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No. 66 November 2019

BEST PRACTICES IN FINANCIAL MANAGEMENT

Accrual Accounting for Defence

Sumati Kumar



INSTITUTE FOR DEFENCE
STUDIES & ANALYSES
रक्षा अध्ययन एवं विश्लेषण संस्थान

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PREFACE

As an officer of the Indian Defence Accounts Service, I was placed with the Defence Economics and Industry Centre at the Institute for Defence Studies and Analyses (IDSA) for research work in related areas. Accrual accounting was chosen as a topic for my study, since it is an emerging field in which not much headway has been made in defence. This mode of accounting brings about better presentation of financial statements and related data leading to more informed decision making and ensuring accountability vis-à-vis public spending. The enormous scale of operations and multifarious expenditure in defence necessitates a continuous effort to prioritize its resource utilization. Accrual accounting then becomes the tool to either validate or correct the course of action. It is, therefore, an area of interest to all stakeholders, namely, the Ministry of Defence, Defence Accounts Department, the Services and IDSA.

Accrual accounting is still at a pilot stage in many government entities in India. Government departments that have started preparing accrual-based financial statements are doing so as a parallel to the cash-based statements. Indian Railways has approached its accounting reforms in a methodical way and has prepared accrual-based financial statements in selected areas of functioning. Defence is also in the process of initiating an exercise to prepare asset registers, which would be a stepping stone to further progress in this direction. The Government Accounting Standards Advisory Board (GASAB), established in 2002, under the aegis of the Comptroller and Auditor General (C&AG) of India, delineated the 'Operational Framework and Road Map' in 2007. This prescribed different stages for transformation to accrual system of accounting and provided guidance for pilot studies to be undertaken in the selected departments and ministries of the union and the state governments.

Recently, the GASAB has approved a 'Guidance Note on Accounting for Fixed Assets'. At present, government organizations do not have complete information about the fixed assets which they possess. Many concepts of accrual accounting have been introduced by this note of

the C&AG (GASAB), such as capital works-in-progress, threshold, leased assets, the recognition and de-recognition of an asset, heritage assets, intangible assets and strategic assets. Guidelines for classification of assets have been clearly laid out. It has also spelt out the measurement of cost at initial recognition for preparation of fixed assets register, and measurement of cost subsequent to initial recognition. This is a step towards incorporating the accrual concepts into the cash accounting system.

This monograph begins with an overview of the government accounting system in India, which is presently on cash basis, and the anticipated transition to accrual-based accounting in future. Along with this, the advantages and disadvantages of the cash system and the accrual system of accounting are also discussed in Chapter 1. Chapter 2 examines the best practices and learnings from financial management of a sister organization in India, the Ministry of Railways, and its accounting reform. The next chapter (Chapter 3) is devoted to a review of best practices and lessons learnt from various countries which are migrating to accrual accounting, and includes case studies giving some aspects of reform as seen in the United Kingdom and Australia (being major reformers), Canada, France, China, Sri Lanka and Chile. The monograph concludes (Chapter 4) by examining the progress of implementation of accrual accounting in defence in India; possible changes in financial statements that would accompany the transition to accrual accounting in this sector; advantages that would emerge as a result of adopting accrual accounting in defence, and suggestions for an implementation strategy for accrual accounting for defence in India. Both primary as well as secondary sources of information have been referred to while preparing this monograph.

I feel immensely privileged to contribute to the publications at IDSA, and I would like place on record my gratitude to IDSA for providing me with this opportunity. Several senior functionaries of the government, from the ministries of defence, railways, finance, the CAG (GASAB), CGA and ICAI have provided invaluable insights to me thereby aiding me in writing this monograph. Finally, I would like to thank the two anonymous domain specialists for their inputs and comments on the draft manuscript which has led to the finer contouring of this publication.

LIST OF ABBREVIATIONS

AR	Accounting Reforms
ARF	Accounting Research Foundation
C&AG	Comptroller and Auditor General
CBAC	Cantonment Board Account Code
CDA	Controller of Defence Accounts
CEOs	Chief Executive Officers
CGA	Controller General of Accounts
CGDA	Controller General of Defence Accounts
CGR	Contraloria General de la Republica
CPM	Chief Project Manager
CRIS	Centre for Railway Information System
CSD	Canteen Stores Department
CSER	Comprehensive Scope Evaluation Report
DGDE	Directorate General Defence Estates
EU	European Union
FAR	Fixed Asset Register
FRBM Act	Fiscal Responsibility and Budget Management Act
GAAP	Generally Accepted Accounting Principles
GASAB	Government Accounting Standards Advisory Board
GDP	Gross Domestic Product

HAG	Higher Administrative Grade
HM	Her Majesty's [Treasury]
ICAI	Institute of Chartered Accountants of India
ICWAI	Institute of Cost Accountants of India
IDAS	Indian Defence Accounts Service
IDSA	Institute for Defence Studies and Analyses
IFA	Internal Financial Advisor
IFAC	International Federation of Accountants
IFRIC	International Financial Reporting Interpretations Committee
IFRS	International Financial Reporting Standards
IGAS	Indian Government Accounting Standards
IGFRS	Indian Government Financial Reporting Standards
IMF	International Monetary Fund
IPAS	Integrated Payroll and Accounting System
IPSAS	International Public Sector Accounting Standards
IT	Information Technology
MIS	Management Information System
MoF	Ministry of Finance
NACAS	National Advisory Committee on Accounting Standards
NAO	National Audit Office
NGOs	Non-Governmental Organizations
NIDEM	National Institute of Defence Estates Management

NMAM	National Municipal Accounting Manual
NR	Northern Railway
NWR	North Western Railway
OECD	Organisation for Economic Co-operation and Development
OFB	Ordnance Factory Board
PHOD	Principal Head of Department
PPP	Public–Private Partnership
PwC	Pricewaterhouse Coopers
RAB	Resource Accounting and Budgeting
RBI	Reserve Bank of India
RCF	Rail Coach Factory
SAG	Senior Administrative Grade

ON ACCRUAL ACCOUNTING

INTRODUCTION

The priorities of public financial management the world over have undergone a major shift in modern times. There are legitimate concerns about fiscal prudence, identifying resources for public scheme funding, efficiency in public expenditure, effectiveness of the delivery system, cost of service delivery and ability to support welfare programmes. Above all, the need for transparency and good governance has taken centre stage. Initiatives like the Fiscal Responsibility and Budget Management (FRBM) Act (2003) and outcome budget reflect the shift in the thinking of policymakers in India. Similarly, financial reporting must also synchronize with the shift in priorities of public finance. Accounting is no longer seen merely as a mechanism of systematic recording of receipts and expenditure, or a means of budgetary and expenditure control. It is evolving to become an important tool of planning and financial management, which enables the management to make cogent and informed decisions.

Government accounting too must reflect true and fair value of the financial position of the organization. A comprehensive, robust and transparent accounting system is a must for any government. The financial, budgetary, accounting and management systems have seen many changes, including experimentation in areas like performance budgeting, zero-based budgeting, planning programming budgeting systems, etc. As a part of the reform measures, there is a worldwide emphasis on transition to principle-based standards and many governments have migrated from cash to accrual-based system of accounting. While some countries have shifted towards accrual-based accounting systems fully, others have shifted partly or with some variation.

CASH-BASED ACCOUNTING SYSTEM IN INDIA

In India, government accounting and financial reporting has a long history, going back several centuries. As of now, our accounting system derives its form and substance from cash-based accounting procedures. Although this system has its advantages, especially for its ease of use, it has been realized over a period of time that there is scope for improving the content and quality of the accounting system to reflect the financial health of government more accurately. At present, it is not only the government and the Parliament that require accounting information, but so do other important stakeholders, such as citizens, analysts and national and international financial institutions. In this era of information revolution, a citizen or a social activist may want information to assess the performance and financial health of governments in delivering public services and running social benefit schemes.

Article 150 of the Constitution of India provides for maintenance of the government accounts ‘in such form as the President may, on the advice of the Comptroller & Auditor General, prescribe’. The executive powers to prescribe the form and content of accounts are delegated to the Controller General of Accounts (CGA), Ministry of Finance (MoF), under the Allocation of Business Rules. In exercise of these powers, Government Accounting Rules have been framed,¹ which lay down the general principles of government accounting.

As government accounts are maintained on a cash basis, expenditures are recorded when there is outgo of cash and receipts are recorded on inflow of cash. Movements in the government cash balance resulting out of such payments and receipts, which are kept with the Reserve Bank of India (RBI), are also simultaneously recorded in the account books. Thus, the main accounts are records of cash flows in and out of Consolidated Fund and Public Account, and the effect/impact of

¹ Available at www.cgaindia.org/html/book3/chapter1.htm (last accessed on 13 May 2019).

these cash flows on the government's liquidity position. In terms of the constitutional provisions, government accounts are maintained in three parts: (i) Consolidated Fund of India; (ii) Public Account; and (iii) Contingency Fund.

Consolidated Fund of India transactions are classified using a functional classification divided into functions and programmes with a six-tier hierarchical structure² as follows: (i) Major Head—representing a major function of the government; (ii) Sub-Major Head—representing a sub-function of the government; (iii) Minor Head—representing a programme of the government; (iv) Sub-Head—representing a scheme; (v) Detailed Head—representing a sub-scheme; and (vi) Object Head—for the object of expenditure (for example, salaries and office expenses).

As of now, the accounts in India follow an annual budgetary cycle of April to March. At the end of this period, final audited accounts are presented to the Parliament in the form of Appropriation Accounts and Finance Accounts. The Appropriation Accounts³ provide information on compliance by the government departments with the appropriations provided by the Parliament under various demands for grants.⁴ Explanations are provided for significant variance (both excesses and saving) between both the original demand and final appropriation and final appropriation and actual expenditure. The Finance Accounts (the main accounts of government) contain statements showing functional head-wise distribution of government receipts and disbursements during the year.

Budget documents use fiscal deficit to show government's revenue–expenditure gap and to measure its dependence on non-government

² In defence, the system of classification has five tiers. See para 35(a) of Defence Accounts Code, at <http://www.cgda.nic.in/accounts/Defence%20Account%20code%202014%20150714.pdf> (last accessed on 13 May 2019).

³ Available at www.cgaindia.org/html/app.htm (last accessed on 13 May 2019)

⁴ Available at www.parliamentofindia.nic.in/ls/intro/p4.htm (last accessed on 13 May 2019)

savings for funding its expenditure. These documents focus on flows into and out of Consolidated Fund, deficit and its financing from various sources. As per the provisions of the FRBM Act, 2003,⁵ additional disclosures of assets held by the government, including non-financial assets, arrears of tax and non-tax revenues and guarantees are required to be made every year along with the budget. Thus, the financial reporting system is designed to cater mainly to facilitate budgetary compliance and management of cash resources. The supplementary information disclosed in the Finance Accounts and in the budget documents provides some useful insight into government's financial position.

Departmental commercial undertakings—such as an industrial factory—which form a part of the operations of the government under a given department, are required to maintain separate capital, trading and profit and loss accounts. These accounts are accrual based and are maintained by the departmental authorities on a pro forma basis outside the general accounts of government. Pro forma accounts are primarily meant for providing internal inputs on costs incurred in production or in service delivery.

EMERGENCE OF ACCRUAL ACCOUNTING IN INDIA

The shift to 'accrual-based accounting' in government was initially considered by the Committee on Fiscal Responsibility Legislation.⁶ The Committee recommended greater disclosure of accrual-based information in the budget documents. Subsequently, the 12th Finance Commission⁷ recommended a gradual shift in a phased manner to

⁵ Available at mof.gov.in/reports/FRBM_report.pdf (last accessed on 13 May 2019).

⁶ The Committee was headed by E.A.S. Sarma, the then Secretary, Economic Affairs, Government of India. It submitted its report in July 2000.

⁷ The 12th Finance Commission was constituted by the President of India on 1 November 2002 to give recommendations on specified aspects of centre–state fiscal relations during 2005–10. The Commission submitted its report covering all aspects of its mandate on 17 December 2004.

accrual accounting, which has been accepted by the government.⁸ The international trend is also for governments to migrate in this direction and India cannot chart a different course.⁹

The report of the 12th Finance Commission brings out the problems of the present cash-based system and describes some of the possible improvements in the accounting system once the shift to accrual takes place:

The cash based system of accounting lays emphasis on transactions vis-à-vis the budget. It does not record and report complete financial information required for management of resources. It does not provide a full picture of the government's financial position at any given point and the changes that take place over time as a result of government policy. The system fails to reflect government's liabilities such as accrued liabilities arising due to unfunded pensions and superannuation benefits and current liabilities arising from a disconnect between commitments and payments. Similarly, the present (cash-based) system is unable to track current assets as well as non-financial assets. It does not provide information on the assets held by the government, much less the cost of holding and operating these assets and the impact of current consumption on the stock of assets. Another major limitation is its inability to record the full cost of providing services by the government's departments or the commitments made by the government regarding payment in future years. ...

⁸ See https://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=597919. The Commission recommended a move by the centre towards introduction of accrual accounting and standardization of accounting classification down to the Object Head for all states to improve fiscal management. The details are given in Chapter 14 of the report.

The government accepted this recommendation in principle. The Government Accounting Standards Advisory Board (GASAB) in the office of the Comptroller and Auditor General (C&AG) of India was asked to draw a detailed road map and operational framework for its implementation.

