

**GUIDANCE NOTE**

**ON**

**INTERNAL AUDIT OF**

**TELECOMMUNICATION**

**INDUSTRY**



***PROFESSIONAL DEVELOPMENT COMMITTEE***



**The Institute of Cost Accountants of India**

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### FOREWORD

I am happy to note that Professional Development Committee (PD Committee) of the Institute is bringing out the Guidance Note on Internal Audit of Telecommunication Industry. Development of this Guidance Note is another effort towards equipping the members of Institute with necessary internal audit skills and also capacity building in Telecommunication Sector.

The guidance note covers sector specific issues relating to Telecommunication Industry such as special transactions peculiar to telecom industry, Audit requirements under the Reporting System on Accounting Separation Regulations, 2012 issued by TRAI, Audit of Call Data Records (CDRs), and other important areas, apart from general framework of the Internal Audit mechanism.

I acknowledge the sincere efforts of CMA Anil Dhingra of Telecom Regulatory Authority of India (TRAI), who has authored this Guidance Note and also thank CMA G R Sharma of Bharat Sanchar Nigam Limited (BSNL) for reviewing this Guidance Note.

I am thankful to CMA P.V. Bhattad, Vice President, ICAI for providing his valuable inputs to this Guidance Note. I acknowledge the contribution of CMA (Dr.) Sanjiban Bandyopadhyaya, Chairman, PD Committee and CMA (Dr.) S.R. Bhargave, Former Chairman, PD Committee and other members of the PD Committee in bringing out this Guidance Note in present form. I also compliment CMA J.K. Budhiraja, Director and his team at PD Directorate of the Institute for extending technical and administrative support in the development of this Guidance Note.

I am sure that the Guidance Note will be very useful for the members and will also guide the Telecom sector in taking its efforts forward in the area of Internal Audit.

**(CMA (Dr.) A.S. Durga Prasad)**  
14<sup>th</sup> May, 2015

**CMA (Dr.) Sanjiban Bandyopadhyaya**

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## **PREFACE**

*Telecommunication Sector in India has emerged as fastest growing sector and registered phenomenal growth during the past few years and has become second largest telephone network in the world, only after China. Like all business entities there is a strong need for audit of business entities involved in telecom business mainly to assess the risks associated with Telecom Sector Companies and the techniques for identifying and controlling such risks, develop methodologies to ensure the adequacy of system controls operating and systems to ensure adequate internal control framework over financial reporting of Telecom Sector Companies and ensure revenue assurance and compliance with the applicable laws and regulations, policies and procedures by the telecom companies. The Guidance Note on Internal Audit of Telecommunication Industry being released by the Institute encompasses all such aspects and provides the guidance on internal audit techniques and tools relating to Telecom Sector.*

*I would like to acknowledge tireless efforts of CMA Anil Dhingra of Telecom Regulatory Authority of India (TRAI), the expert who has prepared the Guidance Note of Internal Audit of Telecommunication Industry and thank CMA G R Sharma of Bharat Sanchar Nigam Limited (BSNL) for reviewing this Guidance Note.*

*CMA J.K. Budhiraja, Director (Professional Development) and his team of Professional Development Directorate have also contributed in providing technical inputs to expert to bring the Guidance Note in present form.*

*I am very much thankful to CMA (Dr.) Sanjay R. Bhargava, Immediate Past Chairman of Professional Development Committee and other members of the Professional Development Committee for guiding and providing valuable contributions and providing necessary inputs in culminating the material for the benefit of the members.*

*I sincerely thank CMA (Dr.) A.S. Durga Prasad, President and CMA P.V. Bhattad, Vice President of the Institute for providing guidance and able leadership connected with the Professional Development Committee.*

*I am quite sure that the Guidance Note would be very useful to Cost Accountants and industry at large.*

**CMA (Dr.) Sanjiban Bandyopadhyaya**  
Chairman, Professional Development Committee

Date: 14<sup>th</sup> May 2015

**ACKNOWLEDGMENTS**

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CMA Rakesh Singh	Member
CMA M. Gopalakrishnan	Member
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CMA. J.K. Budhiraja	Director (PD) and Secretary to PD Committee

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## Chapter 1 Internal Audit- An Introduction

### 1.1 Definition of Internal Audit

The need for internal audit is to provide independent assurance that the organization's risk management, governance and internal control processes are operating effectively and efficiently. The adequacy of internal audit and internal control is prerequisite for the efficient management and control of an organization.

Internal audit is a significant tool in evaluating the adequacy of system controls and points out the state of compliance with the applicable laws and regulations, policies and procedures and ensures risk management and promote efficiency.

The term Internal Audit has been defined by the **Institute of Internal Auditors (IIA)** as under:

*"Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes".*

### 1.2 Need and Basic Objectives of Internal Audit

Internal auditing encompasses to the following steps:

- i. Monitor, assessing, and analyzing organizational risk and controls; and
- ii. Review and confirming information and compliance with policies, procedures, and laws.
- iii. Assure to the Board, the Audit Committee, and Executive Management that risks are mitigated and that the organization's corporate governance is strong and effective. Assurance of compliance with policies, plans, laws, and regulations;
- iv. Safeguard the assets of the business entity;
- v. Report instances of suspected or proven financial irregularities
- vi. Recommend economical and efficient use of entity resources by pursuing established corporate processes, policies, and procedures
- vii. Make recommendations for improving processes, policies and procedures where feasible.

### 1.3 Key Steps for an Internal Audit

While executing an internal audit it is necessary for the person Incharge of internal audit to take following five steps before start of an internal audit:



- a) **Audit schedule:** The audit schedule is a program to chalk out a timetable after discussions with the auditee before taking up an internal audit and identify the functions/ areas in the organization to be audited. The audit Incharge guides the effort to ensure that the different processes are included in the audit. The audit schedule gives an insight about type of resources needed for the audit. A well-defined audit schedule yields the desired results within the scheduled time frame of audit.
- b) **Audit plan:** A well-defined audit plan covers scope of audit, time frame of audit, objectives and agenda. The plan provides a list of events of the audit from its commencement to its completion. It also provides the specific processes and sub-processes which will be audited, when will be audited and by whom including the core areas that will be audited in each segment / function.
- c) **Audit management:** The audit in-charge shall manage the overall audit process including supervising and communicating any changes/ modifications in the audit plan, sharing the audit progress with the Board, the Audit Committee, and Executive Management or to such other person who is authorized. The audit in-charge shall also, ensure that these are carried out as per the audit schedule and stays on track. In case of any non-conformity, the audit in-charge shall ensure that these are logical, valid and clear. Any sort of conflicts shall be addressed and solved constructively by ensuring that the entire audit is conducted professionally and ethically and completed within the stipulated time.
- d) **Audit Verification:** The department or function or activity, subject to audit is usually supposed to respond to audit nonconformities by the mutually agreed date. The response should include identification of the root cause, planned corrective action and a date when the nonconformities shall be removed. The audit in-charge reviews the responses to ensure that the planned corrective actions are adequate. When the Project is undertaken by the auditee to eliminate the root cause or fails to identify root cause or proposes a corrective action related to it, the audit in-charge can reject the response and communicate causes /reasons to the manager-of-the-process as to why the action taken on the matter by the auditee is not satisfactory. The second stage of verification occurs when the manager-of-the-process informs the audit in-charge that corrective action has been taken. Based on the action taken report of auditee the audit in-charge or his team member verifies that the corrective action has been taken and the root cause of the original nonconformity has been removed.
- e) **Audit reporting:** The Board, the Audit Committee, and Executive Management or the person who is authorized is presented with the written audit observations/ suggestions and informed about the issues which needs action on the part of the Board, the Audit Committee, and



Executive Management etc on certain non-conformities which guides the basis for discussion of the audit results and when remains unattended forms part of the audit report.

Thus Internal Audit is a tool to provide an independent assessment and view of state of the business, monitors risks and ensures compliance across organizational and the use of system software make the internal audit more effective and successful. However an effective common framework is required to carry out the Internal Audit for all types of audits - financial, risk, operations, internal, suppliers, and compliance. The auditing priorities are determined for the enterprise-level risk-management.

#### **1.4: Principles of Internal Audit**

##### **COMMITTEE OF SPONSORING ORGANIZATIONS, (COSO) PRINCIPLES OF INTERNAL CONTROL**

*“Internal control is broadly defined as a process, affected by an entity’s board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives.”*

*“While internal control is a process, its effectiveness is a state or condition of the process at one or more points in time.”*

An internal control system, no matter how well conceived and operated, can provide only reasonable — not absolute— assurance to management and the board regarding achievement of an entity’s objectives. The likelihood of achievement is affected by limitations inherent in all internal control systems. These include the realities that judgments in decision-making can be faulty, and the breakdowns can occur because of simple error or mistake.

The Internal control systems operate at different levels of effectiveness which can be judged in following three categories, where the board of directors and management has reasonable assurance that they:

- understand the extent to which the entity’s operations objectives are being achieved.
- believe that the published financial statements are being prepared reliably.
- believe that the applicable laws and regulations are being complied with scrupulously by the organization.

COSO’s internal control framework describes internal controls that consist of five inter-related components. These are generally called “layers” and controls within each layer must be included in management’s assessment. The five layers described by COSO are:

**a. Control Environment:** The control environment sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control e.g., providing discipline and structure. Control environment comprises integrity, ethical values, and competence of the entity’s people; management’s philosophy and operating style; management system



that assigns authority and responsibility, organizes and develops its people; and the attention and direction provided by the board of directors.

**b. Risk Assessment:** Every entity faces a variety of risks from external and internal sources that must be assessed. A precondition to risk assessment is establishment of objectives, linked at different levels and internally consistent. Risk assessment is the identification and analysis of relevant risks that may hinder the achievement of the objectives and forming the basis to determine how the risks can be managed. Because economic, industry, regulatory, and operating conditions will continue to change, therefore mechanisms are needed to identify and deal with the special risks associated with such changes.

**c. Control Activities:** Control activities are the policies and procedures that help ensure management directives are carried out. They help in ensuring that necessary actions are taken to address risks associated with attaining the entity's objectives. Control activities occur throughout the organization, at all levels and in all functions. Control activities are range of diverse activities such as approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets and delegation of duties.

**d. Information and Communication:** This is essential that the pertinent information must be identified, captured and communicated in a form and time frame that enable people to carry out their responsibilities. The information system should produce reports containing operational, financial, and compliance-related information that make possible to run and control the business. The internal auditors deal not only with internally generated data, but also includes information about external events, activities, and conditions necessary to informed business decision-making and external reporting.

Effective communication must occur in broader areas, flowing down, across, and up the organization. All personnel must receive a clear message from top management that responsibilities must be taken seriously by the middle and lower management level and they must understand their own role in the internal control system, as well as how individual activities relate to the work of others. They must have a means of communicating significant information upstream. In the organization effective communication not only within the organization but also with external parties, such as customers, suppliers, regulators and shareholders. They must understand their own role in the internal control system, as well as how individual activities relate to the work of others. They must have a means of communicating significant information upstream. It is essential to have effective communication within the organization not only the upstream but also downstream communications.

**e. Monitoring:** Internal control systems need to be monitored — a process that assesses the quality of the system's performance over time. This is accomplished through ongoing monitoring activities, separate evaluations, or a combination of the two. Monitoring occurs in



the course of operations, includes regular management and supervisory activities, and other actions personnel take in performing their duties. The scope and frequency of separate evaluations will depend primarily on an assessment of risks and the effectiveness of ongoing monitoring procedures.

### **1.5: Internal Audit Strategy and Approach**

There are several different approaches to Internal Audit. International best practice suggests that systems audit is the most effective way of Internal Audit and can add value to an organization. However, it is considered necessary for Internal Audit to complement systems audit with a pre-audit approach. If a pre-audit approach is adopted the Head of Internal Audit, the Audit Committee and the CFO/CEO should discuss that to what extent it is necessary. While discussing the internal audit the audit incharge should ensure that Internal Auditors should spend their time judiciously on pre-audit work.

The internal audit approach assists in assessing and improving the effectiveness of the organization's internal control system. Where internal controls are not adequate and reliable Internal Audit should make practical recommendations to ensure that these controls are improved. Internal Audit evidence should be adequate to meet the objectives of Audit assignments.

The prime purpose of a systems Audit should be to evaluate the extent to which the system may be relied upon to ensure that the objectives of the system are met.

Internal Auditors should be satisfied with the nature, adequacy and relevance of Audit evidence before placing reliance on that evidence. Information should be collected analyzed and documented by the use of appropriate Audit techniques. The production of Audit evidence should be supervised and reviewed by the Head of Internal Audit. To meet an acceptable standard the evidence should be sufficiently adequate and convincing to the extent that a prudent, informed person would be able to appreciate how the Auditor's conclusions were reached.

Internal Audit should also complement its approach with other techniques, e.g.:

- Performance auditing
- Control self assessment
- Advice and assistance on control issues
- Helping with risk management.

Conclusions are the Internal Auditor's evaluations of the effects of the findings on the particular system reviewed. The internal auditors should:

- Put the findings in perspective based on the overall implications and significance of the weaknesses identified



- Identify the extent to which the system's control objectives are being achieved and the degree to which the internal control should ensure that the goals and objectives of the organization are accomplished effectively and efficiently.

Management and Internal Auditor should agree to the responsibility of audit and target dates for implementation of agreed recommendations. The responsibility for final editing of Audit reports should remain with the Head of Internal Audit who should always retain the right to issue reports without further editing.

The internal Auditor should periodically follow up Audit reports to review and test the implementation of agreed Internal Audit recommendations. Follow-up activity is the process by which Internal Audit confirms that agreed recommendations have been implemented by line managers.

The Head of the Internal Audit should submit to the CFO/CEO and Audit Committee, at agreed intervals, a report of Internal Audit activity and results. The report should compare actual Internal Audit activity against the annual Internal Audit plan and should clearly indicate the extent to which the total Internal Audit needs of the organization have been met. In the annual Internal Audit Report the Head of the Internal Audit should give a formal opinion to the CFO/CEO and Audit Committee on the extent to which reliance can be placed on the organization's internal control system. The attention of the CFO/CEO and Audit Committee should be drawn to any major Internal Audit findings where action appears to be necessary but has not been initiated.

### **1.6 Terms of Engagement of Internal Auditor**

Before commencement of internal audit, the internal auditor and the Board of Directors or a relevant Committee (auditee) should agree on the terms of engagement. Terms of engagement should be approved by the Board of Directors or a relevant Committee or such other person(s) as may be authorized by the Board in this behalf. Terms of engagement should contain a statement in respect of the scope of internal audit engagement and should clearly indicate the responsibility and area of coverage of the entity as well as the internal auditor.

Terms of engagement provide the internal auditor with requisite authority, including unrestricted access to all departments, records, property and personnel and authority to call for information from concerned personnel in the organization.

The Terms of engagement should clearly mention that internal auditor would not be involved in the preparation of the entity's financial statements. It should also be made clear to the Board of Directors or a relevant Committee or such other person(s) as may be authorized by the Board that the internal audit would not result in the expression of an opinion or any other form of assurance on the entity's financial statements or any part thereof.



The internal auditor should have full authority on his processes/ hardware/ systems and audit tools he may use in course of performing internal audit. It should be clear that the ownership of working papers rests with internal auditor and not the entity, however its use shall be limited to the internal audit of the entity or matter relating to it or there is a statutory or a regulatory requirement to do so. It should contain a statement that the internal audit engagement would be carried out in accordance with high professional standards and ethics applicable to such audit.

The engagement letter of the internal auditor should contain a condition that the report of internal auditor should not be distributed or circulated by the entity or the internal auditor to any party other than that mutually agreed between the internal auditor and entity unless there is a statutory or a regulatory requirement to do so.

The engagement letter of the internal auditor should indicate that the internal auditor would be compensated, including any out of pocket expenses, travelling expenses, taxes etc. for the services rendered by the internal auditor including the audit team members.

### **1.7 Independence of Internal Auditor**

An independent internal audit function is widely recognized as an integral part of an entity's strategic objectives, corporate governance and risk management of its business activities. Internal auditor's role is to evaluate the adequacy and effectiveness of systems and processes of an entity and to identify and manage risks present in conducting business activities.

Professional internal auditors are required to be independent of the business activities of the entity to which they audit. The internal auditor should also be impartial and free of any interest which is incompatible to integrity and objectivity and inform the entity (auditee) of any personal or external factors that impede or likely to impede the independence and objectivity if required remedial action can be taken.

Generally the internal auditors are part of company management and paid by the company. The internal audit activity of the entity is basically reviewing the matters which are critical to the entity due to the oversight of management's activities. The internal auditors should also take reasonable professional care in specifying evidence required, in gathering and evaluating the evidence its reporting in the findings. They need to remain alert to the instances that could indicate errors, fraud, etc. To provide independence, most Internal auditors report to the Chairman of Board or the chairman of the Audit Committee or some other person authorized by the management of the entity.

While evaluating the adequacy and effectiveness of systems and processes of an entity, the internal auditor should act independent of the business activities and be honest and sincere to the assignment, unbiased and should not compromise integrity, objectivity and hold a neutral position within the



organization while discharging his duties as an internal auditor of the entity.

### **1.8 Legal Requirement for Internal Audit**

The compliance with the laws of the home country as well as the laws of the foreign country for existence of businesses in India and abroad is a critical factor. As per the legal obligation / requirement under different statutes in India and abroad a Company shall have internal audit of its accounts carried out, at such interval and in such manner as may be specified .

### **Securities Contracts (Regulation) Act, 1956 (SCRA)**

#### **Clause 49 of Listing Agreement: Corporate Governance**

In case of the listed companies as per the Clause 49 of Listing Agreement, the audit committee should be reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure, coverage and frequency of internal audit.

### **Companies Act 2013**

The constitution and functioning of the Audit Committee has been explained in **Section 177** of the Companies Act 2013, which *inter alia* provides as under:

177. (1) *The Board of Directors of every listed company and such other class or classes of companies, as may be prescribed, shall constitute an Audit Committee.*

(2) *The Audit Committee shall consist of a minimum of three directors with independent directors forming a majority:*

*Provided that majority of members of Audit Committee including its Chairperson shall be persons with ability to read and understand, the financial statement.*

(3) *Every Audit Committee of a company existing immediately before the commencement of this Act shall, within one year of such commencement, be reconstituted in accordance with sub-section (2).*

(4) *Every Audit Committee shall act in accordance with the terms of reference specified in writing by the Board which shall, inter alia, include,—*

- (i) the recommendation for appointment, remuneration and terms of appointment of auditors of the company;*
- (ii) review and monitor the auditor's independence and performance, and effectiveness of audit process;*
- (iii) examination of the financial statement and the auditors' report thereon;*



- (iv) approval or any subsequent modification of transactions of the company with related parties;*
- (v) scrutiny of inter-corporate loans and investments;*
- (vi) valuation of undertakings or assets of the company, wherever it is necessary;*
- (vii) evaluation of internal financial controls and risk management systems;*
- (viii) monitoring the end use of funds raised through public offers and related matters.*

*(5) The Audit Committee may call for the comments of the auditors about internal control systems, the scope of audit, including the observations of the auditors and review of financial statement before their submission to the Board and may also discuss any related issues with the internal and statutory auditors and the management of the company.*

*(6) The Audit Committee shall have authority to investigate into any matter in relation to the items specified in sub-section (4) or referred to it by the Board and for this purpose shall have power to obtain professional advice from external sources and have full access to information contained in the records of the company.*

*(7) The auditors of a company and the key managerial personnel shall have a right to be heard in the meetings of the Audit Committee when it considers the auditor's report but shall not have the right to vote.*

*(8) The Board's report under sub-section (3) of section 134 shall disclose the composition of an Audit Committee and where the Board had not accepted any recommendation of the Audit Committee, the same shall be disclosed in such report along with the reasons thereof.*

**Section 134 (3) (n)** states that the Board of Directors' Report would include a statement indicating development and implementation of risk management policy for the Company including identification therein of elements of risk, if any, which in the opinion of the Board may threaten the existence of the Company.

As per **Section 134 (5) Directors' Responsibility Statement** referred to in clause (c) of sub-section (3) shall state that— ... (b) *the directors had selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view ...;* (c) *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; .. (e) the directors, in the case of a listed company, had laid down internal financial controls to be followed by the company and that such internal financial controls are adequate and were operating effectively.* **Explanation.**—For the purposes of this clause, the term “internal financial controls” means the policies and procedures adopted by the company for ensuring the orderly and efficient conduct of its business, including adherence to company's policies,



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*the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information; (f) the directors had devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.*

**Section 138(1)** makes internal audit mandatory and provides that such class or classes of companies as may be prescribed shall be required to appoint an internal auditor, who shall either be a chartered accountant or ***a cost accountant***, or such other professional as may be decided by the Board to conduct internal audit of the functions and activities of the company.

The class or classes of companies have been defined under the **Companies (Accounts) Rules, 2014** issued under Section 138(1) as follows:

**Rule 13. Companies required to appoint internal auditor:** (1) *The following class of companies shall be required to appoint an internal auditor or a firm of internal auditors, namely:-*

- a. every listed company;*
- b. every unlisted public company having-*
  - (i) paid up share capital of fifty crore rupees or more during the preceding financial year; or*
  - (ii) turnover of two hundred crore rupees or more during the preceding financial year; or*
  - (iii) outstanding loans or borrowings from banks or public financial institutions exceeding one hundred crore rupees or more at any point of time during the preceding financial year; or*
  - (iv) outstanding deposits of twenty five crore rupees or more at any point of time during the preceding financial year; and*
- c. every private company having-*
  - (i) turnover of two hundred crore rupees or more during the preceding financial year; or*
  - (ii) outstanding loans or borrowings from banks or public financial institutions exceeding one hundred crore rupees or more at any point of time during the preceding financial year.*

*The Audit Committee of the company or the Board shall, in consultation with the Internal Auditor, formulate the scope, functioning, periodicity and Methodology for conducting the internal audit.*

**Section 138(2)** provides that The Central Government may, by rules, prescribe the manner and the intervals in which the internal audit shall be conducted and report to the Board.

**Under Section 144** *an auditor shall not provide any of the following services (whether such services are rendered directly or indirectly to the company or its holding company or subsidiary company, namely:—*

- (a) accounting and book keeping services;*
- (b) internal audit;*
- (c) design and implementation of any financial information system;*
- (d) actuarial services;*
- (e) investment advisory services;*
- (f) investment*



*banking services; (g) rendering of outsourced financial services; (h) management services; and (i) any other kind of services as may be prescribed by the Central Government.*

## **Sarbanes Oxley Act of 2002**

### **Corporate Responsibility for Financial Reports (Under Section 302 of Sarbanes Oxley Act of 2002).**

**(a) Regulations Required.**—The Commission shall, by rule, require, for each company filing periodic reports under section 13(a) or 15(d) of the Securities Exchange Act of 1934 [15 U.S.C. 78m, 78o(d)], that the principal executive officer or officers and the principal financial officer or officers, or persons performing similar functions, certify in each annual or quarterly report filed or submitted under either such section of such Act that—

(1) the signing officer has reviewed the report;

(2) based on the officer’s knowledge, the report does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which such statements were made, not misleading;

(3) based on such officer’s knowledge, the financial statements, and other financial information included in the report, fairly present in all material respects the financial condition and results of operations of the issuer as of, and for, the periods presented in the report;

(4) the signing officers—

(A) are responsible for establishing and maintaining internal controls;

(B) have designed such internal controls to ensure that material information relating to the issuer and its consolidated subsidiaries is made known to such officers by others within those entities, particularly during the period in which the periodic reports are being prepared;

(C) have evaluated the effectiveness of the issuer’s internal controls as of a date within 90 days prior to the report; and

(D) have presented in the report their conclusions about the effectiveness of their internal controls based on their evaluation as of that date;

(5) the signing officers have disclosed to the issuer’s auditors and the audit committee of the board of directors (or persons fulfilling the equivalent function)—

(A) all significant deficiencies in the design or operation of internal controls which could adversely affect the issuer’s ability to record, process, summarize, and report financial data and have identified for the issuer’s auditors any material weaknesses in internal controls; and

(B) any fraud, whether or not material, that involves management or other employees who have a



significant role in the issuer's internal controls; and

(6) the signing officers have indicated in the report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

**(b) Foreign re-incorporations have no effect.**—Nothing in this section 302 shall be interpreted or applied in any way to allow any issuer to lessen the legal force of the statement required under this section 302, by an issuer having reincorporated or having engaged in any other transaction that resulted in the transfer of the corporate domicile or offices of the issuer from inside the United States to outside of the United States.

**(c) deadline**—The rules required by subsection (a) shall be effective not later than 30 days after the date of enactment of this Act.

### **Management Assessment of Internal Controls (Under Section 404 of Sarbanes Oxley Act of 2002).**

**(a) Rules Required.**—The Commission shall prescribe rules requiring each annual report required by section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) to contain an internal control report, which shall—

- (1) state the responsibility of management for establishing and maintaining an adequate internal control structure and procedures for financial reporting; and
- (2) contain an assessment, as of the end of the most recent fiscal year of the issuer, of the effectiveness of the internal control structure and procedures of the issuer for financial reporting.

**(b) Internal Control Evaluation and Reporting.**—With respect to the internal control assessment required by subsection (a), each registered public accounting firm that prepares or issues the audit report for the issuer shall attest to, and report on, the assessment made by the management of the issuer. An attestation made under this subsection shall be made in accordance with standards for attestation engagements issued or adopted by the Board.

Any such attestation shall not be the subject of a separate engagement.



## Chapter 2

### Documentation and Working Papers

Internal audit documentation covers the internal audit charter, audit plan, type and extent of audit procedures performed, timings and the conclusions drawn from the evidence obtained. Proper documents are the basis for the planning and performing the internal audit. Documents provide the evidence of the work of the internal auditor. Internal audit documentation should be detailed and comprehensive to obtain an overall understanding of the audit.

The internal auditor should document the issues that are important in providing evidence and support his findings or in preparation of the report. In addition, the working papers also help in planning and carrying out the internal audit, review and control the work and most importantly, provide evidence of the work performed to support his observations/ findings in the report.

Need for Internal audit documentation:

- I. Aid in planning and executing the internal audit.
- II. Aid in review of the internal audit work.
- III. As evidence of work performed during the internal audit to support the internal auditor's opinion and findings.
- IV. Assistance to third party while reviewing the internal auditor's work.
- V. Can be used as evidence to verify that the internal audit was performed in accordance with the scope of work as mentioned in the engagement letter.

The internal audit documentation should cover all the important aspects of an engagement viz., engagement acceptance, engagement planning, risk assessment and assessment of internal controls, evidence obtained and examination/ evaluation carried out, review of the findings, communication and reporting and follow up. 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.

Internal audit documentation should be designed in accordance with requirement of specific audit and properly maintained to meet the requirements and circumstances of each audit. All significant issues which require special attention, together with internal auditor's observation thereon should be appropriately included in the internal audit documentation.

Properly designed and maintained internal audit documentation enables the reviewer to understand:

- a) the nature and extent of audit procedures performed and applicable legal and regulatory requirements;
- b) timings of the audit



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- c) the outcome of audit procedures and audit evidence obtained;
- d) important issues arising during the course of audit and conclusions drawn; and
- e) terms and conditions of an internal audit engagement, scope of work, reporting requirements and any other special conditions relating to conduct of the internal audit.
- f) documentary record of the work performed.

### **Use of Working Papers as evidence**

The internal audit Documents provide the evidence of the work of the internal auditor and are important in providing evidence to his opinion or the findings. Following are the advantages of having sufficient and properly maintained working papers:

- i. Assistance in the performance of the audit.
- ii. Forming basis of the auditor's observations/ findings in his report.
- iii. Providing information for the report.
- iv. Aiding the review and evaluation of the work done.
- v. Aiding cross referencing between audit evidence and decision taken by the internal auditor.
- vi. Providing record of work performed.

The internal auditor should formulate policies as to the custody and retention of the internal audit documentation within the framework of the overall policy of the entity in relation to the retention of documents and in accordance with the practices prevailing in the profession.

***Note: For more details, the readers may refer to Cost Audit and Assurance Standard (CAAS 102) on "Cost Audit Documentation" issued by the Institute of Cost Accountants of India.***



## Chapter 3

### Planning an Internal Audit and Audit Programme

While carrying out the internal audit of an entity, an internal audit plan is required to be formulated. Internal audit plan is a document which defines the scope, coverage resources and duration of audit required for an internal audit of an organization over a defined time period. The internal auditor should formulate the plan in consultation with those charged with governance e.g. board, audit committee or any other person authorized by the management and develop document for each internal audit engagement to conduct the audit in an efficient and time bound manner. The formulation of internal audit plan ensures that proper attention is given to the significant areas of internal audit and identification of potential problems, use of techniques and available skills judiciously so that the audit assignment can be completed within stipulated time and as per the terms of engagement.

The internal audit plan should be comprehensive and clearly defined so that the objectives of the internal audit can be achieved efficiently and effectively. The internal audit plan should be consistent with the desired goals and objectives of the internal audit function as well as the goals and objectives of the organization. It should be ensured that the plan is consistent with the terms of the engagement and should also reflect the risk management strategy of the entity.

The internal audit Planning involves developing a plan for taking action to cover the expected scope and conduct of audit and developing an audit program consisting the nature, extent of audit procedures and timing. Audit Planning is a continuous exercise. An audit plan should be continuously reviewed by the internal auditor to carry out any modifications required to bring the same in line with the changes, if any, in the scope of audit or change in the audit environment of the organization. However, any major modification to the internal audit plan should be done only after consideration and in consultation with the board, audit committee or any other person authorized by the management if so required. Any modification in the internal audit plan should be documented by the internal auditor, if such modifications are significant.

The internal audit plan should be drawn keeping in view the size and nature of the business of the entity. While developing the internal audit plan, the internal auditor should have regard to the objectives of the internal audit engagement as well as the resources and time, keeping in view the size of the entity.

While drafting an internal audit plan following aspects should be covered:

- i. Provide information about the legal and regulatory framework within which the entity operates.
- ii. Provide information about of the entity's accounting and internal control systems and policies.
- iii. Assessment of the effectiveness of the internal control procedures in practice in the entity.



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- iv. Documentation of the scope, extent of procedures to be performed and timeline for completion of assignment.
- v. Assessment about the activities requiring special focus on the critical activities as well as on their materiality and their effect on operations of the organization.
- vi. Identifying staff which is most suitable for the assignment undertaken.
- vii. Provide information about the identification of persons assigned with reporting responsibilities.

The internal audit plan should also envisage about the benchmarks against which the actual results of the activities can be measured, the time spent, the actual cost incurred on completion of the assignment. The form and content of the audit plan and the extent of its details would depend on the nature, business environment and size of organization however, the internal audit program should be so designed that it facilitates in achieving the desired objectives of the engagement.

