# TECHNICAL GUIDE ON PERFORMANCE AUDIT





### Internal Auditing and Assurance Standards Board (IAASB) The Institute of Cost Accountants of India

(Statutory body under an Act of Parliament)

HQ: CMA Bhawan, 12, Sudder Street, Kolkata-700 016
Delhi Office: CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi-110003



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Any mistake, error or discrepancy noted may be brought to the notice of the Internal Auditing and Assurance Standards Board (IAASB) which shall be taken care of in the next edition..

This material has been compiled on the existing legal and regulatory requirements. Since these keep changing frequently, the users are advised to refer to the latest changes if any.





**President's Foreword** 

I am delighted to present this 'Technical Guide on Performance Audit' published by the Internal Auditing and Assurance Standards Board of the Institute. The contents in this publication are intended to help the Cost Accountants in practice, members and all the stakeholders at large, who will find the guidance contained in this publication useful in conducting the Performance Audit.

A performance audit has two distinct connotations - One, in the context of audit of the performance of Government departments, programs, schemes, projects, legislative measures in the form of various Acts, rules & regulations, procedures and public sector undertakings to evaluate economy, efficiency and effectiveness of their operations, and Secondly, in the context of audit of commercial organizations to evaluate the efficiency & effectiveness of a plant or unit, department or function, projects/ sub projects, technology, process, product, machine, material, customer, market, an employee or a position, and even other contemporary qualitative issues like contribution towards achieving ESG (Environment, Safety and Governance) goals.

I would like to place on record my sincere gratitude to CMA B.B. Goyal, Former Addl. Chief Advisor (Cost), MoF, GoI & Advisor, ICMAI Management Accounting Research Foundation and CMA L.M. Kaushal, Technical Advisor of the Institute for all their efforts and contribution in developing this Technical Guide. I am also grateful to CMA (Dr.) Asish K Bhattacharyya, Distinguished Professor, Shiv Nadar University & Former Professor, Indian Institute of Management Calcutta and CMA Kailash Gandhi, Former Chairman WIRC of the Institute for their support & contribution as reviewers of this document.

I would like to thank all members of IAASB for their guidance and support in developing this document. I also appreciate the efforts of CMA Yogender Pal Singh, Secretary of the Board in bringing out this Technical Guide.

I am confident that the members and other stakeholders would find this Technical Guide highly useful for enriching their knowledge on Performance Audit.

### CMA P. Raju lyer

President, ICAI Chairman, Internal Auditing and Assurance Standards Board 14<sup>th</sup> August, 2022





### **Vice President's Foreword**

I am pleased to note that The Internal Auditing and Assurance Standards Board of the Institute is bringing out a Technical Guide on Performance Audit. This Technical Guide is intended to help the Cost Accountants in practice, members and other stakeholders at large in conducting the Performance Audit in an effective manner.

Indian economy is moving from strength to strength and is one of the most vibrant economies of the world. Government of India's thrust is on making big public investments for creating world-class modern infrastructure. I am of the view that audit carried out after completion of a project is of not much use except that it tells the deficiencies but not the measures to be taken during implementation. The need of the hour is to continuously monitor the progress of the infrastructure projects, have regular performance appraisal and performance audit so that timely interventions can be made so as to avoid delays and time and cost overrun.

The performance audit focuses on evaluating & finding ways to improve the economy, efficiency and effectiveness of any organization or its specific areas or activities. Performance audit can also evaluate the organization's contribution towards achievement of environment, safety and governance (ESG) issues by way of measuring the actual performance vis-à-vis the targets. It can also provide the information with regard to the extent to which the organization has achieved results vis-à-vis its strategic plans and key performance indicators (KPIs).

I congratulate CMA B.B. Goyal, Former Addl. Chief Advisor (Cost), MoF, Gol & Advisor, ICMAI Management Accounting Research Foundation and other resource persons for their efforts and contribution in developing the Technical Guide on Performance Audit. I hope that The Internal Auditing and Assurance Standards Board of the Institute will continue to bring out such valuable publications in the future.

I am sure that the members would find the Technical Guide immensely useful in understanding and effectively conducting Performance Audit in the areas, wherever they are asked to take up the same.

I wish the Board success in all its future endeavors.

**CMA Vijender Sharma** Vice President

14th August, 2022



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### Chapter 1 INTRODUCTION

### **AUDIT**

An 'audit' is an independent and systematic review of a matter referred to the auditor by some authority. The auditor examines the official documents and records and collects requisite evidence to form an opinion on that matter and reports the same to the authority that appointed it.

The statutory financial audit is an independent and systematic examination of books of accounts, statutory records, documents and vouchers of an organization to provide 'Assurance' to various 'Stakeholders' on the true & fair view of maintenance of books of accounts and records, account statements, non-financial disclosures, material misstatements, internal control systems, business ethics followed, and its governance structure.

A statutory audit is to fulfill the requirements prescribed under the law or statute. Whereas a voluntary audit is aimed at to serve the specific objective of the authority within the organization who prescribed such audit. The purpose of a statutory audit is the same as the purpose of any other audit -to determine whether an organization provides fair and accurate presentation of its statements, disclosures, and records.

Statutory audit refers to the audit required under a law or regulation. A voluntary audit is an audit required by an authority within the organisation on its own or at the request of a stakeholder.

An audit serves the interest of one or more stakeholders like management, investors, government (s), lenders, customers, vendors and employees.

A performance audit is an in-depth examination, analysis, review and/ or assessment of a program, scheme, project or activity to find how far it has achieved its goal (outcome) and whether the process was performed



economically, efficiently and effectively or whether the projects etc. are operating economically, efficiently and effectively. This audit has two distinct connotations.

**First** is in the context of audit of the performance of Government departments, programs, schemes, projects, legislative measures in the form of various Acts, rules & regulations, procedures and public sector undertakings to evaluate economy, efficiency and effectiveness of their operation. It may in some context be known as propriety audit wherein the focus is on the actions and decisions of the executives in terms of financial integrity, command structures, efficiency, rules and procedures, prescribed regulations and the protection of public interest. This is done by the Supreme Audit Institutions of each country or state. For example, in India, this audit is performed by the Office of Comptroller & Auditor General of India (C&AG).

**Second** is in the context of audit of commercial organizations to evaluate the efficiency & effectiveness of a plant or unit, department or function, projects/ sub projects, technology, process, product, machine, material, customer, market, an employee or a position, and even other contemporary qualitative issues like contribution towards achieving ESG (Environment, Safety and Governance) goals. In this, actual achievements against the targets or the goals as per the strategic plans or key performance indicators, if any can be compared. This is also known as operations audit, efficiency audit, or management audit. It includes evaluation/ analysis of Input(s) vs. Output(s) and their comparison with Norms, Standards, or Best Practices in the Industry. A performance audit is conducted by the internal auditor, or a cost and management accountant appointed for that purpose. Some firms assign that task to Chartered Accountants.

Chapter 2 of this Technical Guide covers the guidance material in respect of performance audit of central or state government organizations, local bodies, public agencies/ institutions, public sector undertakings, etc. Chapter 3 covers the guidance material in respect of performance audit of commercial entities.

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# Chapter 2 PERFORMANCE AUDIT OF GOVERNMENT/ PUBLIC ENTITIES

### **PUBLIC SECTOR AUDITING - INTRODUCTION**

In a mixed and fast developing economy like India, both Central and State Governments are implementing several social and infrastructure development schemes having huge financial outlays. In the social sector areas like health, education, rural employment generation, drinking water, provision of houses for members of socially and/or economically marginalized communities in both urban and rural areas, electricity and cooking gas connections, sanitation infrastructure, farmers benefit schemes like PM-Kisan, etc., are being implemented. Similarly, for infrastructure development, building highways, roads, airports, seaports, metro and rail networks also, various projects have been launched and are under implementation. Performance audit may play a vital role in this sphere and besides Government auditors, Cost and Management Accountants contribute significantly not only to assess the efficacy of utilization of public funds but also to the outcomes and achievement of objectives of such schemes.

Governments and government agencies are responsible for using their resources mobilised through taxation and from other sources (like a loan from an international financing agency) in the delivery of services to citizens and other targeted beneficiaries. The government departments and those agencies are accountable to the targeted beneficiaries and suppliers of finance for the efficient and effective utilisation of resources for achieving the pre-defined outcomes. Public sector audit provides reasonable assurance that the internal control systems are adequate and effective and that the government departments, government agencies and public servants perform their functions effectively, efficiently, ethically and in accordance with the applicable laws and regulations.

Supreme Audit Institutions (SAIs), e.g. C&AG in India serves this aim as one of the key pillars of national democratic systems and mechanisms and play a

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### **Technical Guide on Performance Audit**

key role in improving public sector governance by emphasizing transparency, accountability, governance, efficiency and performance.

### **OBJECTIVES OF PUBLIC-SECTOR AUDITING**

Before commencing the audit, the auditor sets the audit objectives, which may differ depending on the type of audit being planned. However, all public-sector auditing contributes to the good governance by:

- providing the intended users with independent, objective and reliable information, conclusions or opinions based on sufficient and appropriate evidence relating to public entities;
- enhancing accountability and transparency, encouraging continuous improvement and sustained confidence in the appropriate use of public funds and assets and the performance of public administration;
- reinforcing the effectiveness of those agencies within the constitutional arrangements that exercise general monitoring and corrective functions over government, and those responsible for the management of publicly funded activities;
- creating incentives for change by providing knowledge, comprehensive analyses and well-founded recommendations for improvement.

### **PUBLIC-SECTOR AUDITING - TYPES**

Generally, public sector audits can be divided into three or more categories: financial audit, compliance audit and performance audits. These are described below:

#### Financial audit

Financial audit focuses on determining whether an entity's financial information is presented in accordance with the applicable financial reporting and regulatory framework. This is accomplished by obtaining sufficient and appropriate audit evidence to enable the auditor to express an opinion as to whether the financial information is free from material misstatement due to fraud or error.

### TA CONTRACTOR OF THE PARTY OF T

### Performance Audit of Government/ Public Entities

### Performance audit

Performance audit focuses on whether interventions, programmes and institutions are performing economically, efficiently, and effectively and whether there is room for improvement. Performance is examined against suitable criteria, or the targets set as per long term plans or annual budgets, and the causes of deviations from those criteria, reasons for slippages from the targets or other problems are analyzed. The aim is to answer key audit questions on the entity's performance and to provide recommendations for improvement.

### Compliance audit

Compliance audit focuses on whether activities, financial transactions and information are in compliance with applicable laws, regulations, rules, policies and contractual terms and conditions.

SAIs may carry out audits or other engagements on any subject of relevance to the responsibilities of management and those charged with governance and the appropriate use of public resources. These engagements may include reporting on the quantitative outputs and outcomes of the entity's service delivery activities, sustainability reports, future resource requirements, adherence to internal control standards, real-time audits of projects or other matters. SAIs may also conduct combined audits incorporating financial, performance and/ or compliance aspects.

#### PERFORMANCE AUDITING - DEFINITION

Performance auditing, as carried out by SAIs, is an independent, objective and reliable examination of whether government undertakings, systems, operations, programmes, activities or organizations are operating in accordance with the principles of economy, efficiency and/or effectiveness and whether there is room for improvement.

Performance auditing aims to improve economy, efficiency and effectiveness in the working of public sector entities. It also aims to contribute to good governance, hallmark of which are accountability, equity and transparency.



Performance auditing seeks to provide new information, analysis or insights and, where appropriate, recommendations for improvement. Performance auditing often includes an analysis of the conditions that are necessary to ensure that the principles of economy, efficiency and effectiveness can be upheld.

Performance audits deliver new information, knowledge or value by:

- providing new analytical insights (broader or deeper analysis or new perspectives);
- making existing information more accessible to various stakeholders;
- providing an independent and authoritative view or conclusion based on audit evidence;
- providing recommendations based on an analysis of audit findings.

### **ECONOMY, EFFICIENCY AND EFFECTIVENESS**

Performance audits often include an analyses of the environment that is necessary to ensure that every activity is performed applying the principles of economy, efficiency and effectiveness. The environment should facilitate the adoption of the best management practices and procedures to ensure the correct and timely delivery of services efficiently and effectively. Where appropriate, the impact of the regulatory or institutional framework on the performance of the audited entity should also be taken into account. The principle of economy, efficiency and effectiveness may be defined as below:

### Economy

Economy implies the use of bare minimum resources to achieve the desired goal. The resources used must be available on time, in and of appropriate quantity and quality and at the best price.

Judging economy in itself implies forming an opinion on the resources (human, financial and material) deployed. This requires assessing whether given the context, resources have been acquired, held and used economically and acquired in due time, in appropriate quantity and quality at the best price. The



### Performance Audit of Government/ Public Entities

performance auditor needs to examine whether the means chosen represents the most or at least a reasonable economical use of public funds.

### **Efficiency**

The principle of efficiency means getting the most from the available resources. It is concerned with the relationship between resources employed and outputs delivered in terms of quantity, quality and timing. Efficiency is measured by the value (or quantity) of inputs consumed per unit of output.

"Efficiency exists where the use of financial, human, physical and information resources is such that output is maximized for any given set of resource inputs, or input is minimized for any given quantity and quality of output. The main issue to be examined here is whether the resources have been put to optimal or satisfactory use or whether the same or similar results in terms of quality and turn-around time could have been achieved with fewer resources. It refers to the relationship between the quality and quantity of goods and services yielded and the cost of resources used to produce them, in order to achieve the results.

A finding on efficiency can be formulated by means of a comparison with similar activities, with other periods or with a standard, which the entity has explicitly adopted. Assessments on efficiency might also be based on conditions that are not related to specific standards, i.e. when matters are so complex that there are no standards. In such cases, assessments must be based on the best practices and available information.

Auditing efficiency embraces aspects such as whether:

- human, financial and other resources are efficiently used;
- public sector programmes, entities and activities are efficiently managed, regulated, organized and executed;
- services are delivered in a timely manner; and
- the objectives of public sector programmes are met cost-effectively.



### **Effectiveness**

The principle of effectiveness concerns meeting the objectives set and achieving the intended results.

Effectiveness is essentially a goal-attainment concept. It addresses the issue of whether the programme/activity has achieved its objectives. When focusing on effectiveness, it is important to distinguish between the immediate outputs or products and the ultimate impacts or outcomes. Outcomes are important to the effectiveness of programmes/activities but may be more difficult to measure and assess than the inputs and outputs. Outcomes will often be influenced by external factors and may require long-term rather than short-term assessment.

In auditing effectiveness, performance audit may, for instance:

- assess whether the objectives of and the means provided (legal, financial, etc.) for a new or ongoing public sector programme are proper, consistent, suitable or relevant to the policy;
- assess and establish with evidence whether the observed direct or indirect social and economic impacts of a policy are due to the policy or to other causes;
- identify factors inhibiting satisfactory performance or goal-fulfillment;
- assess whether the programme complements, duplicates, overlaps or counteracts other related programmes;
- assess the adequacy and effectiveness of the management control system for measuring, monitoring and reporting a program's effectiveness; and
- Identify ways of making programmes work more effectively.

#### PERFORMANCE AUDITING - OBJECTIVES

The main objective of performance auditing is constructively to promote economical, effective and efficient governance. It also contributes to accountability and transparency.



