpublished works, or any part thereof, the authors whereof were at the time of the making of the work, subjects or citizens of a foreign country to which the order relates, in like manner as if the authors were citizens of India;

(c) in respect of domicile in any territory outside India to which the order relates in like manner as if such domicile were in India;

(d) to any work of which the author was at the date of the first publication thereof, or, in a case where the author was dead at that date, was at the time of his death, a subject or citizen of a foreign country to which the order relates in like manner as if the author was a citizen of India at that date or time.

The copyright protection to foreign works is sought to be provided only on a reciprocal basis, i.e., the works of Indian authors must also be provided suitable protection in the respective foreign countries.

Registration of Copyright

2.13 The copyright of a person in a work arises from his being the author or owner thereof and does not necessarily require any registration. However, registration of a copyright provides a more effective protection against its infringement. For this purpose, a Copyright Office has been established under the Act. The Office is under the immediate control of the Registrar of Copyrights. A Copyright Board has also been constituted under the Act to perform the specified functions.

2.14 The Register of Copyrights, kept at the Copyright Office, contains the names or titles of works and the names and addresses of authors, publishers and owners of copyrights, and other prescribed particulars. As per Section 45, the author or publisher or owner of a work or other interested person therein may make an application in the prescribed form accompanied by the prescribed fee to the Registrar for entering particulars of the work in the aforesaid Register. On receipt of the application, the Registrar may, after holding such inquiry as he may deem fit, enter the particulars of the work in the Register. Every entry made in the Register is required to be published in the Official Gazette or in such other manner as the Registrar may deem fit.

Infringement of Copyright

2.15 The Act contains an elaborate description of what constitutes an infringement of a copyright. According to

Section 51, copyright in a work shall be deemed to be infringed in the following situations:

(a) When any person, without a licence granted by the owner of the copyright or the Registrar of Copyrights or in contravention of the conditions of a licence so granted or of any condition imposed by a competent authority under the Act:

  (i) does anything, the exclusive right to do which is conferred upon the owner of the copyright; or

  (ii) permits for profit any place to be used for the communication of the work to the public where such communication constitutes an infringement of the copyright in the work, unless he was not aware and had no reasonable ground for believing that such communication to the public would be an infringement of copyright.

(b) When any person:

  (i) makes for sale or hire, or sells or lets for hire, or by way of trade displays or offers for sale or hire, or

  (ii) distributes either for the purpose of trade or to such an extent as to affect prejudicially the owner of the copyright, or

  (iii) by way of trade exhibits in public, or

  (iv) imports into India any infringing copies of the work (one copy of any work for the private and domestic use of the importer is exempt).

Acts not Constituting Infringement

2.16 Section 52 lists more than thirty acts which do not constitute an infringement of copyright. Some significant examples in the case of a literary, dramatic, musical or artistic work, not being a computer programme, are as follows:

- Fair dealing for the purposes of private use, including research, or for criticism or review.

- Fair dealing for reporting current events in a newspaper, magazine or similar periodical, or by broadcast or in a cinematograph film or by means of photographs.

- Reproduction for judicial proceeding/supply in accordance with any law in force.

- Publication of short passages in a collection, mainly composed of non copyright matter, for bonafide use of educational institutions.

- Reproduction by a teacher/pupil in the course of instruction/ examination.

- Any matter in Official Gazette/Act and Rules/Report of Government bodies/court judgements.

Likewise, it is not an infringement for a lawful possessor of a computer programme to make copies of, or adapt the computer programme:

- In order to utilise the computer programme for the purpose for which it was supplied.

- To make back-up copies purely as a temporary protection against loss, destruction or damage in order only to utilise the computer programme for the purpose for which it was supplied.

- Doing any act necessary to obtain information essential for operating inter-operability of an independently created computer programme with other programmes provided that such information is not otherwise readily available.

- Observation, study or test of functioning of the computer programme in order to determine the ideas and principles which underlie any elements of the programme while performing such acts necessary for the functions for which the computer programme was supplied.

- Making of copies or adaptation of the computer programme from a personally legally obtained copy for non-commercial personal use.

2.17 It would be seen from the above that the scope of what constitutes an infringement is very wide. For example, where a stage play is performed in a theatre without permission of the copyright holder, even the theatre owner may be liable for infringement unless it is proved that he was not aware and had no reasonable ground for believing that the performance of the play would be an infringement of copyright. Likewise, using a software acquired under a single-user licence on more than one computer at the same time or using an unlicenced copy of the software or an unlicenced copy of a music or video album would be an infringement of copyright. Similarly, making copies of or adapting a computer programme otherwise than in accordance with the exceptions listed above would be an infringement of copyright.

Civil Remedies

2.18 Chapter XII of the Act, comprising Sections 54-62, deals with civil remedies for infringement of copyright. It is provided, *inter alia*, that where copyright in any work has been infringed, the owner of the copyright is entitled, except as otherwise provided by the Act, to all such remedies by way of injunction, damages, accounts and otherwise as are or may be conferred by law for the infringement of a right. However, if the defendant proves that at the date of the infringement he was not aware and had no reasonable ground for believing that copyright subsisted in the work, the plaintiff is not entitled to any remedy other than an injunction in respect of the infringement and a decree for the whole or part of the profits made by the defendant by the sale of the infringing copies as the court may deem reasonable.

Where, in the case of a literary, dramatic, musical or artistic work, a name purporting to be that of the author or the publisher, as the case may be, appears on copies of the work as published, or, in the case of an artistic work, appeared on the work when it was made, the person whose name so appears or appeared is presumed to be the author or the publisher of the work, as the case may be.

Chapter XIII of the Act, comprising Sections 63-70, deals with offences.

Patents Act, 1970

2.19 A patent is an exclusive legal right granted to a person who has made an invention to use or sell it for a specified period. In India, the law relating to patents is contained in the Patents Act, 1970.

Non-patentable Inventions

2.20 Inventions means a new product or process involving an inventive step and capable of industrial application. Section 3 of the Act specifies that the following inventions are not inventions within the meaning of this Act:

- An invention which is frivolous or which claims anything obviously contrary to well established natural laws.
- An invention the primary or intended use or commercial exploitation of which would be contrary to public order or morality or which causes serious prejudice to human, animal or plant life or health or to the environment.
- The mere discovery of a scientific principle or the formulation of an abstract theory or discovery of any living thing or non-living substance occurring in nature.
- The mere discovery of any new property or new use for a known substance or the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant.
- Substance obtained by a mere admixture resulting only in the aggregation of the properties of the components thereof or a process for producing such substance.
- The mere arrangement or re-arrangement or duplication of known devices each functioning independently of one another in a known way.
- A method of agriculture or horticulture.

- Any process for the medicinal, surgical, curative, prophylactic, diagnostic, therapeutic or other treatment of human beings or any process for a similar treatment of animals to render them free of disease or to increase their economic value or that of their products.

- Plants and animals in whole or any part thereof other than micro-organisms but including seeds, varieties and species and essentially biological processes for production or propagation of plants and animals.

- A mathematical or business method or a computer programme per se or algorithms[2].

- A literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever including cinematographic works and television productions[3].

- A mere scheme or rule or method of performing mental act or method of playing game.

- A presentation of information.

- Topography of integrated circuits[4].

- An invention which, in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known component or components.

- Inventions relating to atomic energy.

Registration of Patents

2.21 An application for a patent for an invention may be made by the 'true and first' inventor of the invention, or any other person who is the assignee of the true and first inventor, or legal

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[2] These may, however, be subject of a copyright. See discussion on Copyright Act, 1957.

[3] Ibid.

[4] Reference may be made in this regard to the Semi-conductor Integrated Circuits Layout-design Act, 2000, which deals with registration of layout of elements in a semiconductor integrated circuit.

representative of any deceased person who immediately before his death was entitled to make such an application.

2.22 The application for patent should state the name of the true and first inventor, the complete or provisional specification of the invention (in the form and manner prescribed by the Act) accompanied by a declaration that the applicant is in possession of the invention and believes that the person so named is the true and first inventor. Where a provisional specification is filed at the time of making the application, a complete specification should be filed within 12 months (extendable by three months on application) from the date of filing provisional specification, failing which the application shall be deemed to be abandoned. The complete specification should:

(a) fully and particularly describe the invention and its operation or use and the method by which it is to be performed;

(b) disclose the best method of performing the invention which is known to the applicant and for which he is entitled to claim protection;

(c) end with a claim or claims defining the scope of the invention for which protection is claimed; and

(d) be accompanied by an abstract to provide technical information on the invention.

An elaborate procedure is prescribed in the Act to ensure that patents are granted only to proper claimants. A patent is granted, subject to certain prescribed conditions, only for one invention and is effective throughout India. Subject to the other provisions of the Act, a patent is dated as of the date of filing of the application therefor.

Register of Patents

2.23 Every patent granted by the Controller General of Patents, Designs and Trademarks, who has been designated as the Controller of Patents for the purposes of the Act, is required to be entered into the Register of Patents which contains details such as the names and addresses of grantees of patents; notifications of assignment and transmission of patents, of licences under

patents, extension and revocation of patents; and matters affecting validity or proprietorship of patents, etc.

Rights Conferred by a Patent

2.24 Section 48 of the Act lays down that subject to certain conditions, a patent confers the following rights on the patentee during its term:

(a) Where the subject matter of the patent is a product, the exclusive right to prevent third parties, who do not have his consent, from the act of making, using, offering for sale, selling or importing for those purposes that product in India.

(b) Where the subject matter of the patent is a process, the exclusive right to prevent third parties, who do not have his consent, from using that process, and from the act of using, offering for sale, selling or importing for these purposes the product obtained directly by that process in India.

A patent is a property right (as opposed to a personal right) and can be assigned. Likewise, the patentee has a right to grant licence to another party for use of the patent.

Term of a Patent

2.25 Section 53 lays down that subject to the provisions of this Act, the term of a patent granted is 20 years commencing from the date of filing of the application for the patent. A patent ceases to have effect on the expiration of the said period or on the failure of the company to pay the renewal fee within the stipulated time frame. On such cessation, the subject matter covered by the said patent is no longer entitled to any protection. However, where such cessation occurs due to non-payment of renewal fee, an application for restoration of the lapsed patent may be filed within 18 months from the date on which the patent ceased to have effect. But no suit or other proceedings can be filed in respect of an infringement of a patent committed between the date of expiry of the original patent and the date of restoration thereof.

Patents of Addition

2.26 The Act also contains provisions with respect to grant of 'patents of addition', i.e., a patent in respect of any improvement in or modification of an invention ('main invention') where the applicant has also applied for a patent for the main invention or is a patentee thereof. The term of a patent of addition is equal to the unexpired term of the main invention, and shall remain in force during that term or until the previous cesser of the patent for the main invention and no longer.

Revocation of Patents

2.27 Section 64 of the Act lists a number of grounds on which a patent may be revoked on a petition of any person interested or of the Central Government. Some of these are:

- The invention was claimed in a valid claim of earlier priority date contained in the complete specification of another patent granted in India.
- The patent was granted on the application of a person not entitled under the provisions of this Act to apply therefor.
- The patent was obtained wrongfully in contravention of the rights of the petitioner.
- The subject of the claim is not an invention as defined by the Act.
- The subject of the claim is not patentable under the Act.
- The invention as claimed is not new having regard to what was publicly known or publicly used in India before the priority date of the claim.
- The invention as claimed is obvious or does not involve any inventive step, having regard to what was publicly known or publicly used in India or what was published in India or elsewhere before the priority date of the claim.
- The invention is not useful.

- The complete specification does not sufficiently and fairly describe the invention and the method by which it is to be performed.
- The scope of the claim is not sufficiently and clearly defined or that the claim is not fairly based on the matter disclosed in the specification.
- The patent was obtained on a false suggestion or representation.
- The complete specification does not disclose or wrongly mentions the source or geographical origin of biological material used for the invention.

The Act also provides for revocation of patent in public interest by the Central Government, if it is of the opinion that a patent or the mode in which it is exercised is mischievous to the State or generally prejudicial to the public. However, prior to such revocation, an opportunity to be heard is required to be given to the patentee.

Infringement of Patents

2.28 A patentee or exclusive licencee (and in certain cases, a non-exclusive licencee) may institute a suit if the patent is infringed. For this purpose, however, the following acts are not considered as infringement of patent rights:

(i) Any act of making, constructing, using, selling or importing a patented invention solely for uses reasonably related to the development and submission of information required under any law in India, or in a country other than India, that regulates the manufacture, construction, use, sale or import of any product.

(ii) Importation of patented products by any person from a person who is duly authorised under the law to produce and sell or distribute the product.

Relief for Infringement of a Patent

2.29 The relief in a suit for infringement of patent rights may be by way of injunction and, at the option of the plaintiff, either damages or an account of profits. However, damages or an account of profits shall not be granted if the defendant proves that at the date of the infringement, he was not aware and had no reasonable grounds for believing that the patent existed. The court can also seize, forfeit or destroy goods which are found to be infringing or are used in the creation of infringing goods, without payment of any compensation.

Penalties

2.30 The Act provides specific penalties for non-compliance, including for unauthorised claim of patent rights by falsely representing that any goods sold are patented in India or subject of an application for patent in India. Depending upon the nature of non-compliance, the penalty may be only fine, or fine or imprisonment, or both.

International Arrangements

2.31 Cross-border patenting of inventions has been greatly facilitated by Patents Cooperation Treaty (PCT) of 1970. Prior to this treaty, virtually the only means by which protection of an invention could be obtained in several countries was to file a separate application in each country. Each application being dealt with in isolation involved repetition of work of examination in each country. The PCT is aimed at establishing an international system which enables the filing, with a single Patent Office (the Receiving Office), of a single application (the International Application) having effect in each of the countries which are party to the PCT which the applicant names in his application. The PCT provides for the formal examination of an International Application by the Receiving Office and for subjecting each International Application to an international search which results in a report citing the relevant prior art (mainly published patent documents relating to previous inventions) which may have to be taken into account in deciding whether the invention is patentable. The PCT provides the national patent offices with the benefit of reducing their work

since they have the benefit of internationally centralized procedures and, thus, need not duplicate those efforts.

2.32 The Patents Act, 1970 contains specific provisions to facilitate compliance with India's obligations as a member of PCT. There is a separate chapter in the Act on 'international arrangements'.

Trade Marks Act, 1999

2.33 In commercial parlance, a 'trade mark' denotes a word, phrase, numeral, logo, or other graphic symbol used by a manufacturer or seller or service provider to distinguish its product or service from that of others. The main purpose of a trade mark is to guarantee the genuineness of a product or service. In effect, the trademark is the commercial substitute for one's signature.

In India, the law relating to trade marks is contained in the Trade Marks Act, 1999. The Act, which replaced the Trade and Merchandise Marks Act, 1958, consolidates the law relating to trade marks, to provide for registration and better protection of trade marks for goods and services, and seeks to prevent the use of fraudulent trade marks.

Meaning of 'Trade Mark'

2.34 The term 'trade mark' is defined under the Act as "a mark capable of being represented graphically and which is capable of distinguishing the goods or services of one person from those of others and may include shape of goods, their packaging and combination of colours".

The term 'mark' used in the above definition includes a device, brand, heading, label, ticket, name, signature, word, letter, numeral, shape of goods, packaging or combination of colours or any combination thereof.

Collective and Certification Trade Marks

2.35 The term 'trade mark' also includes 'collective marks' and 'certification trade marks'. A collective mark is a trade mark

distinguishing the goods or services of members of an association of persons (not being a partnership within the meaning of the Indian Partnership Act, 1932) which is the proprietor of the mark from those of others. A certification trade mark is a mark capable of distinguishing the goods or services in connection with which it is used in the course of trade which are certified by the proprietor of such mark as possessing certain characteristics (e.g., those relating to quality, accuracy or material) from goods or services not so certified. Common examples of certification trade marks are Woolmark and Agmark. The Act contains special provisions for collective marks and certification trade marks.

Registration of Trade Marks

2.36 Chapter II of the Act, comprising Sections 3 to 17, contains provisions relating to maintenance of register of trade marks and the conditions for registration of trade marks. Accordingly, the Controller General of Patents, Designs and Trade Marks, who is appointed by the Central Government shall be the Registrar of Trade Marks for the purposes of this Act. Further provision has been made for establishment of a Trade Marks Registry and its branch offices. A Register of Trade Marks is required to be kept at the Trade Marks Registry to record particulars relating to all registered trade marks, *viz.*, names, addresses and description of the proprietors, notifications of assignment and transmissions, the names, addresses and descriptions of registered users, and conditions, limitations and such other matters relating to registered trade marks as may be prescribed.

2.37 Any person claiming to be the proprietor of a trade mark used or proposed to be used by him, who is desirous of registering it, is required to apply in writing to the Registrar in the prescribed manner. Subject to the provisions of the Act, the Registrar may refuse the application or may accept it absolutely or subject to such amendments or conditions as he may think fit. The Registrar shall, unless the Central Government otherwise directs, register a trade mark as of the date of the making of the application therefor.

Grounds for Refusal of Registration

2.38 Section 9 of the Act lists the following as 'absolute' grounds for refusal of registration of a trade mark:

- The trade mark is devoid of any distinctive character, i.e., not capable of distinguishing the goods or services of one person from those of another person. However, it has been provided that a trade mark shall not be refused registration if before the date of application for registration it has acquired a distinctive character as a result of the use made of it or is a well-known trade mark.

- It consists exclusively of marks or indications which may serve in trade to designate the kind, quality, quantity, intended purpose, values, geographical origin or the time of production of the goods or rendering of the service or other characteristics of the goods or service.

- It consists exclusively of marks or indications which have become customary in the current language or in the bona fide and established practices of the trade.

- It is of such nature as to deceive the public or cause confusion.

- It contains or comprises of any matter likely to hurt the religious susceptibilities of any class or section of the citizens of India.

- It comprises or contains scandalous or obscene matter.

- Its use is prohibited under the Emblems and Names (Prevention of Improper Use) Act, 1950.

- It consists exclusively of:

  (a) the shape of goods which results from the nature of the goods themselves; or

  (b) the shape of goods which is necessary to obtain a technical result; or

  (c) the shape which gives substantial value to the goods.

2.39 Section 11 lists the following as 'relative' grounds for refusal of registration of a trade mark:

- If, because of its identity/similarity with an earlier trade mark and similarity of goods or services covered by the trade mark, there exists a likelihood of confusion on the part of the public, which includes the likelihood of association with the earlier trade mark. This is, however, subject to the exception provided in Section 12 according to which, in the case of honest concurrent use or of other special circumstances which in the opinion of the Registrar, makes it proper to do so, he may permit the registration by more than one proprietor of the trade marks which are identical or similar, subject to such conditions as the Registrar may think fit to impose.

- If the trade mark:

  (a) is identical with or similar to an earlier trade mark; and

  (b) is to be registered for goods or services which are not similar to those for which the earlier trade mark is registered in the name of a different proprietor if or to the extent the earlier trade mark is a well-known trade mark in India and the use of the later mark would take unfair advantage of or be detrimental to the distinctive character or repute of the earlier trade mark.

The above ground of refusal applies only if objection is raised in opposition proceedings by the proprietor of the earlier trade mark.

- If, or to the extent that, the use of the trade mark in India is liable to be prevented:

  (a) by virtue of any law, in particular the law of passing off protecting an unregistered trade mark used in the course of trade; or

  (b) by virtue of law of copyright.

This ground of refusal applies too only if objection is raised in opposition proceedings by the proprietor of the earlier trade mark.

Term of a Trade Mark

2.40 As per Section 25, the registration of a trade mark shall be for a period of ten years, but may be renewed from time to time for a period of ten years at a time.

Renewal, Removal and Restoration of Registration

2.41 At the prescribed time before the expiration of the last registration of a trade mark, the Registrar shall send notice in the prescribed manner to the registered proprietor of the date of expiration and the conditions as to payment of fees and otherwise upon which a renewal of registration may be obtained. If at the expiration of the prescribed time, those conditions have not been duly complied with, the Registrar may remove the trade mark from the register unless an application is made in the prescribed form not later than six months from the expiration of the last registration of the trade mark in which case the Registrar shall renew the registration of the trade mark.

Where a trade mark has been removed from the register of trade marks for non-payment of the prescribed fee, the Registrar shall, after six months and within one year from the expiration of the last registration of the trade mark, on receipt of an application in the prescribed form and on payment of the prescribed fee, if satisfied that it is just so to do, restore the trade mark to the register and renew the registration of the trade mark either generally or subject to such conditions or limitations as he thinks fit to impose. The restoration is for a period of ten years from the expiration of the last registration.