The internal auditor should prepare a formal internal audit program listing the procedures essential for achieving the objective of the internal audit plan and ensure that the internal audit is carried out in accordance with the standards of Internal Audit.

***Note: For more details, the readers may refer to Cost Audit and Assurance Standard (CAAS 101) on “Planning an Audit of Cost Statements” issued by the Institute of Cost Accountants of India.***



## **Chapter 4**

### **Audit Sampling**

In the modern business environment, the internal audit is critical and complicated process as large number of transactions are carried out by the business entities which makes the task of internal audit difficult and time consuming so the internal auditors have to be cautious and careful because there is a time limit for completing the audit assignments as well as they have to take care about quality audit besides proving their professional efficiency to handle effectively the internal audit assignment of big business entity.

In modern age, the auditors seldom perform audit checks on all items of an account or transactions for the purpose of assessment of the population (an account balance or transactions). Consequently, the evidential matter obtained for an account balance or transactions is based upon the reasoning that the characteristics found in a representative sample of a population (an account balance or transactions) are reasonably true representation of characteristics to be found in the population from which such sample is taken.

Audit sampling means the application of audit procedures to less than 100% (all) of the items in class of transactions to enable the internal auditor to obtain and evaluate audit evidence about some characteristic of the items selected in order to form a conclusion concerning the population.

When designing an audit sample, the internal auditor should consider the following:

- (i) the specific audit objectives,
- (ii) time limit of audit
- (iii) the population from which the internal auditor takes sample,
- (iv) the sample size and,
- (v) use of sampling technique (statistical vs. non statistical sampling).

Therefore, while deciding about picking an audit sample, the internal auditor has to ensure that testing the sample will provide appropriate audit evidence. Therefore when determining the sample size, the internal auditor should consider sampling risk, the tolerable error, and the expected error. The internal auditor should select sample items in such a way that the sample can be expected to be fair representative of the population by ensuring that all items or sampling units in the population have an opportunity of being selected.

Despite sampling being unavoidable in most of the audits, it is one area which is a challenge for the auditors and many auditors struggle with as choosing the most appropriate sampling method, picking the appropriate and adequate audit sample, testing the sample and then evaluating the results of the audit sample to ensure that it yields the desired results.

The internal auditor should evaluate the sample results to determine whether the assessment of the relevant characteristics of the population is confirmed or whether it needs to be revised.



## **Chapter 5**

### **Audit Evidence**

While compiling suitable and adequate evidence, the internal auditor should assess whether he has obtained adequate and appropriate audit evidence to draw his conclusions or form an opinion or have a basis of his findings in accordance with the terms of the engagement.

During the internal audit of an entity / department/ function/ activity, the internal auditor draws conclusions or form an opinion with regard to the key issues and areas of concern, significant control lapses, weaknesses / failures in the system or procedures, the internal auditor shall make modifications in the existing in the system or procedures or apply additional audit procedures which in his opinion are necessary to resolve the issue. The internal auditor generally assesses whether the internal audit evidence obtained from one source is inconsistent with that obtained from another. Where the internal auditor has doubts over the reliability of information to be used as internal audit evidence, he should take utmost care that his conclusion or opinion is based on consistent evidence.

The internal auditor can obtain evidence by performing the following procedures:

- a. Inspection and verification of information / data / record
- b. Observation
- c. Inquiry and confirmation
- d. Assessment, findings and computation
- e. Analysis and conclusion

During the course of internal audit, the internal auditor should have / collect all the evidence that he considers necessary for the expression of his opinion. Professional skill and judgment is also required to determine the nature and amount of audit evidence required to draw his conclusions or form an opinion or have a basis of his findings. In this regard, the internal auditor should consider:

- i. Issue or activity, subject to audit;
- ii. materiality / impact of possible lapses/ errors / frauds;
- iii. degree of risk of lapses/ errors / frauds;
- iv. probability of the error occurring;
- v. reliability; and
- vi. appropriateness and support to draw conclusion or to form an opinion or have a basis of findings



### **Use of Working Papers as Evidence**

The internal auditor should document the working papers that he considers important in providing evidence to his opinion or the findings. Advantages of having sufficient and properly maintained working papers include the following:

- a. Aid in the performance of the audit.
- b. Record of work done.
- c. Basis of the internal auditor's observations/ findings in his report.
- d. Input for the report.
- e. Aid in cross referencing between audit evidence and opinion taken by the internal auditor.
- f. Aid in the assessment and evaluation of the work done

Thus while preparing the report, the internal auditor should have suitable and relevant working papers as audit evidence to enable him to draw reasonable conclusions based on such documentary evidences.



## **Chapter 6**

### **Analytical Procedures**

Analytical procedures help in an efficient and effective assessment of information collected during the course of internal audit. The internal auditor should ascertain that analytical procedures developed by him should be applied during the course of internal audit of an organization are effective and yielding the expected results. The application of analytical procedures is an instrument for risk assessment procedures at the planning and overall review stages of the internal audit.

Certain analytical techniques need to be developed for execution of internal audit processes. Analytical procedures means the analysis of significant ratios and trends, including the resulting investigation of fluctuations and relationships in both financial and non-financial data that are inconsistent with other relevant information or which deviate significantly from predicted amounts. The application of analytical procedures in the internal audit help the internal auditor to arrive at the conclusion as to whether the systems, processes and controls are robust, operating effectively and are consistent with the expectation of internal auditor about the result of the business.

The analytical procedures are useful tool to identify significant deviations or the irregularities or the inconsistencies with other relevant information, the internal auditor should investigate and obtain adequate explanations and appropriate corroborative evidence. The examination and evaluation can include inquiries from management and the application of other auditing procedures until the internal auditor is satisfied that the results or relationships are sufficiently explained. Unexplained results or relationships could be indicative of a precarious condition such as a potential error, irregularity, or illegal act. Results or relationships that have not been sufficiently explained should be communicated to the appropriate levels of management. Thus based on the outcome of the analytical procedure the internal auditor based on analytical procedures can recommend appropriate courses of action, depending on the circumstances to the management of the company.



## Chapter 7

### Accounting System and Internal Control

#### Introduction

While the management is responsible for establishment and maintenance of appropriate internal control and risk management systems, the role of the internal auditor is to suggest improvements to those systems. For this purpose, the internal auditor should:

- (i) Obtain an understanding of the risk management and internal control framework established and implemented by the management.
- (ii) Perform steps for assessing the adequacy of the framework developed in relation to the organizational set up and structure.
- (iii) Review the adequacy of the framework.
- (iv) Perform risk-based audits on the basis of risk assessment process.

Internal auditor may, however, also undertake work involving identification of risks as well as recommend design of controls or gaps in existing controls to address those risks.

#### Internal Control System

An internal control system is crucial to the successful functioning of any enterprise. It refers to the policies and procedures as well as the attitude of the management to assist in achieving the following overall objectives of the management:

- (i) Orderly and efficient conduct of the business
- (ii) Adherence to management's policies and directives
- (iii) Safeguarding assets
- (iv) Prevention and detection of frauds and errors
- (v) Accuracy and completeness of the accounting records
- (vi) Timely preparation of reliable financial information
- (vii) The absence, inadequacy or malfunctioning of the internal control system could, therefore, have adverse results.
- (viii) To be able to effectively help the management achieve its above mentioned objectives, it is essential that the internal control system has the following elements:
  - a) Integration with the risk management policy of the entity.
  - b) Constant monitoring of various activities and functions.
  - c) Identification and analysis of variances.
  - d) Determination and implementation of corrective action.



- e) Revision of objectives and norms where needed and where supported.

In addition, the internal controls must also satisfy the three basic criteria:

- (i) they must be appropriate, i.e., the right control in the right place and commensurate to the risk involved;
- (ii) they must function consistently as planned throughout the period, i.e., be complied with carefully
- (iii) by all employees involved and not by-passed when key personnel are away or the workload is heavy; and
- (iv) They must be cost effective, i.e., the cost of implementing the control should not exceed the benefits derived.

The internal control system should focus on both accounting and non-accounting operations and functions.

Strong accounting controls result in correct, reliable, timely and relevant reporting of financial transactions that have already occurred while strong controls in operational areas improve the overall performance of the enterprise.

The internal auditor should review whether the internal controls are cost effective. Evaluation of cost effectiveness should take into consideration both direct and indirect costs. Review of internal controls may include interviews with personnel at various organizational levels, transaction walkthroughs, review and analysis of documented policies and procedures and mapping the process to determine and rectify existing control gaps and to suggest process improvement. The internal auditor should determine if the controls were in use throughout the period of intended reliance or have there any substantial alterations in the same during the stated period. Different techniques may be used to record information. Selection of a particular technique depends on the auditor's judgment.

### **Evaluation of Internal Control**

Internal auditors should systematically evaluate the nature of operations and system of internal controls in the departments being audited to determine the nature, extent and timing of audit procedures. Internal controls of an organization comprise the plan of organization and methods adopted to safeguard assets, comply with laws, ensure the completeness and correctness of data, promote efficiency and encourage adherence to management policies. It is important that a review of an internal control system be directed primarily towards those controls that have an important bearing on the reliability of the system (i.e., key controls).



### **Internal Control Assessments**

The internal auditor assess the 'as-is' internal control system within the organization and map it against a globally accepted 'standard' which is basically, an Internal Controls framework- COSO being the most widely used for:

- Evaluate efficiency and effectiveness of controls
- Recommend new controls where needed – or discontinuing unnecessary controls
- Use of control frameworks

### **Control Self-Assessment (CSA)**

The most contentious aspect of SOX is Section 404, which requires management and the external auditor to report on the adequacy of the company's internal control over financial reporting (ICFR). This is the most demanding aspect of the legislation for companies to implement, as documenting and testing important financial manual and automated controls requires enormous effort. Under Section 404 of the Act, management is required to produce an "internal control report" as part of each annual Exchange Act report. The report must affirm "the responsibility of management for establishing and maintaining an adequate internal control structure and procedures for financial reporting." The report must also "contain an assessment, as of the end of the most recent fiscal year of the company, of the effectiveness of the internal control structure and procedures of the issuer for financial reporting." To do this, managers are generally adopting an internal control framework such as that described in COSO. Both management and the external auditor are responsible for performing their assessment in the context of a top-down risk assessment, which requires management to base both the scope of its assessment and evidence gathered on risk. Both the PCAOB and SEC recently issued guidance on this topic to help alleviate the significant costs of compliance and better focus the assessment on the most critical risk areas.

The recently released Auditing Standard No. 5 of the Public Company Accounting Oversight Board (PCAOB), which superseded Auditing Standard No 2, has the following key requirement for the external auditor:

- (i) Assess both the design and operating effectiveness of selected internal controls related to significant accounts and relevant assertions, in the context of material misstatement risks;
- (ii) Understand the flow of transactions, including IT aspects, sufficiently to identify points at which a misstatement could arise;
- (iii) Evaluate company-level (entity-level) controls, which correspond to the components of the COSO framework;
- (iv) Perform a fraud risk assessment;



- (v) Evaluate controls designed to prevent or detect fraud, including management override of controls; Evaluate controls over the period-end financial reporting process;
- (vi) Scale the assessment based on the size and complexity of the company;
- (vii) Rely on management's work based on factors such as competency, objectivity, and risk;
- (viii) Evaluate controls over the safeguarding of assets; and
- (ix) Conclude on the adequacy of internal control over financial reporting.

### **Internal Control Certifications (ICC)**

Under Sarbanes-Oxley, two separate certification sections came into effect—one civil and the other criminal. Section 302- (civil provision); Section 906- (criminal provision). Section 302 of the Act mandates a set of internal procedures designed to ensure accurate financial disclosure. The signing officers must certify that they are “responsible for establishing and maintaining internal controls” and “have designed such internal controls to ensure that material information relating to the company and its consolidated subsidiaries is made known to such officers by others within those entities, particularly during the period in which the periodic reports are being prepared.” The officers must “have evaluated the effectiveness of the company’s internal controls as of a date within 90 days prior to the report” and “have presented in the report their conclusions about the effectiveness of their internal controls based on their evaluation as of that date.”



## Chapter 8

### Internal Control & Risk Assessment

#### Internal Control

The Internal auditor is required to examine the continued effectiveness of the internal control system through evaluation and then make recommendations, if any, for improving that effectiveness. Internal auditors should systematically evaluate the nature of operations and system of internal controls in the entity being audited to determine the nature, extent and timing of audit procedures. Internal controls of an organization comprise process and methods adopted to safeguard assets, comply with laws, regulations and encourage adherence to management policies, ensure the completeness and correctness of data and promote efficiency. The internal auditor is required to have focus on improving the internal control structure and make continued efforts for promoting better corporate governance in the entity. The internal auditor should cover following aspects while evaluating and making recommendation on the internal control system of an organization:

- Evaluation of the efficiency and effectiveness of controls.
- Recommending new controls where needed – or discontinuing / disbanding unnecessary controls.
- Using control frameworks.
- Developing control self-assessment / evaluation

The evaluation of internal control in an entity involves:

- i. Understanding of the existing framework and operation of the internal control system of the entity;
- ii. assessing the degree of control effectiveness through test checking of controls;
- iii. determining the significance and the sensitivity of the risk for which controls are being assessed;
- iv. assessing the susceptibility to misuse of resources, identifying the areas which are prone to committing of fraud, failure to attain objectives regarding ethics, economy, efficiency and effectiveness, or failure to fulfill accountability obligations;
- v. identification cases of non-compliance with laws and regulations, laid down policies and procedures;
- vi. assessing the adequacy of the control design; and
- vii. observations on the internal control assessment, suggestions and recommendation for necessary corrective actions / measures.

There is always need for an understanding of the significant processes and internal control systems



which are sufficient to plan the internal audit engagement and develop an effective audit approach. The internal auditor can use his professional acumen and judgment to assess and evaluate the efficacy of the internal control operating of the entity. The auditor can have information about the control environment to satisfy in assessing management's attitudes, awareness and actions relating to internal controls and their significance in the entity and can also have an understanding of the internal control procedures adequate to develop the audit plan for the entity.

Following facts are required to be taken into consideration while evaluating of internal control system in an organization:

- a) Information about the entity's mission statement and written goals and objectives.
- b) Assessment of risks at the entity level.
- c) Assessment of risks at the function or activity level.
- d) Prepare a Business Controls worksheet for each significant activity in each function or department of the entity with documentation of the associated controls procedures and their degree of adequacy, give special attention for those activities which are most significant to the success of the activity, function or department.
- e) Study of business controls worksheet to assess the risks, for which no controls exist or the existing controls are inadequate.
- f) Ensure that predictable risks identified at the function or department or entity level are addressed in the Business Controls worksheet and operating controls documents.

The internal control weaknesses should be identified which have not been corrected and necessary steps required for correcting those weaknesses. The internal auditor should document the rationale in deciding which audit recommendations should be followed up on and when, in contrast with recommendations where no follow-up is needed. In the situation where recommendations have been effectively implemented or that senior management has accepted the risk of not implementing the recommendations, the internal auditor should document the matter and appropriately report its impact on the internal audit process.

### **Risk assessment:**

Risk is an event which can prevent, hinder and fail to further or otherwise obstruct the entity in achieving its objectives. Risk can be classified as Strategic, Operational, Financial and leakage of vital/confidential information. Management is responsible for establishing and operating the risk management framework in the organization.

Enterprise Risk Management is a process that consists of risk identification, prioritization and reporting, risk mitigation, risk monitoring and assurance. The corporate risk function establishes the policies and



procedures, and the assurance mechanism that can be accomplished by internal audit. The role of internal auditor is to provide assurance to management on the effectiveness of risk management. While assessing the effectiveness of the enterprise risk management following are required to be examined:

- i. assessment of the risk both at the entity level as well as the function level;
- ii. assessment of compliance with the risk management policy and framework;
- iii. assessment of adequacy of internal audit plan;
- iv. assessment of the efficiency and effectiveness of the risk response.

Enterprise Risk Management is a planned, consistent and perpetual process of evaluating or assessing risk and developing strategies to manage risk within manageable limit. It involves identification, assessment, mitigation, planning and implementation of risk and developing an appropriate risk response policy.

The internal auditor should only assess and identify the risks and not manage any of the risks or take risk management decisions on behalf of the management as the accountability for risk management decisions of the management and should not be taken by the internal auditor. Internal auditor's role is only to comment and advise on risk management and assist / guide management to mitigate the risks.

The internal auditor should normally perform an annual risk assessment of the entity, to develop a plan of audit engagements for the forthcoming period if the circumstance so require. The plan needs to be reviewed at various frequencies carried out. This involves review of the various risk assessments performed by the entity (e.g., strategic plans, competitive benchmarking, etc.), consideration of prior audits, and interviews of divisional and operational heads who are part of the senior management. It is designed for identifying key areas of internal audit and managing risks directly for the enterprise. The risk assessment process should be of a continuous nature so as to identify not only residual or existing risks, but also emerging risks. The risk assessment should be conducted formally at least annually but in complex enterprises it can be conducted more frequently depending upon the gravity of situation.

The internal auditor should properly understand and study the Enterprise Risk Management to give assurance to management on the efficacy of risk management in the entity. The internal auditor should ascertain that risks are appropriately assessed and managed. The internal auditor should keep his independence and objectivity while assuring the management of the entity about the effectiveness of the Enterprise Risk Management. The internal auditor as a result of the review, Tests conducted, Samples covered and Observations and recommendations, delineating the following information Assurance rating (segregated into High, Medium or Low) can submit his report to the Board or its relevant Committee or some other authorized person in this behalf by the entity.



## Chapter 9

### Internal Audit in IT Environment- Requirement for Successful System Audit

#### **(A) IT Environment - Internal Audit**

In the modern business environment the information technology (IT) is almost used in all spheres of operations of an entity, from data entry, data processing to resource planning to online sales, e-commerce, MIS for management and control of business activities of the entity either through the standard software available in the market or through a tailor made software for the entity.

However excessive reliance on the use of information technology without taking proper safety/ protection can land up an entity in loss if data, systems failure or hacking of system/ data and compliance with the cyber laws of the land etc. Entity-level control procedures for information technology are the foundation for internal control, providing discipline and structure to the organization. The information technology controls have a pervasive effect on the reliability, integrity and availability of processing and keeping entire data secured. The internal auditor should properly assess the effect of an IT environment on the internal audit engagement. The internal auditor should understand and analyse the use of information technology environment to record, compile, process and analyse information; and assess the effectiveness of the system of internal control in existence in the entity relating to:

- (i) Input of authorised, correct and entire data to the processing centre;
- (ii) Reliability and authenticity of software ( not pirated software) used in processing, analysis and reporting of data;
- (iii) Verifiability/ audit trail of computer-based accounting reports.

Business process controls provide structure to generate revenue, costs and other financial records and ultimately report on the financials of the organization. These documented templates or flow charts are helpful to the internal auditor to be acquainted with the existence of information technology system controls their design and the related test procedures and management action plan for thwarting weaknesses and deficiencies.

While evaluating the reliability of the internal control systems in IT environment, the internal auditor should ascertain the following:

- I. ensure that authorised, relevant, accurate and entire data is processed,
- II. ensure the accuracy, reliability and completeness of output,
- III. provide for timely detection and rectification of errors,
- IV. generate alert signal for unauthorized amendments to the programs/ software,
- V. ensure safe custody of source code of application software and data files,



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- VI. provide for proper backup of data/ information in case of interruption in the system due to power, mechanical or processing failures or restart of the system,
- VII. ensure adequate security measures to protect data against fire and other calamities, frauds, risk of hacking etc.

The internal auditor should assess the effectiveness and safety of the information technology resources, including – manpower, applications, facilities and data and review that the information technology system in the entity considers the confidentiality, effectiveness, integrity, availability, compliance and validity of data and information processed and handling of processed data/ output.

The internal auditor should have professional knowledge/ expertise of the information technology systems such as the operating knowledge of a specialized ERP / SAP system or other similar accounting system etc to plan, direct, supervise, control and review the work performed through IT system. When the information technology systems are significant, the internal auditor should also obtain an understanding of the IT environment. In case the internal auditor is not professionally equipped to handle the information technology system of the entity he should seek the assistance of a technical expert possessing professional skills in the field of system audit, who can be either on the roll of the internal auditor or act as consultant / system expert.

While designing audit procedures to review the systems, processes, controls and risk management framework of the entity, the internal auditor should understand properly the IT environment of the entity with the help of checklist and questionnaire.

In case the internal auditor finds during the course of audit that the information technology systems or data processing of the entity or a particular operation has been outsourced to an outside party, the internal auditor should give due consideration to the risks associated with such outsourced services and has to review the outsourced IT control processes with regard to the processing of data, security of data and report generated. The internal auditor should ensure as to what extent to the entity's controls provide reasonable assurance with regard to the completeness, validity, reliability and verifiability of the data and information processed by such outsourced agency.

### **(B) Requirement for Successful System Audit**

A successful internal audit program is that which yields the predetermined and desired results and support continuous updating in the changed scenarios/ conditions by use of software and automate the end to end audit process. The audit program shall be effective only when it yields impressive results of the audit process without much human interference. The common internal audit outcomes are:

- a) assessment of effectiveness and adequacy of internal control;
- b) risk management and control assurance;



- c) legal and regulatory compliance assurance, including legislature readiness assessment and ongoing testing, such as Companies Act and SEBI Act and its Directives etc that have bearing on the operations of the organization ;
- d) development of awareness of risk and control across the entity;
- e) ability to respond to urgent matters.

The use of system in the internal audit is most desired in the present scenario. An internal audit shall be more successful and effective if aforementioned key activities are automated using software to make them effective for different audits. The experts have identified the following core requirements of a software solution for a closed-loop internal audit program for end-to-end process, audit management through corrective actions and change control.

**Audit Management:** The software should cover definition and management of various elements of the audit process such as creation of different checklists, tracking audit schedule details, managing role differentiation between audit in-charge, approvers and managers for all audit matters and enabling proper distribution of workload by sharing audit matters. The software should support auditors to track progress/ audit schedule details, identify and append various documentary evidence as supporting proof of the non-conformities, review non-conformities highlighted by the internal audit team, ensure all exit criteria when all the items specified in the checklist have been achieved before the step is completed and report audit results.

**Identification of Non-Conformance and Its Handling:** The software should track and identify all non-conformances noticed during the audit process and provide ability to either to report the non-conformance and its gravity or suggest a corrective action process.

**Corrective Action:** The internal audit software should provide a mechanism for automatically routing a corrective action request to the authorized users with built-in MIS reporting and escalation procedures for unresolved issues, review all relevant non-conformance records to analyze the root cause and document corrective actions to rectify the problem or prevent its recurrence. The system should support configurable industry-specific report formats which are widely used by the consultants.

**Change Control:** The software should support multiple change control mechanisms required for corrective action such as document change, process instructions change or change to a standard operating procedure etc.

The system should be developed to cover all important aspects of audit using web architecture and it can be easily accessed by any user. The system should be such that it can be easily integrated with other systems or corporate portals. The system should report on any non-conformance and corrective action at a function /department/ activity /plant/division level and provide display on dashboard of the monitor the report on key process indicators of the internal audit activities.



## **Chapter 10**

### **Audit Report- Relevance of External Opinion and Reference**

The internal auditor may not be expert in all the areas of operations of an entity and may require assistance / guidance from an expert/ consultant. In order to effectively discharge of his duties as internal auditor, the internal auditor has right 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.

In the event the internal auditor decides to use the opinion of an expert, he should satisfy himself about the competence, objectivity and the independence of such expert and consider the impact of such assistance or advice on the overall result of the internal audit engagement, especially in the cases where the outside expert is engaged by the senior management of the entity. While determining the use of opinion of an expert or not, the internal auditor should consider:

- i. the materiality of the item being examined by the expert.
- ii. the nature and complexity of the item including the risk of error therein.
- iii. the other internal audit evidence available to support/ oppose the opinion of the expert.

The internal auditor should satisfy himself as to the skills and competence of the expert with regard to:

- a. the professional qualifications or membership of the expert in a professional body.
- b. the reputation of the expert in the relevant discipline.
- c. the knowledge and specific experience of the expert in the industry in which the entity operates.

The internal auditor should take all care to ensure himself that the work of the expert constitutes appropriate evidence in support of the overall conclusions formed during the internal audit engagement with regard to:

- I. the consistency and appropriateness of use of source data supplied by the expert.
- II. the assumptions and methods used, if appropriate, and their consistency with the previous period.
- III. the results of the expert's opinion in the light of the internal auditor's overall knowledge of the business and of the results of his audit procedures

The internal auditor should not, normally, refer to the work of an expert in the internal audit report. Such reference can, however, be considered useful, in the report with regard to support for material weaknesses or deficiencies in the internal control system or in such other cases where the internal auditor observes that such a reference would benefit the readers of the report. While referring to the work of the expert, the internal auditor should outline the assumptions, broad methodology and opinions of the expert and when the internal auditor thinks it appropriate to disclose the identity of the expert, he should obtain prior written consent of the expert for such disclosure if such consent has not already been obtained.



## Chapter 11

### Audit Conclusion and Corrective Measures

The Observations paragraph should clearly mention the process name, significant observations, findings, analysis and comments of the internal auditor on the issues which were identified during the course of internal audit process and have bearing on the performance of the entity.

After the conclusion of the audit, the internal auditor, after discussion with the auditee, make observations, highlights findings on various points / issues examined during the course of internal audit of the entity which are not in accordance with the policies and procedures of the entity or the employee of the organization contravening the generally accepted business practices of the entity. Even some times cases of fraud, misappropriation etc are also detected during the course of internal audit of the entity that need to be reported to the management of the entity.

On the findings, observation or comments of internal audits of an entity in some cases, there may be need for corrective action on the part of the management (auditee). Accordingly, the Action Taken Report paragraph should be appended after the observations and findings and should include:

- i. Status of compliance/ corrective action taken/ being taken by the entity with respect to previous internal audit observations or current internal audit observations;
- ii. Status of compliance/ corrective action not taken by the entity with respect to previous internal audit observations or current internal audit observations and the reasons for non-compliance thereof; and
- iii. Revised timelines for compliance of all items in (ii) where no corrective actions have been taken till the date of the report.

The internal auditor's report, in the Summary paragraph, should clearly point out the internal audit findings, key issues and observations of concern, significant controls lapses, failures or weaknesses in the systems or processes, nonconformities, deviation from laid policies and procedures etc which have bearing on the financial or non-financial areas of the entity.

Finally, when the internal auditor has highlighted the significant controls lapses, failures or weaknesses in the systems or processes, nonconformities or deviation from laid policies and procedures and seeks action taken report on such issues and no suitable action is taken by the management of the entity, such points become audit conclusions and reported in the final report submitted to the auditee.



## Chapter 12

### Audit Report and Report Writing

#### **Audit Report**

At the end of the audit, an audit report containing a clear written expression of significant observations, suggestions/recommendations on the vital and critical areas is prepared. Such report should be based on the policies, processes, risks, controls and transaction processing taken into consideration and managements' responses obtained during the course of audit.

The internal auditor's report contains the following basic elements:

- (a) Title of the report;
- (b) Addressee to whom the report is submitted;
- (c) Period of coverage of the Report;
- (d) Introductory or opening paragraph of the Report which deals with;
  - (i) Identification of the processes/functions and items of financial and non- financial statements audited;
  - (ii) A statement of the responsibility of the management of the entity and the responsibility and obligations of the internal auditor;
- (f) Objectives paragraph of the Report – scope and coverage of the internal audit engagement;
- (g) Scope paragraph of the Report (dealing with the nature of an internal audit):
  - (i) A reference to the applicable generally accepted internal audit procedures and standards;
  - (ii) A description of the engagement and the approach and methodology of the internal audit specifying procedures performed by the internal auditor; and
  - (iii) A description of the population sample for the audit and the sampling technique applied.
- (h) Executive Summary, highlighting the key material issues, suggestions, observations, critical areas, control weaknesses in the system and exceptions;
  - (i) Observations, findings and recommendations;
  - (j) Comments/ responses from the management;
- (k) Action Taken Report –pursuant to the observations made in the previous internal audit reports or observations when action not taken on issues reported.
- (l) Date of the report;
- (m) Place of preparation/ issue of the report;
- (n) Authentication of the report;
- (o) Internal auditor's signature with Membership Number, if any.



The internal auditor should take due professional care and apply professional skills to ensure that the internal audit report, inter alia, is:

- (i) concise and clear
- (ii) factual – presents all significant matters with disclosure of material facts
- (iii) specific on issues
- (iv) unambiguous
- (v) submitted as per the schedule
- (vi) complies with applicable generally accepted internal audit standards and procedures.

The internal auditor's report should be appropriately addressed as required by the circumstances of the engagement. Ordinarily, the internal auditor's report is addressed to the appointing authority or such other person as directed in the engagement letter.

### **Report Writing**

At the end of each audit, the auditors issue reports wherein they summarize their findings, recommendations, any responses or action plans and issues pending unattended by the management. An audit report should have an executive summary; findings specific issues or related recommendations or action plans; and appendix details comprising graphs and charts or process information.

The recommendations in an internal audit report are helpful for the organization to exercise effective and efficient governance, risk and control processes associated with operations objectives, financial and management reporting, legal/regulatory compliance and compliance of laid policies and procedures.

Audit observations and recommendations should relate to particular statements about transactions, such as whether the transactions were valid or authorized, properly processed, correctly valued, processed as per schedule, properly disclosed in financial or operational reporting and carried out as per the entity's policies and objectives.

Under the International Internal Auditing (IIA) standards, the preparation of a balanced report is a critical component of the audit process. The internal audit report provides executives and the board with the opportunity to assess and evaluate the issues reported in the proper background and as a constructive approach. The auditors help the entity to achieve its targets and objectives by providing suggestions, viewpoint, analysis and feasible recommendations for business improvements in vital and critical areas of operations.

The audit report should contain five elements, sometimes these are called the "5 C's":

1. **Condition:** Which is the particular problem remains unidentified?



2. **Criteria:** Which is the standard that was not met? The standard may be a company policy or other benchmark.
3. **Cause:** Why did the problem occur?
4. **Consequence:** What is the risk/negative outcome (or opportunity foregone) because of the finding?
5. **Corrective action:** What should management do about the finding? What have they agreed to do and by when?

### **Reporting of critical findings**

Internal auditor emphasizes assisting management and the Board in achieving the organization's objectives through well-reasoned audits, evaluations, and analyses of operational areas and also encourages the modern internal auditor to act as a counselor to management rather than as an expert or consultant.