### Performance Audit of Government/ Public Entities

Performance auditing promotes accountability by assisting those with governance and oversight responsibilities to improve performance. It does this by examining whether decisions by the legislature or the executive are efficiently and effectively prepared and implemented, and whether taxpayers or citizens have received value for money. It does not question the intentions and decisions of the legislature but examines whether any shortcomings in the laws and regulations or their way of implementation have prevented the specified objectives from being achieved. Performance auditing focuses on areas in which it can add value for citizens, and which have the greatest potential for improvement. It provides constructive incentives for the responsible parties to take appropriate action.

Performance auditing promotes transparency by affording parliament, taxpayers and other sources of finance, those targeted by government policies and the media an insight into the management and outcomes of different government activities. It thereby contributes in a direct way to providing useful information to the citizen, while also serving as a basis for learning and improvements. In performance auditing, SAIs are free to decide, within their mandate, what, when and how to audit, and should not be restrained from publishing their findings.

Accountability is the key motivation for performance audit engagements. The performance audit, therefore, is perceived to be a valuable means of determining if goals have been achieved, as well as valuable in identifying what is needed to improve program operations. Among objectives are those relating to program effectiveness, economy and efficiency in the use of resources, internal control, and extent of compliance with legal requirements and policies?

### **GENERAL PRINCIPLES OF AUDIT**

Irrespective of the type of audit, the following principles are common to all. These are very briefly listed below.

**Ethics and independence** - Auditors should comply with the relevant ethical requirements and protect her independence by building adequate safeguard against threats to independence.

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### **Technical Guide on Performance Audit**

**Professional judgement, due care and skepticism**— Auditors should maintain appropriate professional behaviour by applying professional skepticism, professional judgment and due care throughout the audit.

**Quality control** - Auditors should perform the audit in accordance with professional standards on quality control.

**Audit team management and skills** - Auditors should possess or have access to the necessary skills.

**Audit risk** - Auditors should manage the risks of providing a report that is inappropriate in the circumstances of the audit.

Materiality - Auditors should consider materiality throughout the audit process.

**Documentation** - Auditors should prepare audit documentation that is sufficiently detailed to provide a clear understanding of the work performed, evidence obtained, and conclusions reached.

**Communication** - Auditors should establish effective communication throughout the audit process.

#### PRINCIPLES RELATED TO THE AUDIT PROCESS

Whereas performance audit of a Government programme, scheme, project, etc. may involve quite a detailed process; in respect of a public enterprise, it may be totally different. However, irrespective of the type of audit, the following principles are common to all. These are very briefly listed below.

### Planning an audit

- Auditors should ensure that the terms of the audit have been clearly established.
- Audito rs should obtain an understanding of the nature of the entity/ programme to be audited.
- Auditors should conduct a risk assessment or problem analysis and revise this as necessary in response to the audit findings.



### Performance Audit of Government/ Public Entities

- Auditors should identify and assess the risks of fraud relevant to the audit objectives.
- Auditors should plan their work to ensure that the audit is conducted in an effective and efficient manner.

### Conducting an audit

- Auditors should perform audit procedures that provide sufficient appropriate audit evidence to support the audit conclusions.
- Auditors should evaluate the audit evidence and draw conclusions.

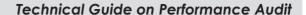
**Evidence, findings and conclusions** - Auditors should obtain sufficient appropriate audit evidence to establish findings, reach conclusions with respect to the audit objectives and questions and issue recommendations.

**Reporting and follow-up** - Auditors should prepare a report based on the conclusions reached.

**Content of the report**—Auditors should strive to provide audit reports which are comprehensive, convincing, timely, reader-friendly and balanced in terms of the audit objectives and its outcomes.

**Recommendations** - If relevant and allowed by the SAI's mandate, auditors should seek to provide constructive recommendations that are likely to contribute significantly to addressing the weaknesses or problems identified by the audit. The recommendations should include the process measures, which are equally important as the end-result measures. Performance audit should cover the processes followed to achieve the desired outcome e.g. in respect of a government scheme – how the beneficiaries were selected, how the implementation of scheme ensured that the right interventions were in place to achieve the targets, etc.

**Follow-up**—Auditors should follow up previous audit findings and recommendations wherever appropriate. Follow-up should be reported appropriately in order to provide feedback to the oversight authority together, if possible, with the conclusions and impacts of all relevant corrective action.





### **PERFORMANCE AUDIT - OUTCOMES**

Performance audits provide entities and stakeholders with information and assurance about the quality of management of public resources and also assist public sector managers by identifying and promoting better management practices. Performance auditing may, therefore, lead to improved accountability, economy and efficiency in the acquisition of resources, improved effectiveness in achieving public sector programme objectives, a higher quality in public sector service delivery and improved management planning and control. It is an important responsibility of the auditor to ensure that through each performance audit one or more of these objectives are met.

Performance auditing is a means to an end and not an end by itself. Performance audit should be aimed at adding value to the Management by way of reliable, objective and independent information, highlighting the shortcomings in programme planning, implementation, information systems affecting the outputs and outcome specifically and quality of expenditure or management generally. In addition, performance audit reports provide valuable information and independent assessment on programme management and the extent of fulfillment of the policy objectives to the stakeholders including the Parliament, the State Legislatures and the general public. Thus, good quality performance audit contributes to good governance.

The users of performance audit reports expect reliable reports. All performance audits should, thus, be planned and performed keeping in view the expected outcome. It is a good practice to evaluate the real impact of performance audit on entity policies and programmes.

### **ANNEXURES**

- Annexure-I is a write-up about the International Organisation of Supreme Audit Institutions (INTOSAI)
- Annexure-II is a brief write-up about the U.S. Government Accountability Office (GAO)
- Annexure-III is a brief write-up about the Comptroller & Auditor General (C&AG) of India

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## Chapter 3 PERFORMANCE AUDIT OF COMMERCIAL ENTITIES

### INTRODUCTION

Enterprises these days operate in a VUCA (volatile, uncertain, complex and ambiguous) world with strict corporate and taxation legislations governing them, which require several time-bound and continuous compliances to be adhered to. Cost and Management Accountants (CMAs) assist the managements of business enterprises by providing them valuable insights by conducting performance audit, which can help them not only to operate in the fiercely competitive environment but to improve their profitability while complying with all the requirements under various corporate and taxation laws. Simple cost and management accounting tools like profit-volume analysis, productivity assessment, budgetary and internal control mechanisms, inventory control systems, working capital management, etc. can provide very effective and useful suggestions to the management in this area.

In the preceding Chapter, we learned about performance audit of government/public organizations, departments, programs, schemes, projects, legislative measures by way of different laws, rules and regulations, and public sector undertakings to evaluate their economy, efficiency and effectiveness. In that part, we have learnt briefly about the public sector audit framework, objectives, & types. We also learnt what is performance audit; what do we understand by the terms 'economy', 'efficiency' and 'effectiveness'; performance audit's objectives; general audit principles and the processes involved in audit; and performance audit outcomes.

In this Chapter, we are going to discuss application of performance audit, operations audit, efficiency audit, or management audit in commercial organizations to evaluate the efficiency & effectiveness of their plant or unit,

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department or function, technology, process, product, machine, material, customer, market, or even an employee or a position.

It includes evaluation/ analysis of Input(s) vs. Output(s) and their comparison with Norms, Standards, Global Best, Industry Best, or Company Best. This is done by the independent auditors, primarily the internal audit team. The cost auditor is also expected to largely focus and perform this audit. Sometimes, even the financial auditor may perform this audit. In terms of professional background to conduct performance or operations audit, he may be from the financial or management accounting discipline, engineer, management graduate, or belonging to any other specialized area of expertise as the engagement may deserve. In large organisations, performance audit is conducted by a cross functional team.

In the following few sections, we learn basics about what is performance audit, operations audit, or management audit.

### Performance Audit

Generally an audit deals with the verification of financial statements, cost statements, compliance requirements or corporate policy. But performance audit focus on evaluating & finding ways to improve the economy, efficiency and effectiveness of any organization or its specific areas or activities. Performance audit can also evaluate the organization's contribution towards achievement of environment, safety and governance (ESG) issues by way of measuring the actual performance vis-à-vis the targets. It can also provide the information with regard to the extent to which the organization has achieved results vis-àvis its strategic plans and key performance indicators (KPIs). Performance audit does not require any attestation or providing assurance to the stakeholders. Instead, performance audits are advisory audits, providing consultation/advice to the management. Such audits are typically requested by management; while assurance audits are typically either risk-based or required by regulation and/or policy. However, in certain situations, the regulators and lenders might direct performance audit to ensure that the resources allocated to it by the government by way of grant or the amount borrowed by the company from

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an international financial institution through government intervention are utilised economically, efficiently, and effectively.

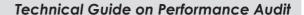
Economy, Efficiency and Effectiveness are three very important key words that are frequently used in business. All those terms were explained in the previous Chapter. In short,

- Economy is about minimizing the cost of resources used;
- Efficiency is how well a process turns inputs into outputs; and
- **Effectiveness** is how well a process accomplishes its objective.

### **Operations Audit**

Operations audits are about process improvement. Just like assurance audits, the specific objectives of operational audits completely depend on the organization and its processes or activities being audited. Whether the objectives of an operational audit are focused on efficiency or effectiveness, they will only be achieved by applying some sort of process improvement. Successfully accomplishing the objectives of an operational audit requires recommendation on process improvements. A **process** can be defined as a series of purposeful steps or actions that, when completed, produce a desired result. Thus, one of the first steps in an operational audit is to identify the processes being reviewed. An important consideration in operational audit engagements is the ability of the auditors - with the help of the client - to identify and map the processes. This may seem simple but being able to view organizations and activities through a process-lens can be difficult. By using procedures such as process mapping and benchmarking, the auditor can provide new insights to the management.

- Process mapping involves drawing a visual representation of a process;
   and
- **Benchmarking** is comparing a current process to a best practice or other alternative to identify opportunities for improvement.





### **Management Audit**

A management audit is an independent and systematic analysis and evaluation of a company's overall activities and performances. It includes a review of top management decisions such as objectives of the organization, policies, procedures, structure, control and systems to ascertain the effectiveness or efficiency of management over the Company's operations. It is a valuable tool used to determine the efficiency, functions, accomplishments and achievements of the company. It is an assessment of how well an organization's management team is applying its strategies and resources and whether the management team is working in the interests of all stakeholders. It examines primarily the non-financial data and focusses on results, evaluating the effectiveness and suitability of controls by challenging underlying rules, procedures and methods. Its scope has been extended to review system and sub-systems, authorization, procedure, accountability, quality of data generated, quality of personnel, etc.

### UTILITY OF THIS TECHNICAL GUIDE

Users of this Technical Guide may encounter three types of companies. First those companies that works at the international level with a sound system of strategic management processes, which includes detailed cost management methods. In these types of companies, this document may be having a limited use and it may be prudent for the Auditor to obtain additional information on performance analysis. In such companies, many performance parameters for appraising the performance already exist in the formal management culture and the auditor may provide an assurance with regard to in respect of selected performance indicators as sought by the management.

The second type of companies is a group, which includes major domestic companies with a vision for the global market. These companies will welcome any valuable and sound suggestions from the Auditor through his Performance Audit Report. Therefore, this technical guidance note will increase the Auditor's efforts in such cases, although ultimately it is the Auditor's discretion to identify key performance parameters that the management of a company may be



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keen, and which would be applicable for entering/operating successfully in global markets.

Third class of companies is a group of domestic companies that are only available in the domestic market, or only part of them, and include small and medium-sized companies. For such companies, this guideline deals mainly with the same situation that the auditors largely face. The value proposition offered by experts in such a situation can strengthen the management's vision / perspective.

This note will supplement the Auditor's efforts in all three cases set out above.

### PERFORMANCE AUDIT - CONTOURS

From the brief descriptions given above, it has become clear that in essence, the contours, scope, objectives and outcomes of performance audit or operations audit or management audit [or even efficiency audit] are almost same. The scope of these audits include audit of any or more of the following:

- Organization,
- Project,
- Plant or Unit.
- Department or Function,
- Technology,
- Process,
- Product,
- Machine,
- Material.

- Automation,
- Control Systems,
- Customer.
- Market.
- Employee,
- Position, or
- Contribution towards achievement of ESG (Environment, Society and Governance) goals.

Performance audit helps managers to identify areas, activities, processes, products, services, etc. that have the potential for significant improvement. The implications of undertaking performance analyses and designing strategies cover a wide range of areas where cost impact is significant and that are why independent auditing of a company's performance is an important consideration for the top management of business firms. Performance audit also



helps the managers to create efficient and improved processes. The procedure involved in the performance audit help understand, manage, and enhance the organizational performance as a whole. Effective performance parameters enable firms to measure and monitor the performance so as to judge that how well a company is performing; to understand whether the company's management is meeting its objectives; and that appropriate steps need to be taken to impact the performance or improve efficiency, if improvement is required. In short, in terms of outcomes of performance audit, these can bring in improvements in,

- Efficiency,
- Economy,
- Effectiveness,
- Productivity,
- Value creation,
- Profitability,
- Risk management,
- Sustainability, and
- Meeting environment, safety and governance goals.

Below, we list out the methodologies used in undertaking performance analysis:

- Overall efficiency analysis,
- Business process flow analysis,
- Operating cycle analysis,
- Analysis of capacity utilization,
- Analysis of productivity efficiency,
- Benchmarking analysis,
- Analysis of energy efficiency,
- Utilities efficiency analysis,
- Analysis of key-costs & contribution,
- Analysis of profitability of products/services,
- Analysis of market profitability,



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- Analysis for customer profitability,
- Segment profitability analysis,
- Analysis in respect of working capital management,
- Inventory management analysis,
- Analyzing manpower efficiency,
- Analyzing volatility of inputs price,
- Analyzing price-sensitivity,
- Risk mapping,
- Application & usage of IT tools,
- Corporate social responsibility analysis,
- Capital expenditure analysis,
- Project milestone analysis,
- Time & cost overrun analysis,
- Environmental analysis, and
- Sustainability analysis.

There is no set formula or number of action steps an organization needs to have to measure and improve its performance. Tracking multiple performance measures at the same time may result into the managers forgetting which of the criteria contribute directly to strategic objectives. On the other hand, having too few steps may not be enough to tell you the good news about your work. Since the Report on Performance Audit is submitted to the Company's Board of Directors, the actions to be considered should be discussed with the Company's higher management and should be finalized for their consideration and reporting.

This guideline is not applicable for the strategic management of the company, but it uses a process for the strategic management in the context of corporate performance analysis. The guidance note is also not a prescriptive but a suggestive methodology for performance audit & analysis.

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The outputs of aforesaid analyses are best compared with the following to find possible areas as well as the extent/ scope of improvements:

- Technology Norms,
- Technical Standards.
- Best Practices in the Industry

### PERFORMANCE AUDIT - OBJECTIVES

The performance audit provides an expert review and an understanding that activities can be done more economically, efficiently, and effectively resulting in a higher level of productivity, and profitability of various projects, activities, products, components etc. of companies so that managers can evaluate performance in from strategic and operational perspectives. It is helpful to find different cost and profit drivers and their impact on performance with a view to assist the organization to -

- achieve its goal;
- achieve desired outcome from various projects etc.
- achieve improved profitability and revenues;
- enhance optimal resource acquisition, allocation and utilization;
- improve product and service portfolio; and
- monitor company operations in different segments.

Performance audit's main objective is to provide a meaningful and relative assessment of the organization's operational activities in various segments. It aims improving the decision-making processes across the organization. It is about providing the Board with "should-know" information to enable it to perform its monitoring and advisory roles effectively to improve business performance. An independent Cost & Management Accountant or the Cost Auditor is well placed to perform the performance audit of business organizations.