2.42 Where a trade mark has been removed from the register for failure to pay the fee for renewal, it shall nevertheless, for the purpose of any application for the registration of another trade mark during one year, next after the date of the removal, be deemed to be a trade mark already on the register, unless the tribunal (Registrar Appellate Board) is satisfied that–

(a) there has been no bona fide trade use of the trade mark which has been removed during the two years immediately preceding its removal; or

(b) no deception or confusion would be likely to arise from the use of the trade mark which is the subject of the application for registration by reason of any previous use of the trade mark which has been removed.

Rights Conferred by Registration

2.43 Articulating the rights conferred by registration of a trade mark, Section 28 states that subject to the other provisions of the Act, the registration of a trade mark shall, if valid, give to the registered proprietor of the trade mark the exclusive right to use it and to obtain relief in case of infringement of the trade mark in the manner provided by the Act. However, the aforesaid exclusive right shall be subject to any conditions and limitations to which the registration is subject. Registration, thus, confers an exclusive legal right which is not available to the proprietor of an unregistered trade mark. A distinct disadvantage of non-registration is that no person is entitled to institute any proceeding to prevent, or to recover damages for, the infringement of an unregistered trade mark.

A trade mark is a property right which can be assigned. Besides, the owner of the trade mark can permit another person to use the trade mark.

Registration as Registered User

2.44 Sections 48 and 49 facilitate the use of a registered trade mark by a person other than the registered proprietor. Accordingly, where it is proposed that a person should be registered as a registered user of a trade mark, the registered proprietor and the proposed registered user are required to jointly apply in writing to the Registrar in the prescribed manner.

Section 52 provides that subject to any agreement subsisting between the parties, a registered user may institute proceedings for infringement in his own name as if he were the registered proprietor. The rights and obligations of the registered user in such case are concurrent with those of the registered proprietor. As per Section 54, the registered user does not have any right of assignment or transmission of his right to use the trade mark.

Infringement of a Trade Mark

2.45 Section 29 lists the following as infringements of registered trade marks by a person:

- Where a person, who is not a registered proprietor or is not a person using the trade mark by way of permitted use, uses in the course of trade, a mark which is identical with, or deceptively similar to, the trade mark in relation to goods or services in respect of which the trade mark is registered.

- Where a person, who is not a registered proprietor or is not a person using the trade mark by way of permitted use, uses in the course of trade, a mark which is likely to cause confusion on the part of the public, or which is likely to have an association with the registered trade mark because of its identity/similarity with the registered trade mark and the identity/similarity of the goods or services covered by such registered trade mark.

- Where a person, who is not a registered proprietor or is not a person using the trade mark by way of permitted use, uses in the course of trade, a mark which:

  (a) is identical with or similar to the registered trade mark; and

  (b) is used in relation to goods or services which are not similar to those for which the trade mark is registered; and

  (c) the registered trade mark has a reputation in India and the use of the mark without due cause takes unfair advantage of or is detrimental to the distinctive character or repute of the registered trade mark.

- Where a person uses a registered trade mark, as his trade name or part of his trade name, or name of his business concern or part of the name of his business concern dealing in goods or services in respect of which the trade mark is registered.

- Where a person applies a registered trade mark to a material intended to be used for labelling or packaging goods, as a business paper, or for advertising goods or services, provided such person, when he applied the mark, knew or had reason to believe that the application of the mark was not duly authorised by the proprietor or a licensee.

- Where any advertising of the trade mark:

  (a) takes unfair advantage of and is contrary to honest practices in industrial or commercial matters; or

  (b) is detrimental to its distinctive character; or

  (c) is against the reputation of the trade mark.

Removal of Trade Mark

2.46 Section 47 contains provisions for removal of a trade mark from the Register of Trade Marks on ground of non-use. For this purpose, an application in the prescribed manner has to be made by an aggrieved person to the Registrar or the Appellate Board established under the Act.

Penalties

2.47 Chapter XII of the Act, comprising Sections 101 to 121, deals with offences, penalties and procedure. Section 103 provides for imprisonment for a term of six months to three years and fine of Rs.50,000 to Rs.2,00,000 for a person who:

(a) falsifies any trade mark; or

(b) falsely applies to goods or services any trade mark; or

(c) makes, disposes of, or has in his possession, any die, block, machine, plate or other instrument for the purpose of falsifying or of being used for falsifying, a trade mark; or

(d) applies any false trade description to goods or services; or

(e) applies to any goods to which an indication of the country or place in which they were made or produced or the name

and address of the manufacturer or person for whom the goods are manufactured is required to be applied under Section 139 of the Act, a false indication of such country, place, name or address; or

(f) tampers with, alters or effaces an indication of origin which has been applied to any goods to which it is required to be applied under Section 139 of the Act; or

(g) causes any of things above-mentioned to be done.

In any such proceeding, it would be a defence that the person concerned acted without intent to defraud. Further, the court may, for adequate and special reasons to be mentioned in the judgement, impose a sentence of imprisonment for a term of less than six months or a fine of less than Rs. 50,000.

Offences by Companies

2.48 Section 114 deals with offences by companies and provides that if the person committing an offence is a company, the company as well as every person in charge of, and responsible to, the company for the conduct of its business at the time of the commission of the offence shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly. It is also provided that where it is proved that the offence has been committed with the consent or connivance of, or that the commission of the offence is attributable to any neglect on the part of, any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly. However, a person shall not be liable to any punishment if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

Designs Act, 2000

2.49 The Designs Act, 2000, which has replaced the Designs Act, 1911, seeks to protect the intellectual property in designs. Like works that are literary, dramatic, musical, artistic, etc. in

nature, designs such as those of a new car or cellphone or a new pattern to be printed on dress material also represent the outcome of exercise of intellectual faculties of their creators/owners and merit legal recognition as their intellectual property.

Meaning of 'Design'

2.50 Section 2(d) of the Act defines the term 'design' as:

"..... only the features of shape, configuration, pattern, ornament or composition of lines or colours applied to any article whether in two dimensional or three dimensional or in both forms, by any industrial process or means, whether manual, mechanical or chemical, separate or combined, which in the finished article appeal to and are judged solely by the eye; but does not include any mode or principle of construction or anything which is in substance a mere mechanical device, and does not include any trade mark as defined in Clause (v) of Sub-section (1) of Section 2 of the Trade and Merchandise Marks Act, 1958 or property mark as defined in Section 479 of the Indian Penal Code or any artistic work as defined in clause (c) of Section 2 of the Copyright Act, 1957".

The above definition emphasises the 'appeal to eye'. Accordingly, the term 'design' refers only to external appearance of an article and not to its functional or engineering design. The design is not the article itself, but a feature or an idea applied to an article e.g., novel shape of a car.

Registration of Designs

2.51 The Controller General of Patents, Designs and Trade marks has been designated under Section 3 of the Designs Act, 2000 as the Controller of Designs. The Controller may on the application of any person claiming to be the proprietor of any new or original design register the design. In the following cases, a design shall not be registered:

(a) It is not new or original.

(b) It has been disclosed to the public anywhere in India or in any other country by publication in tangible form or by use

or in any other way prior to the filing date, or where applicable, the priority date of the application for registration.

(c) It is not significantly distinguishable from known designs or combination of known designs.

(d) It comprises or contains scandalous or obscene matter.

2.52 Upon registration of a design, the Controller shall grant a certificate of registration to the proprietor of the design. Under Section 10, the patent office is required to maintain a Register of Designs containing particulars of registered designs, *viz.*, names and addresses of proprietors of registered designs, notifications of assignments and of transmissions of registered designs, and such other matter as may be prescribed and such register may be maintained wholly or partly on computer floppies or diskettes, subject to such safeguards as may be prescribed.

Effects of Registration

2.53 Upon registration of a design, the registered proprietor of the design has, subject to the provisions of the Act, copyright in the design during ten years from the date of registration. If, before the expiry of the said period of ten years, application for the extension of the period of copyright is made to the Controller in the prescribed manner, the Controller shall, on payment of the prescribed fee, extend the period of copyright for a period of five years from the expiration of the original period of ten years.

Restoration of Lapsed Designs

2.54 Where a design has ceased to have effect by reason of failure to pay the fee for the extension of copyright, the proprietor of the design or his legal representatives and where the design was held by two or more persons jointly, then with the leave of the controller one or more of them without joining the others, may make an application for the restoration of the design in the prescribed manner. Such application can be made within one year from the date on which the design ceased to have effect.

Piracy of Registered Designs

2.55 Piracy of a registered design has been made an offence under Section 22 of the Act by providing that during the existence of copyright in any design, it shall not be lawful for any person:

(a) for the purpose of sale to apply to any article in any class of articles in which the design is registered, the design or any fraudulent or obvious imitation thereof (except with the license or written consent of the registered proprietor) or to do anything with a view to enable the design to be so applied; or

(b) to import for the purposes of sale, without the consent of the registered proprietor, any article belonging to the class in which the design has been registered, and having applied to it the design or any fraudulent or obvious imitation thereof; or

(c) knowing that the design or any fraudulent or obvious imitation thereof has been applied to any article in any class of articles in which the design is registered without the consent of the registered proprietor, to publish or expose or cause to be published or exposed for sale that article.

If any person acts in contravention of the above then he shall be liable for every contravention:

(a) to pay to the registered proprietor of the design a sum not exceeding Rs.25,000 recoverable as a contract debt, or

(b) if the proprietor elects to bring a suit for the recovery of damages for any such contravention, and for an injunction against the repetition thereof, to pay such damages as may be awarded and to be restrained by injunction accordingly.

It is provided that the total sum recoverable in respect of any one design under clause (a) shall not exceed Rs.50,000.

Recent Trends

2.56 The awareness about the intellectual property rights has increased globally over the last two decades or so, with India

being no exception. Among others, the Indian law relating to trade marks and designs has undergone a thorough revision (with new Acts substituting the earlier Acts) over this period and laws have been enacted to deal with areas untouched earlier (e.g., Semi-conductor Integrated Circuit Layout Design Act, 2000).

2.57 Indian judiciary too has played a significant role in protecting the genuine rights of owners of intellectual property as would be evident from the following judicial cases:

- In *Time Incorporated v Lokesh Srivastava & Anr ((2005) 30 PTC 3 (Del))*, the Delhi High Court awarded Time Inc Rs.5,00,000 in damages for the imitation of its famous trademark TIME (transliterated into Hindi) and its unique and well-known red border design. The court also drew a distinction between punitive and compensatory damages, extending the use of punitive damages to acts having a criminal propensity. Basing punitive damages on the theory of corrective justice, the court upheld the prayer for punitive damages on the ground that the courts must intervene on behalf of the public, who suffer from the infringement, while making the persons guilty of infringement realise that they will be exposed to financial penalties for infringing the IP rights of a third party.

- In *Tata Sons Limited v Fashion ID Ltd ((2005) 30 PTC 182), and Buffalo Networks Pvt Ltd v Manish Jain ((2005) 30 PTC 242)* the Delhi High Court awarded the plaintiffs Rs.1,00,000 each for violation of their respective trade marks through the unauthorised use of domain names incorporating these marks.

- In a series of three cases involving the infringement of copyrights and the ADIDAS trademark, the Delhi High Court awarded a total of Rs1.5 million in damages. In *Yahoo! Inc v Sanjay V Shah & Ors ((2006) 32 PTC 263)* the court awarded Yahoo! Inc Rs.5,00,500 upon finding that the defendant had been selling tobacco products under the well-known trademark YAHOO!.

- In *Amarnath Sehgal v Union of India ((2005) 30 PTC 260 and 263)*, the Delhi High Court awarded damages against

> the Government of India for violation of the moral rights of a famous sculptor. The government was directed to pay Rs.5,00,000 in damages to the sculptor for violation of his moral rights by the Government's acts of distortion, damage and mutilation of a large bronze mural commissioned by the Government many years earlier. The Government was also directed to return the mural to the sculptor.

The Delhi High Court in *Microsoft Corporation v Yogesh Popat ((2005) 30 PTC 245)* awarded Microsoft Corporation Rs1.975 million for piracy of its software products. This judgement is significant in as much as it was not only the highest-ever award of damages in any IP matter in India, but also the first award of damages in any software piracy litigation. (There have been some more case involving software piracy where damages have been awarded.)

Chapter 3

Managing Intangible Assets

3.1 Intangible assets of an entity are now well recognised as its primary drivers in today's knowledge-based and service-oriented economies. As, in Peter Drucker's words, organisations move from the paradigm of "make and move" to "knowledge and service", efficient and effective management of intangible assets assumes critical significance. Yet, as indicated earlier in Chapter-1, the management processes relating to intangible assets have by and large not kept pace with the increasing significance of such assets to entities. Possibly because they do not have a physical existence and/or because most of them either do not appear, or appear at far less than their real values in balance sheets, intangible assets often receive less managerial attention than they deserve. It is, therefore, not surprising to find entities discovering to their dismay that they have invested in intangible assets that they either do not need or that do not meet their requirements. It is also not unusual to come across situations of sub-optimal use of intangible assets. While unoccupied portion of a building or unutilised capacity of a machinery causes a lot of concern to management, unutilised functionalities of an intangible asset, say a computer software, go unnoticed for years. Then there is the issue of gross misuse of an entity's intangible assets by its employees and by unauthorised use of its copyrights, patents, trade marks or designs e.g., unauthorised use of computer software or illegal copies being made of CDs of motion pictures or sound recordings or illegal use of a patented process for manufacture of a drug. Similarly, while on one hand, entities find themselves incurring maintenance costs for intangible assets like, patents which they are not using, there are others who lament not getting adequate return on the substantial investment made by them in intangible assets. Finally, lack of attention to use of unauthorised intellectual property of others within an entity can lead to serious legal consequences for the entity and its personnel.

3.2 In some cases, lack of adequate attention, specially to laws and regulations relating to intangible assets, can be disastrous. A case in question is that of Kodak which, in 1986, allegedly infringed several of Polaroid's instant photography patents and had to pay $925 million in damages and $100 million in legal fees. A further $500 million was spent to buy back 16 million instant cameras. Kodak also had to shut down its entire instant photography division and close its $1.5 billion manufacturing plant.

The above discussion underlines the need for an entity to have in place management processes that are commensurate with the significance of intangible assets to it with a view to enhancing the entity's value through the creation of competitive advantages.

Connotation of 'Intangible Assets' from a Managerial Perspective

3.3 According to the criteria for recognition of an intangible asset in the balance sheet, as per generally accepted principles of financial accounting, many valuable resources can not be recognised as intangible assets. Therefore, for the purpose of managing intangible resources, a wider definition is required. Accordingly, from a managerial perspective, an intangible asset is construed as an identifiable non-monetary resource without physical substance which:

(a) is held by the entity for use in the production or supply of goods or services, for sale or rental to others or for administrative purposes, and

(b) has operational, financial, legal or regulatory implications for the entity.

For example, a company engaged in business of providing cellular services obtains a licence from the telecom authorities. The licence so obtained is an intangible asset which has legal and operational implications since it is essential for the company to conduct its business of providing cellular services in the identified circles, and any non-compliance with the terms of the licence may impact its operations.

The above may be useful for management of an entity in instituting appropriate management processes relating to intangible assets, including internal audit.

Framework for Management of Intangible Assets

3.4 An intangible asset needs to be managed efficiently and effectively during its entire lifecycle. The framework for management of intangible assets rests on following four key components:

- *Policies* which denote an entity's commitment to a formal management process covering all business areas.
- *Procedures* which provide the mechanism for implementing the policies.
- *People* needed for a successful rollout of policies and procedures. People within the entity need to be educated about the purpose and significance of the policies and procedures by communicating relevant issues and providing necessary training.
- *Technology* acts as an enabler. It can be used as a means of automating the management process and monitoring the asset usage.

These four components need to be integrated in each phase of the life cycle of an intangible asset by following an appropriate approach. Thus, an intangible asset should be managed during each stage of its lifecycle by using adequate policies, procedures, people and technology.

3.5 Best practices, concepts and policies (i.e., framework/ governance models) have been designed to manage and protect certain intangible assets critical to business of various entities. For example, to ensure that IT (information technology) processes deliver the information that the entity needs to achieve its objectives, there are IT governance models such as Information

Technology Infrastructure Library (ITIL)[1] and Control Objectives for Information and related Technology (COBIT)[2]. The International Organisation for Standardization (ISO) has developed a standard called the ISO 19770–1 which lays out a three-part process for managing software assets[3]. These processes include organisational management process, core Software Asset Maturity (SAM) process and primary interfaces for SAM and allow the entity to fine tune its infrastructure against industry standards, and help it develop efficient and effective processes for managing software assets.

Key Aspects

3.6 This chapter discusses some key aspects of management of intangible assets, *viz:*

- Acquisition/development of intangible assets

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[1] The Information Technology Infrastructure Library (ITIL) is a set of concepts and policies for managing IT infrastructure, development and operations. ITIL is published in a series of books, each of which covers an IT management topic. ITIL gives a detailed description of a number of important IT practices with comprehensive checklists, tasks and procedures that can be tailored to any IT organisation.

[2] The Control Objectives for Information and related Technology (COBIT) is a set of best practices (framework) for information technology (IT) management created by the Information Systems Audit and Control Association (ISACA), and the IT Governance Institute (ITGI) in 1992. COBIT provides a set of generally accepted measures, indicators, processes and best practices to assist them in maximizing the benefits derived through the use of information technology and developing appropriate IT governance and control in an entity. COBIT was first released in 1996. Its mission is "to research, develop, publicise and promote an authoritative, up-to-date, international set of generally accepted information technology control objectives for day-to-day use by business managers and auditors."

[3] ISO/IEC 19770-1:2006 is a framework of Software Asset Management (SAM) processes which has been developed to enable an organisation to prove that it is performing software asset management (SAM) to a standard sufficient to satisfy corporate governance requirements and ensure effective support for IT service management overall. ISO/IEC 19770-1:2006 is intended to align closely to, and to support, ISO/IEC 20000. Good practice in SAM should result in several benefits, and certifiable good practice should allow management and other organisations to place reliance on the adequacy of these processes.

- Identifying and recording intangible assets (including those which do not qualify for accounting recognition as intangible assets)
- Safeguarding intangible assets
- Optimum deployment/use of intangible assets
- Mitigating risks related to litigation

It may be emphasised that the discussion in the following paragraphs is generic and only indicative in nature. Each entity will need to devise management processes relating to intangible assets by considering its own requirements, circumstances and resources.

Acquisition/Development of Intangible Assets

3.7 The first stage in acquisition/development of an intangible asset is the planning stage. At this stage, a careful evaluation needs to be made, *inter alia*, of the purpose(s) for which the asset is proposed to be acquired/developed; whether that purpose can be met from any of the existing assets; if not, whether the asset should be acquired from outside or developed in-house (where possible); does the entity have enough resources to finance the acquisition/development; and whether the benefits expected from the asset exceed the resources expected to be expended thereon. For only illustrative purposes, one may postulate that planning stage for acquisition/development of computer software would involve the following, *inter alia*:

(a) Making strategic decisions to allocate resources between alternative projects at a given point in time. For example, should in-house programmers develop a new payroll system or direct their efforts toward correcting existing problems in an operating payroll system.

(b) Determining the performance requirements (i.e., what it is that they need the software to do) and systems requirements for the computer software project proposed to be undertaken.

(c) Exploring alternative means of achieving specified performance requirements. For example, should the entity make or buy the software.

(d) Determining whether the technology needed to achieve performance requirements exists.

It is important that at the planning stage, consultations are held with the various departments/individuals who would be affected by the ultimate decision. For example, in the case of computer software, the requirements of various users should be determined, i.e., what functionalities and/or controls each user would require for his/her purpose. It has been observed that, quite often, adequate attention is not given to determining the users' requirements and the result is the acquisition of assets which soon need to be replaced or supplemented for obvious reasons.

3.8 The next stage is the execution of the plan, i.e., accumulating the resources and setting them in motion to achieve the planned results. For example, in the case of acquisition of a computer software from a third party, would, generally, involve the following principal activities.

- Identification of vendors of the software and assessing the general standing and repute of the vendors from whom quotations are invited/planned to be invited. While this aspect is not per se peculiar to acquisition of intangible assets, it acquires added significance in the context of such assets due to the legal framework governing them. For example, as per the Copyright Act, purchase or use of unauthorised or unlicenced software may attract severe penalties including imprisonment. Similarly, the legislation relating to trade marks, patents and designs lays down severe consequences of misuse of these intangible assets. To minimise the possibility of getting stuck up with unauthorised intangible assets, only authorised dealers or distributors should be selected.