The internal auditor reports the observation, suggestions and recommendations on critical issues to the Board, Audit Committee, and Executive Management or to such other person who is authorized to receive internal auditor's report along with management's progress towards resolving them. As certain most critical issues that have a reasonable likelihood of causing substantial financial loss or reputational damage to the entity, it is a matter of considerable judgment to select flag issues in the internal audit report that are critical and need Audit Committee's attention and to emphasize these issues in the proper context.

Once the critical issues or weak areas are identified during the course of internal audit, the internal auditor should discuss these issues with the management before incorporating them in the in the report. Writing about positive observations in audit reports was rarely done however for building better relationships this should be done. The audit report must also contain acknowledgment for support and cooperation extended by entity (auditee).



## **Chapter 13**

### **Audit Follow-up**

Consequent upon the completion of the draft audit report is discussed by the internal auditors with the management of the company which may contain certain points / issues on which follow up action would be required. The term follow-up with reference to internal audit has been defined by the Institute of Internal Auditors as: "It is a process by which the internal auditors determine the adequacy, effectiveness and timeliness of actions taken by management on reported audit findings."

The importance of the audit report can be judged with the quality of findings and recommendations, reflecting cost conscious, workable and timely solutions, have been achieved to some quantifiable degree and add value to the organization's functioning. Unfortunately, this does not happen as often as it should be in practice. Most organizations would not outsource their audit function if they gained a thorough understanding of the savings and improvement to operations and processes that the audit can bring to the organization.

The bottom line is how does audit enhance an organization's value? The answer is follow-up, if an organization is to understand what value audit can add in improving operational integrity, efficiency and effectiveness. Therefore the follow up action plays a very important role in improving the efficiency of the organization. Thus by looking at the prior audit recommendations of earlier work, auditors are able to assess if the entity, company or corporation has taken any action toward the report recommendations. If it has, a process is in place to try to assess what impact those recommendations had and to formally report the assessment and findings. The auditors will receive direct feedback from managers, supervisors or staff that their actions are the results of an earlier audit report. In some instances, they may even provide direct information and cost figures on how much is being saved as the result of new controls in place or improvements to the existing processes.

Where agreed action plans are not completely implemented the auditor asks the following questions:

- i. What remains to be done?
- ii. By whom and when?
- iii. Have alternatives been implemented that may be more appropriate?
- iv. Has the agreed action plan ceased to be of value?
- v. If no action was taken, why not?
- vi. What is the issue or concern causing inaction?

The end result should be a brief summary of the status of every action plan agreed upon. The final summary is reviewed with the person responsible for clearing the audit report before the follow-up report is issued to the auditee.



## Chapter 14

### Indian Telecom Sector- An Introduction

#### **An Overview**

The telecom sector has been recognized the world-over as an important tool for socio economic development for a nation and telecom services are crucial to realize the socio-economic objectives of the country. Telecommunications has evolved as a basic infrastructure like electricity & power, transportation, roads etc. and has also emerged as one of the critical components of economic development and growth required for overall socio economic development of the country. The Indian telecom sector has registered a phenomenal growth during the last decade or so and has become second largest telephone network in the world, only after China.

#### **The Regulatory Regime**

The Telecom service sector in India is controlled, regulated and monitored by:

##### **1. Department of Telecom (DoT), Ministry of Communications and Information Technology (MOC&IT), Government of India;**

The Department of Telecommunications (DoT), under the administrative control of the Ministry of Communications and Information Technology (MOC&IT), has been formulating developmental policies for the accelerated growth of the telecommunication services. The Department is also responsible for grant of licenses for various telecom services like Unified Access Service Internet and VSAT service. DoT is also responsible for frequency management in the field of radio communication in close coordination with the international bodies and also enforces wireless regulatory measures by monitoring wireless transmission of all users in the country.) Department of Telecom had the monopoly agency providing communication facilities in India till 1994 when the first time private players were invited to contribute for the telecom sector by way of investment for providing telecom services in the country. Since then Telecommunications has been one of the key sectors in India, which has witnessed widespread structural and institutional reforms as well as exponential growth in India.

##### **2. Telecom Regulatory Authority of India (TRAI)**

The Telecom Regulatory Authority of India (TRAI) was established by the Telecom Regulatory Authority of India Act, 1997 with effect from 20th February 1997, to regulate telecom services, including fixation/revision of tariffs, interconnection and quality of service etc of telecom services in India which were earlier vested in the Central Government.

TRAI's mission is to create and nurture conditions for growth of telecommunications in the country in a manner and at a pace which will enable India to play a leading role in emerging global information



society. One of the main objectives of TRAI is to provide a fair and transparent policy environment which promotes a level playing field and facilitates fair competition. TRAI issues directions, orders and regulations to achieve its objectives and carry out its functions assigned under Telecom Regulatory Authority of India Act, 1997.

### **3. Telecommunications Dispute Settlement and Appellate Tribunal (TDSAT)**

The TRAI Act was amended by an ordinance, effective from 24 January 2000, establishing a Telecommunications Dispute Settlement and Appellate Tribunal (TDSAT) to take over the adjudicatory and disputes functions from TRAI. TDSAT has been set up to adjudicate any dispute between a licensor and a licensee, between two or more service providers, between a service provider and a group of consumers, and to hear and dispose of appeals against any direction, decision or order of TRAI.

### **Applicable Acts to Telecom Service sector companies in India**

Following main enactments are applicable to telecom service companies i.e. the companies who are either requiring licence or registration from DoT:

1. Indian Telegraph Act, 1885
2. Indian Wireless Telegraphy Act, 1933
3. Telecom Regulatory Authority of India Act 1997

### **Telecom Policies**

#### **1. National Telecom Policy (NTP-94)**

The first National Telecom Policy (NTP-94) was announced by the Government in 1994 with the objectives of providing telephone on demand, provision of world class services at reasonable prices and universal availability of basic telecom services to all villages. NTP-1994 recognized that the required resources for achieving these targets could not be made available only out of Government sources and private investment and involvement of the private sector was required to bridge the large resource gap.

#### **2. National Telecom Policy (NTP-99)**

While there were several achievements under the NTP 1994, some of the objectives could not be met. Acknowledging several changes both at the national and global scenario in the telecom sector; a New Telecom Policy- NTP-99 was announced by Government w.e.f. 1st April 1999. Licensing of all telecom services thereafter was to be under the policy framework of NTP-99, which sought to significantly redefine the competitive nature of the industry. The new policy lifted the restrictions on the number of service providers for the Basic Service Providers (BSPs) as well as the Cellular Mobile Service Providers (CMSPs) making it open for participation by all bidders who satisfied the conditions of the DoT. The new policy also allowed all operators who were under the fixed licence fee regime to migrate to a revenue sharing regime. In the revenue sharing model, the operators were required to pay a percentage of their



Adjusted Gross Revenue (AGR) as annual license fee and spectrum usage charge to the Government. The percentage of revenue share depended on the licence service area\* where they offered their services under the Licence.

The Union Cabinet based on the recommendations of Group of Ministers (GoM) on Telecom matters, constituted in September 2003, approved the policy for licensing of Unified Access Services. The GoM had considered the recommendations submitted by Telecom Regulatory Authority of India (TRAI) on 27 October 2003. The policy drew upon NTP-99. Through this approval, Cabinet besides, a number of other related decisions, charted the course to a Universal Licensing Regime. Guidelines for issue of licenses under Unified Access Services (UAS) were issued on 11 November 2003 where after licences were issued only under UAS.

In April 2007, the DoT sought the opinion of the TRAI on some specific points including that of putting a cap on the number of access service providers in a service area, as radio frequency spectrum required for wireless services was not sufficient to meet the increasing demand from UAS Licensees. TRAI recommended (August 2007) that no cap be placed on the number of access service providers in any service area. TRAI in August 2007 also recommended that “a licensee using one technology may be permitted on request, usage of alternative technology and thus allocation of dual spectrum. However, such a licensee must pay the same amount of fee which has been paid by the existing licensees using the alternative technology or which would be paid by the new licensee going to use that technology”.

### **3. National Telecom Policy (NTP-2012)**

The Government approved National Telecom Policy-2012 (NTP-2012) on 31<sup>st</sup> May 2012 which addresses the Vision, Strategic direction and the various medium term and long term issues related to telecom sector. The primary objective of NTP-2012 is maximizing public good by making available affordable, reliable and secure telecommunication and broadband services across the entire country. The main thrust of the Policy is on the multiplier effect and transformational impact of such services on the overall economy. It recognizes the role of such services in furthering the national development agenda while enhancing equity and inclusiveness. Availability of affordable and effective communications for the citizens is at the core of the vision and goal of the NTP-2012. The Policy also recognizes the predominant role of the private sector in this field and the consequent policy imperative of ensuring continued viability of service providers in a competitive environment. Pursuant to NTP-2012, these principles would guide decisions needed to strike a balance between the interests of users/ consumers, service providers and government revenue.

The objectives of the NTP-2012, inter-alia, include the following:

- Provide secure, affordable and high quality telecommunication services to all citizens.
- Strive to create One Nation - One License across services and service areas.



- Achieve One Nation - Full Mobile Number Portability and work towards One Nation - Free Roaming.
- Increase rural tele-density from the current level of around 39 to 70 by the year 2017 and 100 by the year 2020.
- To recognize telecom, including broadband connectivity as a basic necessity like education and health and work towards 'Right to Broadband'.
- Provide affordable and reliable broadband-on-demand by the year 2015 and to achieve 175 million broadband connections by the year 2017 and 600 million by the year 2020 at minimum 2 Mbps download speed and making available higher speeds of at least 100 Mbps on demand.
- Provide high speed and high quality broadband access to all village panchayats through a combination of technologies by the year 2014 and progressively to all villages and habitations by 2020.
- Recognize telecom as Infrastructure Sector to realize true potential of ICT for development.
- Address the Right of Way (RoW) issues in setting up of telecom infrastructure.
- Mandate an ecosystem to ensure setting up of a common platform for interconnection of various networks for providing non-exclusive and non-discriminatory access.
- Enhanced and continued adoption of green policy in telecom and incentivize use of renewable resources for sustainability.
- Achieve substantial transition to new Internet Protocol (IPv 6) in the country in a phased and time bound manner by 2020 and encourage an ecosystem for provision of a significantly large bouquet of services on IP platform.

### **Present Status of the Telecommunication Sector**

The Indian telecom network with 970.97 million telephone connections, including 943.97 million wireless telephone connections, at the end of December 2014 is second largest network in the world after China. Out of this, 398.68 million telephone connections are in rural areas and 572.29 million are in urban areas of the country as on 31st December 2014 (For detailed report Refer\*\*).

### **Highlights of Telecommunication Sector in India (as on December 31, 2014)**

- The country has total 970.97 million telephone connections, comprising 943.97 million wireless and 27.00 million wireline telephone connections.
- Overall tele-density in the country is 77.58%.
- Urban tele-density is 148.06%, whereas rural tele-density is 46.09%.



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- The share of wireless telephones in total telephones is 97.22%..
- Number of Broadband connections is 85.74 million.
- Monthly Average Revenue Per User (ARPU) for Access Services- Rs 119/-
- Monthly ARPU- GSM Rs.118/- whereas Monthly ARPU- CDMA Rs.109/-

\*\* [http://www.trai.gov.in/WriteReadData/PIRReport/Documents/Indicator\\_Reports%20-%20Dec-14=08052015.pdf](http://www.trai.gov.in/WriteReadData/PIRReport/Documents/Indicator_Reports%20-%20Dec-14=08052015.pdf)

### **Licensing Requirement**

The telecom sector is regulated by the Telecom Regulatory Authority of India (TRAI), which regulates the telecom sector through licensing requirements. A telecom company can provide only those services and in such telecom circles (licensed Service areas), for which licences are granted by the Department of Telecom (DoT), Ministry of Communications and Information Technology (MOC&IT), Government of India. Any telecom operator intending to enter into telecom business has to obtain Licence from DoT and fulfill the various license requirements.

### **Need for Internal Audit of Telecom Sector**

As we are aware that Internal audit is a significant tool in evaluating the adequacy of system controls and points out the state of compliance with the applicable laws and regulations, policies and procedures and evaluates risk management and promote efficiency. Telecom sector is also a fast developing infrastructure sector and playing a dominant role in the development and growth in the economy of India. Like all business entities there is a strong need for audit of business entities involved in telecom business and the auditors should:

- (i) Understand the issues facing Telecom Sector Companies in the modern business world of communications.
- (ii) Assess the risks associated with Telecom Sector Companies and the techniques for identifying and controlling such risks.
- (iii) Explore the use of the most appropriate audit techniques to optimize coverage of Telecom Sector Companies.
- (iv) Develop methodologies / techniques to ensure the adequacy of system controls operating in the sector and evaluate systems to ensure adequate internal control framework / guidelines for the financial reporting of Telecom Sector Companies.
- (v) Effective review of the major operating functions of a Telecom Company and make practical and value add recommendations for improvement in the operations of telecom companies.
- (vi) Ensure revenue assurance and compliance with the applicable laws and regulations, policies and procedures by the telecom companies.



**Areas of telecom companies that needs the Audit**

Following are the areas that mainly need to be audited:

1. Audit and Verification of payment of Licence Fee and other charges payable (e.g. SUC) by Telecom Companies on the AGR.
2. Audit requirements under the Reporting System on Accounting Separation Regulations, 2012.
3. Audit of Metering and Billing System of Telecom Service Providers under the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 dated 21st March 2006 and subsequently amended Regulation vide notification dated 25th March 2013
4. Audit of Call Data Records (CDRs) to assess / determine / verify Service Provider- wise Liability of Transit Carriage Charge.
5. Audit of Functional services of the telecom company.
6. Whether all the licensing/regulatory compliances have been done with the appropriate Authority within prescribed time by the Telecom Service Provider.



## Chapter 15

### Transactions Peculiar to Telecom Service Sector

The telecom service sector has witnessed a very fast growth in India in the last decade or so. The horizon for the range of telecom services has expanded multi-folds. The range of services includes:

- Voice services like landline, cellular mobile, satellite and internet based, National Long Distance , International Long Distance
- Data services like leased lines, Wi-Fi
- Video conferencing services
- Cable TV, DTH and broadcasting services
- Any other telecom service for which TSP has to obtain either licence or seek registration from DoT

The telecommunications service sector is regulated by TRAI established under the provisions of Telecom Regulatory Authority of India Act 1997. TRAI regulates licensed telecom service providers who are providing different licensed telecom services in India.

The transactions peculiar to the telecom industry could be as follows:

- a) **Licensing** – the telecom service cannot be started without obtaining the statutory licenses from the DoT, MOC&IT. The license is given for a certain period and the operations are limited to certain geographies called as circles/ licensed service areas.
- b) **Revenue Streams** – The revenue is earned from various service offered by the TSP. These services could be listed as below:
  - i. Revenue from voice calls (wireline, wireless (mobile, WLL etc.))
  - ii. Revenue from data transfer services (use of internet and mail services), leased circuits
  - iii. Revenue from value added services such as call waiting, call diverting, caller ID, call forwarding, alarms, SMS services etc.
  - iv. Revenue from renting of towers and other infrastructure
  - v. Revenue from roaming facilities provided
  - vi. Revenue from any other telecom services not covered above
- c) **Infrastructure sharing** – The telecom sector companies earn revenue through the sharing of infrastructure, dark fibre, access at cable landing station etc with the other service providers. The assets that are commonly shared are the networks (used across different circles for roaming services), the tower facilities, inter-operator call sharing etc. This arrangement works based on the agreement between the different operators and poses some challenges in terms of revenue and cost recognition, risks of abuse and fraud.



The internal auditor should understand the specific telecommunication services provided by the client organisation, applicable licence agreements and also grasp the meaning of some technical terms used in the industry. For the benefit of the reader some of these terms are given below:

- Adjusted Gross Revenue (AGR) is the revenue from telecom services adjusted for deductions allowed in the respective telecom license. AGR is used as a base figure to determine Licensor's share in organization's revenue, in the form of license fee and spectrum usage charges.
- Base Transmission Station (BTS) is the centre that encodes, encrypts, multiplexes, modulates and feeds the RF (Radio Frequency) signals.
- Intelligent Network (IN) for processing call controls via distributed network transfer points.
- Home Location Register (HLR) and Visitor Location Register (VLR)
- Integrated Service Digital Network (ISDN) allowing both voice and data transmittals simultaneously across the world using end-to-end digital connectivity.
- Mediation is a network device that facilitates the receipt & processing of signals, reformatting in to other formats to be sent for the purpose of billing & reporting.
- Virtual Private Network (VPN) works to secure private communication paths facilitating the data transfer safely.
- Call flow Process includes the setups for outgoing calls and incoming calls.
- Call Data records (CDRs)
- Billing, SMS, MMS server etc.

The understanding of the above would help the internal auditor to carry the audit of transactions of the telecom company. Given below is the checklist of special transactions to be taken care while conducting the audit:

### **Compliance with Regulatory Requirements**

- Licensing requirements covering the capital norms, net worth norms and foreign participation norms
- License period, licensed services and licensed circles
- Fees payable include the following:
  - Entry fee – a onetime fee
  - License fee – it's the revenue share payable quarterly at the applicable rate on the AGR as explained above
  - Radio spectrum usage charges (SUC) for allotment of the frequencies for the GSM and CDMA



- Grounds for charging interest and levy penalty on the late payment of the above fees
- Performance Bank Guarantee (PBG) and Financial Bank Guarantee (FBG) to be given to the Licensor (DoT) to fulfill the Terms & Conditions of Licence Agreement.
- Reporting compliances:
  - Quarterly revenue statements, computation & payment of license fee and other levies as per the licence agreement.
  - Operator wise statement of interconnection usage charge payments.
  - Annual reconciliation of gross revenue, adjusted gross revenue with the audited annual accounts of the telecom company.
- Compliance with the TRAI guidelines on the subscriber verification is mandatory, hence the internal control assessment becomes very crucial
- Penalty payable if the conditions for routing the calls through dedicated trunks for local calls, NLD and ILD calls are not complied with, hence the internal auditor should verify the interconnect bill or any notice received from other telecom company to verify if penalty applies
- Another important reporting compliance is the report to be submitted as per the ASR 2012. These reports are Service segment report where the classification is based on types of licence, geographical area, service / product, network elements etc.

### **Operating Activity Audit for Telecom Companies**

The telecom service is characterized by a very wide variety of services, each of which may require separate set of inputs and processing. The services may be provided as a package of bundled services ( Providing two or three services ( Air time, SMSs, and Data Package) for payment of single amount to the customers, thus making it difficult to correctly allocate the revenue and costs to each component of the service type.

One of the very crucial factors involving the threat of operating loss is revenue leakage. The leakage could be owing to many reasons such as:

- Prepaid Call Data Records (CDRs) may get configured as postpaid CDR and call balance may not get reduced for the prepaid subscriber and the call is also not billed in case of a postpaid subscriber
- Prepaid calls may not be charged on 'real time' basis
- Technical faults may not generate the CDR
- Wrong tariff plan configurations for prepaid and post paid customers

The internal auditor should verify the revenue assurance process employed by the company and the effectiveness thereof by looking at variations from the standards, if any. The report that they could refer



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to is the 'error CDR report' generated by the system. It will have to be further analyzed according to the reasons.

The internal auditor should refer to the accounting separation report generated to get a fair idea on the operating efficiencies of the different services offered by the company. The analysis of the following ratios would assist in assessing the operational weaknesses & strength of the company:

- The churn rate i.e. customers leaving for competitor
- Average revenue per user (ARPU)
- Revenue per minute
- Minutes billed to total minutes recorded etc

The technical operating performance could be judged by looking at the various parameters recommended by the TRAI. Some of the useful indicators would indicate the wastages and efficiencies as follows. The areas that cover various performance parameters are listed below:

- Network related parameters – network availability, accessibility, retention ability, point of interconnection congestion,
- Customer service quality parameters – metering & billing, response time, termination of service, service activation time, service restoration time.

The internal auditor should assess the internal control system with regard to the above areas and obtain the data on the various parameters to draw conclusions by observing trend and then benchmarking with the industry averages. The benchmarking data can be easily obtained through the TRAI annual report on the performance indicators.

### **Metering and Billing System**

The internal auditor should verify the documents to find out the following:

- Information about the tariff plan is communicated to the subscriber in advance and also on activation,
- Charges for the value added services must be informed to the subscriber,
- All charges to be consistent with the published tariff,
- Payments by subscribers are credited to their account for both pre and post-paid within the time limit prescribed,
- Notice to be given to subscriber for any restriction or ceasing of the service,
- Documentation process for the identifying, investigating and dealing with billing complaints by the subscribers,



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- Reliability of total metering and billing performance to be within the prescribed tolerance,
- Compliance report to be submitted by 30th June every year with TRAI
- The internal auditor should verify whether the audit has been carried out by notified auditor for metering and billing audit.

### **Some Useful Ratios:**

Following are some useful ratios for the internal auditor to evaluate the functioning and performance of the company:

- Downtime at Base Transceiver Station
- Call set up success rate & Call drop rate
- Connection with good voice quality
- Metering and billing credibility
- Percentage of faults reported and resolved
- Average time to repair
- Call completion rates
- Minutes of use (MOU)

### **Assessment of Frauds**

The internal auditor should study the risks regarding possibility of fraud. These frauds could be categorized as:

- a. External frauds – connected with subscription through false documentation and intentional defaults in the bill payments. The internal auditor should check the internal controls to check existing defaulters not re-enter the system, evaluation of the credit rating & assigning credit limit, monitoring of high usage, monitoring of calling pattern and also calls.
- b. Frauds through illegal telephone exchanges through the use of VoIP and PSTNs resulting into routing the international calls as local call causing huge revenue loss in the form of interconnection usage charges. The internal auditor should assess the internal control system to identify the possibility
- c. Frauds by cloning of handsets and SIMs
- d. Credit facilities frauds
- e. Internal frauds by the dealers, wrong configuration in the operating systems

### **Revenue Recognition**

The revenue will be basically be from the call charges, national & international roaming, value added



services, registration, processing & activation charges, infrastructure sharing charges for passive links & active links, interconnection usage charges such as access deficit, carriage and call termination, sale of recharge coupons, special tariff vouchers etc.

The internal auditor should understand the process of how these revenues are generated, the relevant agreements entered and the basis for recognizing the revenue.

- Postpaid service revenue is recognized according to the various services e.g. the fixed charge is recognized based on the billing month, the call charges, SMS charges & value added services are recognized based on the actual amount utilized & billed.
- The prepaid revenue is recognized only on the activation of the SIM in the initial stage and then on the activation of the recharge voucher. The recharge voucher amount should be split between the administration charges, service tax and the talk time.
- The internal auditor should verify the process of the billing and review the IT system to obtain the input data for billing and recognizing the revenue.

### **Internal Audit of Fixed Assets**

The assets peculiar to the telecom industry are the underground OFC, BTS, RAN, Towers, network cards, routers and other such equipment apart from the normal fixed assets like land & building, equipment, DG sets, air-conditioning, etc. The very high volume and complexity of the telecom business require the IT systems and the equipment to be robust, up-scalable and flexible. As the pace of obsolescence is very fast, the internal auditor should verify the risks associated with the same. Internal Auditor has to see that there should be a sound fixed assets management particularly network assets is existed in the organization. Following are the critical areas relating to fixed assets management:

- The internal auditor should verify the policy for capitalization and amortization of the hardware, spectrum cost (purchased from Govt.), license fee and the software used by the company.
- The IT systems should be verified to assess the synchronization, sufficiency of information and security of information.
- Organization plan/ policies for disposal of retired and redundant assets.
- Review necessary insurance coverage's of assets.
- Whether automated systems to track assets existed in the organisation and resources provided are sufficient for control over fixed assets.
- Robust system for regular assessment of control environment for assets managed by third parties. Existence of robust plan in place to verify, track and manage transition to next generation networks.



## Chapter 16

### Telecom Services Licensed by the Department of Telecommunications (DoT) and Revenue Share Levies

Department of Telecommunications (DoT) deals with Policy, Licensing and Coordination matters relating to telephones, wireless, data, facsimile and telemetric services and other like forms of communications.

Licensing is done by DoT for: -

1. *Access services*
2. *Carrier services*
3. *Data services*
4. *Other services*

#### 1. Access Services:

##### Basic/ Cellular Mobile Telephone Service (CMTS)/ Unified Access Services (UAS)

##### (i) Basic Telephone Service

Basic Telephone Service means the collection, carriage, transmission and delivery of voice or non-voice messages over the service providers (Licensee's) Public Switched Telephone Network (PSTN).

##### (ii) Cellular Mobile Telephone Service (CMTS)

Cellular Mobile Telephone Service (CMTS) means telecommunication service provided by means of a telecommunication system for the conveyance of messages through the agency of wireless telegraphy where every Message that is conveyed thereby has been, or is to be, conveyed by means of a telecommunication system which is designed or adapted to be capable of being used while in motion. The Cellular Mobile Telephone Service refers to transmission of voice or non-voice messages over LICENSEE's Network in real time only. SERVICE does not cover broadcasting of any messages voice or non-voice. However, Cell Broadcast is permitted only to the subscribers of the service. The subscriber (all types, pre-paid as well as post-paid) has to be registered and authenticated at the network point of registration and approved numbering plan shall be applicable. Cellular Mobile Telephone Service Provider (CMSP) means a service provider (Licensee) authorized to provide Cellular Mobile Telephone Service under a Licence in a specified service area.

##### (iii) Unified Access Services (UAS)

Unified Access Services (UAS) means telecommunication service provided by means of a telecommunication system for the conveyance of messages through the agency of wired or wireless telegraphy. The Unified Access Services refer to transmission of voice or non-voice messages over



LICENSEE's Network in real time only. SERVICE does not cover broadcasting of any messages voice or non-voice. However, Cell Broadcast is permitted only to the subscribers of the service. The subscriber (all types, pre-paid as well as post-paid) has to be registered and authenticated at the network point of registration and approved numbering plan shall be applicable. Unified Access Services Provider (UASP) means a service provider (Licensee) authorized to provide Unified Access Services under a Licence in a specified service area by Department of Telecommunications (DoT).

The DoT under the Ministry of Communications and Information Technology is empowered to give licences for telecom services in India under the provisions of Indian Telegraph Act, 1885 and Indian Wireless Telegraphy Act, 1933 and authorized to charge licence fee and spectrum usage charges. As per DOT's orders, the licence fee payable by various categories of licences for the year 2013-14 and onwards is summarized in **Annexure-A**.

**(a) Licence Fee**

Under the terms and conditions of Basic/ Unified Access Services (UAS) / Cellular Mobile Telephone Service (CMTS) Licence a uniform licence fee rate of 8% of Adjusted Gross Revenue (AGR) shall be applicable across all categories of service areas (i.e. 'Metro', 'A', 'B' and 'C' categories) of UASL/ CMTS/ Basic service licensees for the year 2013-14 and onwards as follows:

<b>Category of license service Area</b>	<b>Annual licence fee rate as % of 'AGR'</b>
	For the year 2013-14 and onwards
'Metro' and Category 'A'	8%
Category 'B'	8%
Category 'C'	8%

**(b) Spectrum Usage Charges (SUC)**

In addition to spectrum auction price, Spectrum usage charges are payable as a percentage of AGR from CMTS (using GSM/ CDMA Technology) as per the rates notified by the Government from time to time.

The present spectrum usage charges as notified by the Licensor vide notification dated 5<sup>th</sup> February 2015, is mentioned below:

- For spectrum acquired through auction during March 2015 in 800 MHz, 900 MHz, 1800 MHz and 2100 MHz, SUC shall be charged at 5% of the AGR.
- In cases of combination of existing spectrum in 800 MHz, 900 MHz, 1800 MHz and 2100 MHz bands and spectrum acquired through the auction, the weighted average shall be calculated as equal to (a) sum of spectrum held prior to auction held during March 2015 multiplied by applicable rate as per orders dated 25.2.2010, 31.10.2014 and SUC rates as per Notice Inviting



Application (NIA) dated 25.2.2010 and (b) spectrum acquired through auction held during March 2015 multiplied by five and then the sum of (a) and (b) divided by total spectrum holding.

- The licensees, who have not acquired spectrum through auction held during February 2014/March 2015, shall continue to pay SUC at the applicable slab rate as per the order dated 25.2.2010.

The spectrum usage charges as DoT notification of 25.2.2010 are as follows:

<b>Schedule A: Charges for GSM operators (Applicable for 1800MHz, 900MHz Bands)</b>		<b>Schedule B: Charges for CDMA operators (Applicable for 800MHz Band)</b>	
<b>Spectrum Slabs</b>	<b>% of AGR</b>	<b>Spectrum Slabs</b>	<b>% of AGR</b>
Up to 4.4 MHz	3%	Up to 5 MHz	3%
Up to 6.2 MHz	4%	Up to 6.25 MHz	4%
Up to 8.2 MHz	5%	Up to 7.5 MHz	5%
Up to 10.2 MHz	6%	Up to 10 MHz	6%
Up to 12.2 MHz	7%	Up to 12.5 MHz	7%
Up to 15.2 MHz	8%	Up to 15 MHz	8%

## **2. Carrier Services:**

### **(i) National Long Distance (NLD) Service**

“National Long Distance (NLD) Service” refers to the carriage of switched bearer telecommunication service over long distance network i.e., a network connecting different Short Distance Charging Areas (SDCAs). “National Long Distance Service Provider” (NLDO) is the telecom operator providing the required digital capacity to carry long distance telecommunication service within the scope of LICENCE for National Long Distance Service, which may include various types of tele-services defined by the International Telecommunication Union (ITU), such as voice, data, fax, text, video and multi-media etc.

The company is required to pay a processing fee along with the application of Rs. 15,000/-. The company is required to pay one-time non-refundable Entry Fee of Rs 2.5 crores before the signing of the Licence. In addition to entry fee described above, the uniform annual licence fee @ 8% of the Adjusted Gross Revenue (AGR) shall be levied on NLD service for the year 2013-14 and onwards.

### **(ii) International Long Distance (ILD) Service**

International Long Distance (ILD) Service is a network carriage service (also called Bearer) providing



International connectivity to the Network operated by foreign carriers. The ILD service provider is permitted full flexibility to offer all types of bearer services from an integrated platform. The ILD service providers will provide bearer services so that end-to-end tele-services such as voice, data, fax, video and multi-media etc. can be provided by Access Providers to the customers. Except GMPCS including through INMARSAT the ILD service providers are permitted to offer international bandwidth on lease to other operators. ILD service provider shall not access the subscribers directly (except for Leased Circuits/CUG) which should be through NLD service provider or Access Provider. However, the ILD service provider may access the subscribers directly only for provision of International Long Distance voice service through Calling Cards only. The ILD Service Provider is permitted to provide international bandwidth on lease to Resellers who are issued license for 'Resale of IPLC' under Section 4 of Indian Telegraph Act, 1885.