Once the performance audit has been completed, the findings are forwarded to the top management of the particular organization. The management uses the



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findings to bring necessary changes in the organisation structure and processes to achieve the desired goals with minimum resources. Typically, follow-up performance audit is also carried out to provide the board with the information on whether management has applied any of the audit findings and whether the implementation of the recommendations of the earlier performance audit were accepted by the board and the resulting outcomes.

There cannot be any set periodicity of the Performance Audit; it is to be agreed upon between the company management and the auditor mutually. However, it is recommended that the frequency of Performance Audit should be consistent with the nature, size and complexity of the company's business. Generally under the current regime of business reporting, Board of Directors should get the performance of key areas audited/ examined periodically by the Experts/qualified & experienced professionals, preferably the Cost & Management Accountants (CMAs) and make annual disclosures along with the traditional financial performance results in the board of director's report and/or MD&A. This will, in addition, allow for the identification of business risks a company faced in the recent past and assess the risk mitigation measures planned for the company in the future.

### PERFORMANCE AUDIT - CHARACTERISTICS

The objective of any Performance Audit is to identify opportunities to improve performance and protect and enhance the business value. The performance audit Report is intended to be used by Management and is generally confidential. The significant characteristics of an effective Performance Audit Report are as given below.

- a) The report should focus on performance management and business productivity and should reflect ideas on how the performance of the business can be improved by optimally utilizing the available resources.
- b) When evaluating or analyzing the performance of a group of activities, the performance auditor must explore the impact of changes on the profitability of products, customers and market segments.

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- c) Drivers, which are fully identified for cause-and-effect relationships in the operation of any unit, function, process, product, customer, or market, etc., are the ones which create the first set of Key Performance Indicators (KPIs) that are easy to understand and useful for self-evaluation by managers. Performance auditor while reviewing KPIs can also monitor the management of those drivers. This assessment will enable operational managers to assess what is being done and what needs to be done further.
- d) Analyses of the use of different resources for achieving economy, efficiency and effectiveness of resource utilization is necessary. The economy is reflected in the lower cost of acquiring and / or using resources, without compromising the quality and attributes.
- e) In order to be perceived as an important and valuable document, the Performance Audit Report must provide an analysis of the various performance parameters. When selecting the performance parameters, consideration should be to include those which have had a significant impact in the past or might affect the performance of the organization in future. These steps may change over time and may need to be reconsidered in order to be included or removed from the Performance Audit Report.
- f) The following considerations may assist the auditor to choose and apply various performance measurement standards in the Performance Audit Report:
  - Impact on profitability and revenue short-term, medium term, and long-term
  - Impact on resource utilization per unit of output
  - The impact on cash flows
  - Impact on risks strategic, operational, financial, compliance, and reporting
  - Impact on the quality and attributes of products and services
  - The impact market positioning
  - Impact on market response, etc.

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- g) The Performance Audit Report should also include various indicators in respect of non-financial performance as well in addition to the standard financial ratio analysis. Non-financial performance indicators give valuable information about the predictable outcomes of current and planned operations in future e.g. a consistent customer satisfaction index would assure certain business growth.
- h) Apart from reporting on outputs/inputs, the performance audit report may also provide recommendations on strategic shifts required given the changes in the external/internal environments and the current strategic direction and performance.
- i) An appropriate Performance Audit Report should have the following characteristics:
  - Objectivity
  - Ability to be a predictable value
  - Easily understandable
  - No overload and cluttering of information
  - Strategic thrust with predicted outcomes and implementation guidelines
  - Trend of variances between estimates and actual results for the previous five years
  - Timeliness
  - Overall coverage in accordance with the terms of engagement, preferably the performance of the firm and its segments.

### **PERFORMANCE AUDIT - BENEFITS**

Performance or management audit may benefit the organization through:

 Analyses of organizational performance data, performance measures and self-evaluation systems to determine appropriate measures to guide continuous improvement.



- Identify best practices for establishing bench mark and identifying opportunities for improvements in the overall performance of the firm and different segments.
- Provide information to improve program performance and facilitate decision-making by organizations responsible for overseeing or implementing corrective action.
- Identify value migration and opportunities for cost and revenue management.
- Finding gaps or variances between expected/benchmark costs, revenue and outcomes and actual costs, revenue and out comes in programs or services and recommendations on how bridge the gaps.
- Provide information pertaining to strategic and structural transformation required to meet the challenges by internal and external environmental factors and the necessary steps required to be taken towards these.
- Analyses of business roles and responsibilities and recommendations for changing or eliminating unnecessary roles or responsibilities.

Through periodic review or performance research, the firm can identify processes and procedures that are no longer viable or can be performed in a better way.

### **PERFORMANCE ANALYSIS**

Performance standards tell managers important aspects about the products, services, and the processes of the company. Effective performance standards enable managers to:

- Monitor the performance to evaluate how well a company is performing,
- Know if the company is meeting its goals and whether customers are satisfied,
- Take actions to increase efficiency or improve efficiency

The auditor therefore should select appropriate 'Performance Measures' for the analyses so that he is provided with the requisite data and information. Performance parameters provide a summary of current performance and track



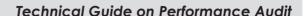
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whether actual performance improves, remains the same, or worsens over time. Maintain a focus on the relevant and important performance parameters such as:

- Is the firm fulfilling its performance appraisal function?
- Do the processes meet the strategic objectives and goals?
- Are customers satisfied?
- Are the various processes managed by the company properly?
- Does the cost competitiveness make the company an industry leader?

Reducing the number of activities needs judgment and understanding of the organization and its customer needs. Remember that knowledgeable audiences set the standard for what is important and relevant. In general, internal audiences are interested in process level estimates and production results. Surveys may be useful in evaluating the final solution for outcomes that are not suitable for quantitative measurement, e.g. customer satisfaction survey can be useful for internal audiences, but generally they may mean little to the external audiences, as those concerned with budget and policy development are keenly interested in efficiency and results (final outcomes). Since the end results are often influenced by many factors other than the activities of the company, the most sensible steps to judge efficiency may be immediate results.

A Performance Auditor should endeavor to avoid mistakes by writing only about selected performance parameters. It should not include descriptions of why the parameter is important or how data is collected. Those comments are about the details of operations, footnotes, or unpublished notes. Avoid jargon and acronyms in performance appraisal headings, so that the readers who are not subject matter experts can understand what is being evaluated. Do not use performance measures as objectives. Objective statements include terms such as "increase" or "decrease," which mean change. Objective statements are not performance measures, although performance measures may tell us whether we are meeting our objectives.





### PERFORMANCE AUDIT REPORT

The auditor should first hold preliminary discussions with the Management of the company to know the significant areas and related issues or concerns involved. Identify and understand key company strategies, both disciplines and emerging strategies included. Strategies that are more visible and can be analyzed with the support of cost data should be chosen. Find activities that were affected by the selected strategies and applied in the year of performance evaluation. Analyze the costs and revenue from those activities and link them to the expected strategic outcomes. Introduce testing, table and any other easily understood format such as histogram, chart, graph etc. Provide descriptive notes on the terms used, the calculations made, and the post-test projections. Complete the findings after the interview with the relevant managers and then the company management.

Before preparing the Performance Audit Report the auditor/ expert first must clearly understand the nature of the company's business, its classification, the area in which the company operates. It is important to list the various business drivers and prioritize the importance of each of them. The command and report structure of the organization is an important consideration. Responsibility centers recognized as investment centers, profit centers or cost centers should be well understood as the performance metrics for all these would be varying. Business drivers, among other things, can include the product life cycle, technology, customer preferences, market development etc. This will enable the auditor / expert to understand the variables that drive the company's performance.

It is recommended that the auditor should collect and analyze the competitor information, company's best performance achieved, industry best and global best performance, if available. In addition, the technical norms/ standards are also important. Using those, the auditor could add value to the Performance Audit Report by clearly bringing out the comparative analysis of performance parameters.

It is necessary to reach an agreement between the auditor and the company's management on the contents of the Audit Report. The performance auditor

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should focus on both financial and non-financial performance indicators. Choosing 'Key Performance Indicators' (KPIs) for a company with diversified products and services can be difficult and should be done based on the economic affiliation of each entity in the entire operations of the company. It may be best to provide comparable statistics for the last one or two years as may be required in consultation with management. Once the terms have been agreed upon, the auditor must ensure that the company has an information system that may include the information required to prepare the Performance Audit Report.

The Auditor must highlight the selected performance metrics for the Performance Audit report, the selection criteria, and how it can assist the company to review its performance. He should present his independent evaluation on the company's performance. It should not only be a diagnostic test but should also contain suggestions for improvement. Improvement suggestions can range from comparing performance to that of competitors, and also to any other selected benchmarks (whether internal or external) e.g. Professional Practices, Technical Standards, Worldwide Best, Industrial Excellence, or Company Best.

For any performance measure, the auditor / specialist must also perform a horizontal and vertical analysis of value statistics; trend analysis of performance parameters showing statistics for 3-10 years; high-quality ideas and explanations; and comparisons with external benchmarks as reflected above.

The performance audit report, apart from reporting on outputs/inputs, may also provide recommendations with regard to the strategic shifts required given the changes in the external/internal environments and the current performance. It may include the information with regard to the requisite measures/actions that need to be taken by the management in the light of challenges posed by the environmental factors.

### CAPACITY UTILISATION ANALYSIS

Capacity utilization analysis is the most important KPI to find the performance of any plant, unit, process, machine or manpower of any organization. In this

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context, the significant points for performance evaluation are given below.

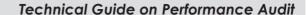
- a) The concepts of capacity and capacity utilization are highly dependent upon one's understanding and thus are very subjective. Whereas on one hand it means the availability of services, it will also mean the maximum rate at which a company can produce goods or services. Capacity utilization level has the greatest impact on profits. The auditor should assess this effect by analyzing and comparing the effect of capacity utilization on profits and revenue.
- b) The auditor must collect information on theoretical, operational, general and budgeted capacity during the period under review. Although information may be available on all machines and tools, the auditor must identify a "limiting factor" that could limit the capacity of the entire organization or a particular product or area.
- c) The Auditor must assess the various limitations for capacity utilization in order to analyze and report effectively. All the factors are having costs and can affect profits. These are:
  - Machinery & equipment internal physical capacity
  - Subcontracting and leasing external physical capacity
  - The manpower bandwidth capacity at all levels
  - Company's financial capacity
- d) The auditor must identify the reasons for overutilization or under utilisation of capacity and classify them into controllable and uncontrollable reasons. It can help to focus on the material consequences of idleness, downtime, lack of energy, lack of materials, and insufficient orders. It would be good to estimate the cost effect of all these factors.
- e) Most of the information pertaining to capacity is available from the departments of manufacturing and industrial engineering. The auditor should also refer to the GST records for actual production data. The auditor should

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comment on how the company responds to product variations by adjusting its volume. This should be done with a focus on the cost effect. Capacity performance measurements can be:

- Ratios to measure capacity utilization
- Identify limiting factors and their impact on costs and revenue
- Ability to serve markets by creating short-term capacity
- Analysis of hourly output of limiting factor resource and hourly return at this resource (can be carried out by decomposing the ratios for Throughput Accounting)
- Committed capacity costs by process and managed capacity costs by process
- Impact of wastages on the capacity
- f) In addition to the capacity performance measures indicated above, the auditor may also consider the following documents as additional references:
  - Cost Accounting Standard (CAS-2) Capacity Determination issued by the Institute of Cost Accountants of India
  - CAM-I capacity model developed by Consortium for Advanced Manufacturing –International, Texas
  - Capacity Utilization Bottleneck Efficiency System (CUBES) model
  - SEMATECH's approach to Overall Equipment Effectiveness (OEE)
  - Theory of constraints model (TOC)
  - Balanced Score Card –by Robert Kaplan
  - AA1000APS (Principles)
  - AA1000AS (Assurance)
  - AA1000SES (Stakeholder Engagement)





### **ANALYSIS OF PRODUCTIVITY AND EFFICIENCY**

Productivity is dependent on the inputs and output. Evaluating, identifying and classifying different inputs and analyzing their contribution to the production of goods and services and their impact on costs and profits is essential to improve overall business performance. Although productivity is a measure of efficiency per unit of output, efficiency is generally measured in entirety.

A performance auditor can understand and analyze the whole series of data on input-processing-output. This analysis, although traditional and basic, can help the auditor to comment on the performance of the organization in all products or product groups. It is necessary for the auditor to understand the input ingredients of each product, product group, customer etc. Consideration for measuring productivity and efficiency can be:

- Performance of input factors such as material, manpower, machines, equipment, tools, processes, management, capital funds etc.
- "The output factors could be units produced and sold, number of customers served, reduced costs, improved responsiveness etc.
- It's not just the productivity, but the improvement (or lack of it) in it that must be measured. This could be done by identifying whether the company is able to
- o Achieve more output with same input
- o Achieve same output with less input
- o Achieve much more output with relatively less increased input
- o Achieve slightly less output with much less input
- For each selected area, the auditor should identify whether the improvement is permanent or temporary and report on the same. The recommended approach for the organization should be focusing on the sustainable improvements. Care should be taken to identify and report potential manipulations.



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- Alongside the productivity or efficiency ratios, the auditor should also analyze
  and report on the effect of the same on quality and attributes. He should
  isolate quality of various inputs and their effect on the output.
- The performance measures in respect of this area could be:
  - Inputs utilized (material, man, machine, capital etc.) per unit of output or output obtained per unit of an input;
  - o Wastages as percentage of input;
  - o Indices could be developed for Single Factor Productivity (SFP), Multi-Factor Productivity (MFP), Total Factor Productivity (TFT); or
  - o Inter-relationships in various productivity measures e.g. output per manhour may have increase, but if it is accompanied by higher wastage per man hour, then there is no real benefit.

### **UTILITIES AND ENERGY EFFICIENCY ANALYSIS**

Utilities are resources used in the process of converting goods and other components into a finished product, but these resources are not part of the visible unit of the product. In the manufacturing industry, utilities and energy make up a considerable portion of the conversion costs. This is an expanded production analysis of one factor pertaining to consumption of utilities and energy acquired and used by the company. The importance of saving non-renewable energy resources need not be emphasized.

Comprehensive topics where resources and energy efficiency can be divided are: energy / electricity, steam, compressed air, water, etc. These resources are used in production processes or in environmental protection programs. Utilization of these resources may be also for managerial or administrative functions viz. for lighting, cooling, ventilation, refrigeration, heating etc. The performance auditor must assess the impact from the perspective of cost management of energy conservation. It is important to check if there are any formal procedures set for the company.

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The auditor must collect information on whether the company falls into an industry that requires electricity as per the Energy Conservation Act, 2001. These industries include Aluminum, fertilizer, metal, cement, paper and pulp, sugar, textiles, chemicals, chemicals petrol., gas crackers, etc. By external measurement, it may be helpful to refer to the procedures followed by companies accredited by the Bureau of Energy Efficiency developed under the Energy Conservation Act, 2001.

The parameters of measuring energy efficiency and resources will include fuel consumption in power generation and then consumption of energy thus produced per unit of final product. Performance parameters may include the following:

- Energy generated per unit of fuel consumed or fuel consumed per unit of energy generated. This could be applied for power, steam, electricity, water etc.
- Measurement of improvement in power factor (denoting reduction in the KVA demand charges).
- The cost of generating energy per unit and the cost of consuming the energy per unit of the finished product would be the critical part of the analysis.
- Trend analysis of energy costs as percentage of total production costs is a good indicator of performance.