⁹ Dawn Cowie, 'The Long Road to Accrual Accounting', Global Government Forum, 26 June 2017, at <https://www.globalgovernmentforum.com/the-long-road-to-accrual-accounting/> (last accessed on 13 May 2019).

Compared to the cash based system, the system of accrual accounting recognizes financial flows at the time economic value is created, transformed, exchanged, transferred or extinguished, whether or not cash is exchanged at that time. It is different from cash based system in that it records flow of resources. Expenses are recorded when the resources (labour, goods and services and capital) are consumed, and income when it is earned, i.e. when the goods are sold or the services rendered. The associated cash flows generally follow the event after some time and may or may not take place during the same accounting period. Thus, in addition to cash flow, unpaid consumptions (payables) and unrealized income (receivables) are also recorded. Resources acquired but not fully consumed during an accounting period are treated as assets (inventory and fixed assets). Payments made for acquisition of inventory are included in the operating cost for the period in which it is consumed. Payments made for acquisition of physical assets, that have future service potential, are amortized over the entire useful life of the asset by charging depreciation. The system of accrual accounting, thus, inter alia, allows better cost-price calculations, records capital use properly, distinguishes between current and capital expenditures, presents a complete picture of debt and other liabilities and focuses policy attention on financial position, as shown in the whole balance sheet not just cash flows or debts. It gives a comprehensive measure of cost of various services, takes care of disinvestment receipts and provides adequate information of both fiscal balance and net worth and their changes over time. Information, as would be available under accrual accounts, constitutes an essential input for bodies like finance commissions, not only in assessing the revenue requirements of the centre and states vis-à-vis the available resources, but also in appraising their fiscal performance with a view to assigning due credit to the government, which has performed well and providing disincentives to those, which fail to measure upto expectations.¹⁰

¹⁰ Available at www.fincomindia.nic.in/.../oldcommission.../fcreport/Report...12th_Finance_Commission/1 (last accessed on 13 May 2019).

The 13th Finance Commission expressed its satisfaction with the attention accorded to the issue of transition to accrual accounting by the relevant authorities and the extant actions taken by the central, state and local governments.¹¹ The approach adopted for the transition was that local bodies would adopt accrual accounting first. This initiative would then slowly ‘bubble up’ to the state and central governments.

CASH VERSUS ACCRUAL SYSTEM OF ACCOUNTING

Table 1.1 A Comparison of Accrual and Cash Accounting Systems

S. No.	Basis	Accrual Accounting	Cash Accounting
1.	Recognition	Recognition of transactions or other events in the reporting period in which they occur, irrespective of whether cash has been received or paid.	Recognition of the financial effects of transactions or other events only when cash is received or paid.
2.	Focus	It is more comprehensive and focuses on total resources, not just cash. It provides information about assets, liabilities, equity, income and expenses and changes in them.	It focuses on cash and does not provide information about assets, liabilities, equity, income and expenses.
3.	Measure of financial performance	The focus on total resources provides a better and more comprehensive measure of financial performance and facilitates resource allocation.	The emphasis on cash provides a narrow assessment of financial performance.

Source: Author

As evident from Table 1.1, cash accounting is a system in which transactions are recorded when there is actual flow of cash. Revenue is recognized when it is actually received. Expenditure is recognized when

¹¹ Available at www.fincomindia.nic.in/ShowContentOne.aspx?id=28&Section=1 (last accessed on 13 May 2019).

the outflow of cash takes place. There is no concept of the 'due' part of the transaction. Such a system of accounting is simple to understand, demanding little skill on the part of the accountant. The entire focus is on cash management and the recognition trigger for recording the transaction is the flow of cash.

Accrual accounting, on the other hand, is a system in which transactions are recognized as soon as a right to receive revenue and/or an obligation to pay a liability is created. Thus, the events are entered in the books of accounts when they become due. The focus is always on the recording of flow of resources, which may be labour, services, goods or capital. In this method, the related cash flow may take place later than the actual event has taken place and it may or may not take place in the same accounting period.

Advantages and Disadvantages of Cash-based Accounting System

The main advantages of cash-based accounting system are as follows:

1. It is based on simple principles that are relatively easy to comprehend and implement.
2. It requires lesser skill level for implementation and practice.
3. It involves little subjectivity in measurement of the events.
4. It provides a very good measure of compliance with the appropriations.

The main disadvantages of cash-based system of accounting are as follows:

1. The scope is limited. It only emphasizes compliance with the budget and does not record/report complete information required for management of resources. It does not provide a complete picture of the financial position. Information on assets and liabilities are not available for fixed assets (building, land, machineries and others).
2. It does not provide information about capital works-in-progress, like roads, bridges, dams and power plants.
3. It does not measure the long-term impact of current events. The system ignores government's accrued liabilities, such as unfunded

pension schemes and other superannuation benefits, including earned leave. A complete picture is not available about government liabilities, for example, bills payable, pensionary commitments, depreciation for replacement of asset and interest due. It does not give complete information on current assets, such as service charges, outstanding royalty, tax arrears and fees.

4. It does not provide an adequate measure of the operating performance and the intrinsic financial position of government/department/organization/unit. The unit cost as well as total cost of services provided by departments of the government like health, water supply, education and transportation are not ascertainable because, in this method, these costs are not recorded. Depreciation and interest are also not included in this method. Thus, this method does not provide the total cost of services as it is based only on cash elements.
5. There is incomplete information on liabilities in this system. As for expenses, those which are incurred in a particular period get recorded in a subsequent period when cash is paid. Therefore, the cost of services is borne later, even by a subsequent generation in some cases. Consequently, the government may be unknowingly under-assessing/undercharging for the services provided by it.
6. Certain transactions get overlooked, such as in cases where expenditure is already incurred but payment is not made, and may not get recorded. Salary, supplies made, telephone charges, overdue interest and also revenue earned but cash not received for services delivered, licence fees, etc., are examples.
7. It gives an incorrect picture of income received as advance tax receipts are recognized as income.
8. The concept of 'matching' (expenses of a specific period be set off against the revenue of the same period) does not exist here.
9. No information is made available about contingent assets and contingent liabilities which could turn into committed ones on account of guarantees given by the government.
10. No information is made available about accounting policies on the basis of which financial statements are being prepared.

Thus, it can be seen that this method does not reveal the real picture of the government's financial performance and position.

Advantages and Disadvantages of Accrual System of Accounting

The main advantages of accrual-based accounting system are as follows:

1. Assessment of financial performance can be correctly done by reflecting surplus/deficit, as all expenses, whether paid or not, and all incomes, whether received or not, get duly accounted for.¹²
2. Information is available on whether income streams are adequate to meet short- and long-term liabilities so that their early payment can be managed keeping in view their nature of payment and the period.
3. It gives complete information on expenses, which helps to assess cost consequences of policies and making possible a comparison with alternative policies. Information about calculation of subsidy can be taken out from the accounts, which can help in its rationalization. By this, the best policy can be adopted and optimal use of scarce resources can be ensured.
4. Liquidity position of the government can be assessed better. As it gives comprehensive information on the financial position (assets and liabilities) of government, financial decisions are seen not just from the point of view of cash outgo or inflow, but from their impact on the asset–liability position of the government and future funding requirements of assets. This makes it possible to plan for their timely maintenance and replacement.¹³

¹² Available at www.aicte-india.org/downloads/accrual_accounting_210812.pdf (last accessed on 13 May 2019).

¹³ GASAB, 'Primer on Accrual Accounting', available at gasab.gov.in/gasab/documents.aspx (last accessed on 13 May 2019).

5. It gives information on account of contingent assets and contingent liabilities such that the risk associated with the guarantees issued can be better assessed by the user of the financial statements.
6. It improves over cash accounting by inclusion of accrued expenses and revenues (receivables and payables), physical assets, capital works-in-progress and depreciation, pension liabilities and provisions in the accounting system.
7. It discloses the accounting policies used in the preparation of financial statements for better understanding and appreciation. Accrual accounting system generally adopts double-entry book keeping system.
8. Since comprehensive information on current stock of assets and liabilities are available in accrual accounting system, financial decisions can be taken from the point of view of future sustainability of the programmes.

There are certain requirements, however, that need to be fulfilled before accrual accounting can be implemented. Accounting policies which determine principles of recognition, disclosure and measurement need to be defined. This will ensure that decisions are taken on the basis of well-defined rules. Simultaneously, audit would need to be strengthened to ensure compliance. Each transaction will have a corresponding entry and thus audit will take on a bigger role to ensure checks and balances.

There are also some disadvantages of accrual system of accounting. The perceived disadvantages of this system of accounting relate to: the substantial costs of transition from cash-based accounting to accrual-based accounting (which involves expenditure on skill upgradation of employees and upgradation of information technology [IT] infrastructure); time taken for the transition (which may extend to several years); and the utility of the emerging financial statements (which require accounting professionals for adequate utilization). However, these are matters of debate among scholars and practitioners and it is perhaps too early to identify and quantify huge discernible benefits from accrual accounting, even in countries who have made this complex transition.

It would be useful to see how the outcome can be entirely different on applying accrual accounting in government accounting as against cash

accounting, by way of an example.¹⁴ The way in which pension obligations are treated is particularly informative in this example. On one hand, cash accounting ignores the Rs 30 lakh pension obligation (in present value terms) until the pension payments are actually made, usually many years later. Conversely, accrual accounting immediately recognizes the obligation as an expense.

A Week in the Life of a Small Government¹⁵

The following example considers a week in the life of a small government (See Figure 1.1). The effects of the following five transactions are shown in the financial statements below:

- a. Corporate taxpayers are required to make tax payments of Rs 100 lakh to the government, but only Rs 90 lakh is received. At the end of the week, Rs 10 lakh is outstanding.
- b. The government sells fixed assets for Rs 100 lakh. The assets had been valued at Rs 100 lakh.
- c. Government salary payments are made during the week. In addition to paying employees Rs 60 lakh, the government is obligated to provide for their pensions when they retire. Employees earned Rs 30 lakh in future pension rights during the period.
- d. The government settles a long running legal dispute. It agrees to pay Rs 30 lakh to the plaintiff in 2 months time.
- e. All the government's borrowings are held in foreign exchange. The exchange rate declined by 2 per cent during the week.

¹⁴ The example has been adapted from Sarath Lakshman Athukorala, 'Government Accounting: Accrual Budgeting and Accounting in Government and its Relevance for Developing Member Countries', Asian Development Bank. See Sarath Lakshman Athukorala and Barry Reid, *Accrual Budgeting and Accounting in Government and its Relevance for Developing Member Countries*, Asian Development Bank, 2003, at <http://hdl.handle.net/11540/5447> (accessed on 13 May 2019).

¹⁵ Ibid. All figures in the original are given in million dollars and are substituted here by lakh rupees.

Figure 1.1 - Accrual Accounting Information vs Cash Accounting Information

Cash Accounting Information		Accrual Accounting Information					
		Operating Statement		Balance Sheet			
				Opening	Changes		
Receipts		Revenue		Assets			
Taxation	a 90	Taxation	a 100	Bank	50	130	180
Asset sales	b 100		100	Receivables	20	a 10	30
				Fixed assets	700	b -100	600
					770	40	810
Payments		Expenses		Liabilities			
Salaries	c -60	Personnel cost	c 90	Litigation	..	d 30	30
Cash Surplus	130	Foreign exchange loss	e 10	Pension Liability	..	c 30	30
		Litigation expenses	d 30	Borrowings	500	e 10	510
			130		500	70	570
Bank balance		Accrual Deficit	-30	Net Assets	270	-30	240
Opening	50						
Closing	180			Equity and			
				Reserves	270	-30	240

Source: Adapted from Athukorala, no. 14.

The example indicates that cash accounting would report Rs 130 lakh surplus, while the accrual operating statement shows a deficit of Rs 10 lakh. The difference arises from the fact that cash accounting ignores the pension liability (Rs 30 lakh), the asset already had a value equal to its sale price (Rs 100 lakh), the exchange rate change (Rs 10 lakh), the judgment liability (Rs 30 lakh), and the taxes to be received (Rs 10 lakh).

ACCOUNTING STANDARDS AND GOVERNMENT ACCOUNTING STANDARDS ADVISORY BOARD (GASAB)

Accounting standards¹⁶ are designed to provide standardized frameworks within which the financial position of a government can be assessed. With good accounting standards, no one can manipulate or abuse the accounting information to provide a misleading picture of what is really happening in the national economy.

¹⁶ See Institute of Chartered Accountants of India, available at https://www.icaai.org/post.html?post_id=8660 (last accessed 13 May 2019).

The GASAB was constituted by the Comptroller and Auditor General (C&AG) of India on 12 August 2002 for the union and states under Article 150 of the Constitution of India.¹⁷ The main objective of setting up the GASAB was to establish and improve standards of government accounting and financial reporting in order to enhance transparency and financial accountability. Apart from this, it also formulates and proposes standards that improve the usefulness of financial reports based on the needs of the users. It covers significant areas of accounting and financial reporting that can be improved through the standard-setting process and improves the common understanding of the nature and purpose of information contained in the financial report.

The GASAB has been working on migration to accrual basis of accounting in union and states in India. Any decision to change the basis of accounting from cash to accrual would essentially be based on a decision of the President of India on the advice of C&AG under constitutional provisions. Since there was a need for accounting framework and accounting standards on accrual basis to facilitate pilot studies and research efforts on migration to accrual accounting at union and state level, it was decided to develop accrual basis accounting standards alongside cash basis standards.