- Obtaining price quotations, product specifications, delivery and credit terms, after-sale warranty and maintenance terms, and the like. In particular, due attention should be given to determining which product suits the requirements of

the entity. Generally speaking, additional features come at a cost and involve complexity of operation. Therefore, a product that meets the current and reasonably foreseeable future requirements may be better than one with esoteric features – it is quite likely that the entity may never use these features.

- Evaluating the proposals of the vendors. This may be a particularly complex and delicate stage where the product offered by different vendors is not a standard off-the-shelf product and therefore a trade-off among different parameters may have to be made.

- Finalising the vendor and the final terms and placement of order. It is important to ensure compliance with the legal framework while acquiring, developing, maintaining, using or selling intangible assets. To this end, it should be ensured that the documented terms of the acquisition are such that they provide a clear and unencumbered right of ownership or use of the asset to the entity. The restrictions or limitations on such right should also be clearly agreed and documented. Besides, the documentation should make it abundantly clear that in the event of a defect in the title or rights of the vendor in relation to the asset in question, the vendor would be liable to reimburse the entity for any resultant fines or penalties levied on the latter.

- Receipt of software and payment of price.

In-house Development

3.9 Execution of a project for in-house development of an intangible asset involves many stages. For example, the development of computer software would involve the following broad stages:

(a) Design including detailed programme design is the process of detailed design of computer software that takes product function, feature, and technical requirements to their most detailed, logical form and is ready for coding.

(b) Coding which includes generating detailed instructions in a computer language to carry out the requirements described in the detailed programme design. The coding of computer software may begin prior to, concurrent with, or subsequent to the completion of the detailed programme design.

At the end of these stages of the development activity, the enterprise has a working model, which is an operative version of the computer software capable of performing all the major planned functions, and is ready for initial testing ('beta' version).

(c) Testing is the process of performing the steps necessary to determine whether the coded computer software product meets function, feature, and technical performance requirements set forth in the product design.

At the end of the testing process, the enterprise has a master version of the software, which is a completed version together with the related user documentation and the training material.

3.10 Development of an intangible asset (whether in-house or through a third party under a contract) needs to be managed properly. For example, among others:

- The progress of development needs to be constantly monitored against budgeted targets and the viability of the project from various angles (e.g., technical, commercial, financial) needs to be constantly re-assessed.

- Compliance with the applicable legal framework needs to be ensured. For example, where development involves use of intellectual property of other parties, the licence or written permission of those parties should be obtained and adequately documented.

Identifying and Recording Intangible Assets

3.11 Entities often rely on their accounting system to identify and record their assets e.g., the fixed assets register normally provides the basis for control of tangible fixed assets. In the case of intangible assets, however, an accounting system does not

often reflect all the intangible assets of the entity. This is due to the fact that as per the present generally accepted accounting principles relating to intangible assets, stringent criteria are applied before an intangible asset qualifies for accounting recognition. Many valuable intangible assets fail to meet these criteria. However, from a managerial and control perspective, it is equally important to identify and record even those intangible assets such as the following which may not qualify for recognition as intangible assets in an entity's financial statements:

Self-generated Intangible Assets

(a) Most entities generate a number of intangible assets in the course of their day-to-day operations (many a time without even recognising this fact). For example, customer lists and terms of dealings with them often represent a valuable intangible asset which cannot, generally, be recognised as an asset, but which is susceptible to misuse by employees or others, for example by providing the customer lists or terms of contracts with key customers to competitors. Similarly, many innovations are introduced in the production and other processes. Similar is the case of internally generated recipes, formulae, mixes, styles, etc. One of the problems in the case of these self-generated intangible assets is that, generally, their cost cannot be distinguished from the cost of running day-to-day operations. Accordingly, these do not often qualify for accounting recognition as intangible assets.

Even where there is a specific project/programme for developing an intangible asset (e.g., a defined research and development project), the extant generally accepted accounting principles lay down certain criteria, must be satisfied before the entity recognises an intangible asset arising from such project or programme. Thus, until these criteria are satisfied, no intangible asset is recognised. In case of many projects for internal development of intangible assets, the aforesaid criteria may be satisfied at a very late stage in the development process. Even after these criteria are satisfied, the amount recognised as asset is limited to the expenditure incurred on development from the time when the aforesaid criteria are met.

Another problem is that Indian generally accepted accounting principles preclude revaluation of intangible assets subsequent to their initial recognition. Thus, the amounts ascribed to intangible assets in a balance sheet (historical costs less accumulated amortisation) may be far out of sync with the real values of many such assets.

Acquired Intangible Assets not Recognised in Accounting

(b) Apart from many self-generated intangible items as discussed above, there are a number of acquired assets which may not find place in an entity's balance sheet. These may include:

- intangibles which are not in use e.g., a discarded software;
- intangibles in use which have been fully amortised;
- intangible assets acquired in a business combination. The acquired entity may have intangible assets that do not appear on its balance sheet, e.g., internally-generated goodwill, patents, brands and customer lists, long-term agreements with key employees or employee associations, profitable contracts with suppliers or customers, and so on. Lack of accounting recognition of these assets may make their identification difficult by the acquirer.

Identification

3.12 From a managerial perspective (as opposed to a purely accounting perspective), it is of utmost importance that all intangible assets belonging to the entity are identified and recorded, whether or not they satisfy the accounting criteria for recognition as intangible assets. Identification of intangible assets acquired in a stand-alone acquisition transaction or developed under discrete internal projects is relatively easy and straight forward. However, identification of other intangible assets such as those referred to often poses difficulties. The following procedures would be useful in this regard:

(a) There should be an institutional mechanism whereby all suggestions, improvements or modifications to materials,

devices, projects, processes, systems or services are reviewed by competent officials to determine whether any of them could potentially be intellectual property. Among others, this requires a good understanding of what constitutes, and what does not constitute, intellectual property as per the law of the land, as per accounting norms; and as per managerial perspective of what is a valuable resource of the entity.

(b) A periodic verification exercise (just like physical stock-taking of tangible assets) should be undertaken whereby all computer software programs, designs, processes, products, special rights, patents, copyrights, trade marks, designs, etc. are reviewed to evaluate the adequacy of controls over their use and the adequacy of title of the entity. The exercise should also identify and document intangible assets which are fully amortised but in use as well as those which have been discarded.

(c) In the case of a business combination, a detailed review of the acquired entity should be made – its history, projects, production processes, systems, contracts, and the like. Here too, the acquired entity may have intellectual property assets that it failed to identify and record. Many a time, such intangibles are not separately identified but clubbed in the overall pool of goodwill.

Documentation

3.13 Appropriate records and documents should be maintained in respect of all identified intangible assets whether or not they qualify for recognition as intangible assets in the entity's financial statements. The exact nature of records and documents to be maintained would differ from case to case, depending upon the nature of the asset in question and the management's requirements. However, in general, the records and documents should be such as would facilitate proper accounting of intangible assets; and also control and compliance with applicable legal and regulatory requirements. To this end, documents evidencing the ownership or other interests of the entity (e.g., licence) in the intangible assets should be carefully maintained so as to protect

the entity in the event of a litigation. These records should contain the following particulars, *inter alia*:

- Sufficient description of the asset. For example, patents, trade marks and designs are normally identifiable by the purchase agreements or the letters granting patent and by registration references. Similarly, computer software may be identified by its title version and serial number, e.g., 'Microsoft Office 2007' and licence number.

- Class of assets to which the asset pertains. A class of assets is a grouping of assets of a similar nature and use in an enterprise's operations. Common classes of intangible assets are:

  (a) brand names

  (b) mastheads and publishing titles

  (c) computer software

  (d) licences and franchises

  (e) copyrights

  (f) patents

  (g) designs service and operating rights

  (h) service rights

  (i) recipes, formulae, models, and prototypes

  (j) customer/vendor lists and contracts

  (k) other intangibles.

- Location, i.e., the name of division, branch or department where the asset is located. This is of primary relevance for intangible assets like computer software which are physically in operation at different locations.

- Quantity, i.e., number of units. This would be relevant for items like standard computer software where more than one unit may have been acquired.
- Original cost. In this regard, it may be emphasised that the cost of an internally generated intangible asset is the sum of expenditure incurred from the time when the intangible asset first meets the criteria for such recognition as per the applicable accounting norms. For assets which do not qualify for recognition in accounting, no value may be ascribed.
- Date on which the asset becomes available for use. This date is significant inasmuch as it marks the commencement of period of amortisation.
- Subsequent expenditure on the asset that is included in its carrying amount, along with the date of incurrence of the expenditure.
- Method of amortisation.
- Amortisation period (or rate of amortisation).
- Amount of amortisation for the period.
- Amount of accumulated amortisation as at the beginning and end of the period.
- Particulars of impairment loss (if any) and any reversal of such impairment loss – date, amount for the period and accumulated amount as at the beginning and end of the period.
- Particulars of retirement, disposal, etc. – date and amount.
- Particulars of registration – name of registration authority and date of registration.
- Period of validity of registration and date of expiry of registration.

- Particulars of renewal/maintenance fee (if any) – scheduled date(s) of payment, amount, particulars of actual payment(s).

- Particulars of any licence or other similar right in the asset granted to third parties, e.g., use rights in a trade mark. Such particulars would include name and address of the counterparty, nature and period of rights granted, other key terms and conditions, consideration received/receivable, details of registration with authority concerned, etc.

3.14 The exact manner of maintaining the aforesaid records (whether manually or on computer, whether in the form of a loose-leaf book or a bound register, whether on a centralised or decentralised basis, etc.) is a matter for each entity to decide depending upon its specific circumstances and requirements. For the above records to be meaningful, entries should be made therein on a timely basis. For example, in the case of acquisition of, say, computer software, it should be recorded within a reasonable time of receiving the software from the vendor. Many entities, such as those in pharmaceutical research and software development are constantly engaged in projects for internal development of intangible assets. From both accounting and control perspectives, it is important that costs relating to each such project are separately identified and recorded. Such costs comprise all expenditure that can be directly attributed, or allocated on a reasonable and consistent basis, to making the asset ready for its intended use. In identifying costs attributable to each internal project for development of an intangible asset, regard should be had to the well-known principles and practices of cost accounting. For example, each project may be assigned a unique project number, and all costs associated with the project identified and accumulated with reference to the project number so assigned.

Safeguarding Intangible Assets

3.15 An entity needs to safeguard all its assets, tangible or intangible, from unauthorised access, use or disposal as well as from accidental loss, destruction, etc. However, in the case of intangible assets, this might be a more difficult task. The very nature of intangible assets, advances in information and

telecommunication technology specially the advent of internet, the relative ease and low cost of replicating many intangibles and other similar factors make intangible assets far more susceptible to unauthorised access, use or disposal than the tangible ones. For example, sensitive information relating to a new drug formulation under development or an improved manufacturing process under testing may get divulged to third parties through hacking of computer data, electronic eavesdropping, competitors hiring employees having access to sensitive information, theft by employees, bribery, etc. A failure to secure or protect intangible assets may lead to loss of competitive advantage, market share, revenue, R & D costs, loss of image, increased legal costs, legal fees associated with loss of third-party information, etc. Therefore, the need for appropriate and adequate measures to safeguard intangible assets of an entity can hardly be over emphasised.

3.16 Effective safeguarding of intangible assets involves, *inter alia*, an organisational environment where the significance of intangibles is well-understood and there is a culture of respecting the confidentiality of sensitive information. Similarly, there should be sensitivity to the unethical aspects and awareness of legal consequences arising from unauthorised use of intellectual property of others. A strong compliance mechanism to protect the entity's rights (including recourse to legal protection wherever required) is also necessary. More specifically, the methods employed by an entity to safeguard its intangible assets may include one or more of the methods discussed in the following paragraphs.

Information Security Policy

3.17 An information security policy is a statement setting out an entity's stance on information security issues. It should address security practices and procedures pertaining to the protection of entity's secrets, information and documents. Furthermore, it should address enforcement and penalties. The document should be clear, unambiguous and widely distributed within the entity. The policy should make it clear that anyone who deals with the entity, either as an employee, supplier, consultant, contractor or customer has a responsibility to protect information. Acknowledgment of this document should be included in business agreements and employment contracts.

Training and Awareness

3.18 One of the most effective methods of protecting sensitive information is to implement an awareness programme to ensure that all employees understand and discharge their responsibility to protect sensitive information of the entity.

Legal Protection and Contracts

3.19 The contracts with employees, consultants, contractors, vendors, etc., should be carefully drafted to incorporate the relevant provisions addressing the ownership of intellectual property rights with the entity. It should be ensured that arrangements are such that the ownership or other rights in intangible assets arising in the course of engagement of employees, contractors, consultants, vendors, etc., vest with the entity, except as specifically provided to the contrary. Before commencing any work, all such persons should be required to sign written agreements transferring ownership of all works of authorship produced by them during the course of their work with the entity and all intellectual property rights therein. The agreements should also provide that these persons will not make unauthorised use of intellectual property or other legal rights of third parties. There should be appropriate non-disclosure agreements with all relevant parties.

3.20 Protection offered by various laws e.g., Patents Act 1970, Copyright Act 1957, etc. should be availed by ensuring that the entity's right to the asset is appropriately registered with the relevant authority. The entity should consult legal experts to ensure that the registration formalities are properly complied with and the documentation is in order. There should a system of periodically reviewing the different types of intellectual property e.g., new processes, softwares in use, to ensure that these are under proper licences so that no adverse legal consequences can arise.

Business Continuity Plan/ Disaster Recovery Plan

3.21 Business Continuity Planning (BCP) is an interdisciplinary concept used to create and validate a logistical plan for how an entity will recover and restore partially or completely interrupted

critical (urgent) function(s) within a predetermined time after a disaster or extended disruption. In plain language, BCP is working out how to stay in business in the event of disaster. Incidents include local incidents like, building fires; regional incidents like, earthquakes; or national incidents like, pandemic illnesses or war. BCP includes planning for aspects such as, key personnel, facilities, crisis communication and reputation protection.

3.22 Disaster recovery is the process, policies and procedures related to preparing for recovery or continuation of technology infrastructure critical to an organisation after a natural or human-induced disaster. Disaster recovery planning is a subset of BCP and should include planning for resumption of applications, data, hardware, communications (such as, networking), IT infrastructure and other intangible assets.

An entity should have a BCP/DRP to respond to situations of loss of intangible assets where these are strategic to its operations.

Other Measures

3.23 Other measures may include the following:

- Secure disposal of sensitive documents and other materials – either internally using a shredder or through a trusted third-party contractor who has been security vetted. Alternatively, sensitive material should be rendered unreadable. All the relevant discs and hard drives should be suitably overwritten or destroyed.

- Background checks for employees, especially, those involved in the development process and those with access to sensitive information, vendors, contractors, etc.

- Exit interviews and non-compete arrangements is also a good measure. During the exit interview, the employee should be specifically advised about his obligation not to disclose or use confidential business information for his own benefit or for the benefit of others without the express written consent of the company. A written confirmation should be obtained and, where required, a non-compete arrangement should be executed. If the employee was given access to an intangible asset owned by the entity, it should

be ensured that the same has been returned or the access rights revoked.

- Appropriate physical security measures should be taken such as a clear desk policy, perimeter protection such as fencing and lighting, intruder detection systems, access control systems, locks, keys, safes, vaults and manned security guarding.

- Appropriate security measures for protection such as use of passwords on computers, those to be followed while travelling or working off-site and those to be used for sharing information in presentations, exhibitions etc,. should be laid down.

- Periodic audit of the security measures should be undertaken to assess their effectiveness.

Optimising the Deployment/Use of Intangible Assets

3.24 To a considerable extent, the efficacy of acquisitions/ development policy of an entity in relation to intangible assets determines the extent to which they are utilised post-acquisition or development. However, subsequent changes in markets, business plans, priorities, etc. also often result in certain intangible assets not being utilised sufficiently. Unutilised intangible assets entail a cost to the entity in the form of maintenance (e.g., renewal fee for a registered trade mark) and/or in the form of loss of opportunity to earn revenue from use, sale or licencing of the asset. The following are some examples:

- According to an estimate by British Telecom, it only uses a quarter of its patents in its existing products.

- Phillips Electronics only uses between 35 and 40 percent of its intellectual property portfolio.

By identifying their unutilised or under-utilised intangible assets, entities can undertake appropriate remedial measures.

3.25 A periodic assessment of the use to which each intangible asset is being put would enable an entity to identify unutilised or under-utilised intangible assets. For such assets, the entity would

need to explore the possibility of new or alternative uses such as licensing out of a patent for a medicine which the entity itself is no longer manufacturing. In some known cases, entities have adopted even innovative modes for exploiting their intangible assets – in recent times, some black and white blockbuster movies of the 1950s and 1960s have been relaunched in India in a coloured version. Where an intangible asset is unlikely to contain any worthwhile potential to generate future economic benefits for the entity and its maintenance involves periodic costs, its relinquishment should be considered.

Mitigating the Litigation Risk

3.26 An entity can become a party to litigations relating to intangible assets in either of the following ways:

(a) An intangible asset belonging to the entity is subject of unauthorised access, use or disposal by another party, e.g., a suit filed by the producer entity of a motion picture against a television channel for exhibiting the picture on the channel without obtaining the entity's consent. Unauthorised use of an entity's intangible assets may often entail huge opportunity loss. This risk can be mitigated by adopting measures such as those discussed earlier under the heading 'safeguarding intangible assets'.

(b) The entity itself is alleged to have accessed, used or disposed of an intangible asset claimed by another party as belonging to the latter, e.g., a suit against the entity for alleged use of unauthorised computer software. This may involve physical cash outflows on account of resultant fines and penalties or even imprisonment in some cases. Loss of reputation is perhaps an even bigger consequence.

3.27 The above risk arises from lack of controls in the entity itself and can, therefore, be mitigated to a large extent by instituting appropriate policies and procedures, putting them into operation, and monitoring their compliance on an on-going basis. Among others, such policies and procedures may include the following:

- Monitoring legal requirements.
- Instituting and operating appropriate internal controls.

- Developing, publicising and implementing a Code of Conduct, containing standard instructions to be followed by employees for ensuring compliance with laws, regulations and entity's policies relating to intangible assets with particular reference to the stipulation that there should be no unauthorised use of intangible assets of others.

- Ensuring that employees are properly trained and that they understand the Code of Conduct.

- Monitoring compliance with the Code of Conduct and acting appropriately to discipline employees who fail to comply with it.

- Maintaining a record of complaints in respect of non-compliance of intellectual property rights both against and by the entity.

Role of Internal Audit

3.28 The policies and procedures relating to intangible assets can be supplemented by assigning appropriate responsibilities to the internal audit function. Among others, internal audit can:

- Review the internal controls related to all stages of lifecycle of intangible assets, monitor their operation and recommend improvements thereto.

- Review the efficiency and effectiveness of use of intangible assets.

Monitor compliance with laws and regulations relating to intangible assets with particular reference to unauthorised use of intangible assets of others, e.g., patents, trademarks, computer software, etc.

Chapter 4

Approach to Internal Audit of Intangible Assets

4.1 To be effective, internal audit in any situation has to be properly planned and executed. In this context, this chapter discusses the overall approach to internal audit of intangible assets.

Legal and Regulatory Requirements

4.2 Even though the overall approach of any internal audit assignment depends on the need and perception of the entity's management, of late certain legal requirements and regulatory prescriptions relating to corporate governance have assumed importance in this regard. Increasingly internal auditors are being asked to constantly review processes of compliance with these requirements and evaluate their efficacy. Not only does this provide assurance to the management and also to those charged with governance (e.g., Board of directors) but it also helps in improving corporate governance practices. The following legal and regulatory requirements are noteworthy in the context of determining the overall approach to internal audit in general, and to internal audit of intangible assets in particular.

Requirements of Section 217(2AA) of Companies Act, 1956

4.3 Under Section 217(2AA) of the Companies Act 1956, the annual report of the Board of Directors of a company to its members has to include a Directors' Responsibility Statement wherein the directors have to make, *inter alia*, the following assertion:

(iii) "that the directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding

the assets of the company and for preventing and detecting fraud and other irregularities"

It is clear from the above that the directors have a responsibility for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities. This would cover both violation of legal rights of other parties attached to intangible assets used by the entity and violation by others of the intellectual property rights of the entity.