### PRODUCT/SERVICE PROFITABILITY ANALYSIS

Per unit profit from a product or service is driven by two main components namely, costs per unit and sales value per unit. The auditor must assess whether the business is in the sellers' market or buyers' market. This will make it easier to evaluate the impact of change in retail price or change in cost, on the product market share and its sustainability.

In case of services, it is essential to exercise care in analyzing the profitability thereof especially when the services provided are diverse and not standard.



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Similarly, in case of joint products or by-products, care should be taken in splitting the joint costs and then evaluate their performance. It would be helpful to separately identify the costs of production, selling & marketing and handling customer services.

The auditor/specialist is expected to provide a comprehensive evaluation of the products and/ or services that contribute more or less to the overall performance of the company. For convenience, products and/or services can be categorized into groups with similar risk profiles. The analysis should differentiate between the benefits of newly introduced products or services and the products or services discontinued over that period and their share in the overall profitability of the organization. The report may highlight five top and bottom five products. This will help the company to understand which products or services are contributing to performance and which are not. Based on this may appropriate corrective actions can be suggested.

### **MARKET / CUSTOMER PROFITABILITY**

Some industries focus on limited markets and types of customers, while others are broad based. Managers may choose to understand their position in different markets and the different clients they cater. The auditor should look at the classification method used by the company to evaluate its profitability. The aim is to take appropriate action against ineffective segments as intended by launching campaigns or removing those unattractive segments.

Markets can be categorized on the basis of nationalities such as local and international, zones or regions. They can also be categorized based on customers, e.g. OEMs, institutions, dealers, aftermarket, retailers etc. These are commonly referred to as distribution channels. Sales and assets to the Government, related organizations may be used for analysis. The challenge in all of the above-mentioned separation methods lies in the calculation of costs and the effectiveness of each of them. The auditor should carefully consider the allocation of costs to various channels, especially marketing and campaign costs.



The life cycle approach can provide a better understanding of the market or analyze customer profits. Therefore, the auditor may analyze the cost of acquisition of a market or a customer, the costs involved in providing and caring for themselves and the costs involved in assessing their potential through market research. It is necessary to look at "Cost per unit" where there are many customers and orders vary in price depending on delivery.

The audit report should specifically highlight the top five and bottom five markets. This will help the company to understand the most profitable market segments as well as those that contribute least but consume valuable resources. Similar exercise should also be done for the different categories of customers or customer segments. This will enable the company to focus on realignment of its markets and customers for achieving optimal performance.

### ANALYSIS OF WORKING CAPITAL AND INVENTORY MANAGEMENT

This part of the performance audit report should highlight performance in the management of the various components of the operating budget. In the case of multi-unit operations, operating costs and asset management are set in one place, with minimum limits set for each production area. Although performance audits are performed throughout the Company, an important factor influencing the operating cost of each unit should be kept in mind and evaluated.

In general, the auditor should review the company's operating policy. The amount of operating income can be analyzed into permanent and variable components. It may be helpful to check whether the funding for these components is in line with the need. An analysis of a company's performance cycle can be very helpful.

For manufacturing industries, inventory is the major portion of the current assets. The auditor should evaluate the inventory management policy which would include, inter alia, procurement policy, stocking policy, inventory valuation method, inventory records and physical verification procedures. Benchmarking of the policy pursued by the company with the industry averages will enhance the value of performance report. It will be appropriate to analyze the inventory



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into its components such as raw material and stores, work in progress and finished goods. For each of these categories, system of inventory control should be evaluated using tools like ABC or VAT or FSND analysis, EOQ technique, JIT system etc. The auditor should comment upon the quality of inventory asset using the inventory aging reports.

Another important component of working capital is receivables trade. Analysis of receivables trade is important for internal perspective (working capital management) and external perspective (customer management) as well. The auditor should examine the company's policy regarding credit evaluation of customers, setting up of credit terms and credit limits, discount policy, collection & delinquency procedures etc. Trade credit from suppliers is the most crucial spontaneous source of working capital funding. The performance in respect of this could be critical for operational efficiencies and liquidity of the company. The auditor could analyze the supplier-wise performance in respect of on time supply, quality issues, pricing, etc.

It will be helpful to include the observations on cost of working capital funding. These costs may include the interest paid on cash credit and loans, cost of using factoring services, cost of collection efforts, costs involved in cash management, inventory carrying costs, etc. In the manufacturing industry, inventory is a major component of current assets. The auditor must review an asset management policy which will include, inter alia, a procurement policy, stock policy, asset valuation method, asset records and material verification procedures. This will improve value of the performance audit report. It will be necessary to analyze inventory in its components such as raw materials and stores, ongoing work and finished goods. In these sections, the list control system should be tested using tools such as ABC analysis or VAT or FSND, EOQ method, JIT system etc. The auditor must comment on the quality of the inventory using the aging reports list.

Another important part of working capital is receivables trade. Receipt analysis is important for internal perspective (effective financial management) and external perspective (customer management) as well. The auditor should review the company's policy regarding customer credit assessments, credit rating and



credit limit, discount policy, collection and criminal procedures etc. Commercial debt from suppliers is a very important automated source of revenue. Working in this regard can be critical to the efficiency of a company and the liquidity of a company. The auditor can analyze the supplier's intelligent performance in terms of time delivery, quality issues, prices, etc.

It will help to include the recognition of operating funding costs. These costs may include interest paid with cash credit and loans, operating costs of factory services, cost of collection efforts, costs involved in financial management, asset management costs etc. These costs may be obvious or not so explicit. The total cost of managing operating capital as a percentage of all invested capital may be a very useful performance indicator.

### **MANPOWER ANALYSIS**

Depth of personnel analysis may depend on the portion of the personnel costs in respect of the total cost of the product or service. The operating conditions of this area will be highly correlated with cost and efficiency or productivity. Also, comparisons with comparable organizations can be helpful.

Manpower costs can be categorized into recruitment cost, staff retention costs and separation costs. Recruitment costs include advertisement costs, commission paid by hiring agencies, participation in job fairs or rental of campuses etc. Cost of retention of manpower may be the cost of training and development, resources provided in addition to financial benefits, etc. Separation costs will usually be implicit costs. These costs as a percentage of total salary can provide insight into the quality of personnel management. These costs can be further subdivided into categories. The time it takes to hire key positions can have a negative impact on performance.

The manpower costs return factor is about productivity and growth in production, the development of organizational skills and knowledge. The auditor should analyze staff productivity statistics, idle time, overtime, absenteeism etc. These factors can be compared to related results such as increased production, increased sales etc. Conditions such as individual sales earned, hourly production per person etc. will add value to the Performance Assessment Report.

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### OTHER PERFORMANCE AREAS

Some additional areas of performance assessment are indicated below. These may not directly affect the current or past performance but may cause the future performance.

- Risk Management
- Environment and Sustainability
- Quality assurance
- ❖ R & D
- Business Process
- Human Resource Accounting
- Value Added Analysis
- Intangible Assets

### **COST & MANAGEMENT ACCOUNTING TOOLS**

The performance measurement involves collection of information, analyzing the same by establishing the inter-relations between them, interpreting the results and then arriving at meaningful conclusion. The managerial costing tools and management accounting tools could be used to analyze the performance with different purposes. The Managerial Costing Tools are:

- Target Costing
- Absorption Costing
- Activity Based Costing (ABC)
- Kaizen Costing
- Performance Based Costing
- Life Cycle Costing
- Marginal Costing (GPK)



- Quality Costing
- Throughput Costing
- Parametric Cost Analysis
- Price-led Design Costing or Design-to-Cost
- Cost as Independent Variable

Similarly, among the Management Accounting Tools, we have

- Budgetary Control
- Balance Scorecard
- Benchmarking
- Business Metrics Development
- Customer or Product Profitability Analysis
- Market, Geographic or Business Segment Analysis
- Lean Accounting
- Resource Consumption Accounting
- Theory of Constrains
- Responsibility Accounting ..... and so on

### **ANNEXURES**

Annexure-IV is an article on Manufacturing Performance Management; and

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### Chapter 4 PERFORMANCE AUDIT OF SERVICE SECTOR

### INTRODUCTION

Service sector plays an important part in the Indian economy contributing more than 50 per cent in the GDP of the country. Service sectors include:

- Trade, hotels, transport, communication and services related to broadcasting,
- Financial, real estate and professional services, and
- Public Administration, defence and other services.

It would be seen that the Gross Value Added (GVA) by service sector was Rs 96.54 lakh crores and of different sectors during the year 2020-21 in India was as follows:

### GVA in 2020-21 (Rupees in Crore)

S. No.	Sector	At Constant Prices	Share (%)	At Current Prices	Share (%)
1	Agriculture, forestry & fishing	2,040,079	16.38 %	3,616,523	20.19 %
2	Industry Sector	3,654,362	29.34 %	4,644,385	25.92 %
2.1	Mining & quarrying	294,644	2.37 %	292,120	1.63 %
2.2	Manufacturing	2,107,068	16.92 %	2,585,740	14.43 %
2.3	Electricity, gas, water supply & other utility services	306,254	2.46 %	484,477	2.70 %
2.4	Construction	946,396	7.60 %	1,282,048	7.16 %
3	Services Sector	6,758,989	54.27 %	9,654,259	53.89 %
3.1	Trade, hotels, transport, communication and services related to broadcasting	2,208,388	17.73 %	2,941,477	16.42 %
3.2	Financial, real estate & prof services	2,872,815	23.07 %	3,950,786	22.05 %
3.3	Public Administration, defence and other services	1,677,786	13.47 %	2,761,996	15.42 %
	GVA at Basic Prices	12,453,430	100 %	17,915,167	100 %



As per the Advanced Estimates (AE), the share of various sectors in the GVA during the year 2021-21 in percentage terms has been as follows:

Sector	Share in GVA (per cent) 2021-22 (AE)
Trade, hotels, transport, communication & services related to broadcasting	16.42
Financial, real estate & professional services	22.05
Public administration, defence & other services	15.42
Total Services (Excluding construction)	53.89

Source: Ministry of Statistics and Programme Implementation

Due to Covid-19 pandemic, the services sector has been adversely affected as its' share in India's Gross Value Added (GVA) declined from 55 per cent in 2019-20 to 54 per cent in 2021-22. However, within the services sector, the effect of Covid-19 has been varied. While non-contact services such as information, communication, financial, professional and business services have remained resilient, the impact has been much severe on contact-based services such as tourism, retail trade, hotel, entertainment and recreation, etc. It shows that Services sector is quite sensitive sector.

### FOREIGN DIRECT INVESTMENT (FDI) INFLOWS INTO SERVICES SECTOR

Apart from the substantial contribution of Services sector in the GVA of the country, it is also the largest recipient of FDI inflows in India. According to the World Investment Report 2021 by the UN Conference on Trade and Development (UNCTAD), India was the fifth-largest recipient of Foreign Direct Investment (FDI) in 2020 improving its rank by four places, from ninth position in 2019. In 2020-21, India registered highest ever annual FDI inflows of US\$ 81.97 billion. The country has received US\$ 43.12 billion FDI inflows in the first six months of 2021-22. FDI equity inflows, i.e., FDI inflows minus re-invested earnings, were US\$ 31.15 billion during April-September 2021, growing by 3.8 per cent over the corresponding period last year.

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### Performance Audit of Service Sector

### INSTITUTE'S GUIDANCE NOTES ON VARIOUS SERVICES

The Institute of Cost Accountants of India is seized of the importance of Service sector in the overall growth of the economy and therefore has issued various Guidance Notes, Monographs, Compendiums, & Management Accounting Guidelines in respect of the various services, which are as follows:

- Guidance Note on Cost Management in Higher Education
- Guidance Note on Cost Management in Healthcare Sector
- Guidance Note on Internal Audit of Telecommunication Industry
- Guidance Note on Internal Audit of Power Industry
- Guidance Note on maintenance of Cost Records & Cost Audit of Construction Industry
- Guidance Note on Block-chain Technology
- Guidance Note on Internal Audit of Stock Brokers & Depository Participants
- Guidance Note on the Concurrent Audit of Commercial Banks
- Monograph on Internal Audit of Treasury Functions of Commercial Banks
- Monograph on Risk-based Internal Audit of Commercial Banks
- Guidance Note on Internal Audit of General Insurance Companies
- Compendium on Cost Competitive Practices in India
- Management Accounting Guidelines-III Implementing Corporate Environmental Strategies

In the rapidly changing global scenario, the Services sector is going to play a significant role in the growth of Indian economy. Therefore, the need to monitor and to evaluate the performance of this service sector cannot be overemphasized. Since 'Performance Audit' focuses on whether interventions, programs and institutions are performing in accordance with the principles of economy, efficiency and effectiveness and whether there is room for improvement, it can greatly help in improvement of the performance and further



growth of the various segments of the services sectors. Performance is examined against suitable criteria, or the targets set as per long term plans or annual budgets, and the causes of deviations from those criteria, reasons for slippages from the targets or other problems are analyzed. The aim has to be to find the answers on key performance audit questions and to provide recommendations for improvement. CMAs are required to play important role in various Service sectors

### PERFORMANCE AUDITING IN SERVICE SECTOR - OBJECTIVES

The main objective of performance auditing in Services Sector is constructively to promote economical, effective and efficient governance. It also contributes to accountability and transparency. Within the Government, social and public sector, performance auditing can promote accountability by assisting those with governance and oversight responsibilities to improve the overall performance of various initiatives, policies, programmes, schemes, and projects undertaken by the Government. It does this by examining whether decisions by the legislature or the executive are efficiently and effectively prepared and implemented, and whether taxpayers or citizens have received value for money. It does not question the intentions and decisions of the legislature but examines whether any shortcomings in the laws and regulations or their way of implementation have prevented the specified objectives from being achieved. Performance auditing focuses on areas in which it can add value for citizens, and which have the greatest potential for improvement.

The profits from services sector are driven by two major components viz. cost per unit and selling price per unit. The performance auditor should analyse if the Service belongs to the sellers' market or buyers' market. This would facilitate the assessment of impact of changes in selling prices and changes in costs on the profitability or otherwise of the services. While the selling price is a single number, the cost is the sum total of different elements. The auditor must ensure that the basis used to allocate indirect costs is consistently adopted by the company.



### Performance Audit of Service Sector

❖ In case of services, the unit of measurement is very important and hence carefully selected. Further, due to the diverse nature of services, it is essential to exercise care in analysing the profitability thereof especially when the services provided are not standard. Many times, there is a combined contract for sale of product along with the service & maintenance contract. In such cases, the auditor should bifurcate the sales and costs for each portion and then compute and comment on their respective profitability.

### PERFORMANCE AUDIT IN GOVERNMENT SERVICES SECTOR

Performance audits examine the government's activities or programs against established criteria to answer the following questions:

- Are activities or programs being run with due regard for economy, efficiency, and environmental impact?
- Does the government have the means in place to measure the effectiveness of its activities or programs?

In other words, a performance audit is an independent, objective, and systematic assessment of how well the government is managing its activities, responsibilities, and resources.

Performance audits are planned, performed, and reported in accordance with professional auditing standards and with policies of the Office of the Comptroller and Auditor General of India (C&AG). Audits are conducted by qualified auditors who

- establish audit objectives and criteria for the assessment of performance,
- gather the evidence necessary to assess performance against the criteria,
- report both positive and negative findings,
- · conclude against the established audit objectives, and
- recommend improvements when there are significant differences between criteria and assessed performance.