The standards based on cash-based accounting system are termed as Indian Government Accounting Standards (IGAS) and become mandatory for application by the union, states and the union territories with legislature, from the date as notified by the government. The standards based on accrual-based accounting system are termed as Indian Government Financial Reporting Standards (IGFRS) and are recommendatory for pilot studies from the date approved by GASAB. The standards developed in consultation with stakeholders are forwarded to the MoF for consideration and notification in accordance with provisions of the Constitution, after which they would become mandatory. However, these standards would actually be used only after

¹⁷ GASAB, available at www.gasab.gov.in/ (last accessed on 13 May 2019).

actual migration to accrual accounting takes place at the centre and in the states.

The following IGFRS have been approved by GASAB and are under consideration of the Government of India:

1. IGFRS 1: Presentation of Financial Statements
2. IGFRS 2: Property, Plant and Equipment
3. IGFRS 3: Revenue from Government Exchange Transactions
4. IGFRS 4: Inventories
5. IGFRS 5: Contingent Liabilities (other than guarantees) and Contingent Assets: Disclosure Requirements

CONCLUSION

Individual road maps have been drawn by different ministries of the Government of India for transition to accrual accounting. Pilot studies have been conducted by the Ministry of Railways and Department of Posts for introduction of accrual accounting. However, as the Finance Accounts of the Government of India are presented by including transactions of all civil ministries, Ministry of Railways, Department of Posts and Ministry of Defence, there is a requirement for transition to accrual accounting by all the departments/ministries. The switchover to accrual accounting for the Government of India as a whole can happen only when all ministries/departments are ready to do so. This requires extensive preparation by them. Different ministries and departments in the central and state governments are at varying stages of preparedness. At present, in the Ministry of Defence in India, the Ordnance Factories, Canteen Stores Department and Cantonment Boards are in the process of preparing financial statements on accrual accounts in parallel with the cash accounts. Gradually, the armed forces as well as other sub-organizations within Ministry of Defence in India would need to develop accrual accounting alongside their traditional cash accounts.

Internationally, it has been considered desirable to have accounting systems with better disclosures which give enhanced degree of accountability and better asset management. Governments have different objectives as compared to commercial entities and therefore accrual

accounting as being followed in commercial entities cannot be followed in its entirety in government accounting. Modified accrual accounting (which combines aspects of accrual-based accounting with aspects of cash-based accounting) is a means to shift to accrual accounting and a way forward. Countries such as Canada, the United States (US), the United Kingdom (UK), Australia, New Zealand and Spain are in different stages of migration to accrual accounting because of this reason. Not just individual countries, but the United Nations (UN) and other organizations in the UN System have decided to adopt International Public Sector Accounting Standards (IPSAS) and have commenced the migration process from United Nations System Accounting Standards (UNSAS) to IPSAS.

ACCOUNTING REFORMS IN INDIAN RAILWAYS

Accounting Reforms shall act as an engine of self-sustainable growth by providing timely, high quality and meaningful financial information to various stakeholders through right accounting, right costing and right outcomes.¹

BACKGROUND

Indian Railways, as all other departments of Government of India, maintains its Finance Accounts under cash-based accounting in the form and format mandated by the CGA and C&AG.² For a number of decades, the existing system has met the needs of correct accounting of receipts, payments and budget reporting. In the post-2000 era however, due to emerging need of expansion of rail network, technological upgradation of operating and technical systems and related enhanced safety imperatives, the requirements for financial resources went up appreciably for the railways. The various committees formed in the post-2000 period highlighted the need for improved financial reporting as per generally accepted accounting principles (GAAP)³ for various stakeholders.

¹ The three pillars of accounting reforms are: 'Right Accounting: Accrual Accounting'; 'Right Costing: Performance Costing'; and 'Right Outcome: Outcome Budgeting'. See sureshprabhu.net/wp-content/uploads/2017/09/Accounting-Reforms-17Aug2017.pdf (last accessed 14 May 2019).

² See Indianrailways.gov.in (last accessed 14 May 2019).

³ Generally accepted accounting principles (GAAP) refer to a common set of accepted accounting principles, standards, and procedures that companies and their accountants must follow when they compile their financial statements. GAAP is a combination of authoritative standards (set by policy

Accounting reforms (AR) were first mentioned in the railway budget speech of 2003–04 (February 2003). Paragraph 40 of the 2003–04 budget speech of the then railway minister stated:

To transform the Indian Railways into a customer-oriented organization, it is proposed to improve its accounting system. In this regard, it is planned to review the existing accounting policies and practices and to introduce fully computerized accounting and Management Information System so as to generate costing data on passenger and freight services on commercial lines⁴.

The Accounting Reforms Directorate in the Railway Board was set up soon after. Thereafter, the AR project was sanctioned in the works programme in 2004–05.

In the year 2006, a consortium of AR consultants was appointed to study the existing accounting system and make recommendations for a state-of-the-art accounting system which not only met the requirements of GASAB for cash-based government accounting but also included aspects of accrual-based commercial accounting. The terms of reference (ToR) included an improved cost accounting system for train, section and route costing and related profitability analysis for informed managerial decision-making in the railways.

The AR consultants submitted their final recommendations in July 2010. This report was examined by various directorates of the Railway Board and the observations and issues raised were communicated to AR consultants for course correction. The final report was seen to have a number of limitations and gaps with reference to the ToR. Several rounds of consultations were held with the AR consultants for aligning

boards) and the commonly accepted ways of recording and reporting accounting information. It improves the clarity of the communication of financial information. See <https://www.investopedia.com/terms/g/gaap.asp> (last accessed 14 May 2019).

⁴ See http://www.indianrailways.gov.in/railwayboard/uploads/directorate/finance_budget/Previous%20Budget%20Speeches/2003-04.pdf (last accessed 14 May 2019).

the recommendations to ToR and Indian Railways' existing systems. However, the matter could not be finalized. Subsequently, in December 2014, Accounting Research Foundation (ARF) of the Institute of Chartered Accountants of India (ICAI) was engaged to conduct a pilot study with the following objectives:

1. to validate the AR report of AR consultants; and
2. to conduct a pilot study for introduction of accrual accounting at a division/zone.

Under the agreed arrangements, ICAI-ARF was to compile the accounts of a division/zone and a workshop under accrual accounting mode, and also draw up financial statements, that is, profit and loss account and balance sheet, for them as a profit and cost centre. The ICAI-ARF was also required to compile a detailed accrual accounting manual for the purpose of implementation of accrual-based commercial accounting in other zonal railways. As per the action plan and road map, after completion of pilot studies at field units and compilation of an accrual accounting implementation manual, the same was to be extended to all the zonal railways in the coming four years. Meanwhile, seminars, workshops and training programmes on accrual-based accounting were being organized in various railway units and training institutes to sensitize the railway officers and officials of all departments on conceptual and applied aspects of accrual accounting.⁵

IMPLEMENTATION OF ACCOUNTING REFORMS

The Accounting Reforms in the Indian Railways took further shape in the Budget speech (Para 88) of 2015-16 by the then Railway Minister:

Madam Speaker, we have limited resources and thus must ensure that all public expenditure results in an optimal outcome. We, therefore, intend to set up a working group to modify the present system of accounting, to ensure tracking of expenditure to desired

⁵ A National Conference on Accounting Reforms in Indian Railways was held in December 2016 in New Delhi.

outcomes. The data on costing would be available online including costs incurred on constructing, augmenting, maintaining and operating railway lines. This would also help in undertaking post commissioning evaluation studies.⁶

The minister's statement delineated three integral modules of AR project in the Indian Railways, which are summed up concisely by Bibek Debroy and Kishore Desai in their "Note on Status of Accounting Reforms in Indian Railways"⁷ as follows:

1. *“Module 1: Accrual Accounting:* Creating financial statements on accrual-based accounting to facilitate assessment of true and fair financial position of the Indian Railways and to bring transparency and clarity in the manner its accounts are represented.
2. *Module 2: Performance Costing:* This involves facilitating online availability of costing data by developing a performance costing framework that identifies appropriate cost and profit centres and allocates costs to such centres. Timely availability of this information would lend transparency and objectivity to management decisions on pricing, efficiency measurements and benchmarking, identifying investment priorities, etc.
3. *Module 3: Outcome Budgeting:* Linking outlays to well-defined outcomes in areas of operations, maintenance, procurement and infrastructure creation.

Linked to the above three components is the development of an integrated IT-based system, which would be implemented across the Indian Railways network. This IT system would interface with the existing applications (such as Passenger Reservation System, Freight Operations Information System and Integrated Payroll and Accounting

⁶ See [www.indianrailways.gov.in/railwayboard/uploads/directorate/finance_budget/Budget_2015-16/Railway_Budget_Speech_2015-16%20\(English\).pdf](http://www.indianrailways.gov.in/railwayboard/uploads/directorate/finance_budget/Budget_2015-16/Railway_Budget_Speech_2015-16%20(English).pdf) (last accessed 14 May 2019).

⁷ See Bibek Debroy and Kishore Desai, 'Note on Status of Accounting Reforms in Indian Railways', 2017, at <https://ideas.repec.org/p/ess/wpaper/id11586.html> (last accessed 14 May 2019).

System [IPAS]) and would provide smooth, secure and seamless integration for management information system (MIS) reporting.”⁸

The then minister for Railways gave further impetus to Accounting Reforms in his Budget speech of 2016-17 (Para 121[f]) by placing it on a mission mode, and stated:

Being a Government undertaking, IR does not follow practices in accounting which aid detailed assessment of unit costs. Though we are moving from single entry to double entry systems and from cash based to completely accrual based accounting, I do not consider them as great reforms. As a thriving commercial entity, we also want IR to go a step further and establish an accounting system where outcomes can be tracked to inputs. This is a structural change, which forms the bedrock of our transformation, as right accounting would determine right costing and hence right pricing and right outcomes. We intend taking up its implementation over Railways in a mission mode and complete the entire roll out in next few years.⁹

A dedicated project, “Mission beyond Book-Keeping” was initiated, where the mission director was termed as Advisor (AR). He was assisted by a director-level officer at Railway Board and a Chief Project Manager (CPM-AR) at Northern Railway. Further, AR cells were created at all zonal railways and production units. Regional project managers were also created at five regional hubs, namely, Delhi, Allahabad, Kolkata, Mumbai, and Secunderabad.

In February 2017, former Finance Minister Arun Jaitley, in his budget speech, stated: ‘As part of accounting reforms, accrual based financial statements will be rolled out by March 2019.’¹⁰

⁸ Ibid.

⁹ https://www.ibef.org/download/Rail_Budget_Speech_2016-17_Eng.pdf (last accessed 14 May 2019).

¹⁰ Para 80 (iii) <https://economictimes.indiatimes.com/news/politics-and-nation/union-budget-2017-full-speech-of-finance-minister-arun-jaitley/articleshow/56914259.cms> (last accessed 14 May 2019).

MODULE 1: ACCRUAL ACCOUNTING

The railways obtained the services of the ICAI–ARF to conduct a pilot study at North Western Railway (NWR) for introduction of accrual accounting in NWR. Similarly, with the aim to introduce accrual accounting and an upgraded costing system in a production unit, a pilot study was conducted at Rail Coach Factory (RCF) Kapurthala. Both these pilot studies were completed timely; and after the successful implementation of pilot, the same model was taken up for implementation across all zonal railways and production units.

The pilot projects led to the creation of fundamental enablers for developing financial accounts on accrual basis. These enablers included principles for creating fixed asset register (FAR), depreciation principles, guidelines for asset valuations where cost data is not available and so on.

The pilot project in North Western Railways has been completed in October 2016 and the following documents have emerged from this project:

1. accrual-based financial statements for NWR for the year ending 31 March 2015, including the opening balance sheet starting 1 April 2014, closing balance sheet as on 31 March 2015, profit and loss account for the year 2014–15 and cash flow statement for 2014–15;
2. notes to accounts and disclosures;
3. significant accounting policies for accrual-based financial statements of NWR; and
4. Accrual Accounting Implementation Manual for roll-out across Indian Railways, including zonal railways and production units.

These documents were circulated to all zonal railways for reference and guided roll-out of accrual accounting at respective zones. Further, the templates and guidelines for developing FARs had also been circulated to all zonal railways during the NWR pilot study, so that they may complete construction of their FARs by the time roll-out process was taken up.

The team of ICAI–ARF was instrumental in giving support to the Ministry of Railways at a crucial juncture, where important consultancy was made available to them in finalising the NWR and RCF pilot projects. Since they had already gained hands-on experience while working with the railways, they were further engaged to provide continued support in rolling out accrual accounting across the country in all zonal railways and production units. This included deployment of ICAI-ARF personnel at all zonal railways and production units, where they would work in tandem with the designated railway officials. They would also need to update and customise the CSER (Comprehensive Scope Evaluation Report) as per the individual requirements of each railway zone or production unit (for example, operating a suburban local train would necessitate a specific accounting treatment). Financial statements would be prepared and targeted trainings provided to the railway personnel.