The company is required to pay a processing fee along with the application of Rs. 50,000/-. The company is required to pay onetime non-refundable Entry Fee of Rs 2.5 crores before the signing of the Licence. In addition to entry fee described above the uniform annual licence fee @ 8% of the Adjusted Gross Revenue (AGR) shall be levied on ILD service for the year 2013-14.

### **3. Data Services:**

#### **Internet Service**

“Internet Service” means all type of internet access or internet content services as provided in the Internet Service provider (ISP) Licence.

The uniform annual licence fee @ 8% of the Adjusted Gross Revenue (AGR) shall be adopted by all ISP and ISP-IT for the year 2013-14. Initially the validity period of ISP Licence was 15 years and entry fee was 20 lakh and 10 lakh for category 'A' & 'B' respectively but the guidelines dated 24.08.2007 have been amended w.e.f. 25.01.10 and validity period of new ISP licence (granted subsequent to 25.01.10) is 20 years with revised entry fee of Rs. 30 Lakh and 15 Lakh for category 'A' & 'B' respectively.

<b>Category</b>	<b>Entry Fee Rs.</b>	<b>PBG Rs.</b>	<b>FBG Rs.</b>
A (All India)	30 Lakh	2 Crore	10 Lakh
B ( a service Area out of 23 areas)	15 Lakh	20 Lakh	1Lakh

Subsequent to ISP Guidelines dated 24.08.07, the applicant company (Licensee) is required to pay Rs. 15,000/- as processing fee along with the application for obtaining ISP Licence. Licensee having Net worth of Rs. 100 crore is eligible to take permission to provide Internet Protocol Television (IPTV) service.

### **4. Other Telecom Services**

#### **(i) Very Small Aperture Terminal (V-SAT)**

“V-SAT” means Very Small Aperture Terminal. There are two types of Closed User Group (CUG) VSAT



licenses: (i) Commercial CUG VSAT license and (ii) Captive CUG VSAT license. The commercial VSAT service provider can offer the service on commercial basis to the subscribers by setting up a number of Closed User Groups (CUGs) whereas in the captive VSAT service only one CUG can be set up for the captive use of the licensee.

A uniform annual licence fee rate of 8% of AGR shall be levied for all Commercial VSAT and MSS-R licences for the year 2013-14.

**(ii) Public Mobile Radio Trunk Service (PMRTS)**

**Public Mobile Radio Trunk Service** means service which is defined as (i) a two way land mobile service in which user communicate among themselves through a pair of radio frequencies out of a pool in a designated frequency band assigned to the system using (ii) the pair of radio frequencies is allocated on placement of call request and returned to the pool on the completion of the call (iii) the communication usually takes place through repeater station (also called base station). Once user is assigned channel (a pair of frequencies) by the system, no one else can interfere with the communication.

There shall be no entry fee. All PMRTS licensees including those using Captive Mobile Radio Trunked Service shall pay licence fee except for agencies working for public service such as Police, Fire and Government Security etc.

The uniform annual licence fee @ 8% of the Adjusted Gross Revenue (AGR) shall be levied on PMRTS service for the year 2013-14. There shall be separate charges (Royalty and Licence fee) for use of Radio Spectrum for commercial as well as captive system shall continue. This will be subject to changes made by Wireless & Planning Cell (WPC) of DOT from time to time.

**(iii) Infrastructure provider category- I (IP- I)**

“Infrastructure Providers” means Providers providing inactive elements of the telecom network including dark fibres, right of way, duct space, towers etc. as well as those who provide end-to-end bandwidth on a long-term basis. Infrastructure Providers Category-I (IP-I Licence) establish as well as lease, rent out or sell digital transmission capacity (end-to-end bandwidth) capable to carry a message.

The applicant company is required to pay Rs. 10,000/- as processing fee along with the application. Infrastructure Providers Category-I is exempted from payment of entry fee as well as licence fee to the Licensor (DOT).

**Rate of Licence Fee Payable as Revenue Share by Various Categories of Licences**

As per DOT’s orders, the licence fee payable by various categories of licences for the year 2013-14 and onwards is as under: -

S. No.	Category of License	Revenue Share payable from April 2013 onwards
1	UASL/ CMTS/ Basic	8% of AGR



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2	National Long Distance	
3	International Long Distance	
4	Internet without Telephony	
5	Internet with Telephony	
6	Commercial VSAT	
7	PMRTS	



## Chapter 17

### Reckoning of Revenue for Revenue Share based Levies - Telecom Service Sector

Under section 4 of the Indian Telegraph Act 1885, the Central Government has exclusive privilege of 'establishing, maintaining and working of telecommunication' and under the proviso of said section the Government has the right to transfer its privilege by way of Licence to any person on such conditions and for consideration of such payments, as it thinks fit. The source of power for granting Licence to provide telecom services and collecting licence fee is derived under the proviso to section 4 of the Indian Telegraph Act 1885. Telecom Licences to service providers are issued under the above provision and the Government is charging licence fee on the basis of revenue share. A fixed percentage of revenue shares is charged on the Adjusted Gross Revenue (AGR) of a particular type of telecom service for which Department of Telecommunications (DoT), Ministry of Communications and Information Technology, Government of India has issued the Licences to the telecom service providers to provide various types of telecom services in India.

Based on the telecom licence granted for the by DoT, a specified percentage of Adjusted Gross Revenue (AGR), determined as per the licence agreement, is charged as a licence fee from the telecom service provider on quarterly basis. The concept of revenue recognition of telecom service provider is based on the same principle which is applicable to all business entities in the country.

The concept of revenue recognition under various jurisdictions:

(i) *"Revenue is the gross inflow of cash, receivables or other consideration arising in the course of the ordinary activities of an enterprise from the sale of goods, from the rendering of services, and from the use by others of enterprise resources yielding interest, royalties and dividends. Revenue is measured by the charges made to customers or clients for goods supplied and services rendered to them and by the charges and rewards arising from the use of resources by them. In an agency relationship, the revenue is the amount of commission and not the gross inflow of cash, receivables or other consideration"*

(ii) The Part-II of the schedule III of the Companies Act, 2013 prescribes the method of presentation of revenue and its disclosures in the Profit & Loss statement of a company. As per this schedule the revenue should be presented on the face of Profit & Loss Statement as under:

- I. Revenue from operations
- II. Other income
- III. Total Revenue (I + II)

Further, Note 2(A) to General Instructions for the Preparation of Statement of Profit and Loss requires that in respect of a company other than a finance company, revenue from operations is to be separately disclosed in the notes, showing revenue from:



- (a) Sale of products
- (b) Sale of services
- (c) Other operating revenues
- (d) Less: Excise duty

As per Note 4 to General Instructions for the Preparation of Statement of Profit and Loss, Other income should be classified as:

- (a) Interest Income (in case of a company other than a finance company);
- (b) Dividend Income;
- (c) Net gain/loss on sale of investments
- (d) Other non-operating income (net of expenses directly attributable to such income).

(iv) The Ministry of Corporate Affairs has notified Ind AS in February 2012 which is converged on the lines of IFRS. Ind AS 18 –on “Revenue” defines the revenue as under:

*“Revenue is the gross inflow of economic benefits during the period arising in the course of the ordinary activities of an entity when those inflows result in increases in equity, other than increases relating to contributions from equity participants.*

*Revenue includes only the gross inflows of economic benefits received and receivable by the entity on its own account. Amounts collected on behalf of third parties such as sales taxes, goods and services taxes and value added taxes are not economic benefits which flow to the entity and do not result in increases in equity. Therefore, they are excluded from revenue. Similarly, in an agency relationship, the gross inflows of economic benefits include amounts collected on behalf of the principal and which do not result in increases in equity for the entity. The amounts collected on behalf of the principal are not revenue. Instead, revenue is the amount of commission”.*

(v) The International Accounting Standards Board has issued IAS/IFRS which are globally accepted standards of accounting. IAS-18 on ‘Revenue’ defines Revenue as:

*‘Revenue includes only the gross inflows of economic benefits received and receivable by the entity on its own account. Amounts collected on behalf of third parties such as sales taxes, goods and services taxes and value added taxes are not economic benefits which flow to the entity and do not result in increases in equity. Therefore, they are excluded from revenue. Similarly, in an agency relationship, the gross inflows of economic benefits include amounts collected on behalf of the principal and which do not result in increases in equity for the entity. The amounts collected on behalf of the principal are not revenue. Instead, revenue is the amount of commission”.*



## **Determination of Gross Revenue (GR) and Adjusted Gross Revenue (AGR) in Telecom Sector in India**

The definition of Gross Revenue (GR) and Adjusted Gross Revenue (AGR) adopted in the Licences by the DoT is broadly the same across all services. The gross revenue is revenue derived from providing licensed service/ accruing to the licensees, revenue on account of interest, dividend, value added services, supplementary services, roaming charges, late fees etc. For the purpose of License fee, Gross Revenue is adjusted for certain pass through items like (i) Public Switched Telecom Network (PSTN) related call charges actually paid to other service providers within India, (ii) roaming revenue on account of revenue charges actually passed to other service providers and service tax actually paid to Government to arrive at AGR.

The components of GR and the list of pass through items being deducted from GR to arrive at AGR for the purpose of licence fee under the different licence agreement for different kinds of telecom services are given below:

<b>Licensed Service</b>	<b>Gross Revenue as per license agreement</b>	<b>Items to be deducted to calculate Adjusted Gross revenue</b>
<b>Unified Access Service Licence (UASL)</b>	The Gross Revenue shall be inclusive of installation charges, late fees, sale proceeds of handsets (or any other terminal equipment etc.), revenue on account of interest, dividend, value added services, supplementary services, access or interconnection charges, roaming charges, revenue from permissible sharing of infrastructure and any other miscellaneous revenue, without any set-off for related item of expense, etc.	(i) PSTN related Call charges (access charges) actually paid to Bharat Sanchar Nigam Ltd. (BSNL) / Mahanagar Telephone Nigam Ltd. (MTNL) or other telecom service providers within India. (ii) Roaming / IUC revenues actually passed on to other telecom service providers, and (iii) Service Tax on provision of service and Sales Tax actually paid to the Government; if gross revenue had included the component of Service Tax.
<b>CMTS</b>	The Gross Revenue shall be inclusive of installation charges, late fees, sale proceeds of handsets (or any other terminal equipment etc.), revenue on account of interest, dividend, value added services, supplementary services, access or	(i) PSTN related Call charges (access charges) actually paid to Bharat Sanchar Nigam Ltd. (BSNL) / Mahanagar Telephone Nigam Ltd. (MTNL) or other telecom service providers within India.



	interconnection charges, roaming charges, revenue from permissible sharing of infrastructure and any other miscellaneous revenue, without any set-off for related item of expense, etc.	(ii) Roaming /IUC revenues actually passed on to other telecom service providers, and (iii) Service Tax on provision of service and Sales Tax actually paid to the Government; if gross revenue had included the component of Service Tax.
<b>BASIC</b>	The Gross Revenue shall include all revenues accruing to the licensee on account of goods supplied, services provided, leasing of infrastructure, use of its resources by others, application Fee, installation charges, call charges, late Fees, sale proceeds of instruments (or any terminal equipment including accessories), handsets, band width, income from Value Added Services, supplementary services, access or interconnection charges, roaming charges, any lease or rent charges for hiring of infrastructure etc. and any other miscellaneous items including interest, dividend etc. without any set off of related items of expense, etc.	(i) PSTN related call charges (access charges) actually paid to other telecom service providers for carriage of calls; (ii) Service Tax for provision of service and sales tax actually paid to the Government, if gross revenue had included the component of service tax.
<b>NLD</b>	‘Gross Revenue’ the revenue income accruing to the licensee by way of providing NLD service under the licence including the revenue on account of supplementary/value added services and leasing of infrastructure, interest, dividend etc. The Gross Revenue shall also include previous debits (e.g. bad debts recovered, of excess provisions in earlier years.) It is clarified that any lease or rent charges for hiring of infrastructure shall not be so deducted. Service tax and sales tax	“Component part of a pass-through nature payable to other service providers to whose networks the Licensee’s NLD network is interconnected for carriage of calls.



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	collected and passed on to the Government(s) from customers of the licensee shall not form a part of the Revenue.	
<b>ILD</b>	The Gross Revenue shall include all revenues accruing to the licensee on account of goods supplied, services provided, leasing of infrastructure, use of its resources by others, application Fee, installation charges, call charges, late fees, sale proceeds of instruments (or any terminal equipment including accessories), handsets, band width, income from Value Added Services, supplementary services, access or interconnection charges, any lease or rent charges for hiring of infrastructure etc. and any other miscellaneous items including interest, dividend etc. without any set off of related items of expense, etc.	“Call charges (access charges) actually paid to other telecom service providers for carriage of calls; service tax for provision of service and sales tax actually paid to the Government, if gross revenue had included the component of service tax.



<b>ISP</b>	The Gross Revenue shall be inclusive of revenue from Internet access service, revenue from internet contents, revenue from Internet Telephony service, revenue from activation charges, revenue from sale, lease or renting of bandwidth, links, R&G cases, Turnkey projects etc., revenue from IPTV service, late fees, sale proceeds of terminal equipments, revenue on account of interest, dividend, value added services, supplementary services, interconnection charges, roaming charges, revenue from permissible sharing of infrastructure and any other miscellaneous revenue, without any set-off for related item of expense etc.	(i) Charges from pure Internet service, activation charges from pure internet subscribers. Pure Internet Services shall mean any method / device / technology to provide access to Internet unless explicitly prohibited and all content available including web-hosting, web-collocation which is available on internet without access restriction.
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**Total Revenue Vs. Revenue from License Activities of the Company:**

It is always not possible that the total revenue shown in the Profit & Loss Statement of a company will match with the total revenue (AGR) calculated for the purpose of license fee. There may be a variance in the figures of total revenue reported in the financial statements and those calculated for AGR. This may be due to the following:

- i. The license fee is levied on AGR generated by each circle. A company may have more than one circle/area of operation and there is possibility of inter -circle transactions related revenue. These inter-circle revenue transactions are eliminated while calculating total revenue for reporting in the financial statements.
- ii. Where a company is engaged in other business in addition to providing telecom services, the total revenue of the company depicted in the profit & Loss account will include revenue from all business of the company including telecom services.

In nutshell, the telecom companies (called Licensees) are required to pay a specified percentage of Adjusted Gross Revenue (AGR) as licence fee to the DOT (called Licensor) in respect of each licensed service which is computed as per the format of Adjusted Gross Revenue (AGR) as Licence Fee prescribed in the Licence Agreement applicable to that particular service.



A specimen of the format of Adjusted Gross Revenue (AGR) as Licence Fee prescribed in Unified Access Service Licence (UASL) Agreement is annexed.

**ANNEXURE-**

**Format of Statement of Revenue and Licence Fee prescribed under Unified Access Services Licence (UASL) Agreement to Determine GR, AGR and Licence Fee from the Revenue records of the Telecom Service Provider**

**Statement of Revenue and Licence Fee**

\_\_\_\_\_ (Name and address of operator)

Unified Access Services in \_\_\_\_\_ (Service Area)

Statement of Revenue and Licence Fee for the Quarter .....

of the financial year.....

**(AMOUNT IN RUPEES)**

S.N.	PARTICULARS	ACTUALS FOR THE PREVIOUS QUARTER	ACTUALS FOR THE CURRENT QUARTER	CUMULATIVE UPTO THE CURRENT QUARTER.
1	Revenue from services			
A	Revenue from wireline subscribers:			
(i)	Rentals			
(ii)	Call revenue within service area			
(iii)	National LONG DISTANCE CALL revenue			
(iv)	International LONG DISTANCE CALL revenue			
(v)	Pass thru revenue for usage of other networks (give OPERATOR-wise details)			
(vi)	Service tax			
(vii)	Service charges			
(viii)	Charges on account of any other value added services, Supplementary Services etc.			
(ix)	Any other income / miscellaneous receipt from wireline subscribers.			



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<b>B</b>	<b>Revenue from WLL subscribers : (Fixed)</b>			
(i)	Rentals			
(ii)	Call revenue within service area			
(iii)	National LONG DISTANCE CALL revenue			
(iv)	International LONG DISTANCE CALL revenue			
(v)	Pass thru revenue for usage of other networks (give OPERATOR-wise details)			
(vi)	Service tax			
(vii)	Service charges			
(viii)	Charges on account of any other value added services, Supplementary Services etc.			
(ix)	Any other income / miscellaneous receipt from WLL subscribers.			
<b>C</b>	<b>Revenue from WLL subscribers : (handheld)</b>			
(i)	Rentals			
(ii)	Call revenue within service area			
(iii)	National LONG DISTANCE CALL revenue			
(iv)	International LONG DISTANCE CALL revenue			
(v)	Pass thru revenue for usage of other networks (give OPERATOR-wise details)			
(vi)	Service tax			
(vii)	Service charges			
(viii)	Charges on account of any other value added services, Supplementary			



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	Services etc.			
(ix)	Any other income / miscellaneous receipt from WLL subscribers.			
<b>D</b>	<b>Revenue from Mobile Services:</b>			
<b>D (a)</b>	<b>Revenue from GSM and 3G spectrum based Mobile Services:</b>			
<b>D (a) 1.</b>	<b>Post paid options:</b>			
i.	Rentals			
ii.	Activation Charges			
iii.	Airtime Revenue			
iv.	Pass through charges (provide operator-wise details)			
v.	Service Tax			
vi.	Roaming charges			
Vii	Service charges			
viii.	Charges on account of any other value added services. Supplementary Services etc.			
ix.	Any other income/ miscellaneous receipt from post paid options.			
<b>D (a) 2.</b>	<b>Pre-paid options:</b>			
i.	Sale of pre-paid SIM cards including full value of all components charged therein.			
ii.	Any other income/ miscellaneous receipt from pre-paid options.			
<b>D (a) 3.</b>	<b>Revenue from Mobile Community</b>			
<b>i.</b>	<b>phone service including full value of all components charged therein.</b>			
<b>ii.</b>	<b>Any other income/ miscellaneous receipt from Mobile Community phone service.</b>			



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<b>D (b)</b>	<b>Revenue from CDMA based Mobile Services:</b>			
<b>D (b) 1.</b>	<b>Post paid options:</b>			
i.	Rentals			
ii.	Activation Charges			
iii.	Airtime Revenue			
iv.	Pass through charges (provide operator-wise details)			
v.	Service Tax			
vi.	Roaming charges			
Vii	Service charges			
viii.	Charges on account of any other value added services. Supplementary Services etc.			
ix.	Any other income/ miscellaneous receipt from post paid options.			
<b>D (b) 2.</b>	<b>Pre-paid options:</b>			
i.	Sale of pre-paid SIM cards including full value of all components charged therein.			
ii.	Any other income/ miscellaneous receipt from pre-paid options.			
<b>D (b) 3.</b>	<b>Revenue from Mobile Community</b>			
<b>i.</b>	<b>phone service including full value of all components charged therein.</b>			
<b>ii.</b>	<b>Any other income/ miscellaneous receipt from Mobile Community phone service.</b>			
<b>D (c)</b>	<b>Revenue from BWA Services:</b>			
<b>D(c) 1.</b>	<b>Post paid options:</b>			
i.	Rentals			



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ii	Activation Charges			
iii.	Airtime Revenue			
iv.	Pass through charges (provide operator-wise details)			
v.	Service Tax			
vi.	Roaming charges			
Vii	Service charges			
viii.	Charges on account of any other value added services. Supplementary Services etc.			
ix.	Any other income/ miscellaneous receipt from post paid options.			
<b>D(c) 2.</b>	<b>Pre-paid options:</b>			
i.	Sale of pre-paid SIM cards including full value of all components charged therein.			
ii.	Any other income/ miscellaneous receipt from pre-paid options.			
<b>D(c) 3.</b>	<b>Revenue from Mobile Community</b>			
<b>i.</b>	<b>phone service including full value of all components charged therein.</b>			
<b>ii.</b>	<b>Any other income/ miscellaneous receipt from Mobile Community phone service.</b>			
<b>E</b>	<b>Revenue from Voice Mail /any other value added service</b>			
<b>2</b>	<b>Income from trading activity (all including of sales tax)</b>			
(i)	Sale of handsets			
(ii)	Sale of accessories etc.			
(iii)	Any other income/ miscellaneous			



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	receipt from trading activity.			
<b>3</b>	<b>Revenue from roaming.</b>			
i.	Roaming facility revenue from own subscribers.			
ii.	Roaming revenue from own subscriber visiting other networks including STD/ISD/pass thru charges for transmission of incoming call during roaming.			
iii.	Roaming Commission earned.			
iv.	Roaming revenue on account of visiting subscribers from other networks (provide operator-wise details).			
v.	Service Tax if not included above.			
vi.	Any other income/miscellaneous receipt from roaming.			
<b>4</b>	<b>Income from investments</b>			
(i)	Interest income			
(ii)	Dividend income			
(iii)	Any other miscellaneous receipt from investments.			
<b>5</b>	<b>Non-refundable deposits from subscribers</b>			
<b>6</b>	<b>Revenue from franchisees /resellers including all commissions and discounts etc. excluding the revenues already included in IA&amp;IB</b>			
<b>7</b>	<b>Revenue from sharing/ leasing of infrastructure</b>			



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<b>8</b>	<b>Revenue from sale/ lease of bandwidth, links, R&amp;G cases, turnkey projects etc.</b>			
<b>9</b>	<b>Revenue from other OPERATORS on account of pass through call charges (provide operator-wise details).</b>			
<b>10</b>	<b>Revenue from other OPERATORS on account of provisioning of interconnection (provide operator-wise details)</b>			
<b>11</b>	<b>Miscellaneous revenue</b>			
<b>AA</b>	<b>GROSS REVENUE OF THE LICENSEE COMPANY: (Add 1-11)</b>			
<b>BB</b>	<b>DEDUCT:</b>			
1	Charges actually paid to other SERVICE PROVIDER(s) (OPERATOR-wise)			
2	Roaming revenues actually paid to other CMSPs And GMPCS service providers. (operator-wise)			
3	Service Tax paid to the Government			
4	Sales Tax paid to the Government			
<b>BB</b>	<b>TOTAL DEDUCTIBLE REVENUE (1+2+3+4)</b>			
<b>CC</b>	<b>ADJUSTED GROSS REVENUE (AA-BB)</b>			
	<b>REVENUE SHARE @ ----- OF ADJUSTED GROSS REVENUE</b>			



**Format of Auditor’s Report on Statement of Revenue and Licence Fee**

To,  
The Board of Directors

.....  
We have examined the attached Statement of Revenue and Licence Fee of .....  
(the name of the operators) for the quarter(s) ending \_\_\_\_\_. We have also examined the reconciliation of the cumulative figures for the quarter(s) ending \_\_\_\_\_ appearing in the Statement of Revenue and Licence Fee of the company with the figures appearing in the profit and loss account of the company for the year ended \_\_\_\_\_ which was audited by us. We understand that the aforesaid statement(s) ( and the reconciliation) is /are to be furnished to the Central Government for assessment of the Licence fee payable by the company to the Government, in terms of the Licence agreement No..... signed between the company and the Department of Telecommunications.

We report that:

1. We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.
2. In our view, the company has an adequate internal control system in relation to revenues which is commensurate with its size and the nature of its business. The system, in our opinion, provides reasonable assurance that there is no unrecorded revenue and that all revenue is recorded in the proper amount and in the proper period.
3. No amounts payable in respect of sales tax, service tax or PSTN/toll/roaming charges were outstanding at the last day of the quarter(s) for a period of more than two months from the date they became payable, except for the following:.....
4. In our opinion and to the best of our knowledge and belief and according to the explanations given to us, the Statement has been prepared in accordance with the norms/guidelines contained in the said Licence agreement in this behalf and gives a true and fair view of the revenue and Licence fee payable for the period computed on the basis of the aforesaid guidelines except for the following:  
\* Strike off wherever not applicable.

**(SIGNATURE)**

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## Chapter 18

### Audit requirements under the Reporting System on Accounting Separation Regulations, 2012 Issued by TRAI

#### 1. Applicability for Filing of ASR Audit Report

The audited annual accounts of a telecom service provider (TSP) company provides only aggregated information i.e. information of the company as a whole and does not provide details for regulatory purpose such as:

- (i) Measuring financial performance of products;
- (ii) Monitor return on products and services regulated with price ceilings;
- (iii) Identify cross subsidizing, Investigating predatory pricing, discrimination and other anti-competitive conduct;
- (iv) Understanding the inter-operator arrangements in terms of price and cost, and
- (v) Monitoring segment-wise performance of integrated operators (TSPs)

Therefore Telecom Regulatory Authority of India (TRAI) got notified “Reporting System on Accounting Separation Regulations, 2012”. These regulations facilitate the availability of more detailed and disaggregated information on revenues and costs on regular basis. These regulations apply to all service providers having aggregate turnover of not less than rupees one hundred crore, during the accounting year for which report is required to be submitted under these regulations, from operations under the licence issued under section 4 of the Indian Telegraph Act, 1885.

#### 2. Telecom Services for ASR regulation:

Given below is the list of services prescribes by the Reporting System on Accounting Separation Regulations, 2012 for which the Telecom Service Provider is required to submit Accounting Separation Reports to the TRAI in accordance with the service area for which licence has been granted by the DoT :

S. No.	Name of Telecom Service	Geographical area of Operation
1	Access Service - Wireless (Full Mobility)	Telecom Circle
2	Access Service – WLL	Telecom Circle
3	Access Service – Wireline	Telecom Circle
4	Internet Service	Category ‘A’ (All India)/‘B’ (Telecom Circle)/‘C’ (District)
5	National Long Distance	All India
6	International Long Distance	All India



7	Tower Business	All India
8	Dark Fibre	All India
9	Cable Landing Station	All India
10	Mobile Number Portability (MNP)	All India
11	Very Small Aperture Terminal Service (VSAT)	All India

### 3. Reports

Every service provider shall furnish to the Authority the financial and non-financial reports:

- (a) every accounting year based on Historical Cost Accounting for all the services specified in above table and;
- (b) every second accounting year based on Replacement Cost Accounting for the following services namely :
  - (i) Access Service – Wireless (Full Mobility)
  - (ii) Access Service – WLL
  - (iii) Access Service – Wireline
  - (iv) National Long Distance Service
  - (v) International Long Distance Service

The service provider is not required to furnish the Accounting Separation Reports based on Replacement Cost Accounting for the first three years from the date of issue of licence.

### 4. Accounting Separation Reports - Proformae

The Accounting Separation Reports (Proformae A to I contain Financial information and Proforma J contains Non-financial information) to the TRAI should be in the following Perfomae:

S. No.	Proforma	Description of the Proforma
1	Proforma A	Profit and Loss Statement – Service
2	Proforma B	Profit and Loss Statement – Product
3	Proforma C	Cost Sheet - Network Elements
4	Proforma D	Cost Sheet - Support Functions/Departments
5	Proforma E	Statement of Gross Block, Depreciation and Net Block – Service
6	Proforma F	Capital Employed Statement- Service
7	Proforma G	Capital Employed Statement: Allocation to Products



8	Proforma H	Statement of Related Party Transactions
9	Proforma I	Reconciliation Statement (covering all services and area of operations) with Audited Financial Statements.
10	Proforma J	Statement of Non-financial information for each service

#### **5. Approval from of Board of Directors**

- a) The accounting separation reports prepared by the service provider under regulation 4 of Regulations shall be adopted by the Board of Directors of the company and shall be signed by the authorized signatory before submitting the same to Auditor.
- b) The accounting separation reports prepared by the service provider and the audit report shall be signed by the auditor or a partner of the firm, if a firm is appointed as auditor.

#### **6. Submission of ASR audit report**

- a) The accounting separation reports along with the audit report shall be submitted to the TRAI within 6 months of the close of the accounting year.
- b) The reports shall be submitted in hard copy and in soft copy in MS Excel format along with its formulae and linkage.
- c) Every service provider shall for the purpose of implementing the accounting and reporting practices specified under these regulations furnish to the Authority within 90 days from the date of commencement of these regulations, a manual containing policies, principles, methodologies and procedures for accounting and cost allocation.
- d) The auditor shall submit his report in the proforma specified in Schedule IV prescribed under the "Reporting System on Accounting Separation Regulations, 2012".



## **Chapter 19**

### **Audit of Call Data Records (CDRs) to Assess / Determine / Verify Service Provider- wise Liability of Transit Carriage Charge**

#### **1. Need for Audit of CDRs:**

Consequent upon the issue of an Order or Direction or Regulation issues by the Telecom Regulatory Body, the auditors / consultants are required to analyse / audit the Call Data Records (CDR) and other billing related information of the telecom service providers based on which the Access Service ( Basic (Wireline) and Cellular Mobile (Wireless) Service provider bills to the customers in India need to be audited to verify the Carriage Transit Charges (part of Interconnection Usage charges (IUC)) to assess the liability of the telecom service providers towards such charges towards the Carriage Transit facility provider.

Call Data Record (CDR) contains the record of the details of the call made by the customer of one telecom service provider to the customer of other telecom service provider using the telecom network of such other telecom service provider to carry or terminate (or both) the call. Usual information on a CDR includes date, start time of call, end time of call, duration of call, originating number and terminating number and other tariff related information from the tariff plan chosen by the subscriber. Call Data Record (CDR) details is used to determine the transit carriage charges which are the charges to be paid by one cellular operator to other operator for carriage of intra-circle mobile traffic handed over by UASL/CMTS networks to Fixed network of other operator, at Level II Trunk Automatic Exchange (TAX) of Long Distance Charging Area (LDCA) in which the call is to be terminated, to the Short Distance Charging Area (SDCA).

#### **2. Auditor 's Role, Responsibilities and Scope of Work for Analysis of CDRs:**

To assess and verify the liability of each telecom service provider as per the Order / Direction or Regulation issues by the Telecom Regulatory Body. The auditor should assess and verify the liability in terms of transit carriage charges, the distance slabs will be taken into consideration as per the carriage charges as specified in the Telecommunication Interconnection Usage Charges (IUC) Regulation issued by the Telecom Regulatory Authority. The assessment and verification of the liability in terms of transit carriage charges can be carried out as per the per minute rate specified in the Telecommunication Interconnection Usage Charges (IUC) Regulation issued by the Telecom Regulatory Authority or such other rate which have been agreed upon by the service provider as per Interconnection Agreement among them.

The Auditor will assess or determine/ verify service providers-wise, service area-wise and month-wise liability of each service provider in terms of transit carriage charges and report in the



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prescribed format as per the requirement of the Order / Direction or Regulation issues by the Telecom Regulatory Body. The verification of call data of service providers can be done on the basis of call data records maintained by both the telecom service providers will be considered as parent data.

The audit report should contain observations and recommendation also includes the summary and explanation of the analysis of CDRs in the report format, if any prescribed.