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### **Technical Guide on Performance Audit**

Performance audits contribute to a public service that is effective and a government that is accountable to Parliament and to the Citizens.

Performance audits do not question the merits of government policies. Rather, they examine the government's management practices, controls, and reporting systems based on its own public administration policies and on best practices.

### ROLE OF COST & MANAGEMENT ACCOUNTANTS IN PERFORMANCE AUDIT IN SERVICES SECTORS

It can be stated that any performance audit process depends on several core factors that deserve to be carefully enumerated. However, among these, two steps require very careful investigation, assessment, and analysis. These are:

- Examination of processes, their analysis, and assessment of their impact evaluation; and
- Performance monitoring and risks recognition.

Both these steps would require help of professional knowledge and usage of data analytics tools.

In recent years, cost & management accounting has gained significant advancement and application in performance evaluation & analysis and managerial decision-making pathways as there are fundamental differences between financial accounting and cost & management accounting. While financial accounting provides only one-dimensional aggregated data (values) for the entity as a whole; in comparison, cost & management accounting provides detailed and disaggregated three-dimensional data viz. quantity, rate & amount (value) about individual products, activities, divisions, plants, operations etc. Therefore, costing methodologies applied in organizations measures the consumption of economic resources, and supports enforcement of the accountability of business performance. Accordingly, CMAs focus on the following three areas:

- Strategic management
- Performance management
- Risk management



### Performance Audit of Service Sector

Therefore, to support the performance audit processes, analysis, impact evaluation, and performance monitoring, various stakeholders should engage CMAs, adopt cost & management accounting techniques, and use right type of data analytics tools to track the entity's performance & find stressed areas, if any. This can lead to various important recommendations towards improvement in the various performance parameters in the services sector.

As part of performing cost competitiveness audit of various units, products, & activities, CMAs review the entity's cost accounting, cost flow, and cost control systems & processes and also perform detailed analytical procedures in respect of the entity's operations, consumption ratios, impact of major cost elements, and their comparison with the previous best. Therefore, CMAs assess the efficiency and effectiveness of entity's operations, cost control systems & related IT framework, and flow of cost to different products/activities, cost centers, and cost objects. The prime objective of cost data analysis and operational analysis is to identify cost savings by reducing or eliminating undesirable functions, activities, or services; to uncover the opportunities for improvement of performance and creation/enhancement of value of the business; to find ways to improve operations and facilitate decision making by the entity with responsibility to initiate corrective action; and to identify right measures to guide continuous improvement. All these analyses would surely help the service sector in close monitoring of client's activities and its strengths, weaknesses, and challenges.

In addition, top authorities and managers in the services sector should insist upon all major stakeholders and various service providers to implement cost accounting & reporting systems to measure the efficiency, productivity & performance of all its products, services, and customers in a most cost-effective manner. In this regard, 'Activity Based Costing' (ABC) model or combination of models can be used depending on type of service which helps to find right data, information & solutions for the management to take right decisions to improve performance, service delivery, competitiveness, productivity, profitability, and sustainability.

Implementation of robust cost accounting & reporting framework enables the entity to exercise control over its operations and costs to achieve optimum



utilisation of available resources. After analysing the available data, CMAs do suggest areas to improve the entity's operations & activities with an objective to bring discernible change in productivity, value creation, profitability, risk management, and sustainability. Their analyses further tells whether the entity's operations/activities are being performed in accordance with the principles of economy, efficiency, and effectiveness and whether there is room for improvement. For evaluating performance of any unit, function, process, service, customer, or market, CMAs select and include those performance measurement criteria that cause visible effect on the entity's profitability, resource utilisation, liquidity, risks, quality, competitiveness, and responsiveness to the market. Therefore, these tools & their results would in real sense function as the service provider's eyes & ears.

### PERFORMANCE AUDIT ANALYSIS

Find periodicity of the entity undertaking following performance audit analysis and major outcomes to be shared with the service provider with reasons of good or bad performance:

- Business Process Flow & Operating Cycle Analysis
- Productivity, Efficiency & Benchmarking Analysis
- Balance-Sheet & Profitability Analysis
- Key-Costs, Contribution and Service Profitability Analysis
- Sales-Volume-Profit Analysis
- Market, Customer & Segment Profitability Analysis
- Working Capital Management Analysis
- Manpower Efficiency Analysis
- Risk Mapping & Sustainability Analysis

The above analysis and tools will vary from one service provider to another. CMAs to study the core activities of the service provider, evaluate actual effect of external factors such as change in the ownership & governance structure,

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### Performance Audit of Service Sector

government policies, global effects, economic slowdown, regional/ country specific relations, customer behaviour, natural or manmade pandemics/ calamities, political interference, etc. and their mitigation steps taken or planned by the entity.

CMAs have vital role in ensuring that the service sector provides services to customers both in domestic as well as international markets, to their satisfaction besides maintaining a competitive price level. This will help in generation of employment, increase in GDP and growth in foreign exchange earnings. Further, by ensuring that investment in areas like education, research & development, communications, information & technology etc. are cost competitive, CMAs can play a vital role in the overall growth of service sector.

### SUGGESTIVE PERFORMANCE PARAMETERS IN SERVICES UNDER COST AUDIT

As per provisions of Companies (Cost Records and Audit) Rules, 2014 notified under section 148 of the Companies Act 2013, companies rendering following services are mandated to maintain service-wise cost records and get these audited by a practicing CMA, subject to their meeting with the laid down turnover criteria. These cost records are required to be maintained on regular basis in such manner as to facilitate calculation of per unit cost of operations, cost of sales and margin for each of its activities for every financial year on monthly or quarterly or half-yearly or annual basis. Further, 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 utilisation of resources.

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 and regulated by the Telecom Regulatory Authority of India under the Telecom Regulatory Authority of India Act, 1997 (24 of 1997); including activities that requires authorisation or license issued by the Department of Telecommunications, Government of India under Indian Telegraph Act, 1885 (13 of 1885);

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- Generation, transmission, distribution and supply of electricity regulated by the relevant regulatory body or authority under the Electricity Act, 2003 (36 of 2003);
- Port services of stevedoring, pilot age, hauling, mooring, re-mooring, hooking, measuring, loading and unloading services rendered for a Port in relation to a vessel or goods regulated by the Tariff Authority for Major Ports under the Major Ports Trusts Act, 1963 (38 of 1963);
- Aeronautical services of air traffic management, aircraft operations, ground safety services, ground handling, cargo facilities and supplying fuel rendered at the airports and regulated by the Airports Economic Regulatory Authority under the Airports Economic Regulatory Authority of India Act, 2008 (27 of 2008);
- Construction Industry as per para no. (5) (a) as specified in Schedule VI of the Companies Act, 2013 (18 of 2013) & Roads and other infrastructure projects corresponding to para no.(1) (a) as specified in Schedule VI of the Companies Act, 2013;
- Health services, namely functioning as or running hospitals, diagnostic centers, clinical centers or test laboratories; and
- Education services, other than such similar services falling under philanthropy or as part of social spend which do not form part of any business.

Given the aforesaid requirements and objectives, following broad/common parameters are suggested for the performance evaluation of services sectors:

- Network in terms of number of registered and active buyers, sellers, or users.
- Value of total likely market size in terms of opportunity and customer potential. This is used to measure the existing & projected market share of each company.
- Active or non-active users, transacting users, number and frequency of transactions, gross order value, average order value, etc.
- Customer lifetime value i.e. the total amount of revenue that a business expects to generate from a customer during the period he stays with it.

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### Performance Audit of Service Sector

- Customer acquisition costs i.e. the cost incurred in the form of advertisement, marketing & discounts to acquire a new customer. For long-term sustainability, customer acquisition cost should not be more than its lifetime value.
- Tracking customer experience in navigating and measuring satisfaction coefficient.
- Churn rate i.e. the percentage of customers/users a business loses compared to the total number of customers/users, in a given period.
- Workforce productivity measured in terms of value generated per employee and per rupee of employee cost.
- Innovation rate by undertaking technology-supported changes to business models, product offerings, systems and processes to enhance customer value, reduce costs and secure growth.
- Cost management index i.e. measuring effect of each cost component visà-vis existing & projected revenues.
- Relationship of operating expenses to new revenue produced. Determine break-even point for each business vertical & its likely achievability in the near term.
- Effect of fiscal benefits on the sustainability of the company, before and after these benefits.

Now let us understand some of the sector specific performance parameters. These are,

**Telecommunication Industry –** the significant parameters of performance of Telecommunication sector include

- Subscriber growth measures how many new customers a company adds over a given time.
- Subscriber acquisition cost which is equivalent to the total average cost of adding a new subscriber to the list.
- Churn rate which is a metric that measures the number of subscribers that cancel their subscriptions or leave the service provider.



- Average revenue per user (ARPU) measures the average revenue a company generates per user over a given time.
- Minutes of Usage i.e. the total time in minutes, used by a customer on their mobile phone in a given timeframe.

**Power Generation, Transmission, & Distribution –** the significant parameters of performance of power sector include,

- Load Factor it is the ratio between average load and peak load.
- Demand Factor it is the ratio of maximum demand on the power station to its connected load.
- Variable load it is the variation in the load of power station due to uncertainty in the demand of consumers.
- ❖ Heat Rate (Energy Efficiency) it is the overall thermal performance or energy efficiency for a power plant for a period i.e. the energy produced per unit of heat supplied to the power plant.
- Capacity Factor it is the ratio between average load and rated load for a period of time.
- Economic Efficiency it is the ratio between production costs, and energy output from the power plant for a period of time.
- Operational Efficiency or Plant Capacity Factor it is the ratio of the total electricity produced by the plant during a period of time compared to the total potential electricity that could have been produced if the plant operated at 100 percent in the period.
- The performance of transmission line depends on the distributed parameters of the line. These include calculation of sending end voltage, transmission loss, and efficiency of transmission. Measuring carbon emissions, transmission & distribution efficiency or say t & d losses, power quality are other factors to measure performance of utilities.

**Port Services –** The port performance factors include transport chain performance that measures the maritime freight rates, maritime transit time, first port of call,

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last port of call, & number of sailings, proximity of port, congestion, possibility of intermodal links, port equipment, port charges, quality of customs handling, free time, port security, size of port, port location, port facility, cargo volume, service level, satisfaction with deep-sea connection, frequency of shipping lines, terminal handling charges, international ship and port facility security, satisfaction with terminal operations, number of container terminals, inland freight rates, inland transit time, frequency of inland lines, and number of inland transport operators. Factors that could influence port efficiency include port throughput, location of the port, frequency of ship calls, port charges, and terminal efficiency, which is in turn affected by container mix, work practices, crane efficiency, vessel size and cargo exchange. Productivity factors for the port include tons per day-ship, tons per worked-hour, tons per crane hour, and tons per berth or linear meter. Economic and financial indicators include operating surplus over GRT, total income per ton, and charge per TEU. World Bank has developed following six key areas of the port logistics performance:

- i) Efficiency of the clearance process by border control agencies, including customs
- ii) Quality of trade-and transport-related infrastructure
- iii) Ease of arranging competitively priced shipments
- iv) Competence and quality of logistics services
- v) Ability to track and trace consignments
- vi) Frequency with which shipments reach the consignee within the scheduled or expected delivery time.

**Airport Services –** In respect of airport, core areas of performance measurement include airport infrastructure utility, class of facilities, flight activity, aircraft movement, taxi-in time & taxi-out time, effective gate-to-gate time, number of arrival & departure delays, average daily capacity & average daily operations, passengers carried, passengers per plane, mix of international & domestic traffic, ease of operations, security & safety, runway incursions rate, noise

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exposure, emissions exposure, cargo throughput, aeronautical revenue and non-aeronautical revenue, revenue per passenger & per ton of cargo, other economic implications, business development, benchmarking across airports, etc.

Construction Services –In construction services, most of the KPIs and performance parameters are project specific. However, the common parameters include adherence to time and cost of the project, analyzing time & cost overruns, cost effectiveness, manpower productivity, team performance, material management, machine utilization, quality of construction, number of defects, reworks, safety during construction, on-site accidents, customer commitment & satisfaction coefficient, project planning, project management systems & procedures, site management, decision effectiveness, effectiveness of on-site communication, risk management, environment management, innovation, sustainability, etc.

**Healthcare Services –** various performance parameters for healthcare services include service delivery, resource management, quality & efficiency of patient care, cost of healthcare services, healthcare outcomes, facility cleanliness, average length of patient stay, average time of service, inpatient mortality rates, bed utilization rate, average cost per discharge, number of fatal incidents, operating margin, safety of patients and employees, values to various stakeholders that includes patients, doctors & Para-medical staff, insurers, & regulators, community or social healthcare, patient satisfaction, asset utilization rate, etc.

**Education Services –** these services cover very wide spectrum from school to college to university to higher/professional education, technical skill development, distance learning, etc. Though the performance audit parameters may differ but the common ones include average student attendance rate, attrition rate of offline/online courses, number of degrees awarded – undergraduates, graduates, masters, doctoral, average grant/scholarship distribution by student, percentage of students on aid, tuition costs, student to



### Performance Audit of Service Sector

faculty ratio, cost per student, value of research expenditures, administrative expenses as a percentage of per educational course and per student, faculty to administration ratio, number of students enrolled, percentage students in key courses, proficiency rates for each subject, percentage of academic staff with a doctorate or advanced certifications or degrees, number of training sessions per year, faculty & staff attendance rates, faculty & staff retention rate, classroom & laboratory utilization rate, percentage of classes using technology, social media engagement, percentage of students living on campus, development expenditures as a percentage of total revenue, etc.

Performance measurement & management is a broad concept that includes operational management and competitive excellence. Members conducting Performance Audit are advised to examine the relevance of aforesaid parameters (components) and Key Performance Indicators (KPIs) and explore new ones to effectively evaluate the entity's performance and provide valuable inputs to the senior management and Board for crucial decision making. Such parameters or indicators may be quantitative, qualitative, or variables that reflect the change. Measurement of change and computing its relative significance vis-à-vis the benchmarks or standards highlight the need for a positive (or negative) review of future business outlook, strategy and planning.

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# Annexure-I INTERNATIONAL ORGANIZATION OF SUPREME AUDIT INSTITUTIONS (INTOSAI)

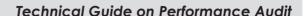
### **OVERVIEW**

In 1953, 34 SAIs and partner organizations met at the initiative of the head of the Supreme Audit Institution of Cuba to take part in the Congress in Havana. On this occasion, INTOSAI (International Organization of Supreme Audit Institutions) was founded as an international association.

International Organization of Supreme Audit Institutions (INTOSAI) is an autonomous, independent, professional, and non-political organization established to provide mutual support; foster the exchange of ideas, knowledge, and experiences; act as a recognized voice of Supreme Audit Institutions (SAIs) within the international community; provide high quality auditing standards for the public sector; promote good governance; and foster SAI capacity development and continuous performance improvement. It operates as an umbrella organization for the external government audit community. It is a non-governmental organization with special consultative status with the Economic and Social Council (ECOSOC) of the United Nations.

INTOSAl's vision is to promote good governance by enabling SAls to help their respective governments improve performance, enhance transparency, ensure accountability, maintain credibility, fight corruption, promote public trust, and foster the efficient and effective receipt and use of public resources for the benefit of their citizens.

A Supreme Audit Institution (SAI) is a public body of a state or supranational organization which, however designated, constituted or organized, exercises, by virtue of law, or other formal action of the state or the supranational organization, the highest public auditing function of that state or supranational organization in an independent manner, with or without jurisdictional competence.