As mentioned earlier, during the pilot studies at NWR Jaipur and RCF Kapurthala, the financial statements of a zonal railway and a production unit were prepared for the year 2014–15, which inter alia included the profit and loss account, balance sheet and cash flow statements of the entire zone and production unit. These financial statements were prepared on grafting basis, wherein the existing financial statements were the basis and additional information in respect of accrual elements were included. The same strategy was used during the roll-out of accrual accounting across the Indian Railways. In parallel, a concept paper on new chart of account was also developed to broaden the capabilities of the online accounting software, so that financial statements can be prepared by capturing data of accrual impact on transaction basis. This would do away with the delay in conversion of existing accounts to the desired format. However, the transaction-based methodology required the development of an IT-based application. Railways chose their own autonomous organization, the CRIS, for carrying out this important task.

Throughout the term of engagement, ICAI–ARF deployed more than 130 personnel and expert professionals across zonal railways, production units and Railway Board. The work was initiated in May 2017. A centralized IT utility was also developed for compilation of assets register and financial statement, besides monitoring of progress. An

expert group, headed by Amarjit Chopra, ex-Chairman of National Advisory Committee on Accounting Standards (NACAS) and ex-President ICAI, along with seven eminent professionals and four Indian Railways officials, was formed to address the policy issues and to guide and steer the roll-out process.

Currently, for long-term capacity building, training of officers and staff at the National Academy of Indian Railway, Vadodara, and Centralized Training Academy of Railway Accounts, Secunderabad, is being organized on a regular basis. In fact, more than 2,500 accounts personnel have been trained in accrual accounting in these institutes.¹¹

Issues Related to Implementation of Accrual Accounting

The ICAI–ARF prepared a CSER during the two pilot studies at NWR and RCF Kapurthala. This included the following tasks:

1. Comprehensive study of the existing accounting system for recording and processing of revenue and capital receipts and revenue and capital expenditure currently being followed.
2. Designing of formats of reporting, which implies capturing of data relating to fixed assets, current assets and current liabilities required for the purposes of accrual accounting.
3. Capturing accrual impact on financial statements.
4. Finalization of significant accounting policies.
5. Finalization of valuation norms for assets and liabilities.
6. Compilation of FAR.
7. Preparation of opening balance sheet as on cut-off date.
8. Compilation of financial statements for the financial year.
9. Preparation of Accrual Accounting Implementation Manual.

¹¹ Author's discussions with officers of the Railway Board.

10. Capacity building, hand-holding and trainings.
11. Identifying the gaps in implementing accrual accounting, and the impact those gaps might have on the proposed accrual accounting system.

This report clearly outlined the changes required for the implementation of accrual accounting, and also defined the way forward for actual implementation of accrual accounting. For example, in order to prepare the balance sheet of NWR Jaipur, the FAR of the zone had to be prepared. The fixed assets were identified and based upon categorization, the formats for collecting information relating to fixed assets for the purpose of compiling FAR were compiled. These formats were primarily designed on the basis of FAR formats of National Municipal Accounting Manual.¹² Regarding valuation of fixed assets, as per the GAAP, fixed assets were to be valued at 'historical cost', that is, at the value originally paid for it; however, in practice, these values may not be readily available. This is especially so in the case of older units of the railways where assets were acquired some 50 or even 100 years ago. Valuation of assets in such cases is more difficult. Therefore, as per the report, where cost was not available, valuation had to be done according to the methodology given in IGFRS 2 on Property, Plant and Equipment—drafted by GASAB for the purpose of accrual accounting and recommendatory in nature for all government departments that are shifting from cash-based system of accounting to accrual-based accounting system. The CSER also highlighted the need for significant accounting policies and notes to accounts based on the GAAP to enable conversion of the existing cash-based system of accounting into accrual-based system of accounting. All these were

¹² The Constitution (Seventy-fourth Amendment) Act, 1992 empowered the urban local bodies in India to function as local self-governments as the third tier of governance. With the view to further strengthening these urban local bodies in their financial management, the central government (Ministry of Urban Development) also developed guidelines for moving to a double-entry accrual-based accounting system through the introduction of a National Municipal Accounting Manual.

given shape by the high-powered expert group headed by Amarjit Chopra, along with eminent professionals and senior Indian Railways officials.

Introduction of accrual accounting entailed identification of outstanding liabilities under various works and stores procurement contracts. It also involved reconstruction of asset register in the requisite formats by all the field offices. The compliance of this requirement necessitated active involvement of all the executive branches. Ready cooperation of executive branch was essential for proper reconstruction of asset register of all the branches as the executive branches are the custodian of records pertaining to the assets that are spread across the field. For correct assessment of outstanding liabilities on account of contractual commitments, necessary cooperation was required from the activity field units, like Senior Section Engineer (SSE)/Permanent Way, SSE/Works, SSE/Signal, SSE/Traction Distribution and other technical supervisors and field officials, as these units are responsible for maintenance of the basic records and housekeeping for contract management. For correct valuation of inventories (including track material), material at site (both stock and non-stock) was required to be identified and accounted. This required inputs and active interface with all the executive branches.

A lot of ground was thus covered by the railways towards the introduction of accrual accounting. As a result, the railways successfully completed the work of preparation of FARs and opening balance sheet of individual railways as well as Indian Railways as on 1 April 2015, besides accrual accounting-based financial statements for 2015–16 and 2016–17, in February 2019, well before the target of 31 March 2019 fixed in parliamentary commitment by the finance minister in budget speech.

These statements have been shared with the MoF, Prime Minister's Office, GASAB and C&AG of India. Further, when this project was taken up, the Ministry of Railways had its own budget and a set of accounts of its own to be presented to the Parliament. The project envisaged recasting Indian Railways' accounts gradually on accrual basis. Now that the railway budget has been merged with the Union budget from 2017–18, the format of Indian Railways' accounts is

required to be in conformity with that of the other government departments. Therefore, the Ministry of Railways has also sought clarification on the MoF decision on shifting to accrual-based accounting so that future course of action may be planned accordingly. In the meantime, the railways has been advised to continue with the exercise of preparation of accrual-based financial statements as an additional set of accounts, apart from the mandatory cash-based government accounts as per constitutional provisions.

Measures are now being taken to initiate the second phase of AR, that is, performance costing, discussed next.

MODULE 2: PERFORMANCE COSTING

Parallel to the ongoing roll-out of accrual accounting across the Indian Railways setup, the Ministry of Railways has awarded the development of a detailed design framework of performance costing (Module 2) to the ICWAI. The unit for pilot study in this area is the Delhi Division of Northern Railway. A structure of integrated costing and accounting for pricing of different activities is sought to be created here, which aims at making costing data available online in real time. The aim thus is to design an information system with different access levels for categories of users to:

1. Provide information about various costs in key performance areas, namely, construction, augmentation, operations and maintenance.
2. Measure performance of each activity/line of business and line of service.
3. Measure costs, revenue and profitability of each of the following, but not limited to:
 - (i) passenger and freight traffic (for each class and each commodity);
 - (ii) train, section, gauge, traction, route, etc., including suburban train, EMUs(Electrical Multiple Unit), special trains, tourist/luxury trains, etc.;
 - (iii) production units, service units, utilities, etc.;
 - (iv) zone, division, field units, etc.;

- (v) locomotive, coach, wagon, etc.; and
- (vi) rail accidents, other abnormalities, etc.

The consultants have submitted Draft As-is-Report detailing existing costing system, which is under finalization in consultation with stakeholders. The consultants are now in the process of designing and developing an improved activity-based costing system in consultation with the stakeholders. Advisory groups, listed next, have been formed on NR to guide and assist the study:

1. An inter-departmental committee comprising Higher Administrative Grade (HAG) and Senior Administrative Grade (SAG)-level officers (FA&CAO, PCE, CCM, COM, CS TE, CEE and CMM)¹³ headed by the Principal Head of Department (PHOD).
2. A team of Junior Administrative Grade officers formed in Delhi division to coordinate with the consultants.

MODULE 3: OUTCOME BUDGETING

The railway minister, in his budget speech 2016–17, stated that right accounting would determine right costing and hence, right pricing and right outcomes. An advisory body was established vide Railway Board order no. ERB-I/2015/23/41, dated 19 October 2015. The ICAI was engaged to conduct a preliminary study and propose a draft concept paper on outcome budgeting in the Indian Railways. The concept paper was drafted by ICAI and submitted. Consequent to this, NR was asked to initiate a pilot study at the zonal level through its AR project team under guidance of PHOD committee formed in Headquarter, NR, and a working group formed under Additional Divisional Railway Manager, Delhi division of NR, formed for this

¹³ These stand for Financial Advisor and Chief Accounting Officer, Principal Civil Engineer, Chief Commercial Manager, Chief Operating Manager, Chief Signalling and Telecommunication Engineer, Chief Electrical Engineer, and Chief Material Manager, respectively.

purpose, besides engaging suitable consultants. Another pilot study was initiated on South Central Railway.

Outcome budgeting contemplated development of a design framework linking outlays with outputs and well-defined outcomes in the areas of operation, maintenance, safety, throughput enhancement, route decongestion, productivity gains, asset optimization, etc. However, outcome budgeting, which was part of this project initially, was later subsumed in the outcome budget of Government of India in view of the MoF's office memorandum dated 25 January 2017, which envisaged that all ministries have to present their outcome budget in a consolidated manner.

On the IT system front, CRIS was engaged for developing the integrated IT-based system for AR. This IT system would interface with the existing applications and would provide smooth, secure and seamless integration for MIS reporting. The CRIS had developed a computerized cash-based financial management system, that is, IPAS. Hence, its experience would be an added advantage while integrating data captured to produce cash-based accounts with that required for developing accrual accounting.

BENEFITS OF AR FOR THE INDIAN RAILWAYS

As far as the Government of India is concerned, the experience of the Indian Railways is very important in view of its complex and widespread operations, even as other departments are taking steps to migrate to accrual accounting. It is particularly of interest to defence, which is still in initial stages of attempting the additionality of accrual accounting.

It is hoped that the benefits achieved out of adopting accounting reforms may exceed the costs associated with it. Possible identifiable benefits to Indian Railways include: intelligible financial statements which stakeholders understand well; availability of activity-wise costing data; identification and elimination of inefficient costs; correct pricing and tariff decisions; improved resource management; availability of data and tools for implementation of cost-benefit analysis thereby enabling informed decision-making; ascertaining economic break-even points; and improving the reliability and integrity of financial data of Indian Railways.

As a result, the expected benefits in coming years would be: easy access to external borrowings with better interest and inflows; clarity in relation to profitability/feasibility of public–private partnership (PPP) projects; segment reporting will help generate competition and focus; cost data and analysis will be better facilitated; and overall, accounts will become ‘fairer and truer’. This would also provide better opportunities in terms of enhanced international investment. Successful implementation of accounting reforms would provide the Indian Railways immense consequential opportunities for expansion and modernization of the current rail system in India in the form of availability of adequate funding, enhanced stakeholder’s confidence, lower costing of products and services, and improvement of rail infrastructure and various products and services. At the same time, it is expected to generate an atmosphere of trust and improve brand building due to enhanced transparency, high quality accounting and a more comprehensive view of Indian Railways’ financial performance with enhanced comparability with other similar international entities.

Accounting reforms also present an opportunity for the Indian Railways to bring the organization closer to the best practices followed worldwide. In the long term, Indian Railways need to move to IGFRS/IPSAS to be part of the premium league following the best accounting practices worldwide.

CHALLENGES FACED BY THE INDIAN RAILWAYS IN IMPLEMENTATION

Implementation of accrual accounting in a government department has its own challenges.¹⁴ These challenges relate to commitment from leadership, change in management, changes in business processes, technological requirements, availability of adequate people at the required level and professionals having adequate expertise to successfully implement accrual accounting. Resistance to change is one of the biggest challenges in any organization, especially government organization.

¹⁴ Discussions with officers of the finance wing of the Indian Railways.

Implementation of accrual accounting is not just limited to adoption of new standards. Most of the challenges lie in implementing these changes from operations point of view, whether legal, business or otherwise.

Indian Railways did consider the above-mentioned challenges and then developed a strategy for implementing accounting reforms. The railways responded in the following ways. First, the key areas that were likely to be significantly affected by reforms were identified since these would need comprehensive adjustments when converting to accrual accounting. Second, careful planning was done so that the introduction of the additionality of accrual accounting would be successful. Third, major project risks that could lead to failure or delays were part of the thought process. Fourth, resources available to perform the transition to accrual accounting were kept aside. Lastly, steps were taken for capacity building to ensure accounting staff is fully conversant with the changes.

A clear strategy (road map) with realistic deadlines was created. Strong commitment of decision-makers also helped the process at every stage. A realistic budget for the reform was part of the commitment, which matched with the vision and long-term planning. An assessment was made of the technical capability and the capacity to comply. Shortfall in this capacity was made up by extensive training and capacity building, including investment in IT infrastructure. The timely preparation of very detailed regulations and instructions for pilot projects and for all-India use was part of the strategy. The aim was to clearly and methodically document all business processes. One of the key areas was information dissemination and clear communication of the transition plan to stakeholders. A careful review of first financial statements of selected entities was carried out. On the IT side, emphasis was given on quality of data through validations. Automatic controls were built in the system for data correctness check. Some tasks were outsourced to specialists. Their job further included on-site training. Thus, it can be seen that a reform of this magnitude and complexity necessitated extensive and adequate preparation and continuous effort on the part of Indian Railways.