## **Chapter 20**

### **Audit of Metering and Billing System of Telecom Companies**

#### **1. Need for Metering and Billing Audit:**

The Telecom Regulatory authority of India receives billing related complaints from the telecom customers, consumer advocacy groups (CAGs) and from any other consumer welfare association. The complaints are mainly related to lapses with regard to flaws in billing system, configuration of systems in accordance with the applicable Tariff Plan, wrong billing due to linking of wrong Tariff Plan, malfunctioning of software of the Telecom Service Providers due to which the customers are wrongly billed. Through the implementation of Regulation, the Telecom Regulatory Authority India (TRAI) ensures that telecom service Providers' Metering and Billing System is generating correct bills to the customers. To ensure this, the Telecom Regulatory Authority India gets conducted the audit of the telecom service provider based on the parameters with benchmarks for fair and reliable metering and billing system by notifying the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 dated 21st March 2006 and subsequently amended Regulation vide notification dated 25th March 2013.

#### **2. System of Appointment of Auditors for Metering and Billing Audit:**

The Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 and subsequently amended Regulation vide notification dated 25<sup>th</sup> March 2013 has a provision that the Telecom Regulatory Authority should notify a panel of auditors to audit the Metering and Billing System of service providers. The service providers may appoint any one of these Auditors (empanelled by TRAI) for auditing their billing system vis-à-vis the Code of Practice for metering and billing accuracy.

#### **3. Obligations and Duties of Auditor**

The Auditors shall assess Service Providers' Metering and Billing System and have to ensure that the Service Providers' Metering and Billing System is complying with the norms set by the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 and subsequently amended Regulation vide notification dated 25th March 2013.

Regarding the obligations of auditor, regulation 6B of the Quality of Service (Code of Practice for Metering and Billing Accuracy) (Amendment) Regulations, 2013 , inter-alia, state that---

(1) Every auditor shall---

- (a) undertake audit of the metering and billing system of a service provider in accordance with the guidelines and checklist issued by the Authority under these regulations and it shall not



undertake audit of a service provider consecutively for more than two years; regulations and it shall not undertake audit of a service provider consecutively for more than two years;

(b) comply with the provisions of the regulations, directions, orders and instructions issued by the Authority, from time to time.

(2) Every auditor shall—

(a) ensure that the audit is conducted in fair and transparent manner;

(b) ensure that the confidential data collected during the conduct of audit of a service provider is not shared with any person except in the manner provided under these regulations;

(c) submit to the Authority report on progress of audit in such format and at such intervals as the Authority may specify from time to time;

(d) report immediately to the service provider instances of overcharging noted by it during the conduct of audit;

(e) examine on receipt from the service provider, the reasons for non-acceptance of the audit observation on overcharging in excess of the applicable tariff, whether such reasons are acceptable or not and, in case the auditor does not accept reasons furnished by the service provider, he shall report such cases in the audit report along with his observations thereon;

(f) submit to the Authority, a monthly progress report on action taken by the service provider on instances of overcharging reported in such format, as may be specified by the Authority, from time to time;

(g) verify the action taken by the service provider on instances of overcharging reported and shall include the findings thereof in the audit report;

(h) be responsible for completing the audit within the time limit to enable the service provider to submit the audit report to the Authority within the time limit specified under regulation 6A of Quality of Service (Code of Practice for Metering and Billing Accuracy) (Amendment) Regulations, 2013;

(i) check, while auditing the metering and billing system of a service provider, compliances of the service provider to the Code of Practice for Metering and Billing Accuracy laid down in the regulation and, based on his assessment, he shall prepare an audit report containing ---

(i) separate audit report for each licensed service area audited by him;

(ii) the methodology adopted for carrying out the audit;

(iii) details of tariff plans audited;

(iv) deficiency noted by him with respect to each of the code or quality parameter laid



down in the Code for Practice for Metering and Billing accuracy and his comments on compliance reported by the service provider;

(v) certificate that he has received all information and explanation from the service provider necessary for the conduct of audit; of audit;

(vi) comments on the authenticity of the information received from the service provider for the purpose of the audit;

(vii) details of test calls, sample analysis made and the results thereof, separately for each audit observations;

(viii) analysis of the complaints lodged in the records of the service provider to identify whether the service provider had undertaken root cause analysis of such complaints; and

(ix) verification of action taken on the audit observations in the preceding year; and

(j) include in the audit report all the comments received from the service provider against each audit observation.

(3) The Authority may refer complaints relating to billing, value added services and other complaints for verification or investigation by the auditor and every auditor, to whom such complaints have been referred by the Authority, shall verify and investigate such complaints and furnish report thereon to the Authority within such time as the Authority may specify, from time to time.

(4) If an auditor fails to comply with the provisions of these regulations, he shall be liable to be removed from the panel of the auditors:

Provided that, reasonable opportunity shall be given to the auditor to explain the non-compliance observed by the Authority.

#### **4. Areas of concern for auditors:**

(i) **Non-Compliance** - an instance of failure to comply with an established requirement. The nature of the failure and the requirement in question need to be made explicit in documenting any Non-Compliance.

(ii) **Deficiency** - an instance of a lack of adequacy in meeting a requirement. An example might be where a Billing system has no facility to detect duplication of records for the same Service Usage. This would be likely to lead to a breach of Code of Practice for Metering and Billing Accuracy, but the absence of a detection facility only causes a problem when such duplication occurs.

(iii) **Observation**- a comment about something that has been seen during an assessment, but is not considered sufficiently serious to be a deficiency. However, it may possibly lead to corrective and / or preventative action.



## **5. Audit Areas, Audit Checks and Procedure:**

The auditors have to:

- A.** verify the billing and charging of telecom operators both for prepaid and postpaid customers in accordance with the Code of Practice for Metering and Billing Accuracy in a representative manner within the overall sample size.
- B.** evaluate inter alia the correctness of the following: -
  - generation process of the Call Data Records (CDR) - raw CDRs.
  - the entries in the direction table which is used for rating the raw CDRs.
  - the rated CDR vis-à-vis the rate applied, duration mentioned, origination and destination codes.
  - charging of VAS services to the subscribers.
  - charging of the roaming services to the mobile subscribers.
- C.** audit the tariff plans having subscribers more than 10 % of the total subscribers will be audited in each licensed service area. The number of sample size to be checked in each tariff plan so that the verification should be such so as to achieve a confidence level of 95% at a confidence interval of 3%.
- D.** take the raw CDRs post-mediated and unrated & process the same to generate the Bill and then verify with already generated bill for any discrepancy. The CDRs of last three months are to be processed. In all cases metering and mediation process to be checked first by sample test calls to ascertain that metering and mediation process is accurate and no systemic deficiency is noticed. After doing the functional testing of the mediation process/software, unrated post-mediated CDRs may be used for generating the bills for audit analysis.
- E.** make sample test calls using test SIM Cards/ telephone for every possible charge scenario and corresponding accuracy of rating procedures by the IN system can be established in the case of Prepaid billing, rated CDRs are produced by the IN system to verify that the billing is as per the applicable tariff plan. In the absence of any un-rated CDRs, backward reconciliation of rated CDRs from IN system shall be done to further establish correctness of rating procedures based on sample bills generated for the sample test calls.

## **6. Independence of Auditors:**

The Auditors must be independent and should not have business relationship during the last one year with of telecom service providers. The Auditors should avoid direct involvement in the design, construction, operation or maintenance of electronic communications networks or



communications metering and / or billing solutions. They shall not represent parties engaged in these activities.

**The telecom service provider shall not appoint an auditor (a) consecutively for more than two years; (b) who is its internal auditor.**

**7. Qualification of Auditors:**

The Auditor should have accreditation from the Quality Council of India/ National Accreditation Board for Certification Bodies or from the International Accreditation Forum or should be an audit firm registered with the Institute of Chartered Accountants of India/ Institute of Costs Accountants of India having experience in technical audit of similar nature to carry out the Metering and Billing approval process as defined in the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 as amended from time to time by the Telecom regulatory authority of India. The Auditor should preferably be qualifies as system auditor or have proven experience in the audit of Billing System used for prepaid customers / Billing System of Credit Card System besides having expertise of understanding of software relating to telecommunication / communication system & technology / Information Technology (IT).

**8. Audit check list for Metering & Billing Audit :**

To provide assistance to the auditors in conducting the audit, an illustrative audit check list for Metering & Billing Audit is as under:

**(A) Audit Check list for Audit of Metering and Billing System of Telecom Service Providers**

<b>Sr. No</b>	<b>Audit Area (item name)</b>	<b>Test to be performed</b>
1	Information relating to Tariffs	

<b>Sr. No</b>	<b>Audit Area (item name)</b>	<b>Test to be performed</b>
1.1	<p>Before a customer is enrolled as a subscriber of any telecommunication service, he shall be provided with advance detailed information relating to the tariff for using that service, in accordance with TRAI's Direction No.301-26/2003- TRAI(Eco) dated 2nd May, 2005 and No.301-49/2005-Eco dated 16.09.2005. Further, the service provider should inform the customer in writing, within a week of activation of service, the complete details of his tariff plan. Such information shall be in the format "C" prescribed in TRAI Direction No.301-26/2003-TRAI (Econ.) dated 2nd May, 2005.</p> <p>In addition, the following information shall also be provided:</p> <ul style="list-style-type: none"> <li>▪ Quantity related charges (e.g. the charge for each SMS message, or kilobyte of data transmitted).</li> <li>▪ Accuracy of measurement of time, duration and of quantity, and also the resolution and rounding rules, including the underlying units, used when calculating the charges for an individual event or an aggregation of events</li> <li>▪ Contractual terms and conditions for supply, restriction and cessation of Service</li> <li>▪ The service providers shall intimate a postpaid customer in advance about his credit limit. This information should also be available in the monthly statement/ bill of the customer on a regular basis.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Verify the process for enrolment of a customer and check whether he was given information relating to tariff</li> <li>▪ Verify whether the customer has been notified the complete details of tariff in writing within a week of activation (take sample cases and test check)</li> <li>▪ Verify availability of information in tariff plan</li> <li>▪ Verify accuracy of measurement and rounding rules.</li> <li>▪ Verify contractual terms and conditions with reference to bill printed.</li> <li>▪ Verify the process of intimating credit limit to subscribers. Check for instances where connections have been de-activated on the ground of the subscriber exceeding credit</li> </ul>

Sr. No	Audit Area (item name)	Test to be performed
	<p>Service shall not be discontinued as long as the amount due is below the amount and his security deposit or the specified limit whichever is higher. TRAI Direction dated 27.06.2005 and 07.06.2006 refers.</p> <ul style="list-style-type: none"> <li>▪ The service provider cannot increase tariff on any item within six months of enrolment in a tariff plan. Telecommunication Tariff Order (31<sup>st</sup> amendment) notified on 07.07.2004 refers.</li> <li>▪ The customer is free to move from one tariff plan to another without paying any fee for migration.</li> </ul>	<p>limits.</p> <ul style="list-style-type: none"> <li>▪ Verify from bills to ensure that no tariff item has been hiked during the six months period specified in the Tariff Order.</li> <li>▪ To verify from bills of subscribers who have changed their tariff plans to ensure that no migration charges have been levied.</li> </ul>
1.2	<p>The information required in the clause above shall be available on the Service Provider’s web site, as prescribed in TRAI Direction No.301-26/2003-TRAI (Econ.) dated 2nd May, 2005 (Format- C).</p>	<ul style="list-style-type: none"> <li>▪ Obtain website URL.</li> <li>▪ Log onto website and verify whether mentioned details are available for each Tariff plan.</li> <li>▪ Establish whether above information is available on the website in accordance with TRAI directives.</li> </ul>
1.3	<p>Where a value-added service (e.g. download of content, such as a film clip or ring tone) or entry to an interactive service (such as a game) can be selected through a choice of the service user (e.g. by dialing a specific number) then the charge for the service must be provided to him before he commits to use the service.</p>	<p>Take a list of all value-added services.</p> <p>Take sample from each value-added service and check the procedures completely.</p> <p>Verify whether the charge for the service is indicated before subscriber commits to use the service.</p>

Sr. No	Audit Area (item name)	Test to be performed
2	<b>Provision of Service</b>	
	The services provided to the customer and all subsequent changes therein shall be those agreed with him in writing prior to providing the service or changing its provisions.	<ul style="list-style-type: none"> <li>▪ Verify procedures to log customer requests for services.</li> <li>▪ Verify procedures for applying such customer requests.</li> </ul>
3	<b>Accuracy of Measurement</b>	
3.1	All charges must be consistent with the published Tariff applicable to the end-user charged.	<ul style="list-style-type: none"> <li>▪ Verify with 3 months CDRs with reference to tariff plan opted by customers and by making calls in each selected plan. Also check tariff related complaints &amp; their redressal.</li> </ul>
3.2	<p>a) Unless otherwise specified in the published Tariff or previously agreed Tariff, a charge shall be determined in accordance with the following limits:</p> <p>b) Where the charge is dependent upon duration, the recorded duration shall be measured to within:</p> <ul style="list-style-type: none"> <li>▪ Between +1 seconds and –1 second; or</li> <li>▪ Between +0.01% (1:10,000) to –0.02% (1:5,000) whichever is less stringent; and</li> </ul>	<ul style="list-style-type: none"> <li>▪ Test check sample records to establish correctness of parameters.</li> </ul>
	c) where the charge is dependent upon the time of day, the time of day shall be recorded to within $\pm 1$ second, traceable to an appropriate time reference; and	<ul style="list-style-type: none"> <li>▪ Test check sample records to establish correctness of parameters.</li> </ul>
	d) where the charges are dependent upon the counting of occurrences of a particular type, the count shall be accurate to no more than plus 1/25,000 (0.004%) or minus 1/1,000 (0.1%).	<ul style="list-style-type: none"> <li>▪ Test check sample records to establish correctness of parameters.</li> </ul>

Sr. No	Audit Area (item name)	Test to be performed										
3.3	Where measurement under clauses 3.2 (a), (b) & (c) reveals systematic errors in timing or counting that result in overcharged events which are not stated in published Tariffs then correction should take place to ensure accurate Bills.	<ul style="list-style-type: none"> <li>▪ Verify with the records whether corrective action has been taken proactively by the TSP or on the complaint made by the customer.</li> </ul>										
4	<b>Reliability of Billing</b>											
4.1	<p>The performance of a Total Metering and Billing System shall be, subject to the tolerances specified in clause 3.2:</p> <p>a) the numbers of items of service usage that are overcharged events or undercharged events, as a proportion of the total number of chargeable events, shall not exceed the limits shown in Table 1; and</p> <p>b) the sum of the values of the errors in the overcharged events or undercharged events, as a proportion of the total value of the total number of Chargeable events, shall not exceed the limits shown in Table 1.</p> <p><b>Table 1 – Total Metering and Billing System reliability performance requirements</b></p> <table border="1" data-bbox="298 1367 870 1860"> <thead> <tr> <th data-bbox="298 1367 537 1461">Chargeable Events</th> <th data-bbox="537 1367 870 1461">Performance</th> </tr> </thead> <tbody> <tr> <td data-bbox="298 1461 537 1593">Number under or not Charged</td> <td data-bbox="537 1461 870 1593">0.1% (1 in 1000)</td> </tr> <tr> <td data-bbox="298 1593 537 1688">Number overcharged</td> <td data-bbox="537 1593 870 1688">0.004% (1 in 25,000)</td> </tr> <tr> <td data-bbox="298 1688 537 1782">Value under or not charged</td> <td data-bbox="537 1688 870 1782">0.05% (1 in 2000)</td> </tr> <tr> <td data-bbox="298 1782 537 1860">Value overcharged</td> <td data-bbox="537 1782 870 1860">0.002% (1 in 50,000)</td> </tr> </tbody> </table>	Chargeable Events	Performance	Number under or not Charged	0.1% (1 in 1000)	Number overcharged	0.004% (1 in 25,000)	Value under or not charged	0.05% (1 in 2000)	Value overcharged	0.002% (1 in 50,000)	Based on the audit procedures applied above, take the total deviation and verify whether the same is in accordance with the limits stated by TRAI
Chargeable Events	Performance											
Number under or not Charged	0.1% (1 in 1000)											
Number overcharged	0.004% (1 in 25,000)											
Value under or not charged	0.05% (1 in 2000)											
Value overcharged	0.002% (1 in 50,000)											

Sr. No	Audit Area (item name)	Test to be performed
4.2	Where implementation of an order for a service, feature or discount which depends on the number or duration of chargeable events is applied at variance with published Tariffs, each chargeable event within the scope of the incorrectly applied order shall be an undercharged event or an overcharged event, as appropriate, for the purposes of clause 4.1.	Verify with reference to tariff plan.
4.3	Where an item of service usage is completed other than intended, but the charge applied is correct for the service as delivered, this shall not be regarded as either an undercharged event or an overcharged event.	Observation
4.4	The increase in duration or number of items of service usage resulting from degraded transmission performance shall not be taken into account when computing the performance of the system.	Observation
5	<b>Applying Credit to Accounts</b>	
5.1	<b>For post-pay accounts</b> , payments made by a customer shall be credited to his account within 3 working days of receipt of the cash/ cheque. Where credit is given by the service provider, this shall be applied within one working day of its agreement.	<ul style="list-style-type: none"> <li>▪ Review the payment credit system.</li> <li>▪ Take payments sample to check whether the credit is applied correctly.</li> <li>▪ Check that the payments made by the customer are regularly updated in the billing system.</li> <li>▪ Updation in respect of post-pay customers to be credited within 3 working days of receipt of the cash/cheque.</li> </ul>
5.2	<b>For pre-pay accounts</b> , top-up credit shall be applied to a customer's account within 15	<ul style="list-style-type: none"> <li>▪ Review the system settings and take sample cases to test whether the</li> </ul>

<b>Sr. No</b>	<b>Audit Area (item name)</b>	<b>Test to be performed</b>
	minutes of its application. Where credit is given by the service provider, this shall be applied within 1 day of its agreement.	conditions are met.
<b>6</b>	<b>Timeliness of Post Pay Billing</b>	
6.1	The timeliness of bill issue or bill data file issue shall be subject to systematic processes.	<ul style="list-style-type: none"> <li>▪ Review process and procedures for issuance of bill.</li> </ul>
6.2	Any chargeable events the details of which are not available when the bill is prepared shall be included in a subsequent bill, but not later than the fourth monthly bill after the chargeable events occurred. Any details not so presented shall be written off and if significant, be counted against the performance for undercharged events in clause 4.1. Exceptionally, event details from a separate service provider may be billed up to three months after receipt.	<ul style="list-style-type: none"> <li>▪ Review the process of chargeable events.</li> <li>▪ Take sample for such cases (typically where the customers are National or International Roaming).</li> <li>▪ Obtain list of all such events (that have occurred) for the period under review.</li> <li>▪ Review procedures of inclusion of such events in subsequent bill (Whether such charges are separately identifiable).</li> <li>▪ Review procedures for writing off of such charges.</li> <li>▪ Verify whether all such charges have been included for calculation of 'undercharged events'</li> <li>▪ Check that all calls billed are in respect of the billing period referred on the bill and also to verify whether the discounts, if any, have been properly passed on to the customers without any errors.</li> </ul>
6.3	Agreement to extend the timescales described in clause 6.2 may be sought from the TRAI. An extension will only be available on an irregular basis. Decisions will be made on application for	<ul style="list-style-type: none"> <li>▪ Review any exceptions sought from TRAI for extension.</li> <li>▪ Review the method in which such clients have been intimated and</li> </ul>

Sr. No	Audit Area (item name)	Test to be performed
	an extension concerning: <ul style="list-style-type: none"> <li>a) The method in which how customers will be informed of a protracted delay in rendering call records onto a subsequent bill; and</li> <li>b) The integrity of the billing process audit arrangements.</li> </ul>	verify the process for such issues <ul style="list-style-type: none"> <li>▪ Verify whether there is appropriate audit procedures implemented within the company to address such issues</li> </ul>
6.4	The service provider shall contract with its delivery agent to ensure that an effectual bill or bill data file delivery schedule is in place. The existence of such a contract shall be subject to audit.	<ul style="list-style-type: none"> <li>▪ Obtain &amp; verify all bill delivery vendor contracts</li> <li>▪ Test &amp; establish effectiveness and adequacy of procedures and process</li> </ul>
7	<b>Restriction and Removal of Service</b>	
	Where the service provider unilaterally intends to restrict or cease service to the customer, a notice shall be provided to the customer in advance of such action so that the customer has reasonable time to take preventive action to avoid restriction or cessation of service.	<ul style="list-style-type: none"> <li>▪ Understand related procedures and establish adequacy thereof</li> <li>▪ Test similar instances during review period and establish adherence</li> <li>▪ Check that proper notices are sent to the customer in advance where the service provider unilaterally intends to restrict or cease service to a customer.</li> <li>▪ In case of disconnection due to payment made beyond credit period, to check that the services get restored once the payments are made within the period as stipulated by TRAI.</li> </ul>
8	<b>Complaint Handling</b>	
8.1	The service provider shall have a documented process for identifying, investigating and dealing with billing complaints and creating appropriate records thereof.	<ul style="list-style-type: none"> <li>▪ Check whether the service provider has a documented process for identifying, investigating and dealing with billing complaints.</li> </ul>

<b>Sr. No</b>	<b>Audit Area (item name)</b>	<b>Test to be performed</b>
8.2  8.3  8.4	<p>The service provider shall carry out a root cause analysis for each upheld billing complaint, categorise the cause and establish proportionate remedial action to correct it.</p> <p>Where the root cause affects multiple customer accounts, then all affected Bills shall, if practicable, be included in a recovery programme.</p> <p>Where remedial action has not been completed and the cause is likely to affect other bills when issued, then the service provider shall take reasonable steps to ensure that they are checked and, if necessary, corrected, before being sent to the customer. If not checked and corrected such Bills shall be included in a recovery programme.</p>	<ul style="list-style-type: none"> <li>▪ Review the Billing Complaint system</li> <li>▪ Review process manual for addressing customer complaints and establish adequacy of procedures</li> <li>▪ Test instances during review period and establish adherence to documented procedures</li> <li>▪ Review &amp; verify procedures for root cause categorization and analyses</li> <li>▪ Check whether the service provider carries out root cause analysis for each upheld billing complaint and where the root cause affects multiple customers, whether all affected bills is included in a recovery program.</li> <li>▪ Test and verify instances of remedial action</li> <li>▪ Verify adequacy of procedures in this regard</li> <li>▪ Check the true and correct position about specific instance of billing complaints having systemic/ generic implications as referred by TRAI.</li> </ul>
9	<b>Materiality</b>	
	<p>Compliance with the requirements contained in this regulation shall need to be demonstrated only in relation to products and services that have a material impact on the customer’s bill. This materiality is deemed to be:</p> <p>a) where the service provider’s turnover from a product or service comprises 5% or more of its total turnover with the customers targeted for that product or service; or</p>	Observations, if any

Sr. No	Audit Area (item name)	Test to be performed
	b) where the number of customers subscribing to a product or service offered by the service provider comprises 5% or more of the customers targeted for that product or service; or c) at the specific direction of the TRAI.	
10	<b>Submission of Compliance</b>	
	The service providers shall submit the compliance of above code of practice to TRAI on yearly basis.	Check the Compliance Report Submitted by the TSP to TRAI.

**(B) Billing & Metering System Review (Transaction Review)**

Sr. No.	Audit Area (item name)	Test to be performed
1	The auditing Agency shall evaluate inter alia the correctness of the following: - (a) In generation process of the CDR-raw CDRs.	<ul style="list-style-type: none"> <li>▪ Test check procedures for CDR recording for both pre-paid and post-paid plans</li> <li>▪ Verify whether CDR's are editable</li> </ul>
	(b) Of the entries in the direction table which is used for rating the raw CDRs.	<ul style="list-style-type: none"> <li>▪ Verify rating masters to establish procedures for creating and modification of service charges</li> <li>▪ To verify the proper configuration of all the tariff plans in billing system.</li> <li>▪ Verify rating masters to establish charges mapped to each tariff plan</li> <li>▪ Test whether rated CDR's are modifiable.</li> </ul>
	(c) In charging of VAS services to the subscribers.	<ul style="list-style-type: none"> <li>▪ Obtain list of all VAS services</li> <li>▪ Verify procedures for mapping of charges to VAS services</li> <li>▪ Verify whether any VAS provided without consumer's consent and charged.</li> <li>▪ In respect of services provided during "Free</li> </ul>

		<p>Trial Period” to subsequently check whether the customer has confirmed the continuance of services once the free trial period has ended and accordingly billed for.</p>
	<p>(d) Of the rated CDR vis-à-vis the rated applied, duration mentioned, origination and destination codes including STD/ISD destinations, both for mobile and fixed.</p>	<ul style="list-style-type: none"> <li>▪ Verify procedures for mapping of call origination and destination locations.</li> <li>▪ Raw CDR’s to be rated according to the Tariff Plans and Rating Algorithms (set of tables/ rate masters)</li> <li>▪ Check all billable activities occurring on the network are accurately captured rated and billed in accordance with customer agreement.</li> <li>▪ Check that there is no delay in updation of billing with latest agreed upon rates/ tariff implementation.</li> <li>▪ Due to non-updation / rating, a CDR generated may go to suspended CDR’s pool which may be billed subsequently. In such cases to check that it is billed subsequently for the same period and is in line with the agreed Tariff Plans.</li> <li>▪ To check discounts / schemes not forming part of the original contract are properly passed on by the Service Providers in respect of the various marketing schemes promoted by the Service Provider from time to time.</li> </ul>
	<p>(e) In charging of the roaming services to the mobile subscribers</p>	<ul style="list-style-type: none"> <li>▪ Verify procedures for applying roaming charges and also evaluate inter alia the correctness as per the published tariff.</li> </ul>
2	<p>The Audit Agency will take the raw CDRs &amp; process the same to generate the Bill and then verify with already generated bill for any discrepancy. The CDRs of last</p>	<ul style="list-style-type: none"> <li>▪ Obtain raw CDR’s for selected audit sample</li> <li>▪ Apply procedures on selected sample</li> <li>▪ Compare the results to ensure that the</li> </ul>

	three months are to be processed.	service provider systems are functionally correct.
<b>3</b>	<p>The Audit Agency will analyse the discrepancy if detected, and find out the root cause of the same.</p> <p>Discrepancy Analysis The discrepancy analysis is done by execution of the inference engine that performs analysis of the rated CDRs in order to establish causes of the discrepancy based on CDR, subscriber and pricing plan data.</p>	<p>Discrepancy analysis of the rated CDR's to be done.</p> <p>If required perform further functional testing on system to identify the cause</p>
<b>4</b>	<p>Bill level discrepancy analysis.</p> <p>After several cycles of event level discrepancy analysis and database adjustment, when all the event level discrepancies are taken care of, the next step is of bill level discrepancy. The bill level discrepancy reports will be produced &amp; analysed by the audit Agency.</p>	To analyze the bill level discrepancy reports as generated by the Service Provider.
<b>5</b>	<p>Verification of corrective actions.</p> <p>In this important stage, a verification of successful implementation of the corrective action is performed</p>	Analyse and tests check the corrective actions.
<b>6</b>	<p>Billing system integration for rental rebates (for basic service). (Reference – Regulation on Quality of Service of Basic and Cellular Mobile Telephone Services, 2005 dated 1<sup>st</sup> July, 2005)</p>	<p>Verify that the billing system is integrated so as to ensure that proper rental rebates are passed on to the customer in cases where the faults are not rectified within three days (for basic service).</p> <ul style="list-style-type: none"> <li>• Faults pending for &gt;3 days and &lt;7 days: Rent rebate for 7 days.</li> <li>• Faults pending for &gt;7 days and &lt;15 days:</li> </ul>



		Rent rebate for 15 days • Faults pending for >15 days: rent rebate for 1 month
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## Chapter 21

### Audit of Functional Areas

Every organisation would have Standard Operating Procedures (SOPs) to ensure internal control and proper functioning of all the departments. Hence, it forms the main basis for the internal auditor to evaluate these functions. The internal auditor should ask for the copies of all the SOPs used by an organisation. In case, there are no written down SOPs in vogue, the internal auditor should discuss with the management/heads of departments and then document these for each department. The internal auditor has to refer to the overall operating framework of policies, practices, systems, management philosophy, values and actions which exist in an organization to ensure that:

- essential organization objectives are achieved and goals have been met;
- assets are protected and risks are managed;
- legal requirements are invariably complied with;
- information used to report to Revenue is accurate;
- compliance with the internal control procedures & risks asserted;
- The incidences of wastages & misappropriation;
- The expenses incurred during a period and the trend of expenses over a period of time; and
- Operational efficiencies of the departments

The general procedure to be followed for internal audit of the support departments is suggested as follows:

- Setting of the internal audit objectives with regard to the audit criteria/benchmark so that the causes for the variations could be assessed and reported along with the effect of such variations on the organization.
- Setting the scope of the audit with regard to the audit period, the audit units such as locations/ departments etc. so that the resources could be planned.
- Collect the information on the departmental activity carried out, the budgets etc. from various sources of information.
- Put forward the results of internal control review through control testing procedures carried out.
- Summarize the report for the department.

#### **Review of Internal Control**

Management has the responsibility to devise and maintain an adequate system of internal control for its operations. Internal controls are the overall means whereby management ensures that objectives are



achieved, risks are assessed and managed, appropriate reviews of the operation's performance are made, and that information sharing and communications occur in a timely, accurate and appropriate fashion, with due regard for protection of valuable information.

However, to judge its effectiveness it is necessary that internal auditor should prepare a questionnaire containing mainly following matters/ questions:

- Does the company have a functioning Audit Committee?
- Is the audit made on a surprise basis rather than scheduled in advance?
- Is an audit also performed when there is a change of officers?
- Are records of the audit documented and the results kept in the files?
- Is controls exercised on the financial information dissemination?

### **Administration Department**

The significance of an administration department assumes a different proportion in the Telecom sector. In many companies administration department may be combined with HR or Accounts depending upon the size of the organisation. The checklist given below is based on the assumption of a separate Administration department:

- Define the audit objective and scope of the work
- For each administrative process, study the SOPs, schedule of authorities etc.
- Decide the sample size and obtain sample data as an audit evidence
- Observe the variations with respect to the SOPs
- Assess the risks and value impact on the organisation
- Arrive at the audit findings and conclusions
- Areas to be checked in administration:
  - Office routine procedures for authorization and approval
  - Office maintenance and utilities
  - Compliances with laws such as Shop act, Weights & measures, property tax laws etc.
  - Office rental agreements and compliance
  - Health, safety and environmental aspects
  - Factory administration compliances such as Factory Act, Payment of wages act, Minimum wages act etc.
  - Administrative purchases and policies thereof
  - The total administrative expenses analysis v/s budgets
  - Administration expenses as a percentage of total cost of sales and the trend over a period of time



The Internal auditors should also check MIS generated periodically on the administrative matters including the areas of critical importance for the management of the organization.