Requirements of Listing Agreement

4.4 The Securities and Exchange Board of India (SEBI) has introduced certain mandatory as well as certain recommendatory corporate governance provisions in Clause 49 of the Listing Agreement applicable to listed entities. Some of the important requirements are as follows:

- The Audit Committee is required to review:
  - *The adequacy of the internal audit function, if any, including the structure of internal audit department, staffing and seniority of the official heading the department, reporting structure, coverage and frequency of internal audit, including appointment, removal and terms of remuneration of the chief internal auditors.*
  - *Internal audit reports relating to internal control weaknesses.*
  - *The finding of any internal investigations by the internal auditors into matters where there is a suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the Board.*
- The Audit Committee is also required to discuss with the internal auditors any significant findings and follow up thereon.

- The CEO and CFO have to certify to the Board of Directors:
  - *That financial statements as well as cash flow statement for the period:*
  - *Do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading.*
  - *Present a true and fair view.*
  - *Are in compliance with the existing Accounting Standards, applicable laws and regulations.*
  - *No transactions were entered into by the company, which were fraudulent, illegal or violative of the company's code of conduct.*
  - *That they accept responsibility for effectiveness of internal controls and that they have disclosed to the auditors and the Audit Committee deficiencies in the design and operation of the internal controls and steps taken for rectification of the same.*
  - *That they have indicated to the Audit Committee and the internal as well as external auditors as to the following aspects:*
    - *Any significant changes in internal controls.*
    - *Any significant changes in the accounting policies and instance of significant fraud, if any, and that the same have been disclosed in the notes to the financial statements.*
    - *Instances of any significant fraud and involvement, if any, therein of the management or any employee having a significant role in the internal control systems of the company*
- The Listing Agreement also requires that the Board should be informed about Risk Management Framework (including assessment and minimisation procedures). Further, the

Management Discussion and Analysis Report (forming part of Annual Report) is also required to disclose 'risks and concerns'.

4.5 Thus, effective internal controls and internal audit including in relation to intangible assets are essential for the management and those charged with governance to successfully discharge their responsibilities. Unauthorised use of the entity's intangible assets by others would constitute an illegal transaction and would be indicative of control deficiencies. Similarly, if the entity is exposed to the risk of breach of laws relating to intellectual property belonging to others e.g., misuse of patent rights or unauthorised use of software, the directors and the management of the company are exposed to serious consequences. Often such infringements are unintentional, but a good internal audit programme would highlight all these risks and trigger corrective action.

Requirements of CARO, 2003

4.6 The Companies (Auditor's Report) Order, 2003 (CARO) requires the Statutory Auditor to report on the following:

"Whether in case of listed companies and/or other companies having paid-up capital and reserves exceeding Rs.50 lakh at the commencement of the financial year concerned, or having an average annual turnover exceeding five crore rupees for a period of three consecutive financial years immediately preceding the financial year concerned, whether the company has an internal audit system commensurate with its size and nature of its business".

Apart from the above, the following requirements of CARO are also of relevance to internal audit.

"Whether any fraud on or by the company has been noticed or reported during the year. If yes, the nature and the amount involved is to be indicated."

"Is there an adequate internal control system commensurate with the size of the company and the nature of its business, for the purchase of inventory and fixed assets and for the sale of goods

and services? Whether there is a continuing failure to correct major weaknesses in internal control system."

Other Requirements

4.7 In addition to the above, for companies exploring the international capital market, especially those seeking listing on US stock exchanges like, NASDAQ, NYSE etc., a strong internal audit function (extending to intangible assets also) would be required to meet the stringent corporate governance and internal control requirements of those stock exchanges.

Approach to Internal Audit

4.8 Standard on Internal Audit (SIA) 7, "*Quality Assurance in Internal Audit*", issued by the Institute of Chartered Accountants of India, requires that a proper system should exist for assuring quality in internal audit to provide reasonable assurance that the internal auditors comply with professional standards, regulatory and legal requirements, so that the reports issued by them are appropriate in the circumstances. The system of quality control should include policies and procedures addressing specified elements including ethical requirements, engagement performance and monitoring.

Standard on Internal Audit (SIA) 8, "*Terms of Internal Audit Engagement*" requires that an internal auditor and the auditee should agree on the terms of the engagement before its commencement and the agreed terms should be recorded in an engagement letter.

Keeping in view the above legal and regulatory requirements and the general perception of those responsible for management and governance of entities, the overall approach to internal audit of intangible assets is as discussed below.

Stages in Internal Audit

4.9 As in the case of any other area, internal audit of intangible assets involves the following stages:

(a) Establishing audit objectives and scope of work.

(b) Planning audit including obtaining background information, determining the resources necessary to perform the audit, communicating with relevant persons, performing on-site survey and designing audit programme.

(c) Obtaining evidence which also includes use of analytical procedures and test checking/statistical sampling techniques for obtaining sufficient and appropriate audit evidence, and maintenance of proper working papers.

(d) Reporting i.e., communication of results.

(e) Appropriate follow-up.

Each of the above stages is discussed in detail in the succeeding parts of this chapter.

Establishing Audit Objectives and Scope of Work

4.10 Keeping in view the legal requirements as discussed above and the requirements of entities in general, an appropriate internal audit approach relating to intangible assets should cover the following aspects:

(a) ***Safeguarding of intangible assets:*** The internal audit should review the means of safeguarding intangible assets. This assumes particular importance since the system of maintenance of records and of providing management information (MIS) relating to intangible assets does not often have a proper formal structure, generally, intangible assets are not even identified properly and so a proper listing of intangible assets is not available. Once the system is properly implemented, a periodical review of the existence and value of such assets should be conducted.

(b) ***Compliance with laws, regulations, contracts, management policies and procedures:*** Internal audit should review the systems established to ensure compliance with laws, regulations, contracts, management policies and procedures relating to intangible assets including copyrights, trade marks, patents and designs to determine whether the entity has complied with them or not. Existence of effective system in this area is important since

even an unwitting non-compliance may entail serious legal consequences (reference may be made to Chapter 2 for a detailed discussion). Similarly, the internal audit should aim to review contracts which result in acquisition or transfer of intangible rights. Finally, in-house procedures for protecting intangible assets e.g., implementation of code of conduct to be followed by employees, vendors, consultants, etc. should also be reviewed.

(c) ***Efficiency and effectiveness of operations:*** Internal audit should appraise the efficiency and effectiveness with which intangible assets are employed. The role of the internal audit in this regard should be to determine whether:

(i) operating standards have been established by the management for measuring efficiency and effectiveness;

(ii) established operating standards are understood and being met by the concerned employees;

(iii) deviations from operating standards are identified, analysed and communicated to those responsible for corrective action; and

(iv) corrective action is taken on a timely basis.

Audits related to efficient and effective use of intangible assets should identify such conditions such as, underutilisation and also non-productive assets and procedures which are not justifiable on cost-benefit considerations.

Planning the Internal Audit

4.11 Standard on Internal Audit (SIA) 1, "*Planning an Internal Audit*", issued by the Institute of Chartered Accountants of India, requires that the internal auditor should, in consultation with those charged with governance, including the audit committee, develop and document a plan for each internal audit engagement to help him conduct the engagement in an efficient and timely manner.

Similarly, Standard on Internal Audit (SIA) 2, "*Basic Principles Governing Internal Audit*", requires the internal auditor to plan his work to enable him to conduct an effective internal audit in a timely and efficient manner, ensuring that appropriate attention is devoted to significant areas of audit, identification of potential problems and appropriate utilisation of skills and time of the staff. Further, the internal auditor should exercise due professional care, competence and diligence expected of him while carrying out the internal audit.

4.12 Standard on Internal Audit (SIA) 15, "*Knowledge of the Entity and its Environment*", requires that the internal audit plan should be based on the knowledge of the business of the entity, its operating environment, including its regulatory environment and the industry in which it operates, sufficient to enable the internal auditor to review the key risk and the entity-wide processes, systems, procedures and controls.

In an initial engagement for internal audit of intangible assets, examples of key areas include:

- Nature of the entity – ownership and management, products or services and markets, location of production facilities, organisational structure, control environment, related parties, etc.
- Intangible assets – nature and extent, mode of acquisition – whether self-generated or purchased or acquired under user licences, whether in own-use or licenced out, etc.
- Legal and regulatory framework applicable to entity's intangible assets; any known past cases of non-compliance.
- Accounting standards or other accounting principles and practices applicable to entity's intangible assets.

4.13 Other aspects to be normally covered in the internal audit plan would be as follows:

- A description of the nature, timing and extent of audit procedures for each class of intangible assets.

- The resources to be deployed for specific audit areas, such as the use of appropriately experienced team members for high risk areas.

- How such resources are to be managed, directed and supervised, such as when team briefing and debriefing meetings are expected to be held, and how engagement partner and manager reviews are expected to take place (for example, on-site or off-site).

- Whether there is any requirement to obtain technical advice and assistance from competent experts if the internal audit team does not possess the necessary knowledge, skills, expertise or experience needed to perform all or part of the internal audit engagement. When the internal auditor uses the work of an expert, he should satisfy himself about the competence, objectivity and the independence of such expert in accordance with Standard on Internal Audit (SIA) 16, "*Using the Work of an Expert*".

Obtaining Evidence

4.14 With respect to audit evidence, Standard on Internal Audit (SIA) 2, "*Basic Principles Governing Internal Audit*", issued by the Institute of Chartered Accountants of India, states as below:

"The internal auditor should, based on his professional judgement, obtain sufficient appropriate evidence to enable him to draw reasonable conclusions therefrom on which to base his opinion or findings. *Factors affecting the professional judgment include the activity under audit, possible errors and their materiality and the risk of occurrence of such errors."*

4.15 As per Standard on Internal Audit (SIA) 12, "*Internal control Evaluation*", the internal auditor should examine the continued effectiveness of the internal control system through evaluation and make recommendations, if any, for improving that effectiveness. Further, Standard on Internal Audit (SIA) 13, "*Enterprise Risk Management*" establishes standards and provides guidance on review of an entity's risk management system during an internal audit or such other review exercise with the objective of providing an assurance thereon.

Thus, depending on the objectives and scope of internal audit in a particular situation, this stage may involve an evaluation of both the design effectiveness and operational effectiveness of various processes and controls.

4.16 Standard on Internal Audit (SIA) 11, "*Consideration of Fraud in an Internal Audit*", provides that even though the primary responsibility for prevention and detection of frauds is that of the management of the entity, however, the internal auditor should help the management fulfill its responsibilities relating to fraud prevention and detection.

4.17 As discussed in the preceding chapter, the framework for management of intangible assets rests on policies, procedures, people, and technology. Effectiveness of design and operation of management processes is evaluated with reference to each of these factors. For example, while evaluating internal controls relating to a computerised application system, the internal auditor should strive to find answers to the following, *inter alia*:

- the objective of the control;
- the risks it helps to mitigate;
- how it is performed;
- how frequently it is applied;
- whether it is documented by management;
- the knowledge, experience and expertise of the person performing it (if a manual control); and
- whether the control has an IT component.

4.18 In line with the above, Standard on Internal Audit (SIA) 10, "*Internal Audit Evidence*", requires an internal auditor to evaluate whether he has obtained sufficient appropriate audit evidence before he draws his conclusions therefrom. The procedures to be employed by the internal auditor in evaluating the design and implementation of systems, procedures and controls may include:

- inspection of documents and records;

- observation of actual performance;
- inquiries of appropriate personnel (alone, this procedure is not sufficient to provide appropriate evidence and, therefore, should be supplemented by other procedures);
- performing a 'walkthrough' where a transaction is traced through each step; and
- application of analytical procedures. Standard on Internal Audit (SIA) 6, "*Analytical Procedures*", issued by the Institute of Chartered Accountants of India establishes standards on the application of analytical procedures during on internal audit. These procedures should be applied at the planning as well as at the overall review stages of internal audit.

4.19 Standard on Internal Audit (SIA) 5, "*Sampling*", issued by the Institute of Chartered Accountants of India establishes standards on the design and selection of an audit sample and provides guidance on the use of sampling in internal audit engagements. It also deals with the aspects of evaluation of sample results. SIA 5 applies to both statistical and non-statistical sampling methods. In determining the extent of application of various audit procedures, due regard should be given to the principles enunciated in SIA 5.

4.20 In accordance with Standard on Internal Audit (SIA) 16, "*Using the Work of an Expert*", the internal auditor should seek reasonable assurance that the expert's work constitutes appropriate evidence in support of the overall conclusions formed during the internal audit engagement, by considering:

- the source data used.
- the assumptions and methods used and, if appropriate, their consistency with the prior period.
- the results of the expert's work in the light of the internal auditor's overall knowledge of the business and of the results of his audit procedures.

The process to be followed by an internal auditor for examination and evaluation of the specific propositions under audit is the subject matter of detailed discussion in subsequent chapters.

Documentation

4.21 The internal auditor should document matters, which are important in providing evidence that the audit was carried out in accordance with the standards on internal audit and support his findings or the report submitted by him.

Standard on Internal Audit (SIA) 3, "*Documentation*" requires that 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

4.22 The primary deliverable in an internal audit engagement is the internal audit report, communicating the findings of internal audit together with the suggestions for corrective or remedial measures or for improvement in prescribed systems, procedures and controls. In this regard, Standard on Internal Audit (SIA) 2, "*Basic Principles Governing Internal Audit*", states as below:

"*The internal auditor should carefully review and assess the conclusions drawn from the audit evidence obtained, as the basis for his findings contained in his report and suggest remedial action.* *However, in case the internal auditor comes across any actual or suspected fraud or any other misappropriation of assets, it would be more appropriate for him to bring the same immediately to the attention of the management.*"

4.23 The nature of findings to be reported in an internal audit report is obviously dependent on the objectives and scope of the engagement. For example, the nature of findings to be reported in an engagement aimed at determining compliance with applicable legal and regulatory framework will be totally different from that in

an engagement aimed at determining whether the patents owned by the entity and licenced out by it are generating sufficient licencing revenues. Likewise, the nature of findings would be totally different in an internal audit engagement where the objective of the engagement is to determine in which of the four maturity levels (Basic, Standardised, Rationalised and Dynamic) do the Software Asset Management (SAM) policies and practices of the entity fall based on the following characteristics of each of the maturity levels:

- Basic – the entity has only a low control over what IT assets are being used and lacks policies, procedures, resources, and tools.
- Standardised – processes as well tool/data repository exist.
- Rationalised – the entity has a vision, policy, procedures, and tools which are used to manage intangible asset life cycle.
- Dynamic – the entity uses SAM on a near real-time basis, aligning itself with changing business needs and realising business competitive advantage through SAM.

4.24 Due to the very nature of internal audit function, it has a serious potential of creating behavioural issues within an entity. Recognising this, Standard on Internal Audit (SIA) 4, "*Reporting*", requires that to facilitate communication and ensure that the recommendations presented in the final report are practical from the point of view of implementation, the internal auditor should discuss the draft with the entity's management prior to issuing the final report. According to SIA 4, ***the different stages of communication and discussion should be as under:***

(a) Discussion Draft – At the conclusion of field work, the internal auditor should draft the report after thoroughly reviewing his working papers. The discussion draft so prepared should also be carefully reviewed before it is presented to the entity's management for auditee's comments. This discussion draft should be submitted to the entity's management for review before the exit meeting.

(b) Exit Meeting – The internal auditor should discuss with the management of the entity his findings, observations, recommendations, and text of the discussion draft. At this meeting, the entity's management should comment on the draft and the internal audit team should work to achieve consensus and reach an agreement on the internal audit findings.

(c) Formal Draft – The internal auditor should then prepare a formal draft, taking into account any revision or modification resulting from the exit meeting and other discussions. When the changes have been reviewed by the internal auditor and the entity management, the final report should be issued.

(d) Final Report – The internal auditor should submit the final report to the appointing authority or such members of management, as directed. The periodicity of the Report should be as agreed in the scope of the internal audit engagement. The internal auditor should mention in the Report, the dates of discussion draft, exit meeting, Formal Draft and Final Report.

Thus, the internal auditor should maintain effective two-way communication throughout the internal audit process by clearly communicating his responsibilities and overview of the planned scope, obtaining relevant information from the management, providing timely observations arising from the internal audit.

Standard on Internal Audit (SIA) 9, "*Communication with Management*" also provides guidance on form, timing, adequacy and documentation of communication process.

Appropriate Follow-up

4.25 The final stage in an internal audit is the review of actions taken on internal audit findings and suggestions. The actions taken are reviewed with a view to determining their appropriateness, adequacy and timeliness. It is also examined whether they have had the desired effect. Where compliance of law is involved, the matter may need to be reviewed in-depth and discussions should be held with top management.

Internal Audit Team

4.26 As the above discussion indicates, depending upon the exact terms of reference for an internal audit engagement relating to intangible assets, the internal audit team may need to comprise of individuals with sufficient knowledge, skills and experience in a multitude of disciplines such as financial accounting, cost accounting, law, computer hardware or software or other engineering disciplines, and so on. A sufficient number of persons possessing the requisite degree of proficiency in the relevant disciplines is a major determinant of the effectiveness with which an internal audit of intangible assets is performed.

Importance of Top-level Support

4.27 The commitment and support of senior management to internal audit function is of paramount importance to motivate all involved to respond positively and constructively to internal audit findings and recommendations, apart from ensuring the availability of sufficient resources. An internal audit programme in an entity is less likely to be successful when it does not have the top-management support and commitment. In entities where internal audit consistently delivers good results, the corrective action process is likely to be institutionalised as a result of the management support.

4.28 To ensure that the internal audit function has the requisite degree of support of the top-level and is also so perceived within the entity, the leader of the internal audit team should be a person of sufficient seniority in the organisational hierarchy (where the internal audit is carried out by an internal audit department within the entity). He should have direct communication with the top management and the governing body, e.g., with audit committee. He should submit activity reports to senior management and to the board (or to the audit committee) highlighting significant audit findings and recommendations and should regularly attend and participate in those meetings of the audit committee which relate to its oversight responsibilities for auditing, financial reporting, governance, and control.

Chapter 5

Internal Audit of Internal Controls Relating to Intangible Assets

5.1 As noted in Chapter 4, in carrying out an internal audit of intangible assets, the internal auditor has to evaluate the adequacy of the risk management and internal control framework relating to such assets and suggest improvements. Standard on Internal Audit (SIA) 12, "*Internal Control Evaluation*" and SIA 13, "*Enterprise Risk Management*" are relevant in this context. SIA 12 establishes standards and provide guidance on the procedures to be followed by the internal auditor in evaluating the system of internal control in an entity and for communicating weaknesses therein to those charged with governance. SIA 13 deals with review of an entity's risk management system during an internal audit with the objective of providing an assurance thereon.

5.2 The internal auditor's evaluation of risk management and internal control framework involves the following aspects:

- Review of policies relating to intangible assets;
- Assessment of control environment;
- Evaluation of entity's risk assessment process;
- Review of information system and communication; and
- Evaluation of control activities.

Review of Policies Relating to Intangible Assets

5.3 The internal auditor needs to understand and evaluate the entity's policies relating to intangible assets, e. g.,

- To what extent or in which areas the entity emphasises internal development of intangible assets and to what extent it depends on procurement of fully developed intangible assets from vendors.

- In the case of technology-related intangible assets, does the entity follows a proactive approach by constantly striving to innovate and improve its products and processes or it's approach is to follow rather than to lead.

- In the case of customer or market-related intangible assets, does the entity constantly monitors its market share, customer loyalty, customers' satisfaction levels, etc. and takes appropriate action to maintain and enhance them.

- Whether it have a clear cut policy regarding registration or otherwise ensuring legal protection of its intangible assets. Similarly, what is the entity's attitude towards use of intellectual property of others without proper authorisation?

5.4 Based on his understanding of the relevant policies, the internal auditor needs to evaluate how far they are consistent with the objectives of the entity. For example, a policy of outsourcing the entire research and development in the high-end technology field may be in order for an entity whose objective is primarily to be a mass manufacturer of products but it is unlikely to work for another entity whose objective is to rank among the industry leaders in innovation. The internal auditor also needs to review whether the policies are regularly reviewed to ensure that they remain effective in the ever-changing external and internal environment, thereby mitigating the risks posed and exploiting the opportunities.