Future challenge will be to ensure that the reforms stay on course. The following advice should be noted in this context:

It is therefore suggested that progress of various modules be regularly monitored at the highest levels of IR leadership. Appropriate actions need to be taken in case the leadership perceives risk of slippages at any point of time. It is further suggested that regular updates about implementation progress vis-à-vis the project plan and timelines be shared with other stakeholders...This mechanism would ensure that external stakeholders also stay tuned with the progress of such a critical reform that has the potential to transform the decision making framework for Indian Railways.¹⁵

This enormous effort on the part of Indian railways carries many lessons for defence, a sister organization. Taking cues from their experiences and strategy as given in this chapter (and further liaison with their authorities on selected areas) would be of great benefit to defence, reducing the lead time and costs for undertaking a reform of this nature.

¹⁵ Debroy and Desai, 'Note on Status of Accounting Reforms in Indian Railways', n. 7.

ACCRUAL ACCOUNTING AND FINANCIAL REFORM IN GOVERNMENT SECTOR IN COUNTRIES ACROSS THE WORLD

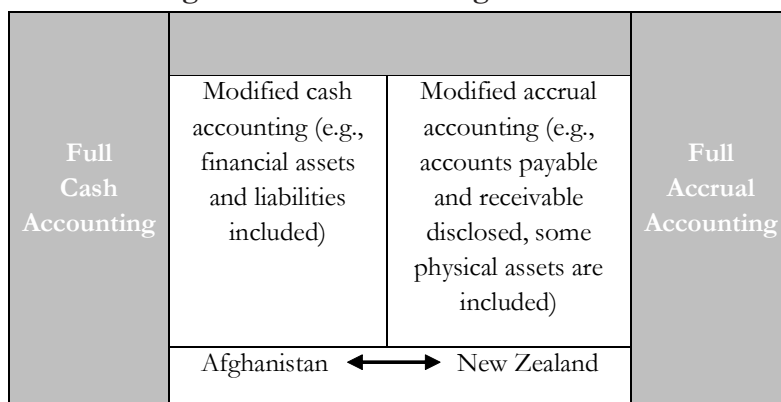
An accurate understanding of the financial position is essential for governments to ensure that policy decisions are based on correct information. Governments, all over the world, are held accountable for their financial performance by the public, legislators, non-governmental organizations (NGOs) and auditors. There is a great demand for better efficiency in public services and a more open government. Therefore, most countries have reviewed their financial management in the past few decades and have modernized their systems.

Accrual accounting was intended to be a part of financial management reforms worldwide. The intention was to assess the full cost of operations to give a fair view of financial condition, promote informed decision-making and meet external reporting requirements. In all departments, including that of defence, it would provide information to senior functionaries to take better decisions. It would strengthen expenditure management, enhance performance orientation and policy evaluation and improve the management of its strategic resources. It would also improve the awareness and management of costs since a better assessment of costs of policies and programmes of the departments, such as defence, would be available. Recording of assets and liabilities, including infrastructure and strategic assets of defence, as well as employee entitlements, would assist in assessing the full magnitude of resources that have been used up. Hence, management would be facilitated in planning analysis, organization and control.

With these aims in mind, several countries around the world have adopted accrual accounting as a key priority area for their financial reporting.¹ They have done so as they have realized that financial reporting in governments by accrual accounting is more comprehensive, more accurate and more transparent, as government's assets and liabilities are reported openly by this method. Coupled with this, better audit techniques and better standard-setting have simultaneously evolved in several countries. As accrual accounting is gradually being adopted, the government accounts are better audited and are published on the lines of well-defined accounting standards. Most of the countries are satisfied that there is enhanced transparency and accountability of their financial operations after the adoption and implementation of accounting reforms.

On the one hand, there are countries such as New Zealand which have completely switched over to accrual for their fiscal policy, budgeting and overall financial management. Then, there are others like Japan which are preparing accrual-based financial statements as a supplementary information to the usual cash-based annual financial statements as their official accounts; however, they do prepare cash-based accounts to comply with cash budgets. This is so because countries find it difficult to move from cash to accrual accounting as it is a complex process that requires commitment of time and resources. In the transition period in particular, some items may continue to be reported on cash basis, while others may be reported on accrual basis. Therefore, a country may not fall neatly into the category of either cash-based accounting or accrual-based accounting. As Figure 3.1 shows, the incremental approach involves making progress along the accounting continuum, as capacity and resources allow.

¹ Organisation for Economic Co-operation and Development (OECD)/ International Federation of Accountants (IFAC), *Accrual Practices and Reform Experiences in OECD Countries*, Paris: OECD, 2017, available at <http://dx.doi.org/10.1787/9789264270572-1-en> (last accessed 15 May 2019).

Figure 3.1 The Accounting Continuum

Source: Sarath Lakshman Athukorala and Barry Reid, *Accrual Budgeting and Accounting in Government and its Relevance for Developing Member Countries*, Manila: Asian Development Bank, 2003, p. 59.

Reforms need to progress at a pace determined by the differing needs and circumstances of each country. In developing countries, the incremental approach can involve the stages outlined in Table 3.1.

Table 3.1 Possible Stages in Adopting an Incremental Approach

Step	Effect
1. Develop a detailed action plan. The plan should consider likely legislative changes. It should also identify communication initiatives.	Will identify potential problems so that they can be addressed in a timely manner. It will also enable resource requirements to be identified.
2. Implement the cash-based IPSAS. Ensure that cash is recorded on a consistent basis. Most importantly, determined the reporting entity and reconcile all cash balances.	Will address several of the shortcomings of the cash accounting basis.
3. Alter reporting formats. Retain the cash accounting basis, but alter charts of account and reporting formats to reflect accrual principles.	Gives information preparers and users time to familiarize themselves with new reporting formats. It also enables information gaps to be easily identified.

4. Improve public enterprise accounting and reporting in line with private sector (accrual) accounting standards.	Likely to yield immediate gains through the identification of quasi-fiscal activities and government liabilities.
5. Supplement existing accounting information with accounts receivable and payables, thereby introducing basic double-entry book keeping and rudimentary accrual accounting.	Provide useful decision-making information or revenue and expense arrears, with minimal additional effort.
6. Identify new asset purchases. Begin categorizing new fixed asset purchases into appropriate expenditure categories (e.g, land, building, computer hardware and software).	Provides a sound basis for future identification, classification, valuation and depreciation of fixed assets.
7. Identify contingencies. Identify, value and disclose contingent liabilities and guarantees.	These are usually very important. Risk identification is the first stage in risk management.
8. Identify major assets and liabilities. Identify and value significant assets and liabilities, beginning with financial item and pension obligations.	It is likely that a few major assets and liabilities will comprise most of the balance sheet.
9. Identify other assets. Gradually identify and value other assets, including property and infrastructure assets.	It may take several years for an accurate register of fixed assets to be assembled.
10. Incorporate assets into the financial statements. Incorporate all assets, including fixed assets, into the financial statements and begin expensing depreciation.	Full financial statements are prepared.
11. Prepare accrual budgets and introduce accrual appropriations. Accrual accounting and reporting need to be firmly established.	It may take some years until the legislature accepts accrual appropriations, given that a country's appropriation system is constitutionally fundamental.

Source: Athukorala and Reid, *Accrual Budgeting and Accounting in Government and its Relevance for Developing Member Countries*, p. 60.

There are also some countries, such as the Netherlands and Germany, which have no plans to switch over to accrual accounting. Each country has devised its own methodology for disclosures and reporting, especially in defence matters. Defence assets and inventories are reported in the balance sheets of Australia, the US, the UK, Canada, France, Japan, Belgium, Hungary and others. Military services pensions are reported in the balance sheets of Australia, the US, Canada, Sweden, the UK and others.²

In most countries, the Ministry of Finance is the standard-setting authority, as is the case with India. Nearly all countries develop their own national accounting standards, but they use international standards (International Financial Reporting Standards [IFRS], IPSAS or statistics frameworks) as primary reference for making these standards. The annual financial reports are audited by supreme audit institutions (SAIs), which are independent public institutions, in most countries. Audit opinions are qualified in most countries because there are issues with inventory and in matters such as valuation of fixed assets of defence equipment. Overall, it is considered advisable to work with the audit institutions and obtain their cooperation in implementing accrual accounting so that the reliability of financial statements improves. Preparing accrual financial statements requires a high degree of skill and judgement. To ensure that financial statements provide a true and fair view, availability of high-quality audits in countries moving towards accrual accounting is extremely important. All the users must be assured that these statements are error free and are compliant to legal requirements, as well as relevant standards.

Costs associated with implementing accrual accounting vary across countries. It has been observed that IT system upgrades and consulting services appear to have taken up most resources in countries which have made the transition.

² 'OECD Accruals Survey (2016)', based on the answers of 28 countries that report on accruals or cash transitioning to accrual basis. See https://www.oecd-ilibrary.org/governance/accrual-practices-and-reform-experiences-in-oecd-countries_9789264270572-en (last accessed 15 May 2019).

CASE STUDIES OF ACCRUAL ACCOUNTING

United Kingdom (UK)

Andrew Smith, Chief Secretary to the Treasury, said in 2002: ‘This is a very significant day for the government. From now on, the government will be using best practice in financial management...The implementation of resource accounting and budgeting puts Britain among world leaders in public service reform.’³

Motivated by a desire to improve decision-making so as to enhance accountability and modernize, accrual-based budgeting and accounting across the entire public sector began in 1993 in the UK and was concluded by 2002. Her Majesty’s (HM) Treasury monitored key factors (‘trigger points’) in the various departments to assess their progress, while giving them adequate time to tackle their problems. Many dry runs and pilots were undertaken so that the risks involved in the transition could be minimized. Identifying and then evaluating liabilities and assets was a huge challenge, as was developing and starting a new IT system. A training network had to be set up to develop financial expertise among non-professionals. The Parliament and the National Audit Office (NAO) were kept involved throughout the process.

Most area of the public sector outside central government had operated variations of the accrual basis for many years. In 1995, HM Treasury announced its intention to move central government to an accrual basis for both budgeting and accounting for individual government departments under the term ‘Resource Accounting and Budgeting’ or RAB.⁴ In 1998, HM Treasury and the NAO initiated a joint study to

³ See www.ukpol.co.uk/ (last accessed 15 May 2019).

⁴ Danny S.L. Chow, Christopher Humphrey and Jodie Moll, ‘Developing Whole of Government Accounting in the UK’, *Financial Accountability and Management*, Vol. 23, No. 1, 2007, at <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-0408.2007.00418.x> (last accessed 15 May 2019).

examine the merits and feasibility of producing a set of consolidated accrual-based accounts, not just for central government but for the whole public sector, termed ‘Whole of Government Accounts’ or WGA. The production of accrual-based WGA was adopted as the revised objective of the reform in the Government Resources and Accounts Act passed in 2000.

Due to the more ambitious scope of the reform, HM Treasury planned a three-stage implementation approach:

1. Stage one involved the production of an unaudited WGA based on statistical rather than accounting data.
2. Stage two involved preparing unaudited consolidated Central Government Accounts, incorporating the accounts of all central government departments but excluding local government and some other non-department bodies.
3. Stage three involved the publication of full accrual-based audited WGA.

Thus, an entire range of accrual-based financial statements were prepared, under WGA. A ‘Clear Line of Sight’ project was announced in July 2007 to simplify financial reporting to the Parliament and ensure that reporting is on consistent lines, in accordance with fiscal rules. After much debate, in April 2010, a legislation known as Constitutional Reform and Governance Bill received the royal assent. This brought in considerable alignment between departmental accounts, budget and the WGA. As a result of delays in taking the final publication decision, the first full set of audited WGA was finally published on 29 November 2011, more than a decade after the passage of the originating legislation. Since then, an action plan has been defined to raise the quality of the data and address issues leading to audit qualifications. A ‘Streamlining and Simplifying’ project is underway so that financial reporting can be further improved. Improvements in 2013–14 included: consolidation of the assets and liabilities of the national rail network; improvement of valuation of fixed assets; and faster WGA publication.

Overall, the public sector accounting reform in the UK went beyond the adoption of accrual accounting techniques; the term ‘resource accounting’ was devised to highlight this fact. The RAB also reflected

parliamentary control and a focus on outputs, rather than inputs,⁵ as practised in the UK.

It was particularly challenging to bring in accruals in the Ministry of Defence.⁶ Deciding accounting policies, putting accounting systems in place, recruiting and training accountants, establishing business processes and valuation of assets and liabilities were among the major challenges. Identification and valuation of assets included 1.5 million lines of inventory in over a hundred locations, some dating from the First World War. Valuation of such a huge inventory posed difficult questions, such as whether purchase price or resale value should be accounted for? Completeness was another hurdle: whether an aircraft should be taken as a collection of components? Unexpected decisions, such as the decision to return British forces in Germany to the UK, added 1.5 billion pounds of unexpected cost to the 2011–12 accounts, which had not been budgeted for. Another difficulty arose in connection with embedded leases in contracts, which were to be accounted for as per International Financial Reporting Interpretations Committee (IFRIC) 4 (UK Standard). In practice, it is estimated that over 500,000 contracts extending over 10 years were probably left out, because information was very difficult to get. This left out approximately 2 billion pounds worth of assets. Another challenge lay in convincing senior policymakers that good accounting practices would act as enablers to get the most out of resources given to defence, leading to better understanding of financial position, linking ‘cost inputs’ to defence capability ‘outputs’ and a better recognition of the actual cost of defence projects. Better financial planning would lead to enhanced spending power too.

⁵ K.P. Kaushik, ‘Government Accounting: Recent Trends and Direction for India’, *The Chartered Accountant*, January 2006.