### **Procurement Department**

In the Telecom industries the procurement may not actually involve buying of raw material, but may be required to buy utilities and services. In light of this the internal auditor should analyze the operating activities of procurement department. The following general checklist may be suitably amended to suit the needs of Telecom industries:

- Obtain the purchase procedures regarding vendor sourcing, vendor registration, vendor evaluation, quotation, tendering, vendor selection, and ordering
- Assess how the procurement quantity and time of requirement decided through the indenting process
- Assess how the ad-hoc and emergency purchases handled
- Are the Purchase Orders (POs) issued as per the schedule of authority?
- Receipt of materials to be only against valid purchase order and from registered vendors
- Process of material acceptance with regard to the specified quality norms
- Appropriate insurance coverage for the inventory
- Physical stock taking procedures and reconciliations with the book records
- The contracts with vendors (long terms & short term), rate agreements, quantity agreements
- The documents for verification:
  - Requests for proposals (RFP)
  - Quotation/tender analysis sheets
  - Purchase orders
  - Inventory verification & reconciliation sheets
  - Financial and Cost Accounting records

### **Accounts and Finance Department**

The focus of the internal auditor should be on compliance with the accounting standards as may be applicable, but keeping in view the peculiar activities of the Telecom sector. The internal auditor should take into account these specific aspects of accounting.

### **Accounting**

The checklist for the accounts and finance departments should cover the following:

- The accounting policy adopted for treatment of different financial elements such as incomes, expenses, assets, liabilities and equity.



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- The accounting system used such as ERP, SAP etc.
- The chart of accounts, master accounting data and automated accounting entries for accounting of financial and non-financial transactions.
- The appropriateness of the accounting policies to be consistent with the accounting standards.
- The integrity of the accounting system e.g. completeness of the double entry principle in correctly updating the relevant tables in the database.
- The controls of the various ledgers such as General Ledger (GL), Cash & Bank book, Fixed Assets Register etc.
- Authorization and approval processes for accounting entries like journal entries, adjustment entries and rectification entries.
- Access control to the accounting system to avoid unauthorized entries.
- Accounting reconciliation statements such as bank reconciliation, AR & AP reconciliation.
- Physical verification of cash, bank balances, fixed assets etc.
- Appropriate insurance covers of cash and fixed assets.
- Identification of non-performing assets.
- The trial balance reports and integrity checking on a continuous basis.
- The data on disclosures required in the financial statements

### The documents for verification:

- Journal vouchers
- Cash vouchers
- Invoices – sales and purchases
- Debit and Credit notes
- Bank statements for current account & other balances
- Fixed Deposit Receipts
- Cash Book
- Cheque books, cancelled cheques, e-cheques
- Electronic banking accesses and controls of authority, the electronic dongles & their custody
- Ledger and fixed assets register

### **Finance**

- The policies and procedures adopted for financial management processes;



- The schedule of authority included authorized signatories for banking and such other transactions;
- The policy on capital structure;
- The methods of raising funds, the authorities for raising loans etc.;
- Loan document registration and filing;
- Interest payments and maintaining the loan agreement covenants
- The trends in financing costs;
- The methods of capital expenditure evaluation;
- The debt ratios, interest cover ratios;
- The banking facilities and agreements for consortium or independent banking;
- The authorizations for banking transactions, and;
- The data utilization (and non-utilization) of bank facilities

### **Receipt of Revenue**

General principles of revenue recognition as per AS 9 are to be applied; however, the revenue recognition aspects in the telecom industry are different. In the telecom service sector, the Gross revenue (GR) and Adjusted Gross revenue (AGR), on which Licence Fee And Spectrum Usage charges ( for services in which spectrum is used) is levied as revenue share basis, is computed in accordance with the terms & conditions of applicable Licence e.g., Unified Access Service licence (UASL).

Further revenue is generated by a telecom company from Billing to Post Paid Subscribers, amount paid by pre-paid subscribers, Billing to Broadband Customers, Billing to IDC Customers, Sales of RCV's / E-recharge and Sales of Handsets and Accessories etc. The Internal Auditor has to determine that proper procedures are followed in handling of receipt of revenue from customers and review the records to determine whether the required reports are being accurately and promptly prepared and verify the tall receipts are properly accounted for in the books of accounts. Thus the internal auditor should:

- verify proper booking of all the receipts and amount received is correctly accounted in the customer's account.
- reconcile cash receipts at each counter with CDR system to avoid fraud by the officials managing the counters.
- verify that receipts of cash and remittances posted accurately and on a daily basis in the correct account.
- check that amount received promptly deposited in an interest-bearing account.
- verify funds that have not yet been deposited adequately protected?



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- see the cases of delay in depositing/ non-depositing the amount collected in the bank.
- verify proper safeguards of accounts, signatories on bank accounts and verify that all Bank Accounts are in name of company.
- verify the system of reconciliation of various bank accounts and controls in place to ensure collections made at various collection centers are properly monitored.
- verify the management of bouncing of cheques of customer.
- Check the cases of delay in transfer of amount collected to central pool account.
- ensure that there is proper control over printing, issue, use of Manual Receipt Books and reconciliation of used receipt books.
- ensure that the Receipts Journal and Disbursements Journal summarized on a monthly basis.

### **Expenditures - Review and Approval**

The auditors while conducting internal audit should refer delegation of powers for sanctioning the payments and ensure that payments (especially big amounts) are approved by the authorized persons and also should:

- verify that all significant expenditures are properly recorded
- verify proper voucher approval procedures.
  - a) determine if routine expenses receive less than full scrutiny and approval
  - b) test a sample of expenditures, especially those to individuals
- verify proper approval obtained for expenditures
- test the reasonableness of expenditures
- verify that goods or services were received
- Ensure that bills presented for payment should be reviewed and the following verified and check that whether the bills are raised in the name of individuals or the company? Are those bills legitimate expenses and are they dated?
- Check that adequate controls are in effect to prevent duplicate payments.
- check that discounts taken where offered.
- check that the bill amount is correct. If corrections are made to a bill, are the incorrect figures ruled out (not erased or obliterated) and the corrections signed by the person approving the bill. Are all bills certified correct by the person who knows that the expenses are authentic.
- check that the all bills properly approved by the appropriate designee in accordance with delegated financial powers?



- check that for all paid bills, statements and expense vouchers kept for records.
- check that the each bill and expense voucher paid show the check number, payment date, to whom paid, and the correct account classification code for the expense.
- check the system when an individual is approving his own expenses?

### **Disbursements of Funds**

Money from bank accounts used during ordinary business activities are to be spent only on the basis of approved bills and expense vouchers. Internal Auditor should review the following:

- Is the money withdrawn from Bank account used strictly for the purpose it is withdrawn?
- Have any cheques or withdrawal slips been signed by the same officer who approved the expenditure or withdrawal?
- Are all Banks accounts reconciled with the bank statements promptly each month?
- What is the procedure if discrepancies in the reconciliation are uncovered or if there are unusual or suspicious circumstances about disbursements or authorization for payment?
- The auditor should reconcile the bank accounts on a random basis during the audit.

### **Advances**

Internal auditor should review the advance paid to staff/ third parties. Outstanding advances should be reviewed and check that:

- are advances to staff / third parties approved by the appropriate authority?
- are such advances made for periods normally not exceeding the period as per company policy?

### **Records Retention**

Internal auditor has to verify that the company keeps records that support items reported on their books or tax returns until the statute of limitations for the return expires. The internal auditor must determine that certain legal requirements are being met with regard to keeping and maintenance of records, including:

- Were any licenses or permits required for an activity duly obtained?
- If special taxes (property taxes, Service tax, excise taxes, VAT etc.) were due, whether provisions made to remit them.
- Determine and verify applicable use of state Sale Tax/VAT tax reporting.
- Whether service taxes collected have been deposited in time?



- Verify that all offices are reporting on a regular basis and that their data is included in annual Telecom Annual Reports.

### **Human Resources and Personnel Department**

The general function of the Human Resources Department (HRD) is to decide and implement policies and procedures with regard to the manpower resources of an organisation. Telecom Industry depends heavily on its manpower. The staff may be appointed on permanent or contract basis depending upon the policy and need of the company. Hence, the internal auditor should carry out the audit of this department taking into account the specific objectives thereof and can encompass the following steps with suitable adjustments as may be necessary:

- Standards for hiring employees specifying professional qualification, education, experience, and other skill sets.
- The process of recruitment followed e.g. through consultants, campus recruiting or direct .
- The candidate screening procedures such as interviews, tests, reference check, medical checks etc.
- Training & induction rules.
- Policy on performance evaluation and salary increase, incentive schemes.
- Assigning responsibilities and job profiling.
- Empowerment of the staff.
- The whistle blowing policy.
- The policy & procedures about code of conduct, ethics and other organisation values
- Rules for disciplinary actions.
- Verify the impact of contingencies related to the labour court cases.
- Verify the cases of misappropriation & fraud by the employees.

### **Salary Audit**

- Check if the appointment letter are properly authorized and are as per the policies
- Assess the overrides in the salary agreed which is different than the normal scales
- Obtain information on the incentive plan for individuals & groups at all the levels of management
- Understand the parameters for incentive calculations and compare the actual with the plans
- Verify the incentives approved with regard to the measured performance



- Check the incentive calculations to verify the correctness
- Verify the monthly payroll processing procedure, whether in-house or outsourced
- Verify the deductions and check the correctness thereof e.g. taxes & applicable TDS rules
- Check the disbursement procedures to verify the correctness of the ECS to the individual bank accounts
- Check the reconciliation of the salary sheets with the previous month to verify the reasons for the change such as new employees added, employees left, salary changes etc.
- Observe the payroll risk areas such as time keeping & time booking, salary changes, etc.
- Verify the master files of the employees with the payroll processed data
- Check the records for leave, absenteeism, etc.
- Verify the contributions to PF, superannuation, gratuity and such other benefits
- Obtain confirmations from the managers of the contributory plans to correctly determine the value of plan assets & plan obligations
- Obtain the information about the basic assumptions made for the actuarial valuation of the benefit obligations
- Verify the schemes of ESOP for allotment of shares
- Verify that employees left do not appear in the payroll
- Check the cases of full & final settlement for accuracy of calculations
- Verify the accounting entries for the payroll for the period
- Is the company complying all the labour laws and other statutory laws being a principal employer in case manpower employed through outsourced agency?
- Verification of employees actually employed for work through outsourced.
- The attendance, leave records and payroll processing of manpower provided by outside agencies.

The internal auditor taking in view of above should verify that the company has proper systems and processes to control dealing with the manpower, their remuneration, incentives and other benefits given to employees of the company.

### **Performance Ratios Assessment**

To assess the efficiency and effectiveness of various control measures established to handle manpower related matters, the internal auditor should consider the following:

- Percentage of employee cost to total cost



- Revenue per employee or revenue per rupee of salary cost
- Labour turnover ratios
- Incentive rewards as percentage of employee costs
- Idle time percentages & its impact on the employee costs

### **Sales and Marketing**

Telecom companies are incurring huge expenditure on sales, marketing and publicity due to fierce competition and high business growth in the industry. The telecom companies are providing various incentive scheme, commissions to the dealers and channel partners to motivate them to acquire more business for the company and they also incurring huge marketing expenses and providing attractive sales schemes to attract new customers and retain their old customers. The following general framework would help the task of the internal auditor in assessing sales & marketing function of the company:

- Billing and Customer payment history trends
- Dispatch
- Collection of dues
- MIS on sales & marketing Accounting
- Pricing policy and discounts
- Competitors' prices
- Credit policy of the company including credit terms, credit limit and credit period
- Credit decisions with regard to Credit assessment of customers & Credit evaluation norms
- Sales orders information and also sales data customer-wise, location-wise, product-wise
- Sales performance v/s plans
- Understanding of total market size, market share of the company
- Brand image and value
- Distribution network
- Bad and doubtful debts
- Policy on appointment of dealers, Channel Partner's
- Channel Partner's expenses such as customer acquisition commission, sales incentives, and collection commission are properly accounted.
- verify the existence and efficacy of the database for making various payments to channel partners.



- Verify that sales are not inflated by the dealers/ distributors to achieve the targets.
- verify the methods and process to monitor promotional schemes expenses.
- Verify the system and process of identifying the eligible winner for prizes of promotional schemes.
- Share of marketing expenses such as advertising, promotion, incentives, commissions etc in total cost.
- Advertisement through Print media, Hoardings, Signage, Electronic Media, Sponsorship of events.
- verify that advertisement is displayed at the contracted location, and that advertisements on hoardings are displayed at various location sites for a contracted period.
- Verify the provision for change of advertisement contents during the agreement period.
- In the case of radio and TV advertisements, ensure that Broadcast/ display of advertisement for agreed time slot.
- Verify that advertising agency has passed on all the discounts on rate negotiation to the company in case of bulk advertising.
- Verify that Telecom Company has a proper understanding with the shopkeeper about return of signages.

Following Performance indicators for sales & marketing can be taken into account by the internal auditor such as:

- New customers added
- Customer churn ratio
- Customer complaints & their resolution
- Increase in market share
- Customer satisfaction index

### **IT Department**

Telecom industries is highly IT enabled sector. Telecommunication companies invariably get access to the IT system to operate and provide services to the customers which is directly linked to the database of the IT system. The IT department of an organisation has to ensure that the systems are absolutely safe, user-friendly and available all the time. The job of an internal audit essentially becomes important to check strict adherence to internal controls, risks related to the safety of individual customer's information, probabilities of unauthorized access, possibility of hacking etc. It naturally becomes a potentially



vulnerable area for audit. The internal auditor should exercise utmost care and diligence in carrying out the audit procedures that are related to the IT systems in the service organisation as mentioned above.

The *control parameters* that the internal auditor should concentrate on could be:

- The IT management including access control, back-up and recovery, IT environment costs
- IT inventory
- IT operations
- IT security related to the system design
- IT service agreements
- Data protection and security e.g. antivirus, antimalware, internet related securities, anti system hacking steps.

The following checklist would help the internal auditor to conduct the audit of the above named control parameters of the IT department.

#### **IT Department Structure**

- Check that the function is fully in house or outsourced or a combination thereof
- Checking of the service agreements for outsourced IT services
- Check the profile of the IT personnel (professional as well as others)
- Review the reporting of the IT department
- Are the IT staff allowed to input transactions in the system (this activity is potential risk to the IT system)

#### **IT Inventory**

- The physical verification of the IT inventory (hardware, operating system software, networking equipment and application software etc.) at all locations;
- The maintenance contracts for the IT equipment;
- Equipment replacement policy, and;
- Equipment and software license status.

#### **IT Processes**

- Are the IT processes clearly defined in the manual?
- Is there a proper documentation regarding system design, application programs, database administration, data entry, disaster recovery & back up processes?



- Checking of the processes for making changes to the programs, authorization thereof, testing procedures.
- Test checking of documentation.

#### **Access control audit**

- Who have the access to the system documentation?
- Is there any access trail available?
- What is the access control to the system & application software?
- What is the control on the data files?
- Who can access the on-line system?
- What is the password administration procedure?
- Is the access blocked on a number of failed log-In attempts?
- Controls related to generation and circulation of reports through email and other communication methods.

#### **Risks Assessment**

- Risks arising and their impact on the organisation and also from external people who access the system;
- Risks of unauthorized changes to the hardware and software and system hacking;
- Risks related to authorized log-in and system abuse;
- Risk arising out of system failure;
- Risks arising from loss of system integrity;
- Risks arising from virus to the system files, program and the application software.

The internal auditor should test the above areas by:

- Checking the documentation for its maintenance , handling and security of IT department;
- Sample checking the access controls, password controls, virus controls;
- Analytical procedures to verify the instances of variation.

#### **Billing and Customer Care System (B&CCS)**

In telecom sector Billing and Customer Care System (B&CCS) is an integrated customer care, billing and accounting platform and supports flexible billing for wide range of Telecom services, viz. wireline, wireless, broadband / data and other related services. It is primarily responsible for activation,



deactivation suspension of subscribers, provisioning /de-provisioning of various services to the subscribers and billing for the various services used by the subscribers.

**The major functions of B&CCS are:**

1. Inventory and SIM management.
2. Activation/deactivation of customers.
3. Provisioning / de-provisioning of various services to the subscribers.
4. Handling of requests from customer care centers regarding telephony services and billing queries.
5. Swapping of SIM and MSISDN.
6. Collecting, processing and storing of CDRs (Call Detail Records) from the Network elements.
7. Rating and mediation of the CDRs and Billing.
8. Payment and Collection
9. Billing for Inter connection Usage Charges
10. Provision for testing new products / services before commercial launching.
11. Threshold monitoring.
12. Revenue settlement with roaming partners.

**Bill Verification**

Internal auditor has to verify the following:

- Verify bulk and incremental discounts and taxation methodologies;
- Policy for discount prorating when change in discount rate during bill cycle;
- Verify special balance-due amounts to exclude
  - Disputed amounts
  - Amounts in collections
  - Amounts on invoices whose payment date has not yet been passed
- Check different discount Rates & special rates based on customer category;
- Verify special rate, discount or both with customizable plan Id;
- Verify special rate, discount or both - Demonstrate Cross product discount;
- Check Friends &Family using Corridor plan feature;
- Verify invoice cycle including annual, monthly, bi-monthly, quarterly, weekly and even daily cycles;



- Various options with regard to the timing within each bill cycle when the customer receives an invoice;
- Verify Invoice timing enabling customers to change invoice cycles;
- Verification of Discount based on the accumulated gross amount of qualifying usage charges during a specified period Discount should get applied only on usage that falls between bill period;
- Flexible formatting of Invoices/ Bills;
- Preparation of detailed bill based on type of usage like Local, STD, ISD;
- Separate taxes to both products and services;
- Verification of tax in a flexible manner, either in the form of a fixed amount, a percentage or combination of both, and;
- Display of Tax in flexible manner i.e. different components like education cess, higher education cess should be displayed separately and accordingly reports should be generated.

#### **Tests on Payments and Adjustments**

- Check whether CSR is able to capture payment information using payment entry interface. The system should support Bar-Code reader Payment should be successfully applied;
- Verifying support for cash, cheque and credit card payment entries;
- Verifying support for ECS, Credit Card payment entries;
- Check of miscellaneous credit adjustment, reversal of an adjustment against an invoice;
- Adjustment with and without service tax ,and;
- Check of daily account reconciliation both cash and all instruments.

#### **Tests on Collection Process**

- Check for calculating outstanding debt for customers for call charges as well as non-usage charges, as per account category;
- Check for reports with the list of customers exceeding their limit during Credit Limit Check;
- Account category wise collection scenario;
- Remove account from collection processes after receipt of payments;
- Check write off module without outstanding limit;
- Auto reconnection should happen taking into Account balance, and;
- Check for Circle wise collection reconciliation.



### **Tests on Roaming**

- Check the agreement of partnership between local operator and remote operator;
- Application of rate, tax & surcharge for in-roamer usage records;
- Check Roaming system supports different rates for different operators and various reports as prescribed by Corporate office or for operational requirement.

### **Revenue Generation related Reports**

- List of refunds effected
- Summary of New customers activated
- Monthly summary of refunds made
- Plan wise Revenue
- Monthly list of bills cancelled/ written off
- Check the operator wise list for TAPIN & TAPOUT call charges from/to other operators
- Check Roaming subscription charge report for National & international roaming
- CSR wise adjustments posted for each circle
- Check prepayments of past excess payments that are being adjusted in the current invoice, payment reversals for pre-payment and deposit payments;
- Details of the cheque payment received containing cheque No., date of issue, bank details and the amount for a particular account number, cheque dishonor ;
- Check the heavy callers, low callers, customers with ISD facility.

### **Ledger and Sub-ledger related reports**

- Ledger review in respect of telecom subscribers
- Details of disconnection/reconnection/ closure
- Details of discounts and commission
- Details of aging outstanding details
- Details of unadjusted credits
- Details of surcharge, Sales Tax / VAT, Service tax
- Reports for customer statistics and Customer Churn rate
- Reports for fault booking statistics



## Chapter 22

### Cost Audit Specific to Telecom Industry

Telecom sector being a regulated industry first time was covered under Cost Accounting Records (Telecommunications) Rules 2002 published vide G.S.R. 689(E) dated 8<sup>th</sup> October, 2002 issued under Section 209 (1) (d) of the Companies Act, 1956.

Till year 2010, the Companies were covered under Cost Audit by specific orders issued by Central Government to a Company/Industry. The Ministry of Corporate Affairs notified the Cost Accounting Records (Telecommunication Industry) Rules, 2011 on 7th Dec 2011 which were applicable to all the companies including foreign company as defined under section 591 of the Companies Act, 1956 and engaged in Telecommunication services. Companies covered under the Cost Audit were required to conduct the cost audit under Cost Audit Order No.52/26/CAB-2010 dated 2nd May 2011/ 6th November 2012 and were required to e-file the cost audit report in XBRL Format as per the provisions of Companies (Cost Audit Report) Rules 2011 issued by Ministry of Corporate Affairs vide GSR 430(E) dated 3rd June 2011.

The Ministry of Corporate Affairs, Government of India has again revised the above rules pursuant to provisions contained in the Companies Act 2013 relating to maintenance of cost records and cost audit vide Section 148(1) and (2) and notified "Companies (Cost Records and Audit) Rules 2014 vide GSR 425(E) dated 1st July 2014. These Rules have been amended vide Companies (Cost Records and Audit) Amendment Rules 2014 vide GSR 01(E) dated 1st January 2015. As per Companies (Cost Records and Audit) Rules 2014 as amended, the Telecom Industry is covered for maintenance of cost records and cost audit. The provisions of the said Rules are given below:

**Application of cost records:** As per Rule 3 for the purposes of sub-section (1) of Section 148 of the Act, the class of companies, including foreign companies defined in clause (42) of Section 2 of the Act, engaged in the production of the goods or providing services under Item (A) Regulated Sectors: Telecommunication services made available to users by means of any transmission or reception of signs, signals, writing, images and sounds or intelligence of any nature (other than broadcasting services) and regulated by the Telecom Regulatory Authority of India ("TRAI") under the Telecom Regulatory Authority of India Act, 1997, having an overall turnover from all its products and services of rupees thirty five crore or more during the immediately preceding financial year, shall include cost records for such products or services in their books of account.

Provided further that nothing contained in this rule shall apply to a company which is classified as a micro enterprise or a small enterprise including as per the turnover criteria under sub-section (9) of section 7 of the Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006).



(a) The cost records are to be maintained in the Form-CRA-1 of the said Rules by the companies on which these rules are applicable. The gist of the details required to be maintained under Form CRA-1 by the companies are as follows:

- Material Cost
- Employee Cost
- Utilities
- Direct Expenses
- Repairs and Maintenance
- Fixed Assets and Depreciation
- Overheads
- Administrative Overheads
- Transportation Cost
- Royalty and Technical Knowhow
- Research and Development Expenses
- Quality Control Expenses
- Pollution Control Expenses
- Service Department Expenses
- Packing Expenses
- Interest and Finance Charges
- Other Cost items
- Capacity determination
- Work in Progress and Finished Goods Stock
- Captive Consumption
- By-products and joint products
- Adjustment of Cost Variances
- Reconciliation of cost and financial accounts
- Related party transactions
- Expenses or Incentives on exports
- Production Records
- Sales Records
- Cost Statements
- Statistical records
- Records of physical verification



- (b) The cost records referred to in sub-rule (1) shall be maintained on regular basis in such manner as to facilitate calculation of per unit cost of production or cost of operations, cost of sales and margin for each of its products and activities for every financial year on monthly or quarterly or half-yearly or annual basis.
- (c) The cost records shall be maintained in such manner so as to enable the company to exercise, as far as possible, control over the various operations and costs to achieve optimum economies in utilization of resources and these records shall also provide necessary data which is required to be furnished under these rules.

**What does Constitute cost Records:**

As per Rule 2(e) the Companies (Cost Records and Audit Report) Rules, 2014, “cost records” means ‘books of account relating to utilization of materials, labour and other items of cost as applicable to the production of goods or provision of services as provided in section 148 of the Companies Act 2013 and these Rules’ that provides data/information to calculate the cost of production, cost of sales and margin of each of the products/activities of the company on monthly or quarterly or half-yearly or annual basis are considered part of the cost records. It includes statistical, quantitative and other records which enable the company to exercise, as far as possible, control over the various operations and costs to achieve optimum economies in utilization of resources and these records shall also provide necessary data which is required to be furnished under the rules.

There cannot be any exhaustive list of cost records. This would depend on the materiality of cost components in the cost of the production of goods or provision of services.

The abridged cost statement can be used as a sample cost statement. This may be modified according to the need of the company.

**Applicability of Cost Audit:**

As per Rule 4, every company specified in item (A) of rule 3 shall get its cost records audited in accordance with these rules if the overall annual turnover of the company from all its products and services during the immediately preceding financial year is rupees fifty crore or more and the aggregate turnover of the individual product or products or service or services for which cost records are required to be maintained under rule 3 is rupees twenty five crore or more.

Sub-rule (3) of Rule 4 provides that the requirement for cost audit under these rules shall not apply to a company which is covered in rule 3, and-

- (i) whose revenue from exports, in foreign exchange, exceeds seventy five per cent of its total revenue; or
- (ii) which is operating from a special economic zone.



### **Cost Audit Report:**

Every cost auditor, who conducts an audit of the cost records of a company, shall submit the cost audit report along with his or its reservations or qualifications or observations or suggestions, if any, in **form CRA-3** along with Annexure to the Cost Audit Report as prescribed ***under Companies (Cost Records and Audit) Rules 2014 as amended.***

(i) **Part-A of CRA-3** includes General Information about Company, General information of Cost Auditor, Cost Accounting Policy, and Product/ Service details. It has been provided to explain the difference, if any, between turnover as per annual accounts and turnover as per excise / service tax records.

(ii) **Part-B of CRA-3 provides for manufacturing sector:**

- Quantitative Information.
- Abridged Cost Statement.
- Details of Material Consumed.
- Details of Utilities Consumed.
- Details of Industry Specific Operating Expenses.

All the above annexures are to be prepared for each product with CETA Code separately.

(iii) **Part C of CRA3** provides for Service sector:

- Quantitative Information.
- Abridged Cost Statement.
- Details of Material Consumed.
- Details of Utilities Consumed.
- Details of Industry Specific Operating Expenses.

(iv) **Part D of CRA3** provides for:

- Product and service profitability statement (for audited products / services).
- Profit reconciliation (for the company as a whole).
- Value addition and distribution of earning (for the company as a whole).
- Financial position and Ratio Analysis (for the company as a whole).
- Related Party Transactions (for the Company as a whole).
- Reconciliation of Indirect Taxes (for the company as a whole).



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**Submission of Cost Audit Report to Central Government:** Every company covered under these rules shall, within a period of thirty days from the date of receipt of a copy of the cost audit report, furnish the Central Government with such report alongwith full information and explanation on every reservation or qualification contained therein, in **form CRA-4** alongwith fees specified in the Companies (Registration Offices and Fees) Rules, 2014.



## Chapter 23

### Checklist for Statutory & Regulatory Compliances Telecom

Checklist For Statutory & Regulatory Compliances –Telecom					
S. No.	Priority	Questionnaire	Risk Associated	Methodology	Input Requirements
1.	A	Whether reports such as Performance Monitoring & Quality of Service Report, Tariff Report, Inter-Connection Reports etc., required to be submitted to the various regulatory authorities such as DOT, TRAI etc. are sent in prescribed format & on scheduled dates.	Penalties/ legal proceedings may follow if these Reports are not submitted/ late submitted.	<p><b>1. Check the formats of the reports submitted to DOT etc. with the formats given in Annexure- I</b></p> <p><b>2. Also, check whether the reports have been submitted within due time limits.</b></p>	Obtain the submission acknowledgements of the Performance Monitoring & Quality of Service Report, Tariff Report, Inter-Connection Reports etc. which had been submitted to DOT etc.
2.		Whether the figures reported in such Reports tally with the Circle MAPA & financial books.	In case incorrect figures reported to DOT etc., legal consequences/ penalties may follow.	<b>Check the figures given in the reports with the base documents.</b>	<b>Obtain the concerned base documents</b>
3.		Ensure that the licenses to operate are obtained / renewed at the required time / frequency.	Non-compliance will amount to illegalized operations	Examine whether the license to operate has been duly received before the start of operations. Check in case of expiry of license, whether	Obtain the copy of the license to operate



<b>Checklist For Statutory &amp; Regulatory Compliances –Telecom</b>					
<b>S. No.</b>	<b>Priority</b>	<b>Questionnaire</b>	<b>Risk Associated</b>	<b>Methodology</b>	<b>Input Requirements</b>
				renewal has been timely done.	
4.		Is there a system in place to maintain/preserve all notices/correspondences from DOT/ other regulatory authorities	Lack of preservation of these notices may result in important notices / queries remaining un-responded.	Check whether all the notices/correspondences have been preserved date wise since beginning and a control register is maintained with details like receipt date, nature of notice and when responded etc.	Obtain the register and file of all the notices/correspondences from various authorities.
5.		Is there a proper system of responding to such notices/correspondences?	Penalties/ legal proceedings may follow.	1.Check whether they have been replied in accordance with corporate guidelines attached in Annexure- 2.  2. Check the timeframe within which it is responded to?	Obtain all the responses/ clarifications sent by the Circle.
6.		Ensure that the basis of calculation of regulatory charges such as Fees for Revenue Sharing etc., are correct & accordingly such dues have been duly	Excess/ wrong payment of Fees for Revenue sharing resulting in loss of funds while short payment will lead to interest payments.	1. Understand how the calculation for Fees for Revenue Sharing is to be done & ensure that such calculations have been made accordingly. 2.Check whether it	1. Working papers for calculation of amount of Fees for Revenue Sharing etc. 2. Obtain the



<b>Checklist For Statutory &amp; Regulatory Compliances –Telecom</b>					
<b>S. No.</b>	<b>Priority</b>	<b>Questionnaire</b>	<b>Risk Associated</b>	<b>Methodology</b>	<b>Input Requirements</b>
		paid within stipulated time.		has been paid within such timelines.	timelines within which such charges are to be paid
7.		Ensure that the original copies/ photocopies of all the Government approvals of a regulatory nature such as Standing Advisory Committee on Radio Frequency Allocation (SACFA) clearances for ROW, PCM links and frequency allocations etc. are physically available and properly maintained.	Lack of these approvals will weaken our stand in future legal proceedings.	Examine whether all the copies are physically available & properly maintained with the Circle.	Obtain original/ photocopies of all the government approvals of a regulatory nature.
8.		Ensure that clearances from Municipal Authorities such as MCD, NDMC, PWD, DDA etc. are obtained & properly preserved for all the sites at various locations.	Non-availability of these clearances may lead to disputes / problems from these agencies.	1. Match the clearances obtained from Municipal authorities with the list of all the sites & identify the ones for which clearance has not been obtained. 2. Also check whether structural stability	1. Obtain a list of all the sites 2. Original/ photocopies of clearances from Municipal authorities for various sites.