5.5 A policy is implemented through a procedure or set of procedures, carried out by people with the aid of technology, where available and cost-effective. The design and operation of an effective internal control system is a pre-requisite for ensuring that the policies and procedures of the management are implemented as prescribed. The term 'internal control system' (or simply 'internal control') is a very wide term that encompasses all processes, procedures, etc. designed, implemented and maintained by those charged with governance, management and other personnel to provide reasonable assurance about the achievement of an entity's objectives with regard to reliability of financial reporting, effectiveness and efficiency of operations, and compliance with applicable laws and regulations. Therefore, the next stage in internal audit of intangible assets is to evaluate

internal controls in respect of each of the stages of the life cycle of an intangible asset.

Assessment of Control Environment

5.6 The Standard on Internal Audit (SIA) 12, "*Internal Control Evaluation*" describes *control environment* as "*the overall attitude, awareness, and actions of director and management regarding the internal control system and its importance in the entity*." The control environment also includes the governance and management functions and sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for effective internal control, providing discipline and structure.

5.7 In evaluating the design of the entity's control environment, the internal auditor should consider the following elements:

(a) *Communication and enforcement of integrity and ethical values* – These are essential elements which influence the effectiveness of the design, administration and monitoring of controls e.g., management's commitment to prevent or permit misuse of intellectual property.

(b) *Commitment to competence* – This is evidenced by management's consideration of the competence levels for particular jobs and how those levels translate into requisite skills and knowledge. This is of particular relevance to intangible assets which are essentially knowledge based and innovative.

(c) *Participation by those charged with governance* – Some of the factors which should be considered are for example, the independence of the directors a company from management, their experience and stature, the extent of their involvement and scrutiny of activities, the information they receive, the degree to which difficult questions are raised and pursued with management and their interaction with internal and external auditors. In the context of the growing emphasis on corporate governance norms, it is important for the Board of Directors and its Audit Committee to pay due attention to controls over intangible assets

through periodical review of internal audit of intangible assets of the entity.

(d) *Management's philosophy and operating style* – This refers to management's approach to taking and managing business risks and management's attitudes and actions towards financial reporting, information processing and accounting functions and personnel.

(e) *Organisational structure* – A properly designed organisational structure provides the framework within which an entity's activities for achieving its objectives are planned, executed, controlled and reviewed.

(f) *Assignment of authority and responsibility* – The procedure by which authority and responsibility for operating activities are assigned and the reporting relationships and authorisation hierarchies are established is also important.

(g) *Human resource policies and practices* – These include recruitment, orientation, training, evaluating, counselling, promoting, compensating and remedial actions.

In understanding the control environment elements, the internal auditor also should consider how effectively they have been implemented. Ordinarily, the auditor obtains relevant audit evidence through a combination of inquiries, analytical procedures and other risk assessment procedures, for example, corroborating inquiries through observation or inspection of documents.

Evaluation of Entity's Risk Assessment Process

5.8 An entity's risk assessment process is its process for identifying and responding to business risks and the results thereof. As per Standard on Internal Audit (SIA) 13, "*Enterprise Risk Management*", the internal auditor has to review the structure, effectiveness and maturity of an enterprise risk management system. The internal auditor needs to obtain an understanding of the entity's process for identifying business risks relevant to the scope of his work and deciding about actions to address those risks, and the results thereof. Thus, in an internal

audit of intangible assets, he needs to obtain an understanding of the various risks associated with acquisition, development, deployment, maintenance and retirement or disposal of intangible assets, and also of ways the entity addresses these risks. The internal auditor also needs to evaluate the results of entity's related actions. The aforesaid risks would include, besides others, the risk of existence of unrecorded intangible assets and risk of non-compliance with the applicable laws and regulations.

Review of Information System and Communication

5.9 An information system consists of infrastructure (physical and hardware components), software, people, procedures, and data. Standard on Internal Audit (SIA) 14, "*Internal Audit in an Information Technology Environment*", requires an internal auditor to consider the effect of an IT environment on the internal audit engagement, *inter alia*:

(a) the extent to which the 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 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 that could otherwise be expected to exist in an entirely manual system.

5.10 Standard on Internal Audit (SIA) 14 requires the internal auditor to review whether the information technology system in the entity considers the confidentiality, effectiveness, integrity, availability, compliance and validity of data and information processed. The internal auditor should also review the effectiveness and safeguarding of IT resources, including – people, applications, facilities and data.

In an internal audit of intangible assets, the internal auditor needs to obtain an understanding of the entity's information system associated with acquisition, development, deployment, safeguarding and retirement or disposal of intangible assets.

5.11 The internal auditor should obtain an understanding of the information system relevant to financial reporting of intangible assets, e.g.:

- The procedures, by which transactions relating to intangible assets are initiated, recorded, processed and reported in the financial statements.

- The related accounting records, supporting information, and specific accounts in the financial statements, in respect of initiating, recording, processing and reporting the relevant transactions.

5.12 In addition, the internal auditor should pay attention to system of capturing and controlling those intangible assets also which are not recognised in financial statements as intangible assets e.g., the reporting system designed to monitor the status of each project for development of a new drug so that projects that are unlikely to succeed may be identified in a timely manner.

The internal auditor also needs to obtain an understanding of how the entity communicates roles and responsibilities and significant matters. Communication involves providing an understanding of individual roles and responsibilities pertaining to internal control and may take such forms as policy and operations manuals. It also includes measures to ensure that personnel understand how their activities relate to the work of others, as well the means of reporting exceptions to an appropriate higher level within the entity.

Evaluation of Control Activities

5.13 Control activities are the policies and procedures that help ensure that management directives are carried out; for example, that necessary actions are taken to address risks that threaten the achievement of the entity's objectives. Control activities have various objectives and are applied at various organisational and

functional levels. Examples of specific control activities include those relating to the following:

(a) *Segregation of duties:* Assigning different personnel the responsibilities of authorising transactions, recording transactions, and maintaining custody of assets is intended to reduce the opportunities to allow any person to be in a position to both perpetrate and conceal errors or fraud in the normal course of his/her duties. Accordingly, the internal auditor should examine whether the various duties relating to intangible assets are properly segregated, e.g., the authority to approve the acquisition of an intangible asset should not be assigned to the person who is responsible for executing its purchase. Even within the accounting and finance function, the duties of various personnel should be properly segregated, e.g., the person having the authority of approving a disbursement should be different from the person responsible for recording the same.

(b) *Performance reviews:* These control activities include reviews and analyses of actual performance versus budgets, forecasts, and prior period performance; relating to different sets of data – operating or financial – to one another, together with analyses of the relationships and investigative and corrective actions; comparing internal data with external sources of information; and review of functional or activity performance. The internal auditor should examine how far such reviews and analyses are carried out in relation to intangible assets.

(c) *Information processing:* The internal auditor should review the efficacy of controls over information processing, i.e., controls aimed at checking the accuracy, completeness, and authorisation of transactions relating to intangible assets. The exact form that these controls take would depend largely on whether the information system is manual or IT-enabled. For example, periodic preparation/reconciliation of trial balance is a major check on mathematical accuracy of accounting records in a manual environment. In an IT-enabled environment, on the other hand, the mathematical accuracy of accounting records is extremely unlikely to be a significant risk area.

However, in an IT-enabled environment, the controls over information processing would comprise application controls and general IT-controls. Application controls apply to the processing of individual applications. Examples of application controls include automated controls such as, edit checks of input data and numerical sequence checks, and manual follow-up of exception reports. General IT-controls are policies and procedures that relate to many applications and support the effective functioning of application controls by helping to ensure the continued proper operation of information systems. General IT-controls commonly include controls over data centre and network operations; system software acquisition, change and maintenance; access security; and application system acquisition, development, and maintenance. Examples of general IT-controls are programme change controls, controls that restrict access to programmes or data, controls over the implementation of new releases of packaged software applications, and controls over system software that restrict access to or monitor the use of system utilities that could change financial data or records without leaving an audit trail.

(d) Physical controls: The internal auditor should examine whether there are sufficient controls for the physical security of intangible assets, including adequate safeguards such as, secured facilities; controls over access to assets and records; authorisation for access to computer programs and data files; and periodic counting and comparison with amounts shown on control records.

Testing Design Effectiveness

5.14 For each internal control, as prescribed, the internal auditor should ascertain the following, *inter alia*:

(a) How is it required to be performed?

(b) When and/or how frequently is it required to be performed?

(c) What purpose does it seek to achieve?

(d) What are the types of experience, knowledge and expertise required of the person who has to perform the control?

(e) Whether the control has an IT component.

5.15 It may be emphasised that at this stage, the internal auditor is concerned with the design of internal controls (rather than their actual operation). In testing the design effectiveness, the internal auditor seeks to find answers to questions such as the following:

(a) How likely it is that the control as designed would succeed in achieving the purpose for which it is designed?

(b) Does the cost of implementing the control exceed the benefits expected from its performance?

(c) Does the entity have persons with the requisite experience, knowledge and expertise for performing the procedure? Likewise, does it have appropriate technology to implement the control?

To illustrate, consider the case of an internal auditor's evaluation of the design of the procedure laid down in an entity for purchase of computer software. After understanding the procedure, the auditor would evaluate whether (assuming it is implemented as prescribed) it is likely to result in acquisition of the right software at right price and at right time from authorised suppliers of the software who also have the requisite infrastructure to meet the after-sales service requirements of the entity. In doing so, the internal auditor would particularly evaluate the efficacy of internal controls built into the purchase procedure, e.g., whether the procedure involves inviting quotations from sufficient number of vendors such that the entity can acquire the software at a competitive price. The internal auditor would also evaluate the adequacy and competence of personnel in the purchase department as well as the efficacy of IT-enabled components of the purchase procedure.

5.16 The internal auditor's evaluation of the design of the various internal controls helps him to identify those which are:

- defective in design such that it is unlikely that they would be effective in achieving their stated purpose;

- redundant, i.e., they serve no useful purpose. This may often be the case where the controls do not keep pace with changes in internal and external environment such as changes in technology; or

- inefficient, i.e., the cost of implementing the control exceeds the benefits arising from its implementation.

Testing Operating Effectiveness of Controls

5.17 After evaluating the design of internal controls, the internal auditor ascertains the continuity and effectiveness of their actual implementation, e.g., whether the prescribed controls have actually been applied continuously throughout the period. Departures from prescribed controls could be indicative, among others, of any one or more of the following:

- The control has not been communicated properly to, or understood properly by, people responsible for performing it.

- The people responsible for implementing it lack the requisite skills to perform it properly.

- The control is defective in design and is therefore impracticable to apply.

Depending on the internal auditor's assessment of the causes of departures, he may suggest the remedial measures in his report.

Chapter 6

Internal Audit of Accounting for Intangible Assets

6.1 A common area of internal audit is the review of financial information and the means used to identify, measure, classify and report such information. The objective of such a review is to ascertain whether:

(a) financial records and statements contain accurate, reliable, timely and complete information; and

(b) controls over record keeping and reporting are adequate and effective.

By reviewing the financial accounting process right from the stage of basic record keeping to preparation of annual financial statements, internal audit seeks to provide assurance to the board of directors and senior management on whether or not the requirements of the Companies Act, 1956 relating to accounts are being complied with.

6.2 In the above context, the internal auditor has to examine whether the assertions underlying financial statements are valid or not. For this purpose, he examines whether internal controls relating to accounting system are effective and were operative throughout the period. He also examines whether the intangible assets have been accounted for in accordance with the generally accepted accounting principles in India.

It may be mentioned that, apart from the above, an internal auditor would also need to examine whether a non-compliance or potential non-compliance with laws and regulations relating to intangible assets (e.g., a legal case against the entity for alleged unauthorised use of a computer software or patent) has been properly dealt with in the financial statements. For example, a potential non-compliance may warrant disclosure of a contingent liability in accordance with Accounting Standard (AS) 29,

"Provisions, Contingent Liabilities and Contingent Assets" issued by the Institute of Chartered Accountants of India.

Internal Auditor's Examination of Compliance with GAAP

6.3 The primary source of Indian GAAP relating to intangible assets is Accounting Standard (AS) 26, "Intangible Assets". The Standard applies in accounting for all intangible assets except the following.

(a) intangible assets that are covered by another Accounting Standard. Examples of such assets are:

- intangible assets held by an enterprise for sale in the ordinary course of business (covered by AS 2, Valuation of Inventories, and AS 7, Construction Contracts);
- deferred tax assets (covered by AS 22, Accounting for Taxes on Income);
- leases that fall within the scope of AS 19, Leases; and
- goodwill arising on an amalgamation (covered by AS 14, Accounting for Amalgamations) and goodwill arising on consolidation (covered by AS 21, Consolidated Financial Statements).

(b) financial assets;

(c) mineral rights and expenditure on the exploration for, or development and extraction of, minerals, oil, natural gas and similar non-regenerative resources; and

(d) intangible assets arising in insurance enterprises from contracts with policyholders.

6.4 Besides, the Standard also does not apply in accounting for:

(a) termination benefits payable to employees on termination of employment before the normal retirement date.

(b) discount or premium relating to borrowings and ancillary costs incurred in connection with the arrangement of borrowings, share issue expenses and discount allowed on the issue of shares.

The primary areas of concern to the internal auditor in examining compliance with AS 26 are discussed below.

Do Recognised Intangible Assets Meet Definition and Recognition Criteria?

6.5 The internal auditor should examine whether items included as intangible assets in the financial statements meet the definition of, and recognition criteria for, intangible assets laid down in AS 26. As already pointed out in Chapter 1, not all intangible items qualify to be recognised as assets in the balance sheet e.g., costs of research or internally-generated brands or mastheads or customer lists, etc.

6.6 As per the definition and recognition criteria of AS 26, to qualify for recognition as an 'intangible asset' in the balance sheet, an item should satisfy the following criteria (apart from being non-monetary, lacking physical substance and being held by the entity for use in the production or supply of goods or services, for rental to others, or for administrative purposes):

(a) It should be identifiable.

(b) It should be an asset of the enterprise, i.e., it should be controlled by the enterprise and economic benefits from it should be expected to flow to the enterprise in future. The capacity of an entity to control the future economic benefits from an intangible asset would normally stem from legal rights that are enforceable in a court of law. In the absence of legal rights, existence of control can be demonstrated only in exceptional circumstances. The standard specifically notes that usually an entity has insufficient control over the expected future economic benefits arising from a team of skilled staff and from training to consider that these items meet the definition of an intangible asset. Further, in the absence of legal rights to protect, or other ways to control, the relationships with customers or the loyalty of the

customers to the entity, the entity usually has insufficient control over the economic benefits from customer relationships and loyalty. Therefore, such items (portfolio of customers, market shares, customer relationships, customer loyalty) do not meet the definition of intangible assets.

(c) It is probable that the future economic benefits that are attributable to the asset will flow to the enterprise.

(d) The cost of the asset can be measured reliably.

Have Intangible Assets been Properly Measured at Cost?

6.7 The cost of an intangible asset that is acquired separately comprises its purchase price, including any import duties and other taxes (other than those subsequently recoverable by the entity from the taxing authorities), and any directly attributable expenditure on making the asset ready for its intended use. If an intangible asset is acquired in exchange for shares or other securities of the reporting enterprise, the asset is recorded at its fair value, or the fair value of the securities issued, whichever is more clearly evident.

How have Internally Generated Intangible Assets been Dealt With?

6.8 Where the entity has recognised internally generated intangible assets, the internal auditor should examine whether the criteria laid down in this regard in AS 26 have been applied properly. AS 26 notes that determining whether the definition and recognition criteria are met sometimes poses difficulties in the case of internally generated intangible items. These difficulties relate to:

(a) identifying whether, and the point of time when, there is an identifiable asset that will generate probable future economic benefits; and

(b) determining the cost of the asset reliably. In some cases, the cost of generating an intangible asset internally cannot be distinguished from the cost of maintaining or enhancing

the enterprise's internally generated goodwill or of running day-today operations.

6.9 For the purpose of applying the definition and recognition criteria to internally generated intangible assets, the standard requires the process of generation of the asset to be divided into - research phase and development phase. If an entity cannot distinguish the research phase from the development phase, the expenditure on the project should be treated as if it were incurred in the research phase only.

6.10 Research is original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding. The following are examples of research activities:

(a) activities aimed at obtaining new knowledge;

(b) the search for, evaluation and final selection of, applications of research findings or other knowledge;

(c) the search for alternatives for materials, devices, products, processes, systems or services; and

(d) the formulation, design, evaluation and final selection of possible alternatives for new or improved materials, devices, products, processes, systems or services.

6.11 Development is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services prior to the commencement of commercial production or use. The following are examples of development activities:

(a) the design, construction and testing of pre-production or pre-use prototypes and models;

(b) the design of tools, jigs, moulds and dies involving new technology;

(c) the design, construction and operation of a pilot plant that is not of a scale economically feasible for commercial production; and

(d) the design, construction and testing of a chosen alternative for new or improved materials, devices, products, processes, systems or services.

6.12 AS 26 lays down that, in the research phase of a project, an entity cannot demonstrate that an intangible asset exists from which future economic benefits are probable. Therefore, this expenditure is recognised as an expense when it is incurred. The Standard recognises that development phase of a project is further advanced than the research phase and, therefore, in the development phase of a project, an entity may be able to identify an intangible asset and demonstrate that future economic benefits from the asset are probable. Accordingly, the standard requires that an intangible asset arising from the development phase should be recognised if, and only if, an enterprise can demonstrate all of the following:

(a) the technical feasibility of completing the intangible asset so that it will be available for use or sale;

(b) its intention to complete the intangible asset and use or sell it;

(c) its ability to use or sell the intangible asset;

(d) how the intangible asset will generate probable future economic benefits. Among other things, the entity should demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset;

(e) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and

(f) the entity's ability to measure the expenditure attributable to the intangible asset during its development reliably.

6.13 The cost of an internally generated intangible asset is the sum of expenditure incurred from the time when the intangible asset first meets the above recognition criteria. Apart from materials, services, labour and other costs that are directly attributable to generating the asset, the cost of an internally generated intangible asset also includes overheads that are necessary to generate the asset and that can be allocated on a reasonable and consistent basis to the asset (for example, an allocation of the depreciation of fixed assets, insurance premium and rent). However, the following are not part of the cost of an internally generated intangible asset:

(a) selling, administrative and other general overhead expenditure unless this expenditure can be directly attributed to making the asset ready for use;

(b) clearly identified inefficiencies and initial operating losses incurred before an asset achieves planned performance; and

(c) expenditure on training the staff to operate the asset.

Have Certain Specified Items of Expenditure been Expensed?

6.14 The internal auditor should examine that, as required by AS 26, expenditure on an intangible item is recognised as an expense when it is incurred except in the following cases:

(a) the expenditure forms part of the cost of an intangible asset that meets the recognition criteria; or

(b) the item is acquired in an amalgamation in the nature of purchase and cannot be recognised as an intangible asset. If this is the case, this expenditure (included in the cost of acquisition) should form part of the amount attributed to goodwill (capital reserve) at the date of acquisition.

6.15 Examples of expenditures that need to be expensed in accordance with the above are:

- Internally generated goodwill.

- Internally generated brands, mastheads, publishing titles, customer lists and items similar in substance – on the basis that the expenditure on these items cannot be distinguished from the cost of developing the business as a whole and, therefore, the criterion regarding reliable measurement of cost is not met.
- Expenditure on start-up activities (start-up costs), unless this expenditure is included in the cost of an item of fixed asset under AS 10. Start-up costs may consist of preliminary expenses incurred in establishing a legal entity such as legal and secretarial costs, expenditure to open a new facility or business (pre-opening costs) or expenditures for commencing new operations or launching new products or processes (pre-operating costs).
- Expenditure on training activities.
- Expenditure on advertising and promotional activities.
- Expenditure on relocating or re-organising part or all of the entity.

6.16 The internal auditor should also examine that expenditure on an intangible item that was initially recognised as an expense in previous annual financial statements or interim financial reports is not recognised as part of the cost of an intangible asset at a later date. For example, expenditure on research phase of an internal project for generation of an intangible asset (which is required to be expensed as incurred) cannot be capitalised later as an asset if the criteria for recognition of an intangible asset are later met during the development phase (this equally applies to development phase expenditure incurred prior to meeting the specified criteria).

Has Subsequent Expenditure been Properly Accounted for?

6.17 It is required that subsequent expenditure on an intangible asset after its purchase or its completion should be recognised as an expense when it is incurred unless:

(a) it is probable that the expenditure will enable the asset to generate future economic benefits in excess of its originally assessed standard of performance; and

(b) the expenditure can be measured and attributed to the asset reliably.