⁶ Ross Campbell, ‘The Challenge of Accruals Accounting in the Ministry of Defence’, *Institute of Chartered Accountants in England and Wales*, 2015, at <https://www2.anm.gov.my/PublishingImages/SitePages/DokumentasiAkruan/6.0%20Case%20study%20-%20Defence.pdf> (last accessed 15 May 2019).

Australia

Australia transitioned to accrual accounting and accrual budgeting in about 10 years, through the 1990s. The Ministry of Finance was in charge of monitoring the reforms. Accrual accounting was progressively implemented, and the requirement for recording assets and liabilities was slowly increased. The main tasks in the ministries, including defence, was that of designing and rolling out new IT systems, developing guidance manuals and overall, achieving a cultural change. Inventories and measurement of assets and liabilities was the most challenging, requiring guidance, for which a central task force was set up by the Ministry of Finance. A training strategy was developed with a consulting firm after assessing the existing skill and knowledge of accruals of the functionaries involved. Realistic time frames were set at each stage and work systematically progressed with the guidance of auditors.

Overall, public administration is better informed in Australia as a result of the accrual accounting and budgeting reforms.⁷ Superannuation was the single-largest liability on the Australian government's balance sheet some years ago. The strong balance sheet focus led to significant decisions by government that are directed to managing the superannuation liability, one of which concerned the establishment of the Future Fund to meet the government's remaining unfunded superannuation liabilities. The Future Fund has been established to accumulate sufficient financial assets to offset the superannuation liabilities by 2020, by investing future budget surpluses in the Fund. This focus on the superannuation liability illustrates how greater visibility of the government's balance sheet, combined with a strong economy, potentially offered a more informed range of policy options for the government to consider in determining its fiscal strategy and budget priorities.

⁷ Ian McPhee, 'Financial Management in the Public Sector: How Accrual Accounting Enhances Governance and Accountability', Australian National Audit Office, August 2006. At https://www.anao.gov.au/sites/g/files/net616/f/McPhee_financial_management_in_the_public_sector_2006.pdf (last accessed 15 May 2019).

Accrual accounting and budgeting have made a significant contribution to public sector administration in Australia. The real benefits of the more comprehensive information have been at the organizational level. This is because agencies have the benefit of information relating to their own operations and programmes administered by them. This aids decision-making by agencies in respect to their own operations, but also allows policy advice to be better targeted because the cost or revenue dimensions of options are better understood. These developments have contributed to more informed policy choices, stronger performance and a more comprehensive basis for accountability. The accounting and budgeting changes have been part of a much wider movement to improve the efficiency, effectiveness and accountability of the public sector.

It has been opined that it was in the defence department that the value of accruals was felt most.⁸ For example, after accrual budgeting was introduced, defence discovered that it had warehouses full of 286 -kilobyte computers. When the department realized they had to carry this stock on their books, they promptly disposed them off. For years, defence had its accounts qualified by the auditor- general; the numbers were not complete and accurate. Later, defence produced annual accounts that were not qualified and on which the public could rely upon. “Thus managing money both in Defence and throughout the public service improved as a result of accrual accounting.”⁹

Indeed, defence has put a major effort into reforming financial reporting and equipment procurement.¹⁰ Defence procurement reforms are

⁸ Stephen Bartos, former senior public servant, available at <http://www.smh.com.au/content/adaptive/smh/federal-politics/twenty-years-on-thebenefits-are-clear-20120604-1zsc2.htm> (last accessed 15 May 2019).

⁹ Ibid.

¹⁰ Defence Submission to the Joint Committee of Public Accounts and Audit: Inquiry into financial reporting and equipment acquisition at the Department of Defence and Defence Materiel Organisation, at http://www.defence.gov.au/AnnualReports/05-06/volume_02/appendices/10_external_scrutiny.html (last accessed 15 May 2019).

improving the timeliness and cost efficiency of acquisitions. Defence continues to maintain a very high standard of cash management practices. None of the financial or procurement issues that have required reform have had a negative impact on the operational competence of the Australian Defence Force. Significant reforms impacting upon defence have had their origins in major government-wide initiatives. The most profound impact upon defence originated from the report of the National Commission of Audit (June 1996)¹¹ which made a number of recommendations, including: achieving greater efficiencies through benchmarking, purchaser/provider arrangements, contestability, contracting-out services, risk management, introduction of new technology and cost recovery mechanisms; accrual principles as the basis for an integrated budgeting; resource management and financial reporting framework; and accrual budgets forming the basis of financial performance targets to be reported in annual reports and ownership of accrual resource management within agencies. The government subsequently introduced an accruals-based management framework focused on outputs and outcomes, including devolved cash management and an incentives regime. The legislative framework was also changed through the introduction of the Financial Management and Accountability Act, 1997 and regulations which supported the financial reform agenda processes required to deliver relevant, timely and useful financial information for managers. Defence has undertaken significant reform of its procurement and financial processes to improve the delivery of capability and the cost effectiveness of its activities. It is recognized that, while some problems can be addressed quickly, others are more deep-seated and will take some years to resolve.

In summary, defence has implemented a number of improvements to its financial management framework, particularly in planning and budgeting, as part of the wider financial management reforms. Defence has established a good record of managing the cash side of its business and this has drawn favourable comment from the government. The

¹¹ See <https://trove.nla.gov.au/work/9824925?q&versionId=16679377> (last accessed 15 May 2019).

aim has been to improve the accrual budgeting framework and the defence outcome and output structure. However, the complex nature and extent of the operations of defence organizations make any reform all the more difficult.

Canada

Canada achieved its goal of accrual budgeting as well as accrual accounting in less than 10 years, by 2002–03. The intention was to evaluate the complete cost of government activities. Implementation of the reform was carried out by the Treasury Board and the Receiver General. It was a smooth exercise due to the fact that they emphasized consultation and mutual engagement between stakeholders. Early in the exercise, they developed models for costing assets where no records were available. New functions in IT systems were added systematically. Changes were sequenced in such a manner that adequate capacity building could take place before the next step was introduced.

The Federal Financial Administration Act of Canada makes it mandatory for Canadian federal government entities to comply with accounting standards established by the Ministry of Finance and the President of the Treasury Board. Accruals-based accounting standards are set by the public sector Accounting Board, which uses IPSAS and IFRS as a reference. The Auditor General of Canada audits the financial statements and presents his opinion on whether the financial position of the Government of Canada and the cash flows at the year end were in accordance with the stated accounting policies of the government. Recent observations of the Auditor General relate to improving the valuation and inventory of the defence assets. Among the complexities in the implementation of accrual accounting has been the question of valuation of existing assets and the development of appropriate amortization schedules. The two are interactive to some extent.

France

Some public sector entities in France had completed their transition to accrual accounting more than 50 years ago. The central government adopted accrual accounting by 2006. This was considered as a core accounting reform in France. The budget law was revised in 2001 and

a wide range of financial reforms followed. An inter-ministerial task force monitored the implementation of reforms, including that of defence. An independent standard-setting authority, which has the mandate of the Ministry of Finance, sets standards in France. These standards are in accordance with French laws and policies. The supreme audit authority is the 'Cour des Comptes' (the Court of Account).

China

China confirmed its earlier decision to migrate to accrual accounting at the Third Plenum of the 18th Central Committee of the Communist Party of China, in late 2013.¹² This initiative of financial reform included: improving fiscal management and public accountability at all levels of government; identifying and managing fiscal risks, particularly direct and contingent liabilities at the sub-national level; improving the management of infrastructure assets; greater prudence about new initiatives to ensure the right balance between maintenance expenditure and new investment; and expanding the accounting function to provide more diversified information to meet these objectives.

The Ministry of Finance in China undertook extensive research to fully comprehend the issues involved so that the reform process and support measures could be suitably designed. This research programme included:

1. A feasibility study of implementing a modified accrual-based accounting system based on the present status of government accounting in China. This study included policy recommendations on the direction of reforms and a basic implementation road map.
2. Effort to define the scope of the government reporting entity, based on an analysis of the Chinese political and governance

¹² Joe Cavanagh, Suzanne Flynn and Delphine Moretti, 'Implementing Accrual Accounting in the Public Sector', International Monetary Fund, at <https://www.imf.org/external/pubs/ft/tnm/2016/tnm1606.pdf> (last accessed 15 May 2019).

structure and drawing on international standards and country practices.

3. Preliminary work on establishing government accounting standards, including content, phasing and implementation plans.
4. Work to design government financial statements, including their scope, content, compilation procedures, analysis and possible uses.
5. A series of accrual accounting pilots.

Beginning with 11 provinces in 2011, the coverage of these pilots was expanded to 23 provinces in 2012, and to all 36 provinces and some cities and county governments in 2013.¹³ From 2011 to 2014, the pilots involved preparation of year-end financial statements on an accrual basis by adjusting and transposing the cash-based statements with additional accrual information. Starting from 2014, government departments were required to change their book keeping and record accruals at transaction level for the recognition of expenses, non-tax revenues, assets, liabilities (except pension liabilities) and equity. New instructions also covered the valuation of non-financial assets and an improved format of financial statements. Other steps planned include: the preparation of a reform action plan; extending the pilots at local level; developing rules for consolidated reporting; further work on accounting standards; more work on the classification of public bodies; and supporting measures on IT systems and capacity building.

Chile

In 2010, the General Controller of Chile (Contraloría General de la República [CGR]) announced its intention to adopt accrual accounting in the public sector based on IPSAS by 2019.¹⁴ One of the key

¹³ Ibid.

¹⁴ Carlos Pimenta et al, 'Public Financial Management in Latin America: The Key to Efficiency and Transparency', IDB, 2015, at <https://publications.iadb.org/en/public-financial-management-latin-america-key-efficiency-and-transparency> (last accessed 15 May 2019).

preparatory tasks in the process was to conduct a gap analysis comparing existing government accounting practices with the requirements of IPSAS. The gap analysis categorized the 32 IPSAS into four categories that allowed the officials to create a framework for studying and applying the new standards:

1. High priority, which comprised fixed assets, property investments, taxes, financial instruments and financial liabilities.
2. Medium priority, which included revenue from exchange transactions, associates and joint ventures, provisions, intangible assets, contingent assets and liabilities, leases and concession arrangements.
3. Low priority, which comprised financial statements, inventories, segment reporting, employee benefits, related party disclosures, effects of changes in foreign exchange rate, agriculture and accounting policies, changes in estimates and errors.
4. Not applicable standards, such as financial reporting in hyperinflationary economies and construction contracts.

Sri Lanka

Sri Lanka has been moving towards accrual accounting based on IPSAS since 2004. Beginning in 2005, the government adopted a revised format for its financial statements, which closely mirrors the four financial statements required by IPSAS 1 (statements of financial performance, financial position, cash flows and changes in net assets). A statement of budgetary performance is also provided in the notes to the accounts to maintain alignment between budget and outturn data. This statement is presented on a modified cash basis with valuation at historic cost. The statement of financial position includes financial assets and liabilities other than cash, including external borrowing.

The government plans to expand incrementally the coverage of the financial statement to a point where the move to full accruals is possible. Currently, the notes to the financial statements include a schedule of movable assets acquired since 2004. For land and buildings, there is a current process of valuation or revaluation which, once completed and together with the data on movable assets, should permit a switch to accruals-based disclosure of fixed assets.

LESSONS DERIVED FROM THE EXPERIENCES OF VARIOUS COUNTRIES

As seen in the above section, different countries the world over have attempted to adopt accrual accounting with varying results. An analysis of the lessons derived from their experiences would provide useful policy inputs to the government in India, with the focus being on implementation in the defence sector. These are discussed below.

1. In any major reforms, such as the introduction of accrual accounting, priority and objectives need to be decided upon. The scope, pace and sequencing of reforms would depend upon this. The sequencing of reforms and the length of time needed to implement accrual accounting can vary greatly. Some countries progressively add accrual elements or disclosures to their financial statements without setting a specific date for full implementation of accrual accounting (for example, the Philippines, South Africa and Sri Lanka). Countries that have looked to implement accrual accounting at the budgetary central government level have undertaken the transition in three (for example, New Zealand) to five years (for example, France and Austria). Other countries have started the implementation at sub-national level to address specific concerns around accumulation of liabilities at that level (for example, China). Countries which sought to implement accrual accounting for the whole of the public sector, such as Peru and the UK, have taken more than 10 years to complete the transition.

For India, better management of government property could be a possible objective, which would be relevant for defence too. To progress the same, recognition of fixed assets could be taken as a priority. Recognition of pensions in the balance sheet could be another major priority. It may also be mentioned here that measures like establishment of a Future Fund to manage pensions and disposal of old computers could be taken only because the issues got highlighted as a result of adoption of accrual accounting by the Australian government, otherwise such issues would not have received the same attention.

2. Implementing accrual accounting goes much beyond setting and adopting new standards. The challenge lies in adopting those

standards and successfully implementing them. Reforming business processes, modernizing IT systems and sustained efforts at capacity building would show necessary results. Implementing accrual accounting is also a time-consuming process; as mentioned, many countries have taken more than 10 years to do so. Even later, the coverage, quality and relevance of the financial statements are in a state of continuous improvement.

3. Cash accounting can be continued in areas where it is not feasible to introduce accrual accounting. Data on government cash flows and reserves may be continued if budgets are not moved over to accruals.
4. It is also a costly process. The cost of moving from cash to accrual accounting depends on the starting point, scope, ambition and speed of transition.