### **INTOSAI – MEMBERS**

At the time of its foundation, INTOSAI had 34 members. At present, INTOSAI has

- 195 Full Members.
- 5 Associate Members and
- 1 Affiliate Member

### **Full Members**

Participation as a Full Member in INTOSAI and all its organs and functions is open to:

- a) the Supreme Audit Institution of all countries which are members of the United Nations Organization or any of its Specialized Agencies and to
- b) the Supreme Audit Institutions of those supranational organizations which are a subject under international law and are endowed with a legal status and an appropriate degree of economic, technical/organizational or financial integration.

Comptroller & Auditor General (C&AG) of India is Full Member of INTOSAI.

### **Associate Members**

- 1. The Institute of Internal Auditors (IIA), Florida, Vereinigte Staaten von America
- 2. The World Bank, Washington, DC, Vereinigte Staaten von America
- 3. Organização ISC da Comunidade de Língua Portuguesa (CPLP), Brasília DF, Brasilien
- 4. Union économique et Monétaire Ouest Africaine (UEMOA), Burkina Faso
- 5. Association ISC Communl'usage du français (AISCCUF), Paris, Frankreich

### **Affiliate Members**

Office of Public Accountability, Suite 401 DNA Building, 96910 Hagåtña, Guam

### International Journal of Government Auditing



### International Organization of Supreme Audit Institutions (INTOSAI)

As the official publication of INTOSAI, the International Journal of Government Auditing (IJGA), is established as a separate legal entity that supports cooperation, collaboration, and continuous improvement of communication among SAIs and the broader audit community. The IJGA is published in the five INTOSAI official working languages by the SAI of the United States of America.

### **INTOSAI** Development Initiative

The INTOSAI Development Initiative (IDI) is an INTOSAI organ as separate legal entity, which supports capacity development of Supreme Audit Institutions (SAIs) mainly in developing countries.

- IDI supports SAI independence, SAI governance, SAI professionalization and SAI relevance. It also serves as a provider of last resort for bilateral projects with SAIs in especially challenging situations.
- IDI also provides support to the INTOSAI-Donor Cooperation.
- IDI was established at the 1986 Sydney Congress.
- IDI in Norway was established in May 1999 as a Foundation under Norwegian law, giving it organizational and economic independence.
- The Norwegian Auditor General acts as Chairman of the Board of IDI.

### **Regional Organizations**

INTOSAI recognizes Regional Organizations as related autonomous entities, established for the purpose of promoting the professional and technical cooperation of its members on a regional basis.

The INTOSAI Governing Board has recognized the following seven Regional Organizations:

- AFROSAI African Organization of Supreme Audit Institutions
- ARABOSAI Arab Organization of Supreme Audit Institutions
- ASOSAI Asian Organization of Supreme Audit Institutions



- CAROSAI Caribbean Organization of Supreme Audit Institutions
- EUROSAI European Organization of Supreme Audit Institutions
- OLACEFS Organization of Latin American and Caribbean Supreme Audit Institutions
- PASAI Pacific Association of Supreme Audit Institutions

### PROFESSIONAL STANDARDS

Since 2004, INTOSAI has worked to build the capacities and structures needed to provide a widely recognized set of international professional standards for public–sector auditing. These efforts will be intensified during 2017–2022.

INTOSAI—P 1, The Lima Declaration, and INTOSAI—P 10, The Mexico Declaration on SAI Independence, emphasized the importance of supporting SAIs in their efforts to conduct independent auditing. ISSAI 100, Fundamental Principles of Public Sector Auditing, defines the basic principles and concepts of public sector auditing and its three main types of audit-financial, operational, and compliance. With the adoption of these principles, INTOSAI established a common ground for further development of ISSAI and the development of appropriate national standards for public sector auditing.

Under the leadership of the Professional Standards Committee (PSC), INTOSAI intensifies its efforts to provide appropriate, effective and transparent standards that add credibility to the work of each auditor and to the resulting audit reports. Through ISSAI and partnering with other standards-makers, INTOSAI aims to ensure a high level of independent public sector research and promote transparency, accountability and success in government.

INTOSAI's professional standards draw on the expertise that is accumulated through SAI knowledge development and knowledge—sharing. All ISSAIs and guidance to the ISSAIs are developed in accordance with the Due Process for the Forum for INTOSAI Professional Pronouncements (FIPP) and are made available to the public on www.issai.org.



### International Organization of Supreme Audit Institutions (INTOSAI)

### Goal 1 - Professional Standards

Promote strong, independent, and multidisciplinary SAIs and encourage good governance, by:

- 1. Advocating for, providing and maintaining International Standards of Supreme Audit Institutions (ISSAI); and
- 2. Contributing to the development and adoption of appropriate and effective professional standards.

### Strategic Objectives for Professional Standards

- 1. Provide a strong organizational framework to support INTOSAI's standard setting including a permanent standard–setting board (the FIPP), a technical–support function, and an independent advisory function.
- 2. Ensure that the ISSAIs are sufficiently clear, relevant and appropriate to make them the preferred solution for INTOSAI's members. The ISSAIs should be widely recognized by all stakeholders as the authoritative framework for public sector auditing.
- 3. Promote the ISSAIs as a source for the development of auditor education and certification programs, as well as education and training standards.
- 4. Work toward and ensure the continued development and maintenance of the INTOSAI Framework of Professional Pronouncements.
- 5. Monitor the implementation and adoption of standards and feed any problems or issues back into the standard-setting process to ensure the standards are as useful and relevant as possible.

### Key Strategies to Achieve Goal "Professional Standards"

 Develop and maintain the Forum for INTOSAI Professional Pronouncements that encompasses INTOSAI's expertise in standards—setting, function as a standard setting board for the INTOSAI Framework of Professional Pronouncements and represent the broad views of INTOSAI's members on standards—setting issues.



- Strengthen the standards-setting governance structure to enhance the trust of INTOSAI members, Donors, and other stakeholders in INTOSAI's standards-setting function and ensure sufficient coordination between the development of new guidance and any related INTOSAI initiatives to support ISSAI implementation and sound professional practices.
- 3. Establish adequate technical supporting functions to ensure efficient operation and high quality in drafting of standards and to promote their wide recognition, acceptance and use.
- 4. Establish and maintain an advisory group, including the current observers in the PSC as well as representatives of users, international audit organizations, and other relevant parties.
- 5. Monitor INTOSAI's standards—setting activities to ensure that the overall due process for the INTOSAI Framework of Professional Pronouncements is followed and facilitate further development and improvement if necessary.
- 6. Further develop the ISSAI website to ensure continued steady growth in the number of visitors and that it is as accurate and useful as possible.
- 7. Implement a monitoring system to obtain feedback from SAIs on their implementation of the ISSAIs and their practical experience using the ISSAIs in audits or as a basis for national standards and to feed this information back into the standards-setting process.
- 8. Collaborate closely to develop a competency framework and certification program established under Goal 2.
- 9. Collaborate closely on initiatives taken under Goal 3 to promote knowledge sharing and develop expertise that can be leveraged in the development of INTOSAI's Professional Pronouncements.
- 10. Collaborate closely with IDI, other INTOSAI bodies, other international standards setters and partners who share the overall goal of promoting strong, independent, and multidisciplinary SAIs and encourage good governance.



### International Organization of Supreme Audit Institutions (INTOSAI)

### CAPACITY DEVELOPMENT

Each SAI has a key responsibility to identify and address its skills development needs based on its strategic and related development programs. These strategic and development plans can be supported by the SAI Performance Measurement Framework (SAI PMF), SAI Self-Assessment of Integrity (INTOSAINT), peer review results, feedback from clients and stakeholders, the desire to successfully support the development of national responsive institutions (SDGs 16) and contribute to the monitoring and review of national sustainable development efforts, in line with the 2030 Agenda for Sustainable Development.

INTOSAI aims to ensure that each INTOSAI member benefits from skill development programs, in line with their needs. The Capacity Building Committee (CBC) leads INTOSAI efforts under this policy and in doing so works closely with other INTOSAI objectives, General Secretariat, IDI, INTOSAI-Donor Cooperation, INTOSAI regional organizations, and others to speak and unify the interest of INTOSAI SAI's skills development efforts. CBC plays a vital role in integrating by ensuring that skills development proposals are in line with previous and ongoing efforts.

### **KNOWLEDGE SHARING**

INTOSAI's third strategic goal builds on the key elements of openness, sharing, and collaboration that have been a hallmark of INTOSAI over the years. This policy serves as the basis for INTOSAI's efforts to share information about SAI's efforts to support and participate in the implementation and review of SDGs within the context of each SAI's mandate, skills, and priorities. The policy, led by the Information Sharing Committee (KSC), incorporates the following strategic objectives to support greater expertise and continuous improvement of SAI:

### **Independence of Supreme Audit Institutions**

SAIs can perform their functions effectively and efficiently only if they are independent of the research organization and are protected from external influences.



Although public institutions may not be fully independent because as a whole, they are part of the State, the SAIs will have the operational and organizational independence required to carry out their duties.

The establishment of SAIs and the required level of independence will be set out in the Constitution; and the details may be legalized. In particular, adequate legal protection of the Supreme Court from any independent interference and audit authority will be ensured.

### Independence of the members and officials of Supreme Audit Institutions

The independence of the SAIs is inseparably linked to the independence of its members. The members are defined as the people who must make decisions for the Supreme Audit Institutions and will be held accountable for these decisions to third parties, that is, members of the decision-making body or the head of a democratically organized SAI.

The independence of the members will be guaranteed by the Constitution. In particular, removal procedures will also be included in the Constitution and will not affect the independence of members. The procedure for the nomination and removal of members depends on the constitution of each country.

In their professional activities, the audit staff of the Supreme Audit Institutions should not be influenced by the organizations, which are audited and should not rely on those organizations.

### Financial independence of Supreme Audit Institutions

Supreme Audit Institutions shall be provided with the financial means to enable them to accomplish their tasks. If required, Supreme Audit Institutions shall be entitled to apply directly for the necessary financial means to the public body deciding on the national budget. Supreme Audit Institutions shall be entitled to use the funds allotted to them under a separate budget heading as they see fit.

### THE INTOSAI PRINCIPLES (INTOSAI-P)

The INTOSAI Principles consist of founding principles and core principles. The founding principles have historical significance and specify the role and functions,



### International Organization of Supreme Audit Institutions (INTOSAI)

which SAIs should aspire to. These principles may be informative to Governments and Parliaments, as well as SAIs and the wider public and may be used as reference in establishing national mandates for SAIs. The core principles support the founding principles for an SAI, clarifying the SAI's role in society as well as high level prerequisites for its proper functioning and professional conduct.

- INTOSAI Founding Principles INTOSAI-P 1-9
- INTOSAI Core Principles INTOSAI-P 10-99

### THE INTERNATIONAL STANDARDS OF SUPREME AUDIT INSTITUTIONS (ISSAI)

The ISSAIs are the authoritative international standards on public sector auditing. The purpose of the ISSAIs is to:

- ensure the quality of the audits conducted
- strengthen the credibility of the audit reports for users
- enhance transparency of the audit process
- specify the auditor's responsibility in relation to the other parties involved
- define the different types of audit engagements and the related set of concepts that provides a common language for public sector auditing.

The full set of ISSAIs is based on a basic set of concepts and principles that defines public sector auditing and the different types of engagements supported by the ISSAIs. Complete framework of ISSAIs is as given below.

- Fundamental Principles of Public Sector Auditing ISSAI 100-129
- SAI Organisational Requirements ISSAI 130-199
- Financial Audit Principles ISSAI 200-299
- Financial Audit Standards ISSAI 2000-2899
- Performance Audit Principles ISSAI 300-399
- Performance Audit Standards ISSAI 3000-3899
- Compliance Audit Principles ISSAI 400-499

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### **Technical Guide on Performance Audit**

- Compliance Audit Standards ISSAI 4000-4899
- Other Engagements Principles ISSAI 600-699
- Other Engagements Standards ISSAI 6000-6499
- Competency Principles COMP 700-799
- Competency Standards COMP 7000-7499

### THE INTOSAI GUIDANCE (GUID)

The guidance is developed by INTOSAI in order to support the SAI and individual auditors in how to apply the ISSAIs in practice in the financial, performance or compliance audit processes; how to apply the ISSAIs in practice in other engagements; understanding a specific subject matter and the application of the relevant ISSAIs. The framework of Guidance is as under:

- SAI Organisational Guidance GUID 1900-1999
- Supplementary Financial Audit Guidance GUID 2900-2999
- Supplementary Performance Audit Guidance GUID 3900-3999
- Supplementary Compliance Audit Guidance GUID 4900-4999
- Supplementary Other Engagements Guidance GUID 6500-6999
- Supplementary Competency Guidance GUID 7500-7999
- Subject Matter Specific Guidance GUID 5000-5999
- Other Guidance 9000-9999

### INTOSAI AND UN - SDGs

There is a growing global awareness - and most importantly- the expectation about the important role of INTOSAI and SAIs in promoting good governance and accountability. The recognition of these roles is highlighted in the resolution adopted by the United Nations (UN) General Assembly in December 2011. "Promoting the efficiency, accountability, effectiveness and transparency of public administration by strengthening supreme audit institutions".



### International Organization of Supreme Audit Institutions (INTOSAI)

Building on that recognition, the UN, through its various forums and effective INTOSAI partnerships, has emphasized the important role of independent and competent SAI in implementing the effective, efficient, transparent and accountable implementation of the 2030 Sustainable Development Agenda. This recognition was clearly recognized by the UN Member States in the December 2014 General Assembly resolution, "Promoting and fostering the efficiency, accountability, effectiveness and transparency of public administration by strengthening supreme audit institutions".

The Sustainable Development Goals (SDGs), which were committed jointly in September 2015 by the UN Member States, provide an ambitious and long-term "plan of actions for people, planet, and prosperity", for all nations. The declaration on the SDGs, "Transforming Our World: The 2030 Agenda for Sustainable Development", noted that "Our Governments have the primary responsibility for follow-up and review, at the national, regional and global levels, in relation to the progress made in implementing the Goals and targets over the coming fifteen years".

Through their audits and in line with their mandates and priorities, SAIs can make valuable contributions to national efforts to track progress, monitor implementation, and identify opportunities for improvement "across the full set of the SDGs and their respective nations' sustainable development efforts. INTOSAI has an important supporting and leveraging role to play in national, regional, and global efforts to implement the SDGs and to follow-up and review progress that is made. However, to meet global expectations, INTOSAI must operate in a more integrated and effective manner.

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# U.S. GOVERNMENT ACCOUNTABILITY OFFICE (GAO)

### **ABOUT GAO**

The U.S. Government Accountability Office (GAO) is an independent, non-partisan agency that works for Congress. The Government Accountability Office is the U.S. government's audit institution and is part of the legislative branch. Often called the "congressional watchdog," GAO examines how taxpayers' dollars are used and provide Congress and government agencies with purposeful, reliable information to help government save money and operate effectively. GAO provides Congress, heads of state, and the public with timely, factual, impartial information that can be used to improve governance and save billions of dollars of the taxpayers. The agency is headed by the Comptroller General, who is appointed to a 15-year term. The long tenure of the Comptroller General gives GAO a continuity of leadership that is rare within government.