The internal auditor should examine whether the subsequent expenditure has been added to the cost of the intangible asset only if the above conditions are met.

Is Amortisation Proper?

6.18 The depreciable amount (i.e., cost less residual value) should be allocated on a systematic basis over the best estimate of its useful life. Amortisation should commence when the asset is available for use.

The Standard makes a rebuttable presumption that the useful life of an intangible asset will not exceed ten years from the date when the asset is available for use. However, where there is persuasive evidence that the useful life of an intangible asset will be a specific period longer than ten years, this presumption is rebutted and the asset is amortised over the best estimate of its useful life. However, in such a case, the entity is required to:

(a) estimate the recoverable amount of the intangible asset at least annually in order to identify any impairment loss; and

(b) disclose the reasons why the presumption is rebutted and the factor(s) that played a significant role in determining the useful life of the asset.

6.19 In the case of intangible assets involving legal rights that have been granted for a finite period, (e.g., patents and trade marks), the useful life of the intangible asset should not exceed the period of the legal rights unless rights are renewable and renewal is virtually certain.

6.20 The Standard does not leave the amortisation method for an intangible asset to management's discretion as an accounting policy choice. It clearly requires that the amortisation method used should reflect the pattern in which the asset's economic benefits are consumed by the entity. If that pattern cannot be determined reliably, the straight-line method should be used.

6.21 Given the nature of intangible assets, the standard requires that the residual value of an intangible asset should be assumed to be zero unless:

(a) there is a commitment by a third party to purchase the asset at the end of its useful life; or

(b) there is an active market for the asset and:

  (i) residual value can be determined by reference to that market; and

  (ii) it is probable that such a market will exist at the end of the asset's useful life.

In the above situation, an estimate is made of the residual value based on prices prevailing at the date of acquisition of the asset. The estimate is not subsequently increased for changes in prices or value.

As amortisation period and amortisation method represent accounting estimates, both are required to be reviewed at least at each financial year end.

Has Recoverable Amount been Determined for Certain Intangible Assets?

6.22 AS 28, Impairment of Assets requires the recoverable amount of an asset falling within its scope to be formally determined only if there is an indication that this may be less than the carrying amount of the asset. AS 26 requires that, in addition, the recoverable amount of the following intangible assets should be estimated at least at each financial year end even if there is no indication that the asset is impaired:

(a) an intangible asset that is not yet available for use; and

(b) an intangible asset that is amortised over a period exceeding ten years from the date when the asset is available for use.

Are Retirement/Disposals Accounted for Correctly?

6.23 The internal auditor should examine whether an intangible asset is derecognised (eliminated from the balance sheet) on disposal or when no future economic benefits are expected from its use and subsequent disposal. Gains or losses arising from the retirement or disposal of an intangible asset should be determined as the difference between the net disposal proceeds and the carrying amount of the asset and should be recognised as income or expense in the statement of profit and loss.

Have Proper Disclosures been Made?

6.24 It should be examined by the internal auditor whether the disclosures required by AS 26 have been properly made which includes disclosures such as, the useful lives or the amortisation rates used, the amortisation methods used, the gross carrying and the accumulated amortisation at the beginning and end of the period, etc.

Chapter 7

Internal Audit of Principal Classes of Intangible Assets

7.1 The nature of different intangible assets varies – some intangible assets represent intellectual property (e.g., motion pictures, sound recordings, computer software), some relate to customers or markets (brand names, trade marks) and some others represent valuable operating rights such as licences, quotas or service-concession agreements. The nature of an intangible asset is one of the factors influencing its internal audit. For example, in the case of intellectual property assets, legal protection against their use by others may either not be available to the entity unless those assets are registered (e.g., innovations patentable under the Patents Act, 1970) or may not be sufficiently effective (e.g., copyright in computer software). Accordingly, one of the primary concerns of the internal auditor in respect of such assets is whether or not the entity has in place appropriate policies and procedures to obtain their registration under relevant laws on a timely basis. On the other hand, in auditing assets like licences, the emphasis may be on determining whether or not the entity's policies and procedures provide sufficient assurance of compliance with the conditions of the licences and whether the entity actually is in compliance thereof.

7.2 This chapter seeks to discuss the salient aspects of internal audit of some principal classes of intangible assets. It may, however, be noted that the emphasis in the following discussion is primarily on the distinctive aspects of internal audit of different classes of intangible assets. The discussion is not intended to provide a comprehensive internal audit programme for the relevant class of assets which would include normal internal audit procedures in respect of aspects which are common with other assets. This has been illustrated in the fairly detailed internal audit programme for computer software in Chapter 8 which may serve as a basic reference for development of appropriate internal audit programmes for different classes of intangible assets and under different situations. It may also be emphasised that the relative

significance of different aspects as discussed herein may differ from entity to entity depending upon its particular circumstances. Besides, certain aspects not mentioned herein may also be significant for a particular entity in view of its peculiar circumstances.

Copyrights

7.3 For entities developing or owning computer software, publishing books and magazines, producing films/music/videos or other artistic and literary work, the internal audit of copyrights is very significant. In the case of others, the internal auditor may concentrate on whether inadvertently or otherwise, no third party copyright has been infringed. An internal audit of copyrights may *inter alia* include the following aspects:

(i) Ascertain whether the entity maintains an up-to-date documentation of copyright law applicable to it. Also ascertain whether salient features of the copyright law are communicated properly to personnel concerned (including, where applicable, the entity's relevant consultants, contractors, sub-contractors, etc.), e.g., those involved in creation of works (within the meaning of the Copyright Act, 1957) or their registration. Depending upon the nature of involvement of different personnel, the aspects of copyright law to be communicated may include:

   (a) Nature of copyright;

   (b) Party/parties whose rights are protected by copyright;

   (c) The rights of a copyright holder;

   (d) Different classes of works for which copyright protection is available in India;

   (e) Requirements for registration of copyrights;

   (f) Mode of assigning copyright;

   (g) Period of copyright;

   (h) Protection of copyright of foreign works in India;

   (i) Offences and penalties;

(j) Special provisions with regard to rights in computer programmes.

(ii) Determine the policy of the entity with regard to registration of copyrights, i.e., whether registration of copyrights is obtained in all eligible cases or whether this is determined on a case-to-case basis. If latter, are the parameters to be applied to determine the issue specifically laid down or is the decision subjective and intuitive? Are the policy and parameters referred to above, if in existence, adequately documented and properly communicated?

(iii) Determine whether sufficient measures are taken by the entity to prevent its claim of being the first owner of copyright in a work being contested. For example, is sufficient care taken in drafting the agreements with employees to ensure that an employee does not have a claim to the copyright in a work arising during the course of his employment? Similarly, where consultants, contractors or sub-contractors are hired and it is intended that the copyright in the work arising in the course of their engagement rests with the entity, are the agreements with them drafted with sufficient care to ensure that their legal effect is as intended?

(iv) Ascertain and evaluate the measures adopted by the entity to ensure the secrecy of a work under development, e.g., confidentiality clauses in agreements with employees, consultants, contractors, physical safeguards, etc.

(v) Ascertain whether the entity is maintaining adequate documents and records to support its claim (or oppose the claims of others) for copyright in a work in any legal proceedings.

(vi) Ascertain whether before asserting the entity's copyright in a work or seeking registration thereof, it is ensured that the work does not involve an infringement of copyright of others. For example:

(a) is it ensured that the work is not substantially similar to an existing work of another party so that there is no infringement of copyrights by the entity?

(b) is a confirmation obtained from the employees, consultants, contractors, etc., involved in the development of the work that no part of their contribution includes any pre-existing material?

(c) where an existing material is used, is it ascertained whether such work is in the public domain or is owned by a third party? Is permission for use of the work obtained from third parties in relevant cases?

(vii) Ascertain whether the legal requirements relating to registration are complied with promptly and with exercise of requisite diligence and care. Also ascertain whether the registration process includes review procedures to identify any possible errors, omissions, etc. in the registration documents.

(viii) Ascertain whether any intangible assets are in use which may involve copyright of others. If so, whether action is being taken to obtain the assignment of copyright so that serious legal penalties are not attracted.

(ix) Where a copyright has been acquired from its previous owner by means of its assignment in favour of the entity, ascertain whether the agreement for assignment:

(a) includes significant terms and conditions;

(b) states whether the assignment is conditional or unconditional;

(c) has been properly executed;

(d) has been registered with appropriate authorities as required;

(e) is being complied with.

(x) Ascertain whether a proper copyright notice appears on all publicly distributed copies of the entity's work to effectively communicate its ownership by the entity.

(xi) Ascertain and evaluate the procedures in place to identify and deal with known instances of infringement of the entity's

copyright by others and infringement of copyrights of others by employees of the entity. Are such procedures sufficient and appropriate to ensure that:

(a) cases of infringement are reported to the appropriate level of management on a timely basis;

(b) legal advice is taken if required by the circumstances;

(c) potential impact is examined and appropriate remedial action is taken by the entity.

(xii) Ascertain the manner in which the entity is dealing with the work in which it has a copyright and identify those that are unused. Obtain information and explanations as to entity's plans in respect of such works, e.g., whether the entity intends to sell (assign) them or enter into licencing arrangements in respect thereof.

(xiii) Ascertain whether the process through which the question of compliance with the criteria for recognition of an internally-generated copyrighted work is determined is appropriate, e.g., is it such as is likely to result in a reliable measurement of cost of such an asset. (AS 26 precludes recognition of an intangible asset unless the prescribed criteria are satisfied. One of these is reliable measurement of cost which often poses difficulties in the case of internally generated intangible assets.) Among others, examine:

(a) how the entity demonstrates that an intangible asset will generate probable future economic benefits.

(b) how the entity demonstrates the availability of resources to complete, use and obtain the benefits from the intangible asset. (This can be demonstrated by, for example, a business plan showing the technical, financial and other resources needed and the enterprise's ability to secure those resources. In certain cases, the availability of external finance may be demonstrated by obtaining a lender's indication of its willingness to fund the plan.)

(c) whether the expenditure incurred prior to meeting the criteria for capitalisation is expensed and is not reinstated, if and when the aforesaid criteria are met?

(xiv) Ascertain whether the period of amortisation of copyrighted works is reasonable. (The period for which the copyright in a work subsists under law does not necessarily represent its useful life. For example, for a motion picture that is expected to generate revenues only over a period of five years from the release date, the amortisation period would be five years notwithstanding that the period of legal validity of copyright is much longer. The amortisation period can differ from one copyrighted work to another.)

(xv) Ascertain whether the method of amortisation of a copyrighted work reflects the pattern in which the asset's economic benefits are consumed by the entity. (For example, in the case of a motion picture, the periodic amortisation charge may be based on the proportion of revenue from the motion picture during the period to estimated total revenue from its exploitation. Different methods of amortisation may be appropriate for different copyrighted works).

(xvi) In case of assignment/licencing of its copyrights by the entity to various parties on lease or for use against consideration, ascertain that this is done only through written agreements/licences. Do such agreements/licences contain clear terms and conditions?

(xvii) Ascertain whether the agreements/licences are implemented effectively to ensure that the parties are discharging their obligations properly.

(xviii) Ascertain whether the agreements/licences are reviewed periodically for modification in the light of the experience of implementation.

Patents

7.4 Patents Act, 1970 grants an exclusive legal right to a person who has made an invention to use or sell it for a specified period

in India. Since a patent can be obtained for both, a new product or a new process which is capable of industrial use, it is imperative for any entity engaged in research and development to carefully monitor the results of this activity so that no opportunity is lost in lodging a claim for a patent. This is particularly important since in India this aspect is often ignored. Apart from own patents, entities use processes or manufacture and sell products which may infringe patents of third parties. Keeping these in mind, the internal audit of patents may include the following aspects:

(i) Ascertain whether the entity maintains an up-to-date documentation of patents law applicable to it. Also ascertain whether salient features of the patents law are communicated properly to personnel concerned (including, where applicable, the entity's relevant consultants, contractors, sub-contractors, etc.) e.g., those directly involved in inventions (within the meaning of Patents Act, 1970) or their registration. Depending on the nature of involvement of different personnel, the aspects of law relating to patents to be so communicated may include:

   (a) Nature of patents;

   (b) Party/parties whose rights are protected by patents;

   (c) The rights of a patent holder;

   (d) Invention for which patent protection is available in India as well as inventions that are not so patentable;

   (e) Requirements and procedure for registration of patents;

   (f) Mode of assigning patents or granting licences in patents;

   (g) Term of patents;

   (h) Offences and penalties.

(ii) Determine the policy of the entity with regard to registration of patents, i.e. whether registration is obtained in all eligible cases or whether this is determined on a case-to-case basis. If latter, are the parameters to be applied to

determine the issue specifically laid down? Is it clearly understood within the entity that an unregistered invention has no legal protection against its use or sale by others? Are the policy and parameters referred to above, if in existence, adequately documented and properly communicated?

(iii) Determine whether sufficient measures are taken by the entity to prevent its claim of being the true and first owner of an invention being contested. For example, is sufficient care taken in drafting the agreements with employees to ensure that an employee does not have a claim to be the first owner of an invention arising during the course of his employment? Similarly, where consultants, contractors or sub-contractors are hired and it is intended that the entity would be the true and first owner of any invention arising in the course of their engagement, are the agreements with them drafted with sufficient care to ensure that their legal effect is as intended?

(iv) Ascertain and evaluate the measures adopted by the entity to ensure the secrecy of new processes, products, etc. under development, e.g., confidentiality clauses in agreements with employees, physical safeguards, etc.

(v) Ascertain whether the entity is maintaining adequate documents and records to support its claim (or oppose the claims of others) for ownership of an invention in any legal proceedings.

(vi) Ascertain whether before seeking registration of a patent in respect of an invention, it is ensured that it is a patentable invention under the Patents Act, 1970 and it does not involve an infringement of patents of others. For example, is a search made to identify similar patents granted already? Likewise, is a confirmation obtained from the employees/consultants/contractors, etc. involved in the activities leading to invention that no part of their contribution infringes an existing patent?

(vii) Ascertain whether the legal requirements relating to registration are complied with promptly and with exercise of

requisite diligence and care. Also ascertain whether the registration process includes review procedures to identify any possible errors, omissions, etc. in the registration documents.

(viii) Where a patent has been acquired from its owner by means of its assignment in favour of the entity, ascertain whether the agreement for assignment:

(a) includes significant terms and conditions;

(b) states whether the assignment is conditional or unconditional;

(c) has been properly executed;

(d) has been registered with appropriate authorities as required;

(e) is being complied with.

(ix) Ascertain whether a proper notice of patent appears on all articles manufactured using the patented process to effectively communicate ownership of patent by the entity.

(x) Ascertain and evaluate the procedures in place to identify and deal with known instances of infringement of the entity's patents by others and infringement of patents of others by the entity. Are such procedures sufficient and appropriate to ensure that:

(a) cases of infringement are reported to the appropriate level of management on a timely basis;

(b) legal advice is taken if required by the circumstances;

(c) potential impact is examined and appropriate remedial action is taken by the entity.

(xi) Ascertain the manner in which the entity is dealing with the registered patents and identify those that are unused. Obtain information and explanations as to entity's plans in respect of such patents, e.g., whether the entity intends to

sell (assign) them or enter into licencing arrangements in respect thereof.

(xii) Ascertain whether the process through which compliance with the criteria for recognition of an internally-generated copyrighted work is determined is appropriate, e.g., is it such as is likely to result in a reliable measurement of cost of such an asset. Among others, examine:

(a) how the entity demonstrates that an intangible asset will generate probable future economic benefits.

(b) how the entity demonstrates the availability of resources to complete, use and obtain the benefits from the patent. (This can be demonstrated by, for example, a business plan showing the technical, financial and other resources needed and the enterprise's ability to secure those resources. In certain cases, the availability of external finance may be demonstrated by obtaining a lender's indication of its willingness to fund the plan.)

(c) whether the expenditure incurred prior to meeting the criteria for capitalisation is expensed and is not reinstated, if and when the aforesaid criteria are met?

(xiii) Ascertain whether the period of amortisation of patents is reasonable. (The period for which a patent is granted under law does not necessarily represent its useful life. For example, for a newly invented article that is expected to have a life cycle of only seven years from the date of commercial release, the amortisation period would be seven years notwithstanding that the period of legal validity of the patent is longer. The amortisation period can differ from one patent to another.)

(xiv) Ascertain whether the method of amortisation of a patent reflects the pattern in which the patent's economic benefits are consumed by the entity. (Different methods of amortisation may be appropriate for different patents.)

(xv) In case of assignment/licencing of its patents by the entity to various parties, ascertain that this is done only through

written agreements/licences. Do such agreements/licences contain clear terms and conditions?

(xvi) Ascertain whether the agreements/licences are implemented effectively to ensure that the parties are discharging their obligations properly.

(xvii) Ascertain whether the agreements/licences are reviewed periodically for modification in the light of the experience of implementation.

Non-compete Agreements

7.5 A non-compete agreement[1] is a promise, usually in a sale of business, partnership, or employment contract, not to engage in the same type of business for a stated time in the same market as the buyer, partner, or employer. These agreements are expected to provide economic benefits to the entity by restricting the other party from performing similar work for a specific period of time within a certain geographical area. The internal auditor may undertake the following procedures while examining such agreements.

(i) Obtain an understanding of:

(a) the conditions under which a non-compete agreement was entered into. For example, an entity may enter into a non-compete, agreement with business partners, employees, contractors or in the situation of a business restructuring such as merger, acquisition, de-merger, spin-off, etc.;

(b) the parties/ people/ entities with whom the agreement are entered into; and

(c) the rights that are protected by way of non-compete agreement.

(ii) Ascertain whether the entity's process of entering into such an agreement includes obtaining competent legal advice to ensure that it would comply with the law applicable to the

[1] Definition as per Black's Law Dictionary.

entity. For example, in drafting a non-compete agreement in India, it may need to be specifically ensured that the agreement does not militate against the provisions of the Indian Contract Act, 1872 in respect of agreements in restraint of trade and/or other applicable law, e.g., the Competition Act. Similarly, ascertain whether legal and professional advice is obtained to ensure that the interests of the entity are adequately protected. For example, is there a provision whereby an individual who is prohibited from engaging into an identical or similar business is not able to circumvent the prohibition by owning (through relatives, friends, etc.) a company that engages into the prohibited business?

(iii) Ascertain whether the scope, terms and conditions of the agreement are stated in a clear and explicit manner including the rights and obligations of each party to the contract, the specific business or services or other subject matter, the period for which and/ or the geographical limits within which the agreement would be binding upon the contracting parties. Similarly, does the agreement specify the amount of the consideration and the mode of payment and payment schedule and whether these stipulations are being adhered to?

(iv) Ascertain whether the persons signing the agreement on behalf of the entity have due authority such as power of attorney to sign the agreement. Also ascertain whether the entity takes adequate safeguards to ensure that the person(s) signing the agreement on behalf of the counterparty are properly authorised to do so. Is the documentary evidence in this regard, e.g., authority letters/ power of attorney carefully examined and got vetted from legal department/ attorneys and kept on record for future reference?

(v) Is there an effective process to ensure that the agreements are being complied with by the counterparties. (One such measure may be to provide in the agreement that the counterparty would be required to provide the entity with a confirmation in the prescribed form periodically about its

continuing compliance with the conditions of the non-compete agreement, duly vetted by its statutory auditors.)

(vi) Ascertain whether there are any known cases of non-compliance and whether appropriate measures have been taken by the entity. Where such cases indicate a systemic weaknesses in the entity (e.g., persistent or widespread drafting deficiencies), is action taken to remedy the situation? Is such action timely and effective?

Licences

7.6 A licence represents a contractual right from the perspective of the licencee (contractual obligation from the perspective of the licensor) to carry out some act that would otherwise be unlawful. A licence may be granted by a government or a regulatory authority (e.g., an import licence) or by a private party (e.g., a licence granted by the owner of a registered trade mark to another person permitting the latter to use the said trade mark).

(i) Obtain a list of licences in which the entity is the licencee and examine whether the licences are supported by an underlying agreement in writing?

(ii) Ascertain whether the licencing agreements are prepared with due diligence and care to ensure that the entity's interests are sufficiently protected and to minimise the chances of subsequent disputes or litigation (since licences create legal rights and obligations, involvement of persons with legal expertise in the relevant area is imperative). In particular:

(a) ascertain whether the scope of each licence is stated in a very clear and explicit manner including the rights and obligations of each party, the specific business or services or other subject matter, the period for which and/or the geographical limits within which the agreement would be binding upon the contracting parties.