It would cost the EU, as a whole, approximately 1.2 to 6.9 billion euros, according to a recent study by Eurostat, after surveying European Union member states (indicative cost only). The Austrian federal government estimated the cost of transition at 30 million euros (0.007 per cent of gross domestic product [GDP]).¹⁵ Apart from the EU, an assessment made by the Swiss government pegged the cost of implementing accrual accounting and budgeting at about 40 million euros (0.005 per cent of GDP) at federal government level. Much of this amount—nearly 80 percent—was for the new IT system.

However, certain aspects need to be kept in mind while considering these cost estimates. First, accrual accounting is usually part of a reform package, so part of the cost may be associated with other financial reforms, such as performance budgeting or improvements in audit practices. Second, the largest-single cost associated with the move to accrual accounting is the upgradation or replacement of IT systems, both software and hardware. But IT systems need to be upgraded or replaced by governments, regardless of any

¹⁵ Cavanagh et al., 'Implementing Accrual Accounting in the Public Sector', n. 9.

reform. The third aspect to be kept in mind is that accrual accounting has much greater benefits which are largely unquantifiable, such as supervision of fiscal risks, improved maintenance of assets and lack of carry-forward of major expenditures. These must be considered and given due importance when costs are being studied.

5. 'Debates about the introduction of accrual accounting and financial reporting techniques have become so widespread over the last decade that they may be labeled, without the risk of inaccuracy, peripatetic.'¹⁶ "Several national governments, including the UK, have successfully implemented a change to accrual accounting. However, the change should not be regarded as an end in itself: it will not solve the problems that arise where inadequate cash accounting systems exist; it will not improve control or management where inadequate control or poor management exist; nor will it improve internal audit or the legislature's control over the executive. Thus, before this reform is introduced, cash accounting should be robust, control should be secure, external audit should be functioning well and the legislature should have an ability to call the executive to account."¹⁷
6. Multilateral institutions such as the International Monetary Fund (IMF) and the World Bank are encouraging governments to introduce accrual accounting. The international accountancy profession is working on facilitating this transition with the help of these multilateral institutions. However, this transition needs to

¹⁶ Tyrone M. Carlin, 'Debating the Impact of Accrual Accounting and Reporting in the public Sector', *Financial Accountability and Management*, Vol. 21, No. 3, August 2005, pp. 0267-4424, at <https://www.semanticscholar.org/paper/Debating-the-Impact-of-Accrual-Accounting-and-in-Carlin/fd1756e956aa3661451ff19a3696c9182c4ed965>, (last accessed on 15 May 2019).

¹⁷ Noel Hepworth, 'Preconditions for Successful Implementation of Accrual Accounting in Central Government', *Public Money & Management*, Vol. 23, No. 1, 2003, pp. 37-44, at <https://www.tandfonline.com/doi/abs/10.1111/1467-9302.00339> (last accessed on 15 May 2019).

be customized to the needs of that country and there can be no 'one-size-fits-all'.

7. Accrual accounting is not an end in itself and can only be part of the financial reform process. A more accurate statement of the cost of resources consumed would emanate from accrual accounting, but unless there is political and managerial willingness to follow up this information to better manage the resources, there is little value to switch to accrual accounting.
8. While accrual accounting would provide better and more comprehensive financial information, there has to be ability and expertise available in a country to identify and debate the implications of that better-quality information. Thus, the availability of expertise is required not only to implement accrual accounting but also to ensure that the available financial information is not manipulated to serve the interests of a section of people. If this expertise does not exist, accrual-based financial statements may add to the distrust of a government, which is the opposite of what accruals is setting out to achieve. The legislature also needs to understand the implications of the change so that it can test the proposals of the executive. Although government financial reports in an accrual regime may look similar to private sector financial reports, their analysis is different and this difference must be accommodated in the decision-making process.¹⁸
9. A cultural change is required before introduction of accrual accounting, where consultation from all concerned and acceptance by all concerned is indispensable.
10. The accountancy profession must be prepared to be involved with the government. For successful implementation, the number of financial managers would have to be increased. Independent standards need to be developed by a critical appraisal process.

¹⁸ Jack Diamond, 'Budget System Reform in Emerging Economies: The Challenges and the Reform Agenda', Occasional Paper No. 245, International Monetary Fund, Washington, DC, 2006.

11. The responsibility and understanding of the external auditors would need to be increased, and they would need to be involved from the outset. A new range of judgements, for example, about asset values, prudence and materiality, would be required from auditors. Perhaps a more thorough training of auditors would be required. For many years, the role of internal auditors was focused on providing assurance services. A gradual shift occurred during the 1990s and internal audit now is also expected to provide advisory services.¹⁹
12. Comprehensive in-house training programme for managers would be essential, which would give them an understanding of how they can derive the benefits from the operation of accrual accounting. They need to understand how to properly make use of the accrual accounting system so that it is utilized for making the various activities more efficient and effective. A practical and hands-on approach would be of much greater benefit, for more efficient utilization of resources and delivering services. Paying too much attention to the technicality of accrual accounting, at the cost of disregarding the operational environment, would also be self-defeating.
13. ‘When we talk about government accounting and public financial management, it all comes down to one question: do we create or do we consume a legacy for the next generation?’²⁰ A PricewaterhouseCoopers (PwC) survey, carried out some years ago, shows that more governments all over the world actively plan to use accrual accounting in the coming years. More developing countries, especially in Asia, Latin America and Africa, are shifting towards accrual accounting. The survey has shown a ‘clear trend’

¹⁹ Anthony Tarantino, *Governance, Risk and Compliance Handbook*.2008, New Jersey: Wiley.

²⁰ Jan Sturesson, ‘Towards a New Era in Government Accounting and Reporting’, PricewaterhouseCoopers at <http://docplayer.net/9683608-Towards-a-new-era-in-government-accounting-and-reporting.html> (last accessed on 15 May 2019).

towards the use of accrual accounting. This would make the countries who were initiating this accounting reform move to the ‘more sophisticated’ end of the accounting spectrum.²¹

A survey was also conducted on 100 countries by PwC to gauge the government accounting landscape around the globe. It included countries across the development spectrum, from emerging economies to G20 nations. The survey highlighted practices and trends in the field of government finance and accounting from around the world. Among the key findings of this survey were the following:

1. There is great diversity in accounting practices, but the trend towards accrual accounting is clear
2. A major shift to accrual accounting is expected in developing countries, with IPSAS serving as a common reference point
3. Budgets remain largely on cash basis
4. Conversion to IPSAS or similar accrual accounting standards is useful for government stakeholders
5. Greater transparency and accountability, comprehensive inventory of assets and liabilities, and performance assessment are the main benefits
6. Accounting for fixed assets, application of accruals concept and disclosure requirements are the major areas of impact
7. More than three years are required on average, for transition to accrual-based IPSAS (or similar)
8. The lack of trained staff and IT system requirements are the main challenges

²¹ ‘Governments Using Accrual Accounting Set to Soar’, Public Finance International, 14 May 2013, available at www.publicfinanceinternational.org/news/2013/05/governments-using-accrual-accounting-set-soar (last accessed on 15 May 2019).

9. Governments indicate a desire to improve their finance function
10. Cost accounting, performance management, fixed assets management and long-term planning and forecasting are the key areas for improvement²²

CONCLUSION

In the past few years, study teams from the Government of India (MoF/CGA) have been visiting various countries which have made the transition to accrual accounting, in order to learn from their experiences. Indian practitioners are striving to acquire better knowledge to become proficient at this advanced skill, to keep pace with this worldwide transformation, and we still have a long way to go. As with anything new, there is ample scepticism too about the need for this change among practitioners and scholars alike. This is also true of countries which have completed the transition, such as the UK, New Zealand and Australia, albeit at their own pace and with different methodologies. The debates continue over the substantial costs of transition, skill upgradation of employees, time taken and the utility of the emerging financial statements, which would be as relevant and applicable to defence as to other sectors. In all, perhaps it may be too early to identify and quantify huge discernible benefits, from accrual accounting, of better resource management in terms of contributing to improved public services and transparency. A richer and more accurate perspective would be gained as these countries move along this path, and countries such as India continue to carefully study the setbacks and successes that they have encountered in order to avoid the pitfalls and adopt their best practices alone.

²² Available at www.pwc.com/gx/en/psrc/publications/assets/pwc-global-ipsas-survey-government-accounting-and-reporing-pdf.pdf (last accessed on 15 May 2019).

REQUIREMENTS, IMPLICATIONS AND CHALLENGES FOR DEFENCE

In India, possibilities of implementing accrual accounting concepts in certain select organizations under the Ministry of Defence, as a parallel to their ongoing system, have been explored in the past few years. These organizations are the Ordnance Factories, Cantonment Boards and Canteen Stores Department (CSD).

ORDNANCE FACTORIES

In Ordnance Factories, accounts are maintained in two ways: one for compliance with the budgetary system; and the other for adhering to the commercial nature of the organization as well as for management information:¹

1. *Cash Compilation:* Actual expenditure is shown against budget allotment, which is prepared on cash basis as budget is prepared for cash expenditure and income. These presentations do not account for receivables and payables. Also, advance receipts and advance payments are not identified separately.
2. *Annual Accounts:* Prepared on the basis of accrual accounting principles, accounting for:
 - (i) cash income and expenditure related to current year;

¹ Inputs from Shri Avra Ghosh, Indian Defence Accounts Service, Additional Controller of Finance; Shri Rabijyoti Bhattacharya, Indian Ordnance Factories Services, ex-Deputy Director General, Ordnance Factory Board (OFB); and Shri Nirmalya Mazumdar, Staff Officer (Finance) (Retd), OFB.

- (ii) advance receipt and amount payable considered as outstanding liability;
- (iii) advance payment and amount receivable considered as outstanding asset;
- (iv) depreciation;
- (v) superannuation charges; and
- (vi) other adjustments as required.

Pro forma accounts in the commercial format, which has been approved by the C&AG, contain the following:

1. Capital balance is reported under two segments, namely, capital outlay and revenue outlay.
2. Gross block of assets is valued at original/historical cost. Retirement of assets is not being accounted for yet.
3. Cost of capital to be apportioned to the cost of production (not yet implemented).
4. Liabilities for advances received from customers against supply of stores, excise duty, sales tax, etc., are reported in the accounts.
5. Deposits made by Ordnance Factories to various agencies, such as electricity boards, are reported as assets.
6. Lapsed amount of earnest money deposit, security deposit, etc., are reported as 'Other Income'.
7. Year-end balances of fund in the 'GM's Public Fund Account' are reported as 'Other Current Assets' by contra creation of liabilities under the category 'Other Liabilities'.
8. The nomenclature for 'other operating expenses' has been rationalized.
9. New categories have been introduced for non-operating expenses for power, fuel and water.

The aim is to enhance transparency in depicting the financial health of each Ordnance Factory and Ordnance Factory Board (OFB) as a whole. The information contained in the commercial accounts serves as an

MIS for effectively monitoring the financial performance of the Ordnance Factories. This enables the organization to have better fiscal management and increased cost consciousness and discipline that is necessary to bring in a culture of competitiveness. This accrual commercial format of presentation of accounts of Ordnance Factories helps in the assessment of the realistic cost of products manufactured, thereby fostering the cause of competitive pricing practices. The MIS generated from the commercial accounts is expected to enable calculation of various management ratios that would facilitate realistic comparison between the various ordnance factories as well as similar factories in the private sector within the country and globally. This may also be used for benchmarking performance.

CANTONMENT BOARDS

At present, all Cantonment Boards follow an accounting system which is cash based, and is based on the Cantonment Account Code, 1924. The existing account code was devised under the Cantonments Act, 1924. After the enactment of the Cantonments Act, 2006, a need arose to amend the Cantonment Account Code, 1924.

Initially, a Draft Cantonment Account Code, 2009 was prepared that remained under discussion in the Ministry of Defence. The draft code of 2009 provided for some administrative changes within the 'cash-based' accounting system itself. However, contemporary developments in the municipal system reforms propelled a shift in proposed amendments.

In Writ Petition (Civil) No. 888/1996 (*Almitra H. Patel & Another vs Union of India & Others*) in Supreme Court, as per orders dated 13 December 2001 and 29 January 2002, Union of India had to agree to issue orders to introduce mercantile accounting system in urban local bodies (ULBs) in Delhi (including Cantonment Board) and constitute a task force to go into the question of method of accounting. Meanwhile, the 11th Finance Commission and the Ministry of Finance recommended for adoption of accrual accounting in the ULBs. The Ministry of Urban Development constituted a task force, under the aegis of C&AG, which prepared National Municipal Accounting Manual (NMAM) to be adopted by all states for their local bodies.

The Second Administrative Reforms Commission and the 13th Finance Commission also recommended the adoption of NMAM by all states. Adoption of modern, accrual-based double-entry system of accounting in ULBs is one of the mandatory reforms for receiving funds under Jawaharlal Nehru National Urban Renewal Mission scheme.

Present Status of Implementation

It was decided to prepare a new account code on an IT platform. The Directorate General Defence Estates (DGDE) also carried out field studies in a number of municipalities. In order to develop an efficient software and a chart of accounts in tune with the specific needs of the organization, a consultant was engaged after following due procedure. Further, a Consultancy Monitoring Committee, under the chairmanship of Director, National Institute of Defence Estates Management (NIDEM), was constituted to monitor the project. The Committee and the consultant prepared a Draft Cantonment Board Account Code (CBAC), 2016, compatible with Cantonments Act, 2006 and the guidelines of NMAM.