<b>Checklist For Statutory &amp; Regulatory Compliances –Telecom</b>					
<b>S. No.</b>	<b>Priority</b>	<b>Questionnaire</b>	<b>Risk Associated</b>	<b>Methodology</b>	<b>Input Requirements</b>
		Also whether structural stability certificate, building bye laws conformances etc. obtained.		certificate, building byelaws conformances etc. had been obtained for all the sites.	
9.		Ensure that lease / leave and license agreement is duly entered into for all cell sites.	Lack of our stand against any future legal proceedings for setting up these sites.	Match the list of all the sites with the leave & license agreements obtained for them and identify the sites for which it has not been obtained. Also check for the validity and completeness of these agreements.	Original/ photocopies of all the leave & license agreements entered into for various sites.
10.		Ensure that original copies of all the agreements with roaming partners, vendors and suppliers, Business partners etc. are physically available and properly maintained for legal compliance.	Lack of these agreements will weaken the stand in future legal proceedings.	1.Check if agreements have been entered into with all the roaming partners. 2.For agreements with suppliers, obtain a list of suppliers for which agreement have been entered & check if copies of all such are with the Unit.	1. Obtain a list of all the roaming partners & a list of suppliers with which an agreement has been entered with the 2. Original/ photocopies of agreements with roaming partners, suppliers etc.



<b>Checklist For Statutory &amp; Regulatory Compliances –Telecom</b>					
<b>S. No.</b>	<b>Priority</b>	<b>Questionnaire</b>	<b>Risk Associated</b>	<b>Methodology</b>	<b>Input Requirements</b>
11.		Whether all The agreements entered into by the Circle are valid in law i.e. on adequate value of stamp paper & the date of agreement within the validity date of the stamp paper etc.	Agreements entered into but not a valid document in law.	Review all the agreements to check <ul style="list-style-type: none"> <li>• All agreements are vetted by the legal department</li> <li>• Agreements are on adequate value stamp paper</li> <li>• Agreement date is after the stamp paper date</li> <li>• The agreement date is within the validity date of the stamp paper</li> <li>• Alterations in the terms of the agreement are properly executed &amp; countersigned.</li> <li>• All expired agreements are renewed in time</li> </ul>	Original/ photocopies of all the agreements entered into by the Unit.

<b>Checklist For Statutory &amp; Regulatory Compliances –Telecom</b>					
<b>S. No.</b>	<b>Priority</b>	<b>Questionnaire</b>	<b>Risk Associated</b>	<b>Methodology</b>	<b>Input Requirements</b>
12.		<p>Ensure that various provisions of Income Tax are duly adhered to</p> <ul style="list-style-type: none"> <li>• Calculation of amount of TDS in respect of payments for salaries, contractors, professional fees, rent, brokerage etc.</li> <li>• Deposit of TDS within stipulated time</li> <li>• Proper Receipt &amp; issue of TDS Certificates</li> <li>• Returns to be filed with Income Tax Authorities are duly filed &amp; within timelines.</li> </ul>	Imposition of penalties under Income Tax Act.	<p>1. Check the computation of rate of TDS for all the payments made for salaries, contractors, professional fees, rent, brokerage etc.</p> <p>2. Check from the TDS Challan, whether it has been submitted within due time.</p> <p>3. Check whether Consolidated TDS Certificates has been timely received &amp; issued.</p>	<p>1. Ledger for salary, contractor etc. for the period</p> <p>2. Original copies of TDS Challan.</p> <p>3. TDS Certificates issued &amp; received.</p>
13.		Ensure that various provisions pertaining to Provident Fund, ESI & Gratuity are duly adhered to.	Imposition of penalties under various laws.	<p>1. check for Correct Deduction &amp; timely deposit of PF, ESI &amp; Gratuity.</p> <p>2. Check for Deduction of PF on payment of leave Encashment for existing employees.</p>	<p>1. Basic salary for all the employees on the payroll of the company.</p> <p>2. Original Challans for</p>



<b>Checklist For Statutory &amp; Regulatory Compliances –Telecom</b>					
<b>S. No.</b>	<b>Priority</b>	<b>Questionnaire</b>	<b>Risk Associated</b>	<b>Methodology</b>	<b>Input Requirements</b>
				3. Check for Filing of Returns/ forms relating to PF, ESI within stipulated time.	deposit of PF, ESI & Gratuity. 3. Returns filed for PF, ESI.
14.		Ensure that compliance of PF, ESI & various labour laws in case of labour employed by the Contractor are duly adhered to.	Although labour employed by the Contractor but because of non-compliance of various laws, penalties could be imposed on Bharti.	Examine the copies of Challans of PF etc. as a proof of deposit for the workers employed by contractor for Bharti.	Copies of PF etc. Challan from the contractors.
16.		Ensure that various provisions pertaining to Shops & Establishments Act, Payment of Bonus Act, Registration Act & other labour Laws duly adhered to.	Imposition of penalties under these laws.	Examine the compliance statement & verify if it is correct.	Obtain the compliance statement.
17.		Ensure that the quarterly return in Form ER I and biannually return ER II are submitted before the due dates as specified in Employment Exchanges (Compulsory	Imposition of penalties under these Rules.	Verify whether it has been prepared correctly and submitted within specified time.	Obtain the quarterly return submitted as per Employment Exchange rules.



<b>Checklist For Statutory &amp; Regulatory Compliances –Telecom</b>					
<b>S. No.</b>	<b>Priority</b>	<b>Questionnaire</b>	<b>Risk Associated</b>	<b>Methodology</b>	<b>Input Requirements</b>
		Notification of Vacancies) Rules, 1960.			
18.		Whether the transactions involving foreign exchange has been made meeting all the statutory requirements.	Imposition of penalties under these laws.	Identify the transactions made in foreign exchange & if check all the statutory requirements of FEMA & RBI guidelines are duly met.	Obtain the schedule of inflows & outflows made in foreign exchange.
19.		<p>Ensure in the case of following</p> <ul style="list-style-type: none"> <li>• Office Premises – whether building plan sanction, completion certificate etc. are properly obtained</li> <li>• Advertising Banners / Hoarding – whether approval from municipal corporation / PWD etc. is duly obtained</li> </ul>	Lack of these documents will weaken our stand in future legal proceedings.	Check if the office premises the Building plan sanction, completion certificate etc. are timely obtained & properly maintained.	Obtain the original/ photocopies of various approvals/ sanctions received for office premises & for advertisement banners, hoardings etc.

<b>Checklist For Statutory &amp; Regulatory Compliances –Telecom</b>					
<b>S. No.</b>	<b>Priority</b>	<b>Questionnaire</b>	<b>Risk Associated</b>	<b>Methodology</b>	<b>Input Requirements</b>
20.		<p>What is the amount of fines/ penalties imposed during the period</p> <ul style="list-style-type: none"> <li>Analyse the reasons for such levy &amp; whether it was avoidable.</li> <li>What are the chances of imposition of this penalty/ fine again?</li> </ul>	<p>Same mistake repeating again resulting in re-imposition of penalties which are avoidable.</p>	<ol style="list-style-type: none"> <li>Examine the schedule of expenses &amp; identify if there are some fines/ penalties imposed.</li> <li>Check the assets accounts wherein some penalties may have been included in the total cost and capitalised.</li> <li>Enquire the reasons for the same &amp; examine if there are some steps taken so as to minimize its re-occurrence.</li> </ol>	<p>Obtain the expense schedule for fines &amp; penalties.</p>
21.		<p>Whether the payment for expenditure of electricity connection at cell sites is timely made &amp; ensures no extra amount is charged.</p>	<p>Penalties/ legal proceedings in case of non-compliance.</p>	<p>Verify the following for the electricity connections at cell sites:</p> <ul style="list-style-type: none"> <li>State Electricity Board clearances are obtained.</li> <li>Check the proof of payment of the dues in case the</li> </ul>	<p>Obtain a copy of the clearance from State Electricity Board.</p> <p>Obtain copy of electricity bills paid in the past along with the supporting bills and proof of</p>

<b>Checklist For Statutory &amp; Regulatory Compliances –Telecom</b>					
<b>S. No.</b>	<b>Priority</b>	<b>Questionnaire</b>	<b>Risk Associated</b>	<b>Methodology</b>	<b>Input Requirements</b>
				<p>meter is in the name of the Landlord.</p> <ul style="list-style-type: none"> <li>• Check if the payment is made within due time &amp; no penalty is imposed because of late payment</li> <li>• Check that the rates charged by the Electricity Board to the landlord are for commercial use and not for residential usage.</li> <li>• Check if the reading of the meter tallies with the amount billed by the Electricity Board.</li> </ul>	payment.
22.		Whether all provisions of The Customs Act are duly complied with	Penalties levied which could have been avoidable.	<ol style="list-style-type: none"> <li>1. Examine all notices/proceedings with the Customs department are timely &amp; properly followed.</li> <li>2. Review the reasons for the payment of demurrage paid &amp; identify if it was</li> </ol>	Obtain a copy of the relevant documents for all proceedings with the Customs department



<b>Checklist For Statutory &amp; Regulatory Compliances –Telecom</b>					
<b>S. No.</b>	<b>Priority</b>	<b>Questionnaire</b>	<b>Risk Associated</b>	<b>Methodology</b>	<b>Input Requirements</b>
				avoidable. 3. Enquire the reasons for any penalty levied	



**Annexure I**

**FORM CRA-1**

**(Pursuant to rule 5(1) of the Companies (Cost Records and Audit) Rules, 2014)**

**Particulars relating to the Items of Costs to be included in the Books of Accounts**

**1. Material Costs-**

- (a) Proper records shall be maintained showing separately all receipts, issues and balances both in quantities and cost of each item of raw material or input services (including all direct charges) required for the production of goods or rendering of services under reference.
- (b) The material receipt shall be valued at purchase price including duties and taxes, freight inwards, insurance, and other expenditure directly attributable to procurement (net of trade discounts, rebates, taxes and duties refundable or to be credited by the taxing authorities) that can be quantified with reasonable accuracy at the time of acquisition.
- (c) Finance costs incurred in connection with the acquisition of materials shall not form part of material cost.
- (d) Self-manufactured materials shall be valued including direct material cost, direct employee cost, direct expenses, factory overheads, share of administrative overheads relating to production but excluding share of other administrative overheads, finance cost and marketing overheads.
- (e) Spares which are specific to an item of equipment shall not be taken to inventory, but shall be capitalized with the cost of the specific equipment. Cost of capital spares and or insurance spares, whether procured with the equipment or subsequently, shall be amortised over a period, not exceeding the useful life of the equipment.
- (f) Normal loss or spoilage of material prior to reaching the factory or at places where the services are provided shall be absorbed in the cost of balance materials net of amounts recoverable from suppliers, insurers, carriers or recoveries from disposal.
- (g) Losses due to shrinkage or evaporation and gain due to elongation or absorption of moisture etc., before the material is received shall be absorbed in material cost to the extent they are normal, with corresponding adjustment in the quantity.
- (h) The forex component of imported material cost shall be converted at the rate on the date of the transaction. Any subsequent change in the exchange rate till payment or otherwise shall not form part of the material cost.
- (i) Any demurrage or detention charges, or penalty levied by transport or other authorities shall not form part of the cost of materials.



- (j) Subsidy or Grant or Incentive and any such payment received or receivable with respect to any material shall be reduced from cost for ascertainment of the cost of the cost object to which such amounts are related.
- (k) Issues shall be valued using appropriate assumptions on cost flow, e.g. First-in-First-out, Last-in-First-out, Weighted Average Rate. The method of valuation shall be followed on a consistent basis.
- (l) Where materials are accounted at standard cost, the price variances related to materials shall be treated as part of material cost.
- (m) Any abnormal cost shall be excluded from the material cost.
- (n) Wherever, material costs include transportation costs, determination of costs of transportation shall be governed by Para No. 9 on Determination of Cost of Transportation.
- (o) Self-manufactured components and sub-assemblies shall be valued including direct material cost, direct employee cost, direct expenses, factory overheads, share of administrative overheads relating to production but excluding share of other administrative overheads, finance cost and marketing overheads.
- (p) The material cost of normal scrap or defectives which are rejects shall be included in the material cost of goods manufactured. The material cost of actual scrap or defectives, not exceeding the normal shall be adjusted in the material cost of good production. Material Cost of abnormal scrap or defectives should not be included in material cost but treated as loss after giving credit to the realisable value of such scrap or defectives.
- (q) Material costs shall be directly traced to a Cost object to the extent it is economically feasible or shall be assigned to the cost object on the basis of material quantity consumed or similar identifiable measure and valued as per above principles.
- (r) Where the material costs are not directly traceable to the cost object, the same shall be assigned on a suitable basis like technical estimates.
- (s) Where a material is processed or part manufactured by a third party according to specifications provided by the buyer, the processing or manufacturing charges payable to the third party shall be treated as part of the material cost.
- (t) Wherever part of the manufacturing operations or activity is subcontracted, the subcontract charges related to materials shall be treated as direct expenses and assigned directly to the cost object.
- (u) The cost of indirect materials shall be assigned to the various Cost objects based on a suitable basis such as actual usage or technical norms or a similar identifiable measure.
- (v) The cost of materials like catalysts, dies, tools, moulds, patterns etc, which are relatable to production over a period of time shall be amortized over the production units benefited by such cost.



(w) The cost of indirect material with life exceeding one year shall be included in cost over the useful life of the material.

## **2. Employee Cost**

- a) Proper records shall be maintained in respect of employee costs in such a manner as to enable the company to book these expenses cost centre wise or department wise with reference to goods or services under reference and to furnish necessary particulars. Where the employees work in such a manner that it is not possible to identify them with any specific cost centre or service centre or department, the employees cost shall be apportioned to the cost centre or service centres or departments on equitable and reasonable basis and applied consistently.
- b) Employee Cost shall be ascertained taking into account the gross pay including all allowances payable along with the cost to the employer of all the benefits.
- c) Bonus whether payable as a Statutory Minimum or on a sharing of surplus shall be treated as part of employee cost. Ex gratia payable in lieu of or in addition to Bonus shall also be treated as part of the employee cost.
- d) Remuneration payable to Managerial Personnel including Executive Directors on the Board and other officers of a corporate body under a statute shall be considered as part of the Employee Cost of the year under reference whether the whole or part of the remuneration is computed as a percentage of profits. Remuneration paid to non-executive directors shall not form part of Employee Cost but shall form part of Administrative Overheads.
- e) Separation costs related to voluntary retirement, retrenchment, termination etc. shall be amortised over the period benefitting from such costs.
- f) Employee cost shall not include imputed costs.
- g) Cost of Idle time is ascertained by the idle hours multiplied by the hourly rate applicable to the idle employee or a group of employees.
- h) Where Employee cost is accounted at standard cost, variances due to normal reasons related to Employee cost shall be treated as part of Employee cost. Variances due to abnormal reasons shall be treated as part of abnormal cost.
- i) Any Subsidy, Grant, Incentive or any such payment received or receivable with respect to any Employee cost shall be reduced for ascertainment of cost of the cost object to which such amounts are related.
- j) Any abnormal cost where it is material and quantifiable shall not form part of the Employee cost.
- k) Penalties, damages paid to statutory authorities or other third parties shall not form part of the Employee cost.



- l) The cost of free housing, free conveyance and any other similar benefits provided to an employee shall be determined at the total cost of all resources consumed in providing such benefits.
- m) Any recovery from the employee towards any benefit provided, namely, housing shall be reduced from the employee cost.
- n) Any change in the cost accounting principles applied for the determination of the Employee cost should be made only if it is required by law or for compliance with the requirements of a cost accounting standard or a change would result in a more appropriate preparation or presentation of cost statements of an enterprise.
- o) Where the Employee services are traceable to a cost object, such Employees' cost shall be assigned to the cost object on the basis such as time consumed or number of employees engaged etc. or similar identifiable measure.
- p) While determining whether a particular Employee cost is chargeable to a separate cost object, the principle of materiality shall be adhered to.
- q) Where the Employee costs are not directly traceable to the cost object, these may be assigned on suitable basis like estimates of time based on time study.
- r) The amortised separation costs related to voluntary retirement, retrenchment, and termination etc. for the period shall be treated as indirect cost and assigned to the cost objects in an appropriate manner. However unamortised amount related to discontinued operations, shall not be treated as employee cost.
- s) Recruitment costs, training cost and other such costs shall be treated as overheads and dealt with accordingly.
- t) Overtime premium shall be assigned directly to the cost object or treated as overheads depending on the economic feasibility and the specific circumstance requiring such overtime.
- u) Idle time cost shall be assigned direct to the cost object or treated as overheads depending on the economic feasibility and the specific circumstances causing such idle time.

### **3. Utilities**

- a) Proper records shall be maintained showing the quantity and cost of each major utility such as power, water, steam, effluent treatment, etc. produced and consumed by the different cost centres in such detail as to have particulars for each utility separately.
- b) Each type of utility shall be treated as a distinct cost object.
- c) Cost of utilities purchased shall be measured at cost of purchase including duties and taxes, transportation cost, insurance and other expenditure directly attributable to procurement (net of



trade discounts, rebates, taxes and duties refundable or to be credited) that can be quantified with reasonable accuracy at the time of acquisition.

- d) Cost of self-generated utilities for own consumption shall comprise direct material cost, direct employee cost, direct expenses and factory overheads.
- e) In case of Utilities generated for the purpose of inter unit transfers, the distribution cost incurred for such transfers shall be added to the cost of utilities determined as above.
- f) Cost of Utilities generated for the intercompany transfers shall comprise direct material cost, direct employee cost, direct expenses, factory overheads, distribution cost and share of administrative overheads.
- g) Cost of Utilities generated for the sale to outside parties shall comprise direct material cost, direct employee cost, direct expenses, factory overheads, distribution cost, share of administrative overheads and marketing overheads. The sale value of such utilities shall also include the margin.
- h) Finance costs incurred in connection with the utilities shall not form part of cost of utilities.
- i) The cost of utilities shall include the cost of distribution of such utilities. The cost of distribution will consist of the cost of delivery of utilities up to the point of consumption.
- j) Cost of utilities shall not include imputed costs.
- k) Where cost of utilities is accounted at standard cost, the price variances related to utilities shall be treated as part of cost of utilities and the portion of usage variances due to normal reasons shall be treated as part of cost of utilities. Usage variances due to abnormal reasons shall be treated as part of abnormal cost.
- l) Any Subsidy or Grant or Incentive or any such payment received or receivable with respect to any cost of utilities shall be reduced for ascertainment of the cost to which such amounts are related.
- m) The cost of production and distribution of utilities shall be determined based on the normal capacity or actual capacity utilization whichever is higher and unabsorbed cost, if any, shall be treated as abnormal cost. Cost of a Stand-by Utility shall include the committed costs of maintaining such a utility.
- n) Any abnormal cost where it is material and quantifiable shall not form part of the cost of utilities.
- o) Penalties, damages paid to statutory authorities or other third parties shall not form part of the cost of utilities.
- p) Credits or recoveries relating to the utilities including cost of utilities provided to outside parties, material and quantifiable, shall be deducted from the total cost of utility to arrive at the net cost of utility.



- q) Any change in the cost accounting principles applied for the measurement of the cost of utilities shall be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organisation.
- r) While assigning cost of utilities, traceability to a cost object in an economically feasible manner shall be the guiding principle.
- s) Where the cost of utilities is not directly traceable to cost object, it shall be assigned on the most appropriate basis.
- t) The most appropriate basis of distribution of cost of a utility to the departments consuming services is to be derived from usage parameters.

#### **4. Direct Expenses**

- a) Proper records shall be maintained in respect of direct expenses in such a manner as to enable company to book these expenses cost centre wise or cost object or department wise with reference to goods or services under reference and to furnish necessary particulars.
- b) Direct expenses incurred for the use of bought out resources shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of trade discounts, rebates, taxes and duties refundable or to be credited.
- c) Other expenses shall be determined on the basis of amount incurred in connection therewith.
- d) Direct Expenses paid or incurred in lump-sum or which are in the nature of 'one – time' payment, shall be amortised on the basis of the estimated output or benefit to be derived from such direct expenses.
- e) If an item of Direct Expenses does not meet the test of materiality, it can be treated as part of overheads.
- f) Finance costs incurred in connection with the self-generated or procured resources shall not form part of Direct Expenses. Direct Expenses shall not include imputed costs.
- g) Where direct expenses are accounted at standard cost, variances due to normal reasons shall be treated as part of the Direct Expenses. Variances due to abnormal reasons shall not form part of the Direct Expenses.
- h) Any Subsidy or Grant or Incentive or any such payment received or receivable with respect to any Direct Expenses shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.
- i) Any abnormal portion of the direct expenses where it is material and quantifiable shall not form part of the Direct Expenses.



- j) Penalties, damages paid to statutory authorities or other third parties shall not form part of the Direct Expenses.
- k) Credits or recoveries relating to the Direct Expenses, material and quantifiable, shall be deducted to arrive at the net Direct Expenses.
- l) Any change in the cost accounting principles applied for the measurement of the Direct Expenses should be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organisation.
- m) Direct Expenses that are directly traceable to the cost object shall be assigned to that cost object.

## **5. Repairs and Maintenance**

- a) Proper records showing the expenditure incurred by the workshop, tool room and on repairs and maintenance in the various cost centres or departments shall be maintained under different heads.
- b) Repairs and maintenance cost shall be the aggregate of direct and indirect cost relating to repairs and maintenance activity. Direct cost shall include the cost of materials, consumable stores, spares, manpower, equipment usage, utilities and other identifiable resources consumed in such activity. Indirect cost shall include the cost of resources common to various repairs and maintenance activities such as manpower, equipment usage and other costs allocable to such activities.
- c) Cost of in-house repairs and maintenance activity shall include cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other resources used in such activity.
- d) Cost of repairs and maintenance activity carried out by outside contractors inside the entity shall include charges payable to the contractor and cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other costs incurred by the entity for such jobs.
- e) Cost of repairs and maintenance jobs carried out by contractor at its premises shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discount), taxes and duties refundable or to be credited. This cost shall also include the cost of other resources provided to the contractors.
- f) Cost of repairs and maintenance jobs carried out by outside contractors shall include charges made by the contractor and cost of own materials, consumable stores, spares, manpower, equipment usage, utilities and other costs used in such jobs.
- g) Each type of repairs and maintenance shall be treated as a distinct activity, if material and identifiable.
- h) Cost of repairs and maintenance activity shall be measured for each major asset category separately.



- i) Cost of spares replaced which do not enhance the future economic benefits from the existing asset beyond its previously assessed standard of performance shall be included under repairs and maintenance cost.
- j) High value spare, when replaced by a new spare and is reconditioned, which is expected to result in future economic benefits, the same shall be taken into stock. Such a spare shall be valued at an amount that measures its service potential in relation to a new spare which amount shall not exceed the cost of reconditioning the spare. The difference between the total of the cost of the new spare and the reconditioning cost and the value of the reconditioned spare should be treated as repairs and maintenance cost.
- k) The cost of major overhaul shall be amortized on a rational basis.
- l) Finance costs incurred in connection with the repairs and maintenance activities shall not form part of Repairs and maintenance costs.
- m) Repairs and maintenance costs shall not include imputed costs.
- n) Price variances related to repairs and maintenance, where standard costs are in use, shall be treated as part of repairs and maintenance cost. The portion of usage variances attributable to normal reasons shall be treated as part of repairs and maintenance cost. Usage variances attributable to abnormal reasons shall be excluded from repairs and maintenance cost.
- o) Subsidy or Grant or Incentive or amount of similar nature received or receivable with respect to repairs and maintenance activity, if any, shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.
- p) Any repairs and maintenance cost resulting from some abnormal circumstances, e.g., major fire, explosions, flood and similar events, if material and quantifiable, shall not form part of the repairs and maintenance cost.
- q) Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the repairs and maintenance cost.
- r) Credits or recoveries relating to the repairs and maintenance activity, material and quantifiable, shall be deducted to arrive at the net repairs and maintenance cost.
- s) Any change in the cost accounting principles applied for the measurement of the repairs and maintenance cost should be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organisation.
- t) Repairs and maintenance costs shall be traced to a cost object to the extent economically feasible.
- u) Where the repairs and maintenance cost is not directly traceable to cost object, it shall be assigned based on either of the following the principles of (1) Cause and Effect - Cause is the process or



operation or activity and effect is the incurrence of cost and (2) Benefits received – overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.

- v) If the repairs and maintenance cost (including the share of the cost of reciprocal exchange of services) is shared by several cost objects, the related cost shall be measured as an aggregate and distributed among the cost objects.

## **6. Fixed Assets and Depreciation**

- a) Proper and adequate records shall be maintained for assets used for production of goods or rendering of services under reference in respect of which depreciation has to be provided for. These records shall, inter-alia, indicate grouping of assets under each good or service, the cost of acquisition of each item of asset including installation charges, date of acquisition and rate of depreciation.
- b) Depreciation and Amortisation shall be measured based on the depreciable amount and the useful life. The residual value of an intangible asset shall be assumed to be zero unless:
  - i) there is a commitment by a third party to purchase the asset at the end of its useful life; or
  - ii) there is an active market for the asset and:
    - a. residual value can be determined by reference to that market; and
    - b. it is probable that such a market will exist at the end of the asset's useful life.
    - c. The residual value of a fixed asset shall be considered as zero if the entity is unable to estimate the same with reasonable accuracy.
- c) The minimum amount of depreciation to be provided shall not be less than the amount calculated as per principles and methods as prescribed by any law or regulations applicable to the entity and followed by it.
- d) In case of regulated industry the amount of depreciation shall be the same as prescribed by the concerned regulator.
- e) While estimating the useful life of a depreciable asset, consideration shall be given to the following factors:
  - i) Expected physical wear and tear;
  - ii) Obsolescence; and
  - iii) Legal or other limits on the use of the asset.
- f) The useful life of an intangible asset that arises from contractual or other legal rights shall not exceed the period of the contractual or other legal rights, but may be shorter depending on the period over which the entity expects to use the asset.



- g) If the contractual or other legal rights are conveyed for a limited term that can be renewed, the useful life of the intangible asset shall include the renewal period(s) only if there is evidence to support renewal by the entity without significant cost. The useful life of a re-acquired right recognised as an intangible asset in a business combination is the remaining contractual period of the contract in which the right was granted and shall not include renewal periods.
- h) The useful life of an intangible asset, in any situation, shall not exceed 10 years from the date it is available for use.
- i) Depreciation shall be considered from the time when a depreciable asset is first put into use. An asset which is used only when the need arises but is always held ready for use. Example: fire extinguisher, stand by generator, safety equipment shall be considered to be an asset in use. Depreciable assets will be considered to be put into use when commercial production of goods and services commences.
- j) Depreciation on an asset which is temporarily retired from production of goods and services shall be considered as abnormal cost for the period when the asset is not in use.
- k) Depreciation of any addition or extension to an existing depreciable asset which becomes an integral part of that asset shall be based on the remaining useful life of that asset.
- l) Depreciation of any addition or extension to an existing depreciable asset which retains a separate identity and is capable of being used after the expiry of the useful life of that asset shall be based on the estimated useful life of that addition or extension.
- m) The impact of higher depreciation due to revaluation of assets shall not be assigned to cost object.
- n) Impairment loss on assets shall be excluded from cost of production.
- o) The method of depreciation used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity.
- p) An entity can use any of the methods of depreciation to assign depreciable amount of an asset on a systematic basis over its useful life, viz., Straight-line method; Diminishing balance method; and Units of production method.
- q) The method of amortisation of intangible asset shall reflect the pattern in which the economic benefits accrue to entity.
- r) The methods and rates of depreciation applied shall be reviewed at least annually and, if there has been a change in the expected pattern of consumption or loss of future economic benefits, the method applied shall be changed to reflect the changed pattern.
- s) Spares purchased specifically for a particular asset, or class of assets, and which would become redundant if that asset or class of asset was retired or use of that asset was discontinued, shall form



part of that asset. The depreciable amount of such spares shall be allocated over the useful life of the asset.

- t) Cost of small assets shall be written off in the period in which they were purchased as per the accounting policy of the entity.
- u) Depreciation of an asset shall not be considered in case cumulative depreciation exceeds the original cost of the asset, net of residual value.
- v) Where depreciation for an addition of an asset is measured on the basis of the number of days for which the asset was used for the preparation and presentation of financial statements, depreciation of the asset for assigning to cost of object shall be measured in relation to the period, the asset actually utilized.
- w) Depreciation shall be traced to the cost object to the extent economically feasible.
- x) Where the depreciation is not directly traceable to cost object, it shall be assigned based on either of the following two principles, namely;
  - i) Cause and Effect - Cause is the process or operation or activity and effect is the incurrence of cost and
  - ii) Benefits received – overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.

## **7. Overheads**

- a) Proper records shall be maintained for various items of indirect expenses comprising overheads pertaining to goods or services under reference. These expenses shall be analysed, classified and grouped according to functions.
- b) Overheads representing procurement of resources shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discounts), taxes and duties refundable or to be credited.
- c) Overheads other than those referred to above shall be determined on the basis of cost incurred in connection therewith.
- d) Any abnormal cost where it is material and quantifiable shall not form part of the overheads.
- e) Finance costs incurred in connection with procured or self-generated resources shall not form part of overheads.
- f) Overheads shall not include imputed cost.
- g) Overhead variances attributable to normal reasons shall be treated as part of overheads. Overhead variances attributable to abnormal reasons shall be excluded from overheads.



- h) Any subsidy or Grant or Incentive or amount of similar nature received or receivable with respect to overheads shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.
- i) Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the overheads.
- j) Credits or recoveries relating to the overheads, material and quantifiable, shall be deducted from the total overhead to arrive at the net overheads. Where the recovery exceeds the total overheads, the balance recovery shall be treated as other income.
- k) Any change in the cost accounting principles applied for the measurement of the overheads shall be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an entity.
- l) While assigning overheads, traceability to a cost object in an economically feasible manner shall be the guiding principle. The cost which can be traced directly to a cost object shall be directly assigned.
- m) Overheads shall be classified according to functions, viz., works, administration, selling & distribution, head office, corporate etc.
- n) Assignment of overheads to the cost objects shall be based on either of the following two principles; (1) Cause and Effect - Cause is the process or operation or activity and effect is the incurrence of cost and (2) Benefits received – overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.
- o) The variable production overheads shall be absorbed to products or services based on actual capacity utilisation.
- p) The fixed production overheads shall be absorbed based on the normal capacity.
- q) Assignment of Administration Overheads shall be in accordance with para no. 8.
- r) Marketing Overheads that can be identified to a product or service shall be assigned to that product or service.
- s) Marketing Overheads that cannot be identified to a product or service shall be assigned to the products or services on the most appropriate basis.