(b) ascertain whether the agreement specifies the amount of the consideration and the mode of payment and payment schedule.

(c) ascertain whether there are clauses clarifying the ownership of any technology improvements made by the licencee.

(iii) Ascertain whether due diligence and care was exercised by the entity to ensure that the licencor owns the rights that are proposed to be provided by it to the entity under the licence.

(iv) Ascertain whether there is an effective process to ensure that the agreements are being complied with by both parties, e.g., review the correspondence of the entity with the concerned authorities or counterparties. In the event of non-compliance by either party:

(a) are such cases of non-compliance reported to an appropriate level of management on a timely basis?

(b) is legal advice taken if required by the circumstances?

(c) is potential impact examined and appropriate remedial action taken by the entity?

(v) Inquire whether renewal fees, if any, are being deposited in time after due approval by authorised person. Is the system of monitoring renewal of rights effective especially for time-bound licences?

Designs

7.7 'Design' refers to shape, configuration, pattern, composition of lines or colours like, that of a car or phone. The Designs Act, 2000 seeks to protect the intellectual property in new and unpublished designs, if registered. The internal audit of this intangible asset may *inter alia* include the following aspects:

(i) Ascertain whether the entity maintains an up-to-date documentation of law relating to designs applicable to it. Also ascertain whether salient features of such law are communicated properly to personnel concerned (including,

where applicable, the entity's relevant consultants, contractors, sub-contractors, etc.) e.g., those involved in creation of designs (within the meaning of the Designs Act, 2000) or their registration. Depending on the nature of involvement of different personnel, the aspects of law relating to designs to be so communicated may include:

(a) Meaning of design;

(b) Party/parties whose rights are protected by law;

(c) Requirements for registration of designs;

(d) Mode of assigning copyright in designs;

(e) Period of copyright in designs;

(f) Renewal/ restoration of registration of designs;

(g) Offences and penalties.

(ii) Determine the policy of the entity with regard to registration of designs, i.e., whether registration of designs is obtained in all eligible cases or whether this is determined on a case-to-case basis. If latter, are the parameters to be applied to determine the issue specifically laid down? Is it clearly understood within the entity that (unlike 'works' within the meaning of the Copyright Act, 1957) an unregistered design has no legal protection against use by others? Are the policy and parameters referred to above adequately documented and property communicated?

(iii) Determine whether sufficient measures are taken by the entity to prevent its claim of being the proprietor of a design being contested. For example, is sufficient care taken in drafting the agreements with employees to ensure that an employee does not have a claim to the design arising during the course of his employment? Similarly, where consultants, contractors or sub-contractors are hired and it is intended that the copyright in any design arising in the course of their engagement rests with the entity, are the agreements with them drafted with sufficient care to ensure that their legal effect is as intended?

(iv) Ascertain and evaluate the measures adopted by the entity to ensure the secrecy of designs under development, e.g., confidentiality clauses in agreements with employees, physical safeguards, etc.

(v) Ascertain whether the entity is maintaining adequate documents and records to support its claim (or oppose the claims of others) for copyright in a design in any legal proceedings.

(vi) Ascertain whether before seeking registration of a design, it is ensured that the design does not involve an infringement of right of others. For example:

  (a) is it ensured that the design is not substantially similar to an existing design of another party?

  (b) is a confirmation obtained from the employees, consultants, contractors, etc. involved in the development of the design that no part of their contribution includes a pre-existing design?

(vii) Ascertain whether the legal requirements relating to registration are complied with promptly and with exercise of requisite diligence and care. Also ascertain whether the registration process includes review procedures to identify any possible errors, omissions, etc. in the registration documents.

(viii) Where a copyright in a design has been acquired from its previous owner by means of its assignment in favour of the entity, ascertain whether the agreement for assignment is in writing and:

  (a) includes significant terms and conditions;

  (b) states whether the assignment is conditional or unconditional;

  (c) has been properly executed;

  (d) has been registered with appropriate authorities as required; and

(e) is being complied with.

(ix) Ascertain whether applications for renewal of registration of designs made only after a careful assessment of the need for such renewal. Is such assessment made and renewal sought on a timely basis to prevent lapse of registration?

(x) Ascertain whether, where practicable, a proper copyright notice appears on all relevant publicly distributed materials (e.g., owner's manual of a car) to effectively communicate the ownership of the design by the entity.

(xi) Ascertain and evaluate the procedures in place to identify and deal with known instances of infringement of the entity's designs by others and infringement of designs of others by employees of the entity. Are such procedures sufficient and appropriate to ensure that:

(a) cases of infringement are reported to the appropriate level of management on a timely basis;

(b) legal advice is taken if required by the circumstances;

(c) potential impact is examined and appropriate remedial action is taken by the entity?

(xii) Ascertain the manner in which the entity is dealing with the registered designs and identify those that are unused. Obtain information and explanations as to entity's plans in respect of such works, e.g., whether the entity intends to sell (assign) them?

(xiii) Ascertain whether the process through which the cost of an internally-generated design is determined is such as is likely to result in a reliable measurement of such cost. (If the cost of an intangible asset cannot be measured reliably, AS 26 precludes its recognition as an intangible asset. Reliable measurement of cost poses difficulties primarily in the case of internally-generated intangible assets.) Among others, examine:

(a) How the entity demonstrates that an intangible asset will generate probable future economic benefits?

(b) How the entity demonstrate the availability of resources to complete, use and obtain the benefits from the design. (This can be demonstrated by, for example, a business plan showing the technical, financial and other resources needed and the enterprise's ability to secure those resources. In certain cases, the availability of external finance may be demonstrated by obtaining a lender's indication of its willingness to fund the plan.)

(c) Whether the expenditure incurred prior to meeting the criteria for capitalisation is expensed and is not reinstated if and when the aforesaid criteria are met?

(xiv) Ascertain whether the period of amortisation of registered designs is reasonable. (The period for which the copyright in a design subsists under law does not necessarily represent its useful life. The amortisation period can differ from one design to another.)

(xv) Ascertain whether the method of amortisation of a design reflects the pattern in which its economic benefits are consumed by the entity. (Different methods of amortisation may be appropriate for different designs.)

Trade Marks

7.8 In India, the law relating to trade marks is contained in Trade Marks Act, 1999. A 'trade mark' denotes a word, phrase, numeral, logo or other graphic symbol used to distinguish a product or service from others. The internal audit of trade marks owned by an entity is similar to that of its copyrights and includes the following aspects:

(i) Ascertain whether the entity maintains an up-to-date documentation of law relating to trade marks applicable to it and communicates it to personnel concerned. The aspects of trade marks law to be documented and communicated may include:

(a) Nature of trade mark;

(b) Party/parties who can apply for registration of a trade mark;

(c) The rights of owner of a registered trade mark;

(d) Procedures for registration, renewal and restoration of trade marks;

(e) Mode of assigning trade marks or granting right of use of trade marks;

(f) Duration of trade marks;

(g) Offences and penalties.

(ii) Determine whether the entity has sought registration of all its trade marks? Is it clearly understood within the entity that an unregistered trade mark has no legal protection against its use by others?

(iii) Ascertain whether before using a trade mark or seeking registration of a trade mark, it is ensured that it does not involve an infringement of a registered trade mark, i.e., is a search made of identical or similar trade marks registered already?

(iv) Ascertain whether the legal requirements relating to registration are complied with promptly and with exercise of requisite diligence and care. Also ascertain whether the registration process includes review procedures to identify any possible errors, omissions, etc. therein.

(v) Where a trade mark has been acquired from its previous owner by means of its assignment in favour of the entity, ascertain whether the agreement for assignment is in writing and:

(a) includes significant terms and conditions;

(b) states whether the assignment is conditional or unconditional;

(c) has been properly executed;

(d) has been registered with appropriate authorities as required;

(e) is being complied with.

(vi) Ascertain whether a proper notice appears on all publicly distributed articles carrying the trade mark that the trade mark is owned by the entity (or that the entity is registered user of the trade mark).

(vii) Ascertain and evaluate the procedures in place to identify and deal with known instances of infringement of the entity's trade marks by others and infringement of trade marks of others by employees of the entity. Are such procedures sufficient and appropriate to ensure that:

(a) such cases of infringement are reported to the appropriate level of management on a timely basis;

(b) legal advice is taken if required by the circumstances;

(c) potential impact is examined and appropriate remedial action is taken by the entity?

(viii) Ascertain that internally generated trade marks are also registered but are not recognised as assets in financial statements.

(ix) Ascertain whether the period(s) of amortisation of trade marks is reasonable. (The period for which the entity's ownership of a trade mark subsists under law does not necessarily represent its useful life. For example, for a product that is expected to have a remaining life cycle of 10 years from the date of acquisition of the related trade mark, the amortisation period would be 10 years notwithstanding that the period of legal validity of trade mark (including renewals that are regarded by the entity as virtually certain) may be much longer. The amortisation period can differ from one trade mark to another.)

(x) Ascertain whether the method of amortisation of a trade mark reflects the pattern in which its economic benefits are consumed by the entity. (Different methods of amortisation may be appropriate for different trade marks.)

Service Concession Arrangements in the Nature of Intangible Assets

7.9 In the last two decades, central and state governments have introduced contractual service arrangements to attract private sector participation in the development, financing, operation and maintenance of infrastructural facilities for public services such as roads, bridges, tunnels, hospitals, airports, dams, water distribution facilities, energy supply and telecommunication networks. For example, an expressway may be built by a private operator who may also maintain and operate it for a specified period, say 30 years. The operator may be entitled to charge toll from the users of the expressway during this period.

7.10 Such an arrangement is often described as a 'build-operate-transfer', or 'rehabilitate-operate-transfer' or a 'public-to-private' service concession arrangement. While the operations and assets/liabilities of such arrangements would be subjected to normal internal audit procedures, it is important for the internal auditor to recognise that if such arrangements have the features discussed below, their accounting would involve special treatment.[2] In all such cases, the following aspects of accounting recognition and disclosure should, therefore, be specifically examined by the internal auditor.

Assets Involved are not Tangible Fixed Assets

7.11 Most of these service concession arrangements involve significant physical assets e.g., ports, bridges, roads. However, the various classes of assets of these infrastructural facilities should not be recognised as tangible fixed assets of the operator if the main features of a service concession arrangement satisfy the prescribed criteria.

The prohibition on the various categories of physical assets being classified as tangible fixed assets or property, plant and equipment is on the rationale that the service concession

[2] Reference may be made to the proposed "Guidance Note on Accounting for Service Concession Arrangements" to be issued by the Institute of Chartered Accountants of India.

arrangement does not convey to the operator, the right to control the use of the public service infrastructural facilities. The operator only has access to operate the infrastructural facilities to provide the public service on behalf of the grantor in accordance with the terms specified in the contract. As the grantor regulates the price of the services to be charged, it (i.e., the grantor) is considered to control the services to be provided. Moreover, the grantor is the owner of significant residual interest in infrastructural facilities at the end of the term of the arrangement.

Distinguish Construction Services from Operation Services

7.12 Under the terms of contractual arrangement, the operator acts as a service provider. If the operator constructs or upgrades the infrastructure and also operates/maintains the same, the operator is providing two separate kinds of services:

(a) *Construction or upgrade services:* For this service, the operator should recognise and measure revenue in accordance with Accounting Standard (AS) 7, "Construction Contracts".

(b) *Operation services:* The operator operates and maintains the infrastructural facilities (operation services) for a specified period of time. For this service, the operator should recognise revenue in accordance with Accounting Standard (AS) 9, "Revenue Recognition".

If the operator performs more than one service under a single contract or arrangement, consideration received or receivable should be allocated by reference to the relative fair values of the services delivered, when the amounts are separately identifiable. The nature of the consideration determines its subsequent accounting treatment.

Financial Asset

7.13 The nature of consideration receivable by the operator may be of two types. One possibility is that the operator has an unconditional contractual right to receive cash or another financial asset from or at the direction of the grantor as consideration for

rendering services. In such a case, the operator should recognise a financial asset. For example if the operator is paid Rs.200 crores for building the expressway and Rs.10 crores each year for maintaining and collecting specified toll on behalf of grantor, the arrangement results in a financial asset (say accounts receivable) for the operator. The rationale is that the grantor has no discretion to avoid payment of the above because the agreement is enforceable by law. The operator has an unconditional right to receive cash if the grantor contractually guarantees to pay the operator (i) specified or determinable amounts or (ii) the shortfall, if any, between amounts received from users of the public service and specified or determinable amounts, even if payment is contingent on the operator ensuring that the infrastructural facilities meet specified quality or efficiency requirements.

Intangible Asset

7.14 If the operator does not get a contractual right to receive cash or other financial asset as discussed above but gets the right (a licence) to charge the users of the public service as per the regulated rates, the operator should recognise an intangible asset. A right to charge the users of the public service is not an unconditional right to receive cash because the amounts are contingent on the extent that the public uses the service.

7.15 It must be noted that the intangible asset would not be recognised at an amount equal to the cost incurred to construct the infrastructure. Instead the fair value of the constructed asset would be recognised (ordinarily, fair value would be measured as normal cost of construction plus a fair margin of profit, which a normal construction contractor would have charged). The difference between the fair value and the actual cost of construction would be treated as arising from construction of the infrastructure and recognised in accordance with AS 7. Further, instead of depreciation being charged on individual categories of tangible fixed assets, the intangible asset would be amortised over the period of arrangement.

7.16 The operator may have contractual obligations it must fulfill as a condition of its licence (i) to maintain the infrastructural facilities to a specified level of serviceability or (ii) to restore the infrastructural facilities to a specified condition before these are

handed over to the grantor at the end of the service arrangement. This may also involve replacement of assets which have a shorter useful life than the period of arrangement. These contractual obligations to maintain or restore infrastructural facilities should be recognised and measured in accordance with AS 29, "Provisions, Contingent Liabilities and Contingent Assets", i.e., at the best estimate of the expenditure that would be required to settle the present obligation at the balance sheet date.

7.17 If the grantor provides some assets to the operator that the operator can keep or deal with as it wishes after the period of concession and if such assets form part of the consideration payable by the grantor for the services, they are not government grants as defined in AS 12, "Accounting for Government Grants". They are recognised as assets of the operator, measured at fair value on initial recognition. The operator should recognise a liability in respect of unfulfilled obligations it has assumed in exchange for the assets.

Customer Related Intangible Assets

7.18 Customer related intangible assets are those intangible assets that occur as a result of interactions with outside parties such as customer lists, order backlogs, and other contractual and non-contractual customer relationships. These do not qualify for recognition in the accounting records (and, therefore, in the financial statements) unless they have been purchased from a third party. However, from the perspective of the management, even such intangibles may often be valuable.

7.19 A customer relationship may be either contractual or non-contractual. A customer contract is, generally, a fixed term contract with customers that includes contractual rights to future revenue that are legally enforceable, and as such, the entity has the ability to control the economic benefits arising out of such contracts. For example, entity A enters into an exclusive purchase agreement with entity B under which A will purchase inventory only from B's catalogue of products for five years. If A purchases inventory from another supplier, then it would be required to pay a penalty to B. Similarly, order backlog represents contracts in the form of sales orders for the entity's products and services.

Customer lists are specified information about customers. Even where these do not confer legal or other contractual rights, such lists are valuable and are, therefore, prone to misuse through clandestine sale.

7.20 Internal audit of customer related intangible assets may include the following specific procedures.

(i) Obtain a list of customer contracts.

(ii) Ascertain whether the entity has a system to monitor compliance of terms of customer contracts.

(iii) Ascertain whether the entity executes a confidentiality/non-disclosure agreement with the concerned employees or other parties to safeguard against unauthorised use of customer related intangibles, i.e., customer lists, customer contracts, correspondence with customers, etc. Does the agreement extend to post-employment period?

(iv) Ascertain whether the entity has taken adequate steps to protect its customer related intangibles (e.g., customer lists) against unauthorised use or sale e.g. restricting access to database to a few personnel only.

Chapter 8

Illustrative Internal Audit Programme for Computer Software

8.1 To illustrate how an internal audit programme for a class of intangible assets may be prepared for a particular engagement, this chapter outlines an internal audit programme for computer software which is now one of the most common intangible assets in business entities. It is assumed that the situation is that of a large entity that uses a fairly large variety and number of computer software programs (both internally-developed and standardised off-the-shelf programs) in its operations. This illustration further assumes that the scope of internal audit of computer software as determined by the management is fairly comprehensive and covers the following areas:

(a) Whether financial and operating records and reports contain accurate, timely and complete information relating to computer software.

(b) Whether controls over record-keeping and reporting relating to computer software are adequate and effective.

(c) Whether effective systems have been established to ensure compliance with laws, regulations, contracts, policies and procedures relating to computer software with special reference to exposure to consequences of unauthorised use of computer software.

(d) Whether the computer software is adequately protected against accidental loss, unauthorised use, loss of legal rights, etc.

(e) Whether the computer software is being used economically and efficiently.

(f) Internal auditor's evaluation of software asset management (SAM) of the entity in terms of ISO 19770-1. (The four SAM maturity levels have been described in Chapter 4.)

8.2 It is assumed that the internal audit team comprises sufficient number of persons with requisite technical proficiency, that the engagement has clear support of the top management and audit committee, and that the internal audit work is properly planned and the work of assistants is duly directed, supervised and reviewed.

8.3 The programme may be suitably modified for other classes of intangible assets (refer to Chapter 7 for specific aspects relating to major intangible assets). Similarly, it may be modified for use in the case of medium and small entities e.g., such entities may only be acquiring off-the-shelf software from vendors and not developing any software in-house.

Policy

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

(i) Whether there is a clear and enforceable policy on software and whether the policy deals with all relevant aspects including the extent of computerisation, in-house development v. acquisition, maintenance of records, assignment of responsibilities regarding software and its upgradation, retirement and disposal, misuse of entity's software and prohibition on use of pirated or unauthorised software.

(ii) Whether the policy is documented and conveyed to all concerned.

Organisational Structure

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

(i) Whether qualified persons have been assigned duties of management of computer software with well defined responsibilities.

(ii) Whether responsibilities for the following have been assigned to different persons (to the extent possible):

(a) authorisation of acquisition/ in-house development and disposals.

(b) execution of transactions relating to acquisitions and disposals.

(c) physical custody of items.

Authorisation of Acquisition / In - house Development

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

(i) Whether there exists a system of capital budgeting for computer software and evaluate its efficacy, particularly with regard to the following aspects:

(a) are proposals invited from various departments well-in-time?

(b) are proposals received in a properly laid down format which provides for complete details about the financial, commercial and technical aspects?

(c) are the proposals scrutinised by a committee consisting of qualified personnel and then a composite budget put up to the top management or governing body for approval?

(d) is the approved budget communicated in writing to various departments including the purchase department and the accounts department?

(ii) The Parameters used for evaluating a proposal for acquisition/ in-house development of a computer software and evaluate their appropriateness and adequacy. In

particular, examine whether in evaluating a proposal, a careful assessment is made of the following:

(a) the function that the software is intended to perform.

(b) how the entity will benefit from the software

(c) can an existing software be modified or upgraded to perform the desired function.

(d) availability of alternate softwares in the market that can perform same functions and their comparative evaluation in terms of cost of acquisition, cost of operation, manpower and hardware resources required for operation, ease of operation, and upgradeability.

(e) whether the software should be acquired from outside or developed in-house. This decision should be made by considering, *inter alia*, the following factors:

- availability of resources for in-house development *vs* availability of software with requisite features in the market place or degree of customisation required in the case of acquired software.

- opportunities for selling or licencing out internally developed software.

- relative ease of operation of developed *vs* acquired software.

- comparative costs–initial as well as recurring.

(iii) Whether there is a periodic comparison of capital expenditure incurred with the capital budget. In cases where the amounts actually expended indicate the likelihood of cost over-runs, whether supplementary budgets are prepared and got approved from a competent authority.

Purchase of Software

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

(i) The procedure prescribed for acquisition of software from outside and evaluate its adequacy in respect, *inter alia*, of the following:

(a) does the procedure provide for invitation of competitive bids? If not, evaluate the validity of the reasons therefor?

(b) is a list of approved vendors maintained for the purpose of inviting competitive bids? If yes:

- are the parameters for approving vendors adequate including whether the vendor is an authorised distributor or dealer of the software?
- is the list updated periodically?
- does the list show clearly whether a supplier is a related party and, if so, the nature of relationship?