The Budget and Accounting Act created GAO in 1921 because federal financial management was in disarray after World War I. GAO was formed to investigate all matters related to the use of public funds. Until the end of World War II, GAO primarily checked the legality and adequacy of government expenditures. After World War II, as government responsibilities and programs grew, so did GAO. The act also requires GAO to report on the findings and recommend ways to increase economy and efficiency in government spending. The focus of GAO shifted toward helping Congress monitor executive branch agencies' programs and spending.

GAO support Congress in meeting its constitutional responsibilities, and help improve the performance and ensure the accountability of the federal government. It provide Congress with timely information that is objective, fact-



based, nonpartisan, non-ideological, and balanced. Accountability, integrity, and reliability: GAO's mission core values allow it to demonstrate that its work is independent, objective, and accurate. GAO operate under strict professional standards of review and referencing; all facts and analyses in its work are thoroughly checked for accuracy. In addition, its audit policies are consistent with the Fundamental Auditing Principles (Level 3) of the International Standards of Supreme Audit Institutions.

### STRATEGIC PLANNING & PERFORMANCE

GAO produces a strategic plan, a performance plan, and an annual performance and accountability report with information comparable to that reported by executive-branch agencies.

### GAO's Strategic Plan, 2018-2023

Every 4 years, GAO publishes a strategic plan for serving the Congress that considers the full scop e of operations of the federal government, as well as emerging and future trends that may affect the government and society as a whole. This plan, presented in the three documents outlined below, describes GAO's goals and strategies to support the Congress in meeting its constitutional responsibilities and to ultimately improve the safety, security, and well-being of the American people.

The three components of GAO's 2018-2023 strategic plan are:

- 1. Strategic Plan Goals and Objectives form the foundation of the plan and outline long-term strategies and goals.
- 2. Plan's Key Efforts detail the near-term priorities and substantial bodies of work that will contribute to the accomplishment of performance goals.
- 3. Trends Affecting Government and Society provide the strategic context for plan through an exploration of eight trends having a major impact on the nation and its government. This includes emerging issues in global and national security, the federal government's fiscal condition, demographics, science and technology, and preparing the workforce of the future. Foresight tools



### U.S. Government Accountability Office (GAO)

like trend analysis are essential to help inform decision making and long-term planning to serve the Congress.

### Performance Plan

GAO's annual performance plan covers activities for each of the strategic goals and is included with budget submission each year.

In the spirit of the Government Performance and Results Act, theannual performance plan informs the Congress and the American people about what GAO expect to accomplish on their behalf in the coming fiscal year. It sets forth plan to make progress toward achieving strategic goals for serving the Congress and the American people. This framework not only shows the relationship between the strategic goals and strategic objectives, but also shows major themes that could potentially affect the work.

### Performance and Accountability Report

GAO's Performance and Accountability Report describes the agency's performance measures, results, and accountability processes for the fiscal year. Our 2019 work yielded a record \$214.7 billion in financial benefits for the federal government—a return of about \$338 for every dollar invested in GAO. In assessing its performance, the actual results are compared against the targets and goals that were set in the annual performance plan and performance budget to help carry out strategic plan.

### **Peer Reviews**

Every 3 years, independent organizations perform a peer review of GAO's system of quality control for work done under generally accepted government auditing standards to determine whether it is suitably designed and operating effectively. For the most recent review, the peer review team commented on the very high quality of the GAO work they examined, noting various institutional strengths that enable GAO to provide Congress and the public with reliable and objective information.



The peer review includes a review of audit documentation, tests of functional areas, and staff interviews. The peer reviewers brief the Executive Committee, management, and staff members. Beginning with the 2010 peer review, an international team from supreme audit institutions performs the peer review of both performance and financial audits. Previously, the review of performance audits was conducted separately from the review of financial audits (an international certified public accounting firm conducted the peer review of financial audit engagements).

### THE YELLOW BOOK

The Generally Accepted Government Auditing Standards, also known as the Yellow Book, provides a framework for conducting high-quality audits with competence, integrity, objectivity, and independence.

The Yellow Book is used by auditors of government entities, entities that receive government awards, and other audit organizations performing Yellow Book audits. It outlines the requirements for audit reports, professional qualifications for auditors, and audit organization quality control. Auditors of federal, state, and local government programs use these standards to perform their audits and produce their reports.

### THE RED BOOK

Principles of Federal Appropriations Law, also known as the Red Book, is GAO's multi-volume treatise concerning federal fiscal law. The Red Book provides text discussion with reference to specific legal authorities to illustrate legal principles, their application, and exceptions. These references include GAO decisions and opinions, judicial decisions, statutory provisions, and other relevant sources.

### THE GREEN BOOK

Internal controls enable an entity to run its operations efficiently and effectively, report trust-worthy information about its operations, and comply with applicable laws and regulations. Standards for Internal Control in the Federal Government,



### U.S. Government Accountability Office (GAO)

known as the "Green Book," sets the standards for an effective internal control system for federal agencies.

### **FRAUDNET**

GAO maintains the Fraud Net hotline to support accountability across the federal government. If anyone suspects fraud, waste, abuse, or mismanagement of federal funds, Fraud Net helps report these allegations to the right people. After reviewing the allegations and obtaining additional information as necessary, Fraud Net will refer these allegations to federal, state, or local agencies or departments, as appropriate. Fraud Net also supports congressional investigations and audit requests, provides audit and investigative leads to GAO staff, and offers support to government at all levels for establishing and operating hotlines.

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# Annexure-III COMPTROLLER AND AUDITOR GENERAL (C&AG) OF INDIA

### **CONSTITUTION OF INDIA**

The Comptroller and Auditor General (C&AG or CAG) is the Supreme Audit Institution (SAI) of India. The CAG is the Constitutional Authority.

Article 148 of the Constitution provides for appointment of C&AG of India by the President by letter of authority under his hand and seal and shall be removed from office only in the same manner and for the same reasons as Judge of the Supreme Court. The Constitution also provides that the remuneration and other conditions of service and functions of the CAG may be determined by Parliament. Pursuant to these provisions, Parliament enacted the CAG (Duties, Powers and Conditions of Service) Act, 1971 (DPC Act) to determine the working conditions of the CAG and to determine its functions and powers. In exercising the powers conferred on the DPC Act, as amended from time to time, the CAG has laid down the Audit and Accounting Regulations, 2007, which provide a comprehensive management framework for both accounting and audit activities.

### **CAG's AUDIT MANDATE**

The CAG's mandate for conduct of audits is enshrined in the Constitution of India, the DPC Act and certain laws enacted later by Parliament and the State Legislatures.

Article 149 of the Constitution of India provides that the CAG shall perform such functions and exercise those powers in relation to the accounts of the Union and the State and any other authority or body that may be determined or under any law passed by Parliament. Article 151 further provides that CAG reports relating to the accounts of the Union shall be submitted to the President, who shall submit



them to each House of Parliament and that reports relating to State accounts must be submitted to the President, who will cause them to be brought before the State Legislature. In addition, Article 279 provides that 'revenue' in relation to any tax or service means total receipts minus the collection costs and that revenue from any tax or occupation, or any portion of any tax or duty, or related area shall be determined and certified by the CAG, whose certificate will be final. In addition, Schedule Six of the Constitution of India also seeks to audit the accounts of the Regional Councils of autonomous regions and Districts.

The general provisions pertaining to audit by C&AG are detailed in Sections 13 to 21 and 24 of the DPC Act. There are also other laws that provide for the audit of certain entities by the CAG. The audit authority of the CAG extends to agencies or officials such as the corporations set up under specific statutes, stateowned enterprises, autonomous entities such as corporations, trusts or non-profit corporations, societies, urban and rural entities and any other body or authorities for which the audit may be delegated. CAG under the law. To fulfill its mandate, C&AG of India conduct financial audits, compliance monitoring, performance audit and/or integration of such audits.

### **CAG's DUTIES IN RELATION TO AUDIT**

As mentioned above, the general provisions pertaining to audit are contained in Sections 13 to 21, 23 and 24 of the DPC Act. Section 13 of the Act authorizes the CAG to undertake audit all expenditure incurred out of Consolidated Fund of India, each State and each Union Territory with Legislature and to determine whether the funds shown in the accounts as disbursed were legally available and applicable to the service or purpose for which they are used or charged and whether the expenses are in accordance with the authority under their jurisdiction. Such expenditure audits are comprehensive and includes:

A. Audit against provision of funds: The completeness and accuracy of the accounts is examined and it is seen that there is proper voucher or proof of payment. Audit against provision of funds is aimed at ascertaining whether the monies shown in the accounts as having been disbursed, were legally



### Comptroller and Auditor General (C&AG) of India

available for and applicable to the service or purpose to which they have been applied or charged.

- B. Regularity audit: The Appropriation Accounts of the Union Government and of such State Governments and Union Territory Governments, whose accounts are compiled and kept by the respective Governments, are prepared by the Governments concerned and audited by the Comptroller and Auditor General. The Appropriation Accounts of other State Governments are prepared by the Comptroller and Auditor General from the accounts compiled and kept by him. It is seen in audit that the expenditure conforms to the authority which governs it.
- C. Propriety audit: Audit also examines the propriety of executive action and looks beyond formality of the expenditure to its wisdom, faithfulness and economy and brings to the notice of the Legislature, cases of waste, losses, extravagant and nugatory expenditure and thus challenges any improper exercise of discretion, and comments on propriety of expenditure.
- D. Efficiency-cum-Performance audit: Efficiency-cum-performance audit is a comprehensive appraisal of the progress and efficiency of the execution of development programmes. In this audit, an attempt is made to assess and appraise to what extent, social and economic objectives sought to be achieved have been achieved and at what cost; and to examine how far the agency or department is adequately discharging its financial responsibilities and ascertain whether the schemes are being executed and their operations conducted economically.
- **E. Systems audit:** "In systems audit, organization and systems that regulate authorization, recording, accounting and internal controls are evaluated and quality and performance standards are monitored.

Section 13 of the Act also requires the C&AG to audit all transactions of the Union, States and Union Territories with Legislature, concerning Contingency Funds and Public Accounts and to audit all trading, manufacturing, profit and loss accounts and balance sheet and other subsidiary accounts maintained

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### **Technical Guide on Performance Audit**

in any department of the Central Government, State Government or a Union Territory.

### PREREQUISITES FOR FUNCTIONING OF CAG

The pre-requisites constitute the principles that are essential for the functioning of SAI, India and for proper practice of public sector auditing within the SAI.

- a. Independence
- b. Accountability and Transparency
- c. Fthics
- d. Quality assurance

### **ELEMENTS OF PUBLIC SECTOR AUDIT**

Public sector audit is important for public administration, as public service management is a matter of trust. The responsibility for managing public funds in accordance with the intended objectives is vested in the entity or the public representative. Public sector audit enhances the confidence of the target users by providing independent and purposeful information and assessment of deviations from accepted standards or principles of good governance. All public sector assessments have the following same basic characteristics:

- a. The three parties
- b. Subject matter, criteria and subject matter information
- c. Types of engagement

### PRINCIPLES OF PUBLIC SECTOR AUDITING

Audit is a cumulative and interactive process. The principles of public sector audit include the general standards applicable to SAI India employees as auditors, and which are essential for carrying out the audit of all forms of public sector entities. Principles to be observed by all auditors are divided into two distinct groups.

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- General Principles
  - Ethics and Independence
  - Professional Judgment, Due Care and Skepticism
  - Quality Control
  - Audit Team Management and Skills
  - Audit Risk
  - Materiality
  - Documentation
  - Communication
- Principles related to the audit process
  - Planning an audit
  - Conducting an Audit
  - Reporting and Follow-up

### **CAG's AUDITING STANDARDS 2017**

The CAG discharges his constitutional functions through the Indian Audit and Accounts Department. The Indian Audit and Accounts Department has been continuously striving to upgrade and update its auditing practice as part of its overall endeavor to achieve professional excellence. The Auditing Standards were first brought out by the Department in 1994, first revised in 2002, and again revised in 2017.

The CAG's Auditing Standards constitute the next layer of the audit governance framework and set out the professional standards of auditing for the organization as well as for its personnel - the individual auditors.

These standards establish the norms which are applicable to all public sector audit engagements, irrespective of their form or context. These standards



incorporate the Prerequisites for the functioning of Supreme Audit Institutions and Fundamental Auditing Principles of the International Standards of Supreme Audit Institutions, which have been suitably adapted with due consideration of the audit mandate and rules applicable to SAI India. These standards determine the audit procedures that shall be applied in audit and constitute the criteria or benchmark against which the quality of audit results is evaluated. These Auditing Standards were made effective from 1 April 2017. All audit engagements as per the audit mandate of SAI India on or after this date shall be conducted in accordance with these standards.

In addition to the general principles relating to the basic audit concepts and those relating to the audit process applicable to all types of public sector audits constituting the general standards, this document also contain Specific Standards applicable to financial, compliance and performance audits.

### STANDARDS ON PERFORMANCE AUDIT

Performance audit is an independent, objective and reliable examination of whether public sector undertakings, systems, operations, programmes, activities or organizations are operating in accordance with the principles of economy, efficiency and effectiveness.

The main objective of performance audit is to constructively promote economical, effective and efficient governance. It also contributes to accountability and transparency.

Performance audit promotes accountability by assisting those charged with governance and oversight responsibilities to improve performance through an examination of whether:

- a. decisions by the legislature or the executive are efficiently and effectively prepared and implemented and
- b. taxpayers or citizens have received value for money.

It does not question the intentions and decisions of the legislature but examines whether any shortcomings in the implementation of the law and framing of



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regulations have prevented the specified objectives from being achieved. Performance audit focuses on areas in which it can add value for citizens, and which have the greatest potential for improvement. It provides constructive incentives for the responsible parties to take appropriate action.

Performance audit promotes transparency by affording all stakeholders an insight into the management and outcomes of different public sector activities. It thereby directly contributes to providing useful information to the citizen, while also serving as a basis for learning and improvements.

### **Perspective of Performance Audit**

Performance audits undertaken by SAI, India may have overlaps with other audit types (or combined audits) and in such circumstances the following points shall be considered:

- a. Elements of performance audit can be part of a more extensive audit that also covers compliance and financial auditing aspects.
- b. In the event of an overlap, the primary objective of the audit shall guide the auditors as to which standards to apply.

In determining whether performance considerations form the primary objective of the audit engagement, it should be borne in mind that performance auditing focuses on activity and results rather than reports or accounts, and that its main objective is to promote economy, efficiency and effectiveness rather than report on compliance.

### Type of Engagement and Assurance

Performance audit is a direct reporting mechanism in which the auditor evaluates or examines the matter through an interactive process. Performance audit is not expected to provide an overview, as is the case in respect of opinion on the financial statements but provides assessment with regard to organization's performance on economy, efficiency and effectiveness. The extent of achievement of economy, efficiency and effectiveness can be reflected in the audit report on various activities:



- a. it can be from a holistic view of economic factors, efficiency and effectiveness, where the purpose of the audit, the examination of various areas, the evidence obtained, and the findings allow for that conclusion;
- b. or by providing specific information on a list of points to include the purpose of the audit, the questions asked, the evidence obtained, the method used to determine, findings and conclusions. The performance auditing is designed to provide reasonable assurance and a set of conclusions and, if appropriate, a single conclusion and to present a balanced report by considering all relevant theories.

### **Audit Risk**

Auditors shall actively manage audit risk, which is the risk of obtaining incorrect or incomplete conclusions, providing unbalanced information or failing to add value for users.