## **8. Administrative Overheads**

- a) Administrative overheads shall be the aggregate of cost of resources consumed in activities relating to general management and administration of an organisation.



- b) In case of leased assets, if the lease is an operating lease, the entire rentals shall be included in the administrative overheads. If the lease is a financial lease, the finance cost portion shall be segregated and treated as part of finance costs.
- c) The cost of software (developed in house, purchased, licensed or customised), including up-gradation cost shall be amortised over its estimated useful life.
- d) The cost of administrative services procured from outside shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discount), taxes and duties refundable or to be credited.
- e) Any Subsidy or Grant or Incentive or any amount of similar nature received or receivable with respect to any Administrative overheads shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.
- f) Administrative overheads shall not include any abnormal administrative cost.
- g) Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the administrative overheads.
- h) Credits or recoveries relating to the administrative overheads including those rendered without any consideration, material and quantifiable, shall be deducted to arrive at the net administrative overheads.
- i) Any change in the cost accounting principles applied for the measurement of the administrative overheads should be made only if it is required by law or for compliance with the requirements of a cost accounting standard or a change would result in a more appropriate preparation or presentation of cost statements of an organisation.
- j) While assigning administrative overheads, traceability to a cost object in an economically feasible manner shall be the guiding principle.
- k) Assignment of administrative overheads to the cost objects shall be based on either of the following two principles;
  - (i) Cause and Effect - Cause is the process or operation or activity and effect is the incurrence of cost.
  - (ii) Benefits received – overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.

## **9. Transportation Cost**

- a) Proper records shall be maintained for recording the actual cost of transportation showing each element of cost such as freight, cartage, transit insurance and others after adjustment for recovery



of transportation cost. Abnormal costs relating to transportation, if any, are to be identified and recorded for exclusion of computation of average transportation cost.

- b) In case of a manufacturer having his own transport fleet, proper records shall be maintained to determine the actual operating cost of vehicles showing details of various elements of cost such as salaries and wages of driver, cleaners and others, cost of fuel, lubricant grease, amortized cost of tyres and battery, repairs and maintenance, depreciation of the vehicles, distance covered and trips made, goods hauled and transported to the depot.
- c) In case of hired transport charges incurred for despatch of goods, complete details shall be recorded as to date of despatch, type of transport used, description of the goods, destination of buyer, name of consignee, challan number, quantity of goods in terms of weight or volume, distance involved, amount paid and other related details.
- d) Records shall be maintained separately for inward and outward transportation cost specifying the details particulars of goods despatched, name of supplier or recipient, amount of freight etc.
- e) Separate records shall be maintained for identification of transportation cost towards inward movement of material (procurement) and transportation cost of outward movement of goods removed or sold for both home consumption and export.
- f) Records for transportation cost from factory to depot and thereafter shall be maintained separately.
- g) Records for transportation cost for carrying any material or product to job-workers place and back shall be maintained separately so as include the same in the transaction value of the product.
- h) Records for transportation cost for goods involved exclusively for trading activities shall be maintained separately and the same shall not be included for claiming any deduction for calculating assessable value excisable goods cleared for home consumption.
- i) Records of transportation cost directly allocable to a particular category of products shall be maintained separately so that allocation can be made.
- j) For common transportation cost both for own fleet or hired ones, proper records for basis of apportionment shall be maintained.
- k) Records for transportation cost for exempted goods, excisable goods cleared for export shall be maintained separately.
- l) Separate records of cost for mode of transportation other than road like ship or air are to be maintained, which shall be included in total cost of transportation.
- m) Inward transportation costs shall form the part of the cost of procurement of materials which are to be identified for proper allocation or apportionment to the materials or products.



- n) Outward transportation cost shall form the part of the cost of sale and shall be allocated or apportioned to the materials and goods on a suitable basis.
- o) The following basis shall be used, in order of priority, for apportionment of outward transportation cost depending upon the nature of products, unit of measurement followed and type of transport used:
  - i) Weight
  - ii) Volume of goods
  - iii) Tonne-Km
  - iv) Unit or Equivalent unit
  - v) Value of goods
  - vi) Percentage of usage of space
- p) Once a basis of apportionment is adopted, the same shall be followed consistently.
- q) For determining the transportation cost per unit, distance shall be factored in to arrive at weighted average cost.
- r) Abnormal and non-recurring cost shall not be a part of transportation cost.

#### **10. Royalty and Technical Know-how**

- a) Adequate records shall be maintained showing royalty and or or technical know-how fee including other recurring or non-recurring payments of similar nature, if any, made for the goods or services under reference to collaborators or technology suppliers in terms of agreements entered into with them.
- b) Royalty and Technical Know-how Fee paid or incurred in lump-sum or which are in the nature of 'one-time' payment, shall be amortised on the basis of the estimated output or benefit to be derived from the related asset. Amortisation of the amount of Royalty or Technical Know-how fee paid for which the benefit is ensued in the current or future periods shall be determined based on the production or service volumes estimated for the period over which the asset is expected to benefit the entity.
- c) Amount of the Royalty and Technical Know-how Fee shall not include finance costs and imputed costs.
- d) Any Subsidy or Grant or Incentive or any such payment received or receivable with respect to amount of Royalty and Technical Know-how fee shall be reduced to measure the amount of royalty and technical know-how fee.
- e) Penalties, damages paid to statutory authorities or other third parties shall not form part of the amount of Royalty and Technical Know-how fee.



- f) Credits or recoveries relating to the amount Royalty and Technical Know-how fee, material and quantifiable, shall be deducted to arrive at the net amount of Royalty and Technical Know-how fee.
- g) Any change in the cost accounting principles applied for the measurement of the amount of Royalty and Technical Know-how Fee should be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organisation.
- h) Royalty and Technical Know-how fee that is directly traceable to a cost object shall be assigned to that cost object. In case such fee is not directly traceable to a cost object then it shall be assigned on any of the following basis:
  - i) Units produced
  - ii) Units sold
  - iii) Sales value
- i) The amount of Royalty fee paid for mining rights shall form part of the cost of material.
- j) The amount of Royalty and Technical Know-how fee shall be assigned on the nature or purpose of such fee. The amount of royalty and technical know-how fee related to product or process know how shall be treated as cost of production; if it is related to trademarks or brands shall be treated as cost of sales.

### **11. Research and Development Expenses**

- a) Research, and Development Costs shall include all the costs that are directly traceable to research and or development activities or that can be assigned to research and development activities strictly on the basis of a) cause and effect or b) benefits received. Such costs shall include the following elements:
  - i. The cost of materials and services consumed in Research and Development activities.
  - ii. Cost of bought out materials and hired services as per invoice or agreed price including duties and taxes directly attributable thereto net of trade discounts, rebates, taxes and duties refundable or to be credited.
  - iii. The salaries, wages and other related costs of personnel engaged in Research, and Development activities;
  - iv. The depreciation of equipment and facilities, and other tangible assets, and amortisation of intangible assets to the extent that they are used for Research, and Development activities;
  - v. Overhead costs, other than general administrative costs, related to Research and Development activities.
  - vi. Costs incurred for carrying out Research, and Development activities by other entities and charged to the entity; and



- vii. Expenditure incurred in securing copyrights or licences
  - viii. Expenditure incurred for developing computer software
  - ix. Costs incurred for the design of tools, jigs, moulds and dies
  - x. Other costs that can be directly attributed to Research, and Development activities and can be identified with specific projects.
- b) Subsidy or Grant or Incentive or amount of similar nature received or receivable with respect to Research and Development Activity, if any, shall be reduced from the cost of such Research and Development Activity.
  - c) Any abnormal cost where it is material and quantifiable shall not form part of the Research and Development Cost.
  - d) Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the Research, and Development Cost.
  - e) Research and Development costs shall not include imputed costs.
  - f) Credits or recoveries relating to Research, and Development cost, if material and quantifiable, including from the sale of output produced from the Research and Development activity shall be deducted from the Research and Development cost.
  - g) Research and Development costs attributable to a specific cost object shall be assigned to that cost object directly. Research & development costs that are not attributable to a specific product or process shall not form part of the product cost.
  - h) Development cost which results in the creation of an intangible asset shall be amortised over its useful life. Assignment of Development Costs shall be based on the principle of “benefits received”.
  - i) Research and Development Costs incurred for the development and improvement of an existing process or product shall be included in the cost of production. In case the Research and Development activity related to the improvement of an existing process or product continues for more than one accounting period, the cost of the same shall be accumulated and amortised over the estimated period of use of the improved process or estimated period over which the improved product will be produced by the entity after the commencement of commercial production, as the case may be, if the improved process or product is distinctly different from the existing process or product and the product is marketed as a new product. The amount allocated to a particular period shall be included in the cost of production of that period. If the expenditure is only to improve the quality of the existing product or minor modifications in attributes, the principle shall not be applied.
  - j) Development costs attributable to a saleable service namely; providing technical know-how to outside parties shall be accumulated separately and treated as cost of providing the service.



## **12. Quality Control Expenses**

- a) Adequate records shall be maintained to indicate the expenses incurred in respect of quality control department or cost centre or service centre for goods or services under reference. Where these services are also utilized for other goods or services of the company, the basis of apportionment to goods or services under reference and to other goods or services shall be on equitable and reasonable basis and applied consistently.
- b) Quality Control cost incurred in-house shall be the aggregate of the cost of resources consumed in the Quality Control activities of the entity. The cost of resources procured from outside shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discounts), taxes and duties refundable or to be credited by the Tax Authorities. Such cost shall include: Cost of conformance to quality: (a) prevention cost; and (b) appraisal cost.
- c) Identification of Quality Control costs shall be based on traceability in an economically feasible manner.
- d) Quality Control costs other than those referred to above shall be determined on the basis of amount incurred in connection therewith.
- e) Finance costs incurred in connection with the self-generated or procured resources shall not form part of Quality Control cost.
- f) Quality Control costs shall not include imputed costs.
- g) Any Subsidy or Grant or Incentive or any such payment received or receivable with respect to any Quality Control cost shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.
- h) Any abnormal portion of the Quality Control cost where it is material and quantifiable shall not form part of the Cost of Quality Control.
- i) Penalties, damages paid to statutory authorities or other third parties shall not form part of the Quality Control cost.
- j) Any change in the cost accounting principles applied for the measurement of the Quality Control cost shall be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organisation.
- k) Quality Control cost that is directly traceable to the cost object shall be assigned to that cost object. Assignment of Quality Control cost to the cost objects shall be based on benefits received by them on the principles, namely;



(1) Cause and Effect - Cause is the process or operation or activity and effect is the incurrence of cost and

(2) Benefits received – overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.

### **13. Pollution Control Expenses**

- a) Adequate records shall be maintained to indicate the expenses incurred in respect of pollution control. The basis of apportionment to goods or services under reference and to other goods or services shall be on equitable and reasonable basis and applied consistently.
- b) Pollution Control costs shall be the aggregate of direct and indirect cost relating to Pollution Control activity. Direct cost shall include the cost of materials, consumable stores, spares, manpower, equipment usage, utilities, resources for testing & certification and other identifiable resources consumed in activities such as waste processing, disposal, remediation and others. Indirect cost shall include the cost of resources common to various Pollution Control activities such as Pollution Control Registration and such like expenses.
- c) Costs of Pollution Control which are internal to the entity should be accounted for when incurred. They should be measured at the historical cost of resources consumed.
- d) Future remediation or disposal costs which are expected to be incurred with reasonable certainty as part of Onerous Contract or Constructive Obligation, legally enforceable shall be estimated and accounted based on the quantum of pollution generated in each period and the associated cost of remediation or disposal in future.
- e) Contingent future remediation or disposal costs e.g. those likely to arise on account of future legislative changes on pollution control shall not be treated as cost until the incidence of such costs become reasonably certain and can be measured.
- f) External costs of pollution which are generally the costs imposed on external parties including social costs are difficult to estimate with reasonable accuracy and are excluded from general purpose cost statements.
- g) Social costs of pollution are measured by economic models of cost measurement. The cost by way of compensation by the polluting entity either under future legislation or under social pressure cannot be quantified by traditional models of cost measurement. They are best kept out of general purpose cost statements.
- h) Cost of in-house Pollution Control activity shall include cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other resources used in such activity.



- i) Cost of Pollution Control activity carried out by outside contractors inside the entity shall include charges payable to the contractor and cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other costs incurred by the entity for such jobs.
- j) Cost of Pollution Control jobs carried out by contractor at its premises shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discount), taxes and duties refundable or to be credited. This cost shall also include the cost of other resources provided to the contractors.
- k) Cost of Pollution Control jobs carried out by outside contractors shall include charges made by the contractor and cost of own materials, consumable stores, spares, manpower, equipment usage, utilities and other costs used in such jobs.
- l) Each type of Pollution Control e.g. water, air, soil pollution shall be treated as a distinct activity, if material and identifiable.
- m) Finance costs incurred in connection with the Pollution Control activities shall not form part of Pollution Control costs.
- n) Pollution Control costs shall not include imputed costs.
- o) Price variances related to Pollution Control, where standard costs are in use, shall be treated as part of Pollution Control cost. The portion of usage variances attributable to normal reasons shall be treated as part of Pollution Control cost. Usage variances attributable to abnormal reasons shall be excluded from Pollution Control cost.
- p) Subsidy or Grant or Incentive or amount of similar nature received or receivable with respect to Pollution Control activity, if any, shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.
- q) Any Pollution Control cost resulting from abnormal circumstances, if material and quantifiable, shall not form part of the Pollution Control cost.
- r) Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the Pollution Control cost.
- s) Credits or recoveries relating to the Pollution Control activity, material and quantifiable, shall be deducted to arrive at the net Pollution Control cost.
- t) Research and development cost to develop new process, new products or use of new materials to avoid or mitigate pollution shall be treated as research and development costs and not included under pollution control costs. Development costs incurred for commercial development of such product, process or material shall be included in pollution control costs.
- u) Any change in the cost accounting principles applied for the measurement of the Pollution Control cost should be made only if, it is required by law or for compliance with the requirements of a cost



accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organisation.

- v) Pollution Control costs shall be traced to a cost object to the extent economically feasible.
- w) Direct costs of pollution control such as treatment and disposal of waste shall be assigned directly to the product, where traceable economically.
- x) Where these costs are not directly traceable to the product but are traceable to a process which causes pollution, the costs shall be assigned to the products passing through the process based on the quantity of the pollutant generated by the product.
- y) Where the Pollution Control cost is not directly traceable to cost object, it shall be treated as overhead and assigned based on either of the following two principles, namely;
  - (1) Cause and Effect - Cause is the process or operation or activity and effect is the incurrence of cost and
  - (2) Benefits received – overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.

#### **14. Service Department Expenses**

- a) Proper records shall be maintained in respect of Service Departments, i.e., cost centres which primarily provides auxiliary services across the enterprise, to indicate expenses incurred in respect of each such service cost centre like engineering, work shop, designing, laboratory, safety, transport, computer cell, welfare etc.
- b) Each identifiable service cost centre shall be treated as a distinct cost object for measurement of the cost of services subject to the principle of materiality.
- c) Cost of service cost centre shall be the aggregate of direct and indirect cost attributable to services being rendered by such cost centre.
- d) Cost of in-house services shall include cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other resources used in such service.
- e) Cost of other resources shall include related overheads.
- f) Cost of services rendered by contractors within the facilities of the entity shall include charges payable to the contractor and cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other resources provided to the contractors for such services.
- g) Cost of services rendered by contractors at their premises shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discount), taxes and duties refundable or to be credited. This cost shall also include the cost of resources provided to the contractors.



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- h) Cost of services for the purpose of inter unit transfers shall also include distribution costs incurred for such transfers.
- i) Cost of services for the purpose of inter-company transfers shall also include distribution cost incurred for such transfers and administrative overheads.
- j) Cost of services rendered to outside parties shall also include distribution cost incurred for such transfers, administrative overheads and marketing overheads.
- k) Finance costs incurred in connection with the Service Cost Centre shall not form part of the cost of Service Cost Centre.
- l) The cost of service cost centre shall not include imputed costs.
- m) Where the cost of service cost centre is accounted at standard cost, the price and usage variances related to the services cost Centre shall be treated as part of cost of services. Usage variances due to abnormal reasons shall be treated as part of abnormal cost.
- n) Any Subsidy or Grant or Incentive or any such payment received or receivable with respect to any service cost centre shall be reduced for ascertainment of the cost to which such amounts are related.
- o) The cost of production and distribution of the service shall be determined based on the normal capacity or actual capacity utilization whichever is higher and unabsorbed cost, if any, shall be treated as abnormal cost. Cost of a Stand-by service shall include the committed costs of maintaining such a facility for the service.
- p) Any abnormal cost where it is material and quantifiable shall not form part of the cost of the service cost centre.
- q) Penalties, damages paid to statutory authorities or other third parties shall not form part of the cost of the service cost centre.
- r) Credits or recoveries relating to the service cost centre including charges for services rendered to outside parties, material and quantifiable, shall be reduced from the total cost of that service cost centre.
- s) Any change in the cost accounting principles applied for the measurement of the cost of Service Cost Centre shall be made, only if it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an enterprise.
- t) While assigning cost of services, traceability to a cost object in an economically feasible manner shall be the guiding principle.



- u) Where the cost of services rendered by a service cost centre is not directly traceable to a cost object, it shall be assigned on the most appropriate basis.
- v) The most appropriate basis of distribution of cost of a service cost centre to the cost centres consuming services is to be derived from logical parameters which could be related to the usage of the service rendered. The parameter shall be equitable, reasonable and consistent.

### **15. Packing Expenses**

- a) Proper records shall be maintained separately for domestic and export packing showing the quantity and cost of various packing materials and other expenses incurred on primary and or or secondary packing indicating the basis of valuation.
- b) The packing material receipts should be valued at purchase price including duties and taxes, freight inwards, insurance, and other expenditure directly attributable to procurement (net of trade discounts, rebates, taxes and duties refundable or to be credited) that can be quantified at the time of acquisition.
- c) Finance costs directly incurred in connection with the acquisition of Packing Material shall not form part of Packing Material Cost.
- d) Self-manufactured packing materials shall be valued including direct material cost, direct employee cost, direct expenses, job charges, factory overheads including share of administrative overheads comprising factory management and administration and share of research and development cost incurred for development and improvement of existing process or product.
- e) Normal loss or spoilage of packing material prior to receipt in the factory shall be absorbed in the cost of balance materials net of amounts recoverable from suppliers, insurers, carriers or recoveries from disposal.
- f) The forex component of imported packing material cost shall be converted at the rate on the date of the transaction. Any subsequent change in the exchange rate till payment or otherwise shall not form part of the packing material cost.
- g) Any demurrage, detention charges or penalty levied by the transport agency or any authority shall not form part of the cost of packing materials.
- h) Any Subsidy or Grant or Incentive or any such payment received or receivable with respect to packing material shall be reduced for ascertainment of the cost to which such amounts are related.
- i) Issue of packing materials shall be valued using appropriate assumptions on cost flow, namely; First In First Out, Last In First Out, Weighted Average Rate. The method of valuation shall be followed on a consistent basis.



- j) Wherever, packing material costs include transportation costs, determination of costs of transportation shall be governed by Cost Accounting Standard on determination of average (equalized) cost of transportation.
- k) Packing Material Costs shall not include imputed costs.
- l) Where packing materials are accounted at standard cost, the price variances related to such materials shall be treated as part of packing material cost and the portion of usage variances due to normal reasons shall be treated as part of packing material cost. Usage variances due to abnormal reasons shall be treated as part of abnormal cost.
- m) The normal loss arising from the issue or consumption of packing materials shall be included in the packing materials cost.
- n) Any abnormal cost where it is material and quantifiable shall be excluded from the packing material cost.
- o) The credits or recoveries in the nature of normal scrap arising from packing materials if any, should be deducted from the total cost of packing materials to arrive at the net cost of packing materials.
- p) Packing material costs shall be directly traced to a cost object to the extent it is economically feasible.
- q) Where the packing material costs are not directly traceable to the cost object, these may be assigned on the basis of quantity consumed or similar measures like technical estimates.
- r) The packing material cost of reusable packing shall be assigned to the cost object taking into account the number of times or the period over which it is expected to be reused.
- s) Cost of primary packing materials shall form part of the cost of production.
- t) Cost of secondary packing materials shall form part of distribution overheads.

## **16. Interest & Financing Charges**

- a) Interest and Financing charges are costs incurred by an enterprise in connection with the borrowing of fund or other costs which in effect represent payment for the use of non- equity fund.
- b) Interest and Financing Charges incurred shall be identified for:
  - i) acquisition or construction or production of qualifying assets including fixed assets; and
  - ii) Other finance costs for production of goods or operations or services rendered which cannot be classified as qualifying assets.
- c) Interest and Financing Charges directly attributable to the acquisition or construction or production of a qualifying asset shall be included in the cost of the asset.
- d) Interest and Financing Charges shall not include imputed costs.



- e) Subsidy or Grant or Incentive or amount of similar nature received or receivable with respect to Interest and Financing Charges, if any, shall be reduced to ascertain the net interest and financing charges.
- f) Penal Interest for delayed payment, Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the Interest and Financing Charges. In case the company delays the payment of Statutory dues beyond the stipulated date, interest paid for delayed payment shall not be treated as penal interest.
- g) Interest paid for or received on investment shall not form part of the other financing charges for production of goods or operations or services rendered;
- h) Assignment of Interest and Financing Charges to the cost objects shall be based on either of the following two principles, namely;
  - (1) Cause and Effect - Cause is the process or operation or activity and effect is the incurrence of cost and
  - (2) Benefits received – to be apportioned to the various cost objects in proportion to the benefits received by them.

### **17. Any other item of Cost**

Proper records shall be maintained for any other item of cost being indispensable and considered necessary for inclusion in cost records for calculating cost of production of goods or rendering of services, cost of sales, margin in total and per unit of the goods or services under reference.

### **18. Capacity Determination**

- a) Capacity shall be determined in terms of units of production or equivalent machine or man hours.
- b) Installed capacity is determined based on:
  - i) Manufacturers' Technical specifications
  - ii) Capacities of individual or interrelated production centres.
  - iii) Operational constraints or capacity of critical machines or
  - iv) Number of shifts
- c) In case manufacturers' technical specifications are not available, the estimates by technical experts on capacity under ideal conditions shall be considered for determination of installed capacity. In case any production facility is added or discarded the installed capacity shall be reassessed from the date of such addition or discard. In case the same is reassessed as per direction of the Government, it shall be in accordance with the principles laid down in the said directives. In case of improvement in the production process, the installed capacity shall be reassessed from the date of such improvement.



- d) Normal capacity shall be determined vis-a-vis installed capacity after carrying out following adjustments:
- i) Holidays, normal shut down days and normal idle time,
  - ii) Normal time lost in batch change over,
  - iii) Time lost due to preventive maintenance and normal break downs of equipment,
  - iv) Loss in efficiency due to ageing of the equipment, or
  - v) Number of shifts.
- e) Capacity utilization is actual production measured as a percentage of installed capacity.

### **19. Work-in-Progress and Finished Stock**

The method followed for determining the cost of work-in-progress and finished stock of the goods and for services under delivery or in-process shall be appropriate and shall be indicated in the cost records so as to reveal the cost element that have been taken into account in such computation. All conversion costs incurred in bringing the inventories to their present location and condition shall be taken into account while computing the cost of work-in-progress and finished stock. The method adopted for determining the cost of work-in progress and finished goods shall be followed consistently.

### **20. Captive Consumption**

If the goods or services under reference are used for captive consumption, proper records shall be maintained showing the quantity and cost of each such goods or services transferred to other departments or cost centres or units of the company for self-consumption and sold to outside parties separately.

### **21. By-Products and Joint Products**

- a) Proper Records shall be maintained for each item of by-product, if any, produced showing the receipt, issues and balances, both in quantity and value. The basis adopted for valuation of by-product for giving credit to the respective process shall be equitable and consistent and should be indicated in cost records. Records showing the expenses incurred on further processing, if any, as well as actual sales realization of by-product shall be maintained. The proper records shall be maintained in respect of credits or recoveries from the disposal of by-products.
- b) Proper records shall be maintained the cost up to the point of separation of products or services shall be apportioned to joint products or services on reasonable and equitable basis and shall be applied consistently. The basis on which such joint costs are apportioned to different products or services arising from the process shall be indicated in the cost records. Proper records shall be maintained in respect credits or recoveries from the disposal of joint products or services.



## **22. Adjustment of Cost Variances**

Where the company maintains cost records on any basis other than actual such as standard costing, the records shall indicate the procedure followed by the company in working out the cost of the goods or services under such system. The cost variances shall be shown against separate heads and analysed into material, labour, overheads and further segregated into quantity, price and efficiency variances. The method followed for adjusting the cost variances in determining the actual cost of the goods or services shall be indicated clearly in the cost records. The reasons for the variances shall be duly explained in the cost records and statements.

## **23. Reconciliation of Cost and Financial Accounts**

The cost statements shall be reconciled with the financial statements for the financial year specifically indicating the expenses or incomes not considered in the cost records or statements so as to ensure accuracy and to adjust the profit of the goods or services under reference with the overall profit of the company. The variations, if any, shall be clearly indicated and explained.

## **24. Related Party Transactions**

- a) Related Party means related party as defined under sub-section 76 of section 2 of the Companies Act, 2013.
- b) “Normal” Price means price charged for comparable and similar products in the ordinary course of trade and commerce where the price charged in the sole consideration of sale and such sale is not made to a related party. Normal price can be construed to be a price at which two unrelated and non-desperate parties would agree to a transaction and where such transaction is not clouded due to the proximity of the parties to the transaction and free from influence though the parties may have shared interest.
- c) The basis adopted to determine Normal price should be classified as under:
  - i) Comparable uncontrolled price method
  - ii) Resale price method;
  - iii) Cost plus method;
  - iv) Profit split method;
  - v) Transactional net margin method;
  - vi) Any other method, to be specified.
- d) In respect of related party transactions or supplies made or services rendered by a company to a company termed “related party relationship” and vice-a-versa, records shall be maintained showing contracts entered into, agreements or understanding reached in respect of -
  - (i) purchase and sale of raw materials, finished good(s), rendering of service(s), process materials and rejected goods including scraps, etc.;



- (ii) utilisation of plant facilities and technical know-how;
  - (iii) supply of utilities and any other services;
  - (iv) administrative, technical, managerial or any other consultancy services;
  - (v) purchase and sale of capital goods including plant and machinery; and
  - (vi) any other payment related to the production of goods or rendering of services under reference.
- e) These records shall also indicate the basis followed for arriving at the rates charged or paid for such goods or services so as to enable determination of the reasonableness of such rates in so far as they are in any way related to goods or services under reference.

### **25. Expenses or Incentives on Exports**

- a) Proper records showing the expenses incurred on the export sales, if any, of the goods or services under reference shall be separately maintained so that the cost of export sales can be determined correctly. Separate cost statements shall be prepared for goods or services exported giving details of export expenses incurred or incentive earned.
- b) Proper records shall be maintained giving details of export commitments license-wise and the fulfilment of these commitments giving the reasons for non-compliance, if any. In case, duty free imports are made, the cost statements shall reflect this fact. If the duty free imports have been made after actual production, the statement shall reflect this fact also.

### **26. Production Records**

Quantitative records of all finished goods (packed or unpacked) or services rendered showing production, issues for sales and balances of different type of the goods or services under reference, shall be maintained. The quantitative details of production of goods or services rendered shall be maintained separately for self-produced, third party on job work, loan license basis etc.

### **27. Sales Records**

Separate details of sales shall be maintained for domestic sales at control price, domestic sales at market price, export sales under advance license, export sales under other obligations, export sales at market price, and sales to related party or inter unit transfer. In case of services, details of domestic delivery or sales at control price, domestic delivery or sales at market price, export delivery or sales under advance license, export delivery or sales under other obligations, export delivery or sales under market price, and delivery or sales to related party or inter unit transfer. Such details shall be maintained separately for each plant or unit wise or service centre wise for total as well as per unit sales realization.



## **28. Cost Statements**

- a) Cost statements (monthly, quarterly and annually) showing quantitative information in respect of each good or service under reference shall be prepared showing details of available capacity, actual production, production as per excise records, capacity utilization (in-house), stock purchased for trading, stock and other adjustments, quantity available for sale, wastage and actual sale during current financial year and previous year.
- b) Such statements shall also include details in respect of all major items of costs constituting cost of production of goods and services, cost of sales of goods or services and margin in total as well as per unit of the goods and services. The goods or services emerging from a process, which forms raw material or an input material or service for a subsequent process, shall be valued at the cost of production or cost of service up to the previous stage.
- c) Cost statements (monthly, quarterly and annually) in respect of reconciliation of indirect taxes showing details of total clearances of goods or services, assessable value, duties or taxes paid, CENVAT or VAT or Service Tax credit utilized, duties or taxes recovered and interest or penalty paid.
- d) If the company is operating more than one plant, factory or service centre, separate cost statements as specified above shall be prepared in respect of each plant. Factory or service centre.
- e) Any other statement or information considered necessary for suitable presentation of costs and profitability of goods or services produced by the company shall also be prepared.

## **29. Statistical Records**

- a) The records regarding available machine hours or direct labour hours in different production departments and actually utilized shall be maintained for production of goods or rendering of services under reference and shortfall suitably analysed. Suitable records for computation of idle time of machines or labor shall also be maintained and analysed.
- b) Proper records shall be maintained to enable company to identify the capital employed, net fixed assets and working capital separately for the production of goods or rendering of services under reference and other goods or services to the extent such elements are separately identifiable. Non-identifiable items shall be allocated on a suitable and reasonable basis to different goods or services. Fresh investments on fixed assets for production of goods or rendering of services under reference that have not contributed to the production of goods or rendering of services during the relevant period or year shall be indicated in cost records. The records shall, in addition, show assets added as replacement and those added for increasing existing capacity.

## **30. Records of Physical Verification**

Records for physical verification may be maintained in respect of all items held in the stock such as



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raw material, process materials, packing materials, consumables, stores, machinery spares, chemicals, fuels, finished goods and fixed assets etc. Reasons for shortages or surplus arising out of such verifications and the method followed for adjusting the same in the cost of the goods or services shall be indicated in the records.



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