(c) is the process of inviting bids appropriate?

(d) is the evaluation of bids carried out by a committee which has appropriate representation of user department and finance department apart from the department responsible for making the purchases?

(e) if the bid accepted is not one with the lowest price terms, are reasons for accepting the bid required to be documented?

(ii) The procedure in respect of placement of purchase order for computer software and evaluate its appropriateness.

(iii) The procedure in respect of receipt of software against purchase orders and evaluate its appropriateness.

(a) on receipt, is computer software checked for genuineness, e.g., where the box or the media

containing software is supposed to carry a hologram of a particular shape or appearance, is the existence of the hologram checked? Similarly, if a PC is purchased with pre-loaded operating system such as Windows XP, is proof of licence for OEM version of the software checked? (This may comprise Certificate of Authenticity, CD/DVD jewel case, documentation and end-user licence agreement.)

(b) are particulars of receipt of all computer software entered immediately in records?

In-house Development of Software

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

(i) Whether there is a separate department for development of software (including modifications to the existing ones) or is software development carried out by each user department in respect of its sphere of operations.

(ii) The systems development and documentation process and evaluate its efficacy, particularly with respect to the following aspects:

(a) is there sufficient consultation with the user groups before the technical specifications of a software proposed to be developed are finalised?

(b) apart from the user groups, are views and suggestions also sought from internal and external auditors as to audit trail and controls needed in the proposed software?

(c) are the programmes test-run and the test-run reports reviewed by the systems analyst before the programs are put into actual operation?

(d) is there adequate documentation of new computer programs? Does the documentation include flow charts, a description of the purpose of each part of the program, the detailed program, and program run instructions (specifying the nature and format of input,

the detailed operating instructions, possible errors, and the nature and format of output)?

(e) is there a strict control over program changes? Are program files 'compiled' to ensure that the computer operators cannot alter them? If a need for an alteration in a program arises, is the alteration made only with the authorisation of the systems analyst and is it properly documented? Does the documentation show the reasons for alteration, the details of alteration, the results of test-run of the altered program, and the authorisation of the systems analyst for putting the altered program in operation?

Deployment Process

8. 9 The following should be verified by the internal auditor for this purpose:

(i) Whether the systems is in place to track the software usage.

(ii) Whether the entity permits personally owned software to be installed on the entity's computers. If so, under what conditions.

(iii) The access to deployment records and to ensure that only approved users have access to the deployment summary reports.

(iv) Whether the entity has a policy to protect its software against misuse and infringement. What action is taken by the entity in case of infringement of its software by persons external or internal to the entity? Does the entity maintain a track of reported cases of infringement of software owned by it.

(v) Whether the entity enters into appropriate agreements with its employees, consultants etc., *inter alia* for ensuring that there is no illegal use of software of the entity.

(vi) Whether the entity has instituted a formal system of obtaining feed back and suggestions from the users periodically about the computer software in use:

(a) if a standardised format is used for feedback and suggestions, review whether the format is designed so

as to obtain the users' response on all relevant aspects, specially the suitability of the software for their requirements, ease of operation, extent of usage, and the users' suggestions as to modifications required.

(b) examine whether the feedback and suggestions given by the users result in appropriate action and whether such action is timely.

(c) obtain further feedback and suggestions of users through discussions with a carefully selected sample.

Use of Unauthorised Software

8.10 The internal auditor for this purpose should examine whether policy and controls aimed at preventing the use of pirated or unauthorised software are properly implemented:

(i) Obtain a listing of all work stations attached to the network. Compare the number of Client Access Licences to the number of workstations. Investigate any difference between the number of licenses and number of workstations.

(ii) Obtain a listing of all PCs/other computers. Compare the number of computers against the number of licences the unit has for basic applications (e.g., MS Word, MS Excel). Investigate any difference between the numbers.

(iii) What action is taken if use of unlicenced software is detected?

Retirement

8.11 For this purpose, the internal auditor should ascertain the policies and procedures relating to retirement, disposal, etc. of computer software and evaluate their efficacy. To this end, internal auditor should ascertain:

(i) Whether computer software is retired from use or disposed of only on the basis of written authorisation of specified managers.

(ii) Whether any legal or contractual restrictions on the ability of the entity to dispose of a computer software are duly complied with.

(iii) Whether there are proper controls over disposal of computer software, particularly with regard to invitation of quotations, approval of prices, etc.

(iv) Whether there is proper documentation of retirement or disposal of computer software and the system ensures that all such retirements and disposals are recorded in the books of account promptly.

(v) Whether the retired hardware assets are tracked in a way to enable the software on them to be reused, if possible . In such cases, the software inventory should be simultaneously updated.

(vi) Whether there is a periodical review of softwares to identify those which are no longer of any use or from which no future benefits are expected.

Record-keeping and Accounting

8.12 For this purpose, the internal auditor should ascertain what records and documents are maintained by the entity in respect of computer software and evaluate their appropriateness and adequacy.

8.13 In the case of software acquired from outside, are sufficient documents maintained to evidence the entity's ownership of, or other interest in, the computer software including agreement with the supplier (or licencing agreement), invoice of the supplier and supporting documents and evidence of payment. In this regard, pay special attention to the following:

(i) Evaluate the policies and procedures established to ensure the completeness and accuracy of licence entitlement records?

(ii) Examine whether the purchase agreement for all licence entitlements have been properly executed by each party to the transaction?

(iii) Evaluate whether entitlement records are accessible to interested parties e.g., IT operators, end-users, legal department, etc. only through approved usage rights?

8.14 In the case of software developed internally within the entity, examine the evidence of its registration with relevant authorities, where applicable.

8.15 For this purpose, the internal auditor should also examine whether the records contain sufficient details including the following:

(i) Sufficient description of the asset.

(ii) Location, i.e. the name of division, branch or department where the asset is located.

(iii) Quantity, i.e. number of units.

(iv) Original cost.

(v) Date on which the asset becomes available for use.

(vi) Subsequent expenditure on the asset that is included in its carrying amount, along with the date of incurrence of the expenditure.

(vii) Method of amortisation.

(viii) Amortisation period (or rate of amortisation).

(ix) Amount of amortisation for the period.

(x) Amount of accumulated amortisation as at the beginning and end of the period.

(xi) Particulars of impairment loss (if any) and any reversal of such impairment loss – date, amount for the period and accumulated amount as at the beginning and end of the period.

(xii) Particulars of retirement, disposal, etc. – date and amount.

(xiii) Particulars of licence.

(xiv) Particulars of registration – name of registration authority and date of registration along with period of validity of registration and date of expiry.

(xv) Particulars of renewal/maintenance fees (if any) – scheduled date(s) of payment, amount, particulars of payment(s).

(xvi) Particulars of any licence or other similar right in the asset granted to third parties.

8.16 The internal auditor should also examine whether entries are made in the aforesaid records on a timely basis.

8.17 The internal auditor should also verify whether computer software is accounted for and disclosed in the financial statements appropriately e.g., in accordance with Accounting Standard (AS) 26, "Intangible Assets". The following aspects may be particularly examined in this regard:

(i) Is the computer software recognised at cost?

(ii) Does the cost of a computer software acquired from outside comprise:

(a) purchase price, including any import duties and other taxes but excluding any trade discounts and rebates; and

(b) any directly attributable expenditure on making the asset ready for its intended use e.g., professional fees for legal services?

(iii) In the case of internally-developed computer software:

(a) is the expenditure on research phase recognised as expense when it is incurred?

(b) is the expenditure on development phase recognised as an intangible asset only when the entity demonstrates all of the following:

- technical feasibility of completing the software so that it will be available for use or sale;
- its intention to complete the software and use or sell it;
- its ability to use or sell the software;
- how the software will generate probable future economic benefits;
- availability of adequate technical, financial and other resources to complete the development and to use or sell the software; and
- its ability to measure the expenditure attributable to the software during its development reliably?

(c) does the cost of an internally generated computer software comprise only the expenditure incurred from the time when the asset first meets criteria listed above and that can be directly attributed or allocated on a reasonable and consistent basis, to creating, producing and making the software ready for its intended use?

(d) if the entity cannot distinguish the research phase from the development phase, does it treat expenditure on that project as expense in the period of incurrence?

(iv) Are the following excluded from the cost of a computer software:

(a) selling, administrative and other general overhead expenditure unless this expenditure can be directly attributed to making the software ready for use;

(b) clearly identified inefficiencies and initial operating losses incurred before software achieves planned performance; and

(c) expenditure on training the staff to operate the software?

(v) Is subsequent expenditure on a computer software after its purchase or its completion recognised as an expense when it is incurred unless:

(a) it is probable that the expenditure will enable the software to generate future economic benefits in excess of its originally assessed standard of performance; and

(b) the expenditure can be measured and attributed to the software reliably?

If the above conditions are met, the subsequent expenditure should be added to the carrying amount of the software.

(vi) Is the depreciable amount of a computer software allocated on a systematic basis over the best estimate of its useful life?

(vii) Does the amortisation period(s) of computer software appear reasonable on a consideration of various factors affecting its useful life?

(viii) Is the amortisation method used appropriate?

(ix) Is a computer software derecognised (eliminated from the balance sheet) on disposal or when no future economic benefits are expected from its use and subsequent disposal?

Safeguarding

8.18 For this purpose, the internal auditor should ascertain the procedures employed by the entity to safeguard the computer software against deliberate misuse, alteration, disposal, etc., as well as against accidental loss such as due to fire, floods or

computer virus or malfunctioning of hardware, and evaluate their appropriateness and adequacy. Among others, the following aspects should be examined:

(i) Have procedures such as the following been laid down and are these effectively in operation:

  (a) are software access rights of different users well defined and commensurate with the functions performed by them?

  (b) depending on the criticality or sensitivity of a software application, have sophisticated access control tools like passwords, smart cards, fingerprinting, voice printing, etc. been applied and are these effective?

(ii) Is the importance of maintaining the integrity of computer software and preventing its use by unauthorised persons or for unauthorised purposes made clear to computer system users and reinforced from time to time?

(iii) Are source codes, flow charts, program documentation, program run instructions, and master tapes or compact disks containing master copies of computer software kept in safe custody of computer librarian and with proper environmental controls such as air-conditioning?

(iv) Subject to any legal, regulatory or contractual restrictions in this behalf, are back-up copies made of purchased computer software?

(v) For critical or expensive software programs, is an effective procedure of off-site back-up in operation? For such software, have arrangements been made with the manufacturer or vendors to provide replacement copies in case of need?

(vi) Are documents evidencing the entity's ownership of, or other interest in, computer software kept in safe custody and are these verified physically at periodic intervals?

(vii) Has adequate insurance cover been taken against the various risks associated with ownership and use of computer software, e.g., risk of accidental loss or

destruction and legal risks? Is the renewal premium paid in time to ensure continuity of the insurance cover?

(viii) Is there a periodic verification of computer software assets? Is the procedure for such verification appropriate and adequate? Is frequency of such verification reasonable? Have internal audit's suggestions in this regard been implemented? Is a representative of internal audit part of the verification team?

Compliance with Laws, Regulations and Contractual Requirements

8.19 For this purpose, the internal auditor should ascertain the legal, regulatory and contractual requirements insofar as they are applicable to the computer software owned, maintained or used by the entity, evaluate the extent of compliance with the aforesaid requirements and determine the potential consequences of non-compliance. In particular:

(i) Obtain a general understanding of the legal and regulatory framework applicable to computer software. (As noted in chapter 2, computer software attracts the provisions of the Copyright Act, 1957. An understanding of the provisions of the Act is essential to evaluate whether or not the entity is in compliance thereof.)

(ii) Obtain an understanding of the limitations, restrictions, obligations, etc. cast upon the entity in the agreements for purchase or licencing of software entered into by it.

(iii) Based on the above understanding, the discussions with the entity's legal counsel or other relevant personnel, identify key areas of risk of non-compliance and potential consequences of non-compliance.

(iv) Ascertain whether the entity's policies and procedures address the identified risks. Carry out the following procedures in this regard:

(a) is the overall control environment within the entity conducive to securing compliance with the relevant laws, regulations and contractual requirements?

(b) are the attitudes and actions of those responsible for governance and management towards compliance with legal, regulatory and contractual requirements

- reflective of total commitment,
- moderate,
- permissive?

(c) what specific procedures have been instituted to secure compliance with relevant laws, regulations and contractual requirements and how effectively are they in operation?

(d) does the entity have a formal Code of Conduct for employees (either generally or specifically with reference to computer software). If yes:

- are the instructions relating to “do’s and dont's” such that, if followed, they would ensure compliance with relevant laws and regulations?

  (As mentioned earlier, the Copyright Act, 1957 is directly relevant to computer software. Therefore, it would be useful if the Code of Conduct includes a detailed illustrative list of what would or may tantamount to non-compliance of the Act. In framing the Code of Conduct, it should be clearly borne in mind that law is a specialised and complex discipline and, therefore, its implications may not be obvious to a user of computer software. For example, it is not uncommon to come across cases where entities purchase one (single-user) copy of a software and use it on a number of computers simultaneously without realising that they are violating the Copyright Act. Likely situations such as these should be foreseen and specifically dealt with in the Code of Conduct.)

- do induction training programmes for new employees give adequate coverage to the existence of the Code of Conduct, its principal elements, the need to comply with it and the potential consequences for the entity (and the employee

concerned) in the event of non-compliance? Are the above aspects reinforced from time to time at training programmes, through circulars, etc?

- have procedures been instituted to identify cases of non-compliance with the Code of Conduct (e.g., random checks to determine whether or not the computer software programs running on a computer are licenced) or whether discovery of such cases is only accidental?
- how are cases of non-compliance dealt with? Is action taken commensurate with the frequency and/or seriousness of non-compliance?
- in case the entity hires consultants or contractors and their actions could potentially tantamount to non-compliance by the entity with laws and regulations relating to software:
  - are adequate steps taken to create awareness among the consultants, contractors etc., about the entity's policies and procedures concerning compliance with laws and regulations and are they required to ensure compliance with them?
  - are the related agreements so drafted that the entity's exposure in the event of non-compliance is reduced as far as possible, including specific provisions requiring the counterparties to indemnify the entity for any loss or damage to it on account of their non-compliance?

8.20 The internal auditor should also ascertain whether in case of a non-compliance or potential non-compliance, a proper assessment has been made of the financial effect (fines, damages, etc.) that the situation may entail. Also ascertain whether the situation has been properly dealt with in the financial statements; for example, a potential non-compliance may warrant disclosure of a contingent liability in accordance with Accounting Standard (AS) 29, "Provisions, Contingent Liabilities and Contingent Assets".

SAM Maturity Assessment

8.21 ISO 19770-1 represents a significant initiative towards establishing a framework for managing an intangible asset like, computer software.

An entity's current software asset management (SAM) maturity is assessed as Basic, Standardised, Rationalised or Dynamic (refer Chapter 4 for a description of what each maturity level signifies).

The assessment is with reference to ten key performance indicators (KPI). Each KPI is assessed for Test of Design and Operational Effectiveness.

- Test of design effectiveness is the current state assessment of the organisational SAM process around people, process and technology.

- Test of operational effectiveness is the determination of how effectively the SAM processes are working in monitoring and inventorising the software licences being used.

8.22 In a mature SAM deployment, the software is managed by using adequate people, processes and technology during each of the stages of its life cycle, *viz*., acquisition, deployment, maintenance and retirement.

The approach to a SAM review is sought to be illustrated below with the help of a sample work paper relating to this aspect of internal audit of computer software.

ISO 19770-1 Categories	Key Competency	Risk	Current Maturity	Current State Observation	Self Assessment	Action Item to Improve Maturity	(Initial) Observation Notes
Organisational Management	**a. SAM throughout Organisation**	SAM is not being actively managed as a priority by qualified individuals.	Basic	SAM roles and responsibilities are not defined. Software tracking is not implemented throughout the organisation (in every infrastructure group).	1	For each infrastructure group within the organisation identify who has direct management responsibility for each unique SAM inventory throughout the organisation. Specifically identify: 1) all locations, 2) estimated quantity of each hardware platform at each location, 3) a functional description of each group, 4) a representative with direct responsibility for the group's SAM processes, and 5) a description of the SAM process and/or tool used for the group.	

ISO 19770-1 Categories	Key Competency	Risk	Current Maturity	Current State Observation	Self Assessment	Action Item to Improve Maturity	(Initial) Observation Notes
	b. SAM Improvement Plan	A SAM improvement plan is not approved.	Basic	There is no plan for implementing SAM; or no SAM improvement plan has been completed within the organisation with executive sponsorship and budget.	1	Develop a SAM self improvement plan with defined funding/budget which specifically defines scope, schedule, and resources for SAM.	
SAM Inventory	**a. Hardware and Software Inventory**	Inventory records are not kept or are inaccurate.	Basic	The % of total hardware and software tracked in a Configuration Management Database (CMDB) is not tracked but is less than 68%	1	Establish a centralised hardware inventory that contains between 68% and 95% of all Servers and between 68% and 95% of all PCs that have installed software owned by the entity. Establish a centralised software inventory representing products consisting of 68% to 95%	

ISO 19770-1 Categories	Key Competency	Risk	Current Maturity	Current State Observation	Self Assessment	Action Item to Improve Maturity	(Initial) Observation Notes
						of entity software spend. The software inventory should include software deployments from all hardware in the hardware inventory.	
	b. Accuracy of Inventory	Inventory records are not kept or are inacurate.	Basic	Inventory details are reconciled with the original source rarely or ad-hoc	1	Once a year or more, reconcile the centralised software asset inventory with other independent sources to verify that it accurately includes all applicable software and hardware metrics required to reconcile software deployments and software usage to licence entitlement.	

ISO 19770-1 Categories	Key Competency	Risk	Current Maturity	Current State Observation	Self Assessment	Action Item to Improve Maturity	(Initial) Observation Notes
SAM Verification	**a. Licence Entitlement Records**	Entitlement records are not kept or organised.	Basic	The % of licence entitlement in a repository is not tracked but is likely less than 68%.	1	Establish a centralized entitlement inventory for each infrastructure group or business unit. Inventory should completely and accurately include all records required to reconcile software deployments and software usage to deployment inventory.	
	b. Periodic Self Evaluation	Periodic SAM reporting is not occurring.	Basic	Deployment and entitlement reconciliation is done rarely or ad-hoc.	1	Perform a yearly (or more frequent) executive review and sign-off of SAM reports; reports should include at least a deployment and entitlement reconciliation of high risk software titles.	

ISO 19770-1 Categories	Key Competency	Risk	Current Maturity	Current State Observation	Self Assessment	Action Item to Improve Maturity	(Initial) Observation Notes
SAM Operations Management and Interfaces	**Operations Management Interfaces**	SAM tools are not in place or not integrated.	Basic	Operations Management functions generally do not use software and hardware inventories.	1	Establish policies and procedures for operations management functions (i.e., IT support, financial fixed asset tracking, security, and network administration) to each manage their inventories and track the assets they control.	
Lifecycle Process Interfaces	**a. Acquisition Process**	Software purchasing is not managed or controlled.	Standardised	The % is not tracked but is between 68% to 95%.	2	Base all software entitlement contract purchases on periodic deployment/entitlement reconciliation reports. Ensure entitlement information is communicated to IT Operations and all entitlement records are accessible to IT Operations and other organisational	

ISO 19770-1 Categories	Key Competency	Risk	Current Maturity	Current State Observation	Self Assessment	Action Item to Improve Maturity	(Initial) Observation Notes
						stakeholders (i.e., End-users, Legal, HR, Chief Intelligence Officer (CIO)) with detailed approved usage rights.	
	b. Deployment Process	Software deployment is not managed or controlled.	Standardised	The % is not tracked but is between 68% to 95%.	2	Establish a system that provides organisational stakeholders with access to software deployment summary reports and provides summary information on product usage rights. (Stakeholders with access should include Procurement, IT Operations, End-users, Legal, HR, CIO).	

ISO 19770-1 Categories	Key Competency	Risk	Current Maturity	Current State Observation	Self Assessment	Action Item to Improve Maturity	(Initial) Observation Notes
	c. Retirement Process	Software on retired machines is not being uninstalled and/or reused.	Basic	The % of hardware assets that are retired and recorded in a way to enable the software on them to be reused is not tracked but is likely less than 68%.	1	Establish a process to accurately update software inventory when hardware and software assets are retired.	