In performance audit, many topics are sensitive and complex. The risk that the audit will fail to add value differs from the possibility of not being able to provide new information or ideas to the risk of ignoring important aspects and as a result of not being able to provide users of audit report with sufficient information or recommendations that can make a real contribution towards better performance. Significant risk factors may include inability to perform a comprehensive or indepth analysis, lack of access to high quality information, incorrect information (e.g. due to fraud or incorrect practices), inability to record all findings correctly, and failure to collect or deal with the most relevant issues. Auditors therefore have to manage risks. Coping with audit risk is inherent throughout the process and method of performance audit.

### Selection of topics

Auditors shall select audit topics through the strategic planning process by analyzing potential topics and conducting research to identify risks and problems.

Determining which audits will be pursued is usually part of SAI India's strategic planning process. If appropriate, auditors shall contribute to this process in their



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respective fields of expertise. They may share knowledge from previous audits, and information from the strategic planning process may be relevant for the auditor's subsequent work. In this process, auditors shall consider that audit topics are sufficiently significant as well as auditable and in keeping with SAI India's mandate.

The topic selection process shall aim to maximize the expected impact of the audit while taking account of audit capacities (e.g. human resources and professional skills). Formal techniques to prepare the strategic planning process, such as risk analysis or problem assessments, can help structure the process but need to be complemented by professional judgment to avoid one-sided assessments. Performance auditing generally requires that audit-specific, substantive and methodological knowledge be acquired before the audit is launched ("prestudy").

### Audit design

Auditors shall plan the audit in a manner that contributes to a high-quality audit that will be carried out in an economical, efficient, effective and timely manner and in accordance with the principles of good project management.

In planning an audit, it is important to consider:

- a. the background knowledge and information required for an understanding of the audited entities so as to allow an assessment of the problem and risk, possible sources of evidence, audit ability and the significance of the area considered for audit, consultation with stakeholders, if necessary, including domain specialists or experts in the field to build up proper knowledge
- the audit objectives, questions, criteria, subject matter and methodology (including techniques to be used for gathering evidence and conducting the audit analysis);
- c. the necessary activities, staffing and skills requirements (including the independence of the audit team, human resources and possible external expertise), the key project timeframes and milestones and the main points for control.



The planning phase will also include research work aimed at building knowledge, evaluating various designs for audit, and assessing whether the required data is available. This may include compiling and comparing data from different sources, drawing initial conclusions and combining findings to form hypotheses that can be tested, if necessary, against additional data. This makes it easier to choose the most appropriate test method. Technology and data analysis can be fully utilized to enable this process.

### **Audit approach**

Auditors shall choose a result, problem or system-oriented approach, or a combination thereof, to facilitate the soundness of audit design.

It determines the nature of the examination to be made and defines the necessary knowledge, information, data and the audit procedures needed to obtain and analyse them. Performance auditing generally follows one of three approaches:

- a. a system-oriented approach, which examines the proper functioning of management systems, e.g. financial management systems;
- a result-oriented approach, which assesses whether outcome or output objectives have been achieved as intended or programmes and services are operating as intended;
- c. a problem-oriented approach, which examines, verifies and analyses the causes of particular problems or deviations from criteria.

All three approaches can be pursued from a top-down or bottom-up perspective. Top-down audits concentrate mainly on the requirements, intentions, objectives and expectations of the legislature and central public sector. A bottom-up perspective focuses on problems of significance to people and the community.

### **Audit procedures**

When planning the audit, the auditor shall design the audit procedures to be used for gathering sufficient and appropriate audit evidence.



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The methods chosen shall be those which best allow evidence to be gathered in an efficient and effective manner. This can be approached in several stages:

- a. deciding on the overall audit design (which questions to ask, e.g. explanatory/ descriptive/evaluative);
- b. determining the level of observation (e.g. looking at a process or individual files) and methodology (e.g. full analysis or sample);
- c. specific data-collection techniques (e.g. analysis of records, questionnaire, interview or focus group).

Data-collection methods and sampling techniques shall be carefully chosen. While the auditors shall aim to adopt best practices, practical considerations such as the availability of data may restrict the choice of methods. It is therefore advisable that planning be flexible and pragmatic. For this reason, performance audit procedures shall not be overly standardized.

### **Quality Control**

Auditors shall apply procedures to safeguard quality, ensuring that the applicable requirements are met and placing emphasis on appropriate, balanced and fair reports that add value and answer the audit questions.

In the conduct of performance audits the following specific issues need to be addressed:

- a. Performance audit is a process in which the audit team gathers a large amount of audit-specific information and exercises a high degree of professional judgment and discretion concerning the relevant issues. This must be taken into account in quality control. The need to establish a working atmosphere of mutual trust and responsibility and provide support for audit teams shall be seen as part of quality management.
- b. In performance auditing, even if the report is evidence-based, well-documented and accurate, it might still be inappropriate or insufficient if it fails to give a balanced and unbiased view, includes too few relevant viewpoints



- or unsatisfactorily addresses the audit questions. These considerations shall therefore be an essential part of measures to safeguard quality.
- c. As audit objectives vary widely between different audit engagements, it is important to define clearly what constitutes a high-quality report in the specific context of an audit engagement. General quality control measures shall therefore be complemented by audit-specific measures.

No quality control procedures at the level of the individual audit can guarantee high-quality performance audit reports. It is equally important for auditors to be – and remain – competent, motivated and willing to innovate. Control mechanisms shall therefore be complemented by support, such as on-the-job training and guidance for the audit team.

### Reporting

### Auditors shall strive to provide audit reports which are comprehensive, convincing, timely, reader-friendly and balanced.

To be comprehensive, the report shall include information about the audit objective, audit questions and answers to those questions, the subject matter, criteria, methodology, sources of data, any limitations to the data used, and audit findings. The audit findings shall be put into perspective. It shall clearly answer the audit questions or explain why this was not possible. To be convincing, it shall be logically structured and present a clear relationship between the audit objective, criteria, findings, conclusions and recommendations. All relevant arguments shall be addressed. The report shall explain why and how problems observed in the findings hamper performance in order to encourage the audited entity or the user to initiate corrective action. It shall, where appropriate, include recommendations for improvements to performance. The report shall be as clear and concise as the subject matter permits and phrased in unambiguous language. As a whole it shall be constructive, contribute to better knowledge and highlight any necessary improvements.



### Comptroller and Auditor General (C&AG) of India

Being balanced means that preparation of the report needs to be impartial in content and tone. In preparing a balanced and constructive report the auditors shall strive to present (i) findings objectively and fairly. The facts shall be presented and interpreted in neutral terms, avoiding biased information or language that can generate defensiveness and opposition (ii) different perspectives and viewpoints. Where different interpretations of the evidence can legitimately be made, they need to be presented to ensure fairness and balance and (iii) both positive and negative aspects and give credit where it is due.

### **Recommendations**

Auditors shall seek to provide constructive recommendations that are likely to contribute significantly to addressing the weaknesses or problems identified by the audit.

Recommendations shall be well-founded and add value. They shall address the causes of problems and/or weaknesses. However, they shall be phrased in such a way that avoids truisms or simply inverting the audit conclusions and they shall not encroach on the management's responsibilities.

It shall be clear who and what is addressed by each recommendation, who is responsible for taking any initiative and what the recommendations mean i.e. how they will contribute to better performance. Recommendations shall be practical and be addressed to the entities which have responsibility and competence for implementing them. Recommendations shall be presented in a logical and reasoned fashion. They shall be linked to the audit objectives, findings and conclusions. Together with the full text of the report, they shall convince the reader that they are likely to significantly improve the conduct of public sector operations and programmes, e.g. by lowering costs, simplifying administration, enhancing the quality and volume of services, or improving effectiveness, impact or the benefits to society.



### Follow-up

Auditors shall follow up previous audit findings and recommendations wherever appropriate. Follow-up shall be reported appropriately in order to provide feedback to the legislature together, if possible, with the conclusions and impacts of all relevant corrective action.

Follow-up refers to the auditors' examination of corrective action taken by the audited entity, or another responsible party, on the basis of the results of a performance audit. It is an independent activity that increases the value of the audit process by strengthening the impact of the audit and laying the basis for improvements to future audit work. Follow-up is not restricted to the implementation of recommendations but focuses on whether the audited entity has adequately addressed the problems and remedied the underlying situation after a reasonable period of time.

When conducting follow-up of an audit report, the auditor shall concentrate on findings and recommendations that are still relevant at the time of the follow-up and adopt an unbiased and independent approach. Follow-up results may be reported individually or as a consolidated report, which may in turn include an analysis of different audits, possibly highlighting common trends and themes across a number of reporting areas.

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# Annexure-IV MANUFACTURING PERFORMANCE MANAGEMENT

Manufacturing performance management strategies have reduced inventory and manufacturing cycle times, and more complete and on-time shipments of better quality products. Yet there seems to be no relief in sight from the constant pressure of mandated cost reductions and higher expectations of customer service.

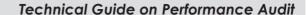
Customers continue to demand lower prices; however customers' demand for shorter lead times has now become the number one driver in manufacturing performance management strategies. Cost reductions remain the focus of all enterprises and many still struggle with data collection and cultural issues.

Better performers are getting better while poorer performing companies make little progress, so the performance gap is widening.

### FOUR ELEMENTS OF PERFORMANCE

- Planning: scheduling, sequencing or load leveling production
- Execution: instruction, inspection or status
- Control: plan vs. actual status, alerting, re-planning or corrective action
- Analysis: effectiveness or improvement opportunity identification

With very few exceptions, real-time integration across these 4 elements has been either non-existent or a custom effort, loosely coupled at best. All companies would benefit from a more focused effort on closing the loop between the first three of these critical elements, developing a philosophy of continuous improvement and promoting a culture where change is welcomed and embraced.





### BEST IN CLASS PRACTICES HAVE MADE SIGNIFICANT PROGRESS IN

- Reducing manufacturing cost
- Shrinking manufacturing cycle times
- Improving schedule compliance
- Satisfying demand for more complete and on-time shipments

### **BUSINESS IMPROVEMENT CATEGORY**

- Reduced Operating Expenses
- Increased Facility Utilization
- Increased Operational Availability
- Increased High Value Product Production
- Reduced Environmental Incidents

### PROCESS AND ORGANIZATION

"While all manufacturing companies understand the dynamics associated with the 3 dimensions of manufacturing performance – price, quality and delivery – best performing manufacturers recognize a fourth dimension – interoperability – as a necessary component of the success equation. Successful orchestration of the complexities of operating across an extended supply chain is dependent upon a company's ability to effectively and efficiently communicate, collaborate and inter-operate with its customers and suppliers.

The first step in this journey toward productive collaboration is to make this standard practice internally.

The purpose of collaboration is to shorten lead times, improve responsiveness and drive out costs, including the cost of inventory. Most top performers today have embraced **Lean manufacturing** philosophies which focus on the following tenants:

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### **Manufacturing Performance Management**

- **Specifying value** from the customer's perspective.
- **Identifying the value stream** or set of actions required to bring product or solution to the customer; from concept to product launch, from order-to-delivery, and from raw materials to finished product.
- **Making it flow** by converting from departments and batches to product teams that redefine the work of departments.
- "Pulling" from the customer back by making exactly what the customer wants just when the customer wants it; let the customer "pull" the product as needed rather than pushing product, often unwanted, into inventory.
- **Striving toward perfection** is an ongoing process of reducing effort, time, space, cost, and mistakes.

### **CHALLENGES**

Data collection and culture issues present the greatest challenge to companies seeking to make significant strides in managing manufacturing performance.

Without timely collection of data, performance deviations surface much too slowly to allow for immediate corrective action and effective communication. And without adequate data, it is hard to justify continued support and further investment.

While businesses cannot operate competitively today without ERP, ERP alone cannot deliver Best in Class results, and home grown or custom developed systems typically cannot keep pace with mature packaged applications. In the back office, ERP is an effective tooling for planning, recording, documenting and reporting on the business, yet ERP is not necessarily reflective of reality in manufacturing

Best in Class companies have either fully implemented or are now implementing planning systems (applications which schedule, sequence or load level production), although many still rely heavily on ERP and home grown or custom developed systems.



### RECOMMENDATIONS FOR IMPROVENT OF PERFORMANCE MANAGEMENT

- Measure Key Performance Indicators (KPIs) more frequently quality
  deviations should be monitored and measured in real time; operational
  metrics such as shipment performance and schedule compliance should
  be measured daily; metrics that measure assets such as inventory should be
  measured weekly.
- Balance cost reduction efforts against customer satisfaction as acceptable
  customer service levels are achieved, work specifically to reduce inventory
  levels.
- Use available technology for data collection, operational efficiency and visibility –integrated manufacturing and operations intelligence platforms, as well as adaytics and other business intelligence tools.

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### ACCUMINISTRATION OF THE PROPERTY OF THE PROPER

### **Technical Guide on Performance Audit**

### References

The material in this Technical guide on Performance audit is largely drawn from the following documents/websites:

- i. "Guidance Note on Performance Appraisal Report", November 2012 Reference: Institute of Cost Accountants of India's Website: <a href="https://icmai.in/ProfessionalDevelopment/PD Publications.php">https://icmai.in/ProfessionalDevelopment/PD Publications.php</a>, S No 28, Page no 21-39. Of "Guidance Note on Performance Appraisal Report"
- ii. "Performance Auditing Guidelines 2014" issued in June 2014by the Comptroller & Auditor General (C&AG) of India's Websitehttps://cag.gov.in/uploads/guidelines/PA-Guidelines2014-05de4f757ca0964-06548165.pdfand "Practice Guide for Planning Individual Performance Audits" issued by the Comptroller & Auditor General (C&AG) of India's Website: <a href="www.cag.gov.in">www.cag.gov.in</a>, "CAG's Auditing Standards 2017' issued by the Comptroller & Auditor General (C&AG) of India's Website: <a href="https://cag.gov.in/en/page-cag-s-auditing-standards-2017#">https://cag.gov.in/en/page-cag-s-auditing-standards-2017#</a>
- iii. Various Principles, Standards, Guides, and other documents issued by the U.S. Government Accountability Office (GAO) <u>www.gao.gov</u>
- iv. Fundamental Principles of Auditing (ISSAI 100), Performance Audit Principles (ISSAI 300 -399), Performance Audit Standards (ISSAI 3000-3899), Performance Audit Guidelines (ISSAI 3000-3100), Supplementary Performance Audit Guidance (GUID 3900-3999) and other documents issued by the International Organization of Supreme Audit Institutions (INTOSAI). Source: www.intosai.org
- v. Performance Auditing Guidelines issued by the European Organization of Supreme Audit Institutions (EUROSAI) Website: <a href="https://www.eurosai.org">www.eurosai.org</a>
- vi. Performance Audit Manual issued by the Directorate of Audit Quality Control of European Court of Auditors in September, 2017 Website: <a href="https://www.eca.europa.eu/">https://www.eca.europa.eu/</a>
- vii. Performance Audit Manual issued by the Pacific Association of Supreme Audit Institutions (PASAI)
- viii. Performance Audit Handbook issued by the English language sub-group of African Organization of Supreme Audit Institutions (AFROSAI-E) Website: <a href="www.afrosai-e.org.zagov.in">www.afrosai-e.org.zagov.in</a>
- ix. Performance Audit Guide issued by Arab Organization of Supreme Audit Institutions (ARABOSAI) in August, 2017 Website: <a href="https://www.arabosai.org">www.arabosai.org</a>



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### Internal Auditing and Assurance Standards Board (IAASB) The Institute of Cost Accountants of India

(Statutory body under an Act of Parliament)

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