During 2012–13, pilot projects were executed in two Cantonment Boards, namely, Agra and St Thomas Mount, Chennai. These projects have been successfully implemented in both the boards as a parallel system.

The CBAC, 2016 has been approved by the Ministry of Defence and vetted by the Ministry of Law. As part of the procedure, objections from the general public and various stakeholders has been called for by putting CBAC, 2016 in the public domain. Eight weeks time has been given and once the objections have been disposed, the new account code will be notified. After that, the implementation of the accrual-based accounting system in all the Cantonment Boards will commence.²

Extensive preparations have been made by all Cantonment Boards throughout the country for the smooth implementation of the new system. Repeated training of the personnel, including the programmers,

² Discussion with Director, NIDEM, Raksha Sampada Bhawan, New Delhi, September 2017.

accountants and accounts staff of various Cantonment Boards, has been undertaken. A security audit of the computer programme is underway.

Salient Features of Revised CBAC, 2016

It is based on accrual-based double-entry accounting and is compatible with the Cantonments Act, 2006. The budgeting will be on cash basis, which is integrated to the expenditure under each head. No expenditure is possible in any head of account until there exists a suitable provision as per sanctioned amount.

The chart of accounts is based on NMAM chart of accounts structure with 11-digit code system. It enables drilling down each account up to the desired level, while at the same time presenting a macro picture by using function code or 'Major Head' codes. The system will enable chief executive officers (CEOs) and controlling officers to access the account system from their desks at any time and review financial statements, cash/bank book, abstracts, trial balance and accounts periodically.

Suitable provisions have been made for mandatory authentication of books of accounts, particularly the cash book, bank book, classified abstract, scale register, bank reconciliation statement and other books. The CBAC, 2016 also provides for inventory and works management which were too primitive in the earlier Cantonment Account Code, 1924.

The system has been built on a centralized architecture by way of hosting on National Informatics Centre server. It will enable DGDE to control the accounts of all Cantonment Boards and implement the system in a homogeneous manner. It will also enable DGDE/Ministry of Defence to collect and collate essential data centrally.

A number of forms will be generated by the ABAS System, which have been numbered by adding 'S' to it. Other forms which will be prepared manually are suffixed with alphabet 'M'.

The accrual-based accounting system will enable the Cantonment Board to plan development functions efficiently as it will be able to assess its net worth, assets and liabilities realistically.

CANTEEN STORES DEPARTMENT (CSD)

The CSD is a department of Government of India functioning under the Ministry of Defence. It is entrusted with the responsibility of procuring and selling consumer goods and other household articles of common use to the personnel of the defence services and other entitled personnel at a price lower than the prevailing market price. The CSD is a revenue-neutral department of the Government of India.

The CSD functions on commercial principles. The financial results of the department are compiled in the form of annual accounts every financial year. These accounts are prepared on the basis of pro forma accounts provided by Controller General of Defence Accounts (CGDA) through Controller of Defence Accounts (CDA), CSD vide CDA, CSD letter no. AA/41/CSD/98-99, dated 8 October 1999, duly modified from time to time. These accounts, after having been audited by CDA (CSD), C&AG of India (through Resident Audit Cell, Mumbai) and CGDA, are submitted to the Ministry of Defence, Government of India.

The CSD's annual accounts comprise the following:

1. *Statement on Annual Accounts by the Chairman, Board of Administration:* General Manager, CSD, gives a brief summary of the financial highlights and the performance appraisal of CSD, incorporating the achievements of the department during the financial year. The future plans and goals of the department are also laid down in this part.
2. *Audit Report:* CDA (CSD), who is also the Internal Financial Advisor (IFA) of CSD, places the audit report in this part of the annual accounts. The observations raised by CDA (CSD) (if any), budget analysis, ratio analysis, statement on working capital and funds flow statement form part of the CDA's audit report.
3. *Final Accounts:* Trading account, profit and loss account, profit and loss adjustment accounts and balance sheet incorporating the financial results of the department are placed in this section of annual accounts of CSD, along with complete summary of relevant schedules.

4. *Seven Years' Financial Statement at a Glance*: This section of the annual accounts displays the data for the past seven financial years on important operational/financial aspects, like sale, purchase, gross profit, net profit, administrative overheads and reserves.

It can be seen from the above-mentioned details that the annual accounts of CSD are prepared more or less on the basis of accrual concept of accounting. As CSD is already following the accrual accounting concept, minor adjustments have been given in a revised format by the office of the CGDA to further refine the procedures of CSD.

POSSIBLE CHANGES IN FINANCIAL STATEMENTS

As mentioned earlier, the Finance Accounts of the Government of India are presented by including transactions of all civil ministries, Ministry of Railways, Department of Posts and Ministry of Defence. Thus, there is a requirement of developing accrual accounts by all the involved departments/ministries as a parallel account to the existing cash accounts, before a final decision to make the switchover is taken by the Government. At the Union level, pilot studies have been carried out for the introduction of accrual accounting in civil ministries. The Department of Post has also done a lot of work in this area. The status of accounting reforms in the Ministry of Railways has already been discussed. Since Ministry of Defence does not have separate finance accounts, all its transactions are a part of Finance Accounts of the Government of India. As three areas at the Union level (civil, posts and railways) have already proceeded to introduce accrual accounting system as a parallel exercise, the Ministry of Defence would also be required to do the needful for maintaining a common base of accounting. The following could be the likely changes in financial statements:³

1. Budget and Appropriation Accounts would require no change as they would continue on cash basis. Thus, there may be no change in the demands for grants and Appropriation Accounts of the Ministry of Defence.

³ CAG, D.O. No. 10-GASAB/AC(Def)/3-2005, dated 31 January 2006.

2. In the Finance Accounts, since the existing summary of transactions read with statement of expenditure on capital outlay (involving cash transactions) would remain, the existing information as available today in respect of Ministry of Defence would continue to be captured in the accounts.
3. In addition to the above, in the accrual system, statement of income and expenditure and statement of assets and liabilities would be provided for. Provision of these two statements would entail the following:
 - (i) *Revenue Side–Accrual*: Various types of revenue relating to defence are listed in Classification Handbook: Defence Services Receipts and Charges⁴ (Major Head 0076 [Army], 0077 [Navy] and 0078 [Air Force], amongst others). It would be necessary to assess whether for each of these types of revenue, there exists accrued receipts at the end of the year. The idea is that whatever is due to be received is shown as receivables at the end of the year.
 - (ii) *Expenditure Side–Accrual*: Salary and non-salary expenditures would be on accrual basis. These would be accounted for as expenditure of the year when due, whether or not cash was paid out during the year regarding these expenditures. Similarly, wherever applicable, grants-in-aid given to organizations and laboratories for research and development would also be accounted for on accrual basis. In addition, depreciation at predefined rates would be expensed out to the income and expenditure account for the non-military (conventional) fixed assets discussed in point (iv).
 - (iii) *Current Assets*: Records relating to receivables of the accounting year/sundry debtors, non-military inventory, etc., at the end of the year would have to be maintained and their value reflected in the books of accounts.

⁴ http://cgda.nic.in/accounts/code_heads/CLASSIFICATION%20HANDBOOK_2014.pdf, (last accessed 14 May 2019).

- (iv) *Fixed Assets*: The practice mostly followed internationally is to differentiate between conventional assets and military assets of the Ministry of Defence.

Conventional assets would include buildings, factories, land, machinery, plants, transport vehicles, etc. The criteria for their treatment could be similar to the criteria applied for fixed assets, as in the case of other government assets, including depreciation. In cases where even conventional assets have defence implications, it could be decided to include them in military assets.

Military assets relate to defence-specific equipments, such as fighter aircraft and tanks; defence-related items, such as radar systems and reconnaissance equipments; and defence research facilities. They are also called single-use assets, meaning that they are used for a particular purpose and cannot be used for any other purpose other than defence, or sold and purchased in the general market at fair value. As per UN System of National Accounts (SNA),⁵ generally military assets are expensed in the year of purchase.

For administrative, decision-making and control purposes, information on these assets may be kept in the form of MIS and these may not be made available as part of the statement of assets and liabilities. Some governments, like the US, exclude disclosure of military defence assets as accounting data and provide them only as stewardship information.

There is, therefore, a requirement of identifying and listing all conventional and military assets, and creating Defence Assets

⁵ The SNA is the internationally agreed standard set of recommendations on how to compile measures of economic activity. The SNA describes a coherent, consistent and integrated set of macroeconomic accounts in the context of a set of internationally agreed concepts, definitions, classifications and accounting rules. It is intended for use by all countries, having been designed to accommodate the needs of countries at different stages of economic development.

Registers by classifying them into appropriate groups within these two categories. This process has recently been initiated in the Ministry of Defence, at the behest of the Ministry of Finance.

- (v) *Current Liabilities*: Records relating to payables of the accounting year/sundry creditors and other accrued liabilities at the end of the year would have to be maintained and their value would need to be reflected in the books of accounts.
- (vi) *Liabilities*: Long-term liabilities, such as loans for defence purchase outstanding at the end of the year, would need to be captured in the accounts.

Since the Ministry of Defence is still operating an unfunded pension scheme, assessment of pension liabilities on actuarial basis for defence personnel would be required. An actuarial calculation would give an idea about likely liabilities on account of pension in a year and accordingly, the entity is expected to provide the same after debiting its income statement/profit and loss account. Once a provision is made in the accounts on an annual basis, the amount gets accumulated in a separate account, like a depreciation or a sinking fund. Thereafter, payments are supposed to be made only through that fund, so that no spikes are felt in government budgeting on account of pension payments.

ADVANTAGES FOR DEFENCE

It is expected that the following defence-specific advantages would emerge:⁶

1. This system would not disturb the information as present today, and it would provide additional information on assets, including inventory, military and conventional assets and liabilities.
2. Since the liabilities/commitments get recorded, there is transparency and past unreported commitments do not get loaded onto future

⁶ Discussions with senior C&AG and CGA officers.

generations. This avoids distortion in financial management, especially with regard to areas such as pensions.

3. With a proper record of all assets, government is able to keep track of vast assets in defence created over a period of time, the depreciation in the value of fixed assets and erosion of non-financial assets.
4. Cash as well as non-cash transactions are recorded for a more complete picture of financial position at any point of time. This enhances control over financial resources.
5. Better-quality information is available for decision-making even in a department such as defence, which is non-commercial in nature. The system provides better mechanism for control of costs and decision on subsidies. Full cost of operations, including liabilities incurred and the long-term impact on the fiscal position of government, is available.
6. Assessment of the performance of schemes and projects is possible since data is available linking input cost to outcomes. This enhances accountability of the management.
7. Accrual accounting may not entail disclosure of all information on defence and strategic related assets. A policy decision would need to be taken on what to disclose and what to exclude from a strategic perspective.
8. The outline of the system described here is similar to the system of accounts followed in Western countries in their defence areas, such as the US and the UK. In case this system is followed, we would be benchmarking ourselves internationally.

THE ROAD AHEAD

The challenges associated with implementation of accrual accounting are significant. This is especially true of organizations with large and diverse asset bases, such as defence. The commitment of top management is an essential prerequisite for this process.⁷ Given the

⁷ No. Consultant /AA, dated 25.5 2006, Accrual Accounting in Defence, CGDA

same, a period of 10–12 years may be considered as reasonable for this changeover. The complexities involved in an organization such as defence make it an even greater challenge. As defence is primarily a spending department whose nature of work is non-commercial, additional time may be required for adaptation to policies. Major challenges can be in administrative, technical and capacity-building activities; and some that may emerge in the actual implementation are described next.

The *policies related to accrual accounting* need to be well developed and a correct approach is essential. If there is an overly general approach in implementing the policies, it is likely to get into difficulties. Expectations must be realistic, and it is to be accepted that refinements and development of policies will continue long after the initial implementation. In fact, implementing accrual accounting policies requires time, effort, resources and finances. The resources required to implement and maintain accrual accounting capabilities must not be underestimated. The change to accrual accounting policies is long term and therefore, all solutions must be thought through. Policies should not be too rigid and must allow room for manoeuvrability and feasibility.

Asset classification, identification and valuation methodology must be carefully crafted and implemented. They need to be clear, consistent, practical and compatible to the defence forces' requirements. Unless this is done, material assets may remain excluded from financial statements, thereby making them unreliable and incomplete. There appears to be no easy way to estimate approximate historical cost of assets. Some defence organizations, despite extensive efforts to inventorize their asset bases, have found material assets 10 years even after they made the transition. Spare parts asset classification policy also needs to be very clearly spelt out. Any ambiguity here could lead to inconsistent and unreliable information at higher level. Similarly, the policy created for depreciation of spare parts needs to be reasonable and consistently applied. Infrastructure assets must be appropriately identified and classified. The approach must be consistent so that useful information can be generated. The rationale for classification must be clearly documented. Maintenance projects must be well documented in order to facilitate appropriate classification and tracking of capital assets. The transfer of capital works-in-progress to FAR must be validated prior to

conducting asset classification and identification exercises. The asset identification process requires great discipline. Therefore, a thorough stocktaking exercise, which identifies active, obsolete and surplus assets, needs to be carried out prior to actual accounting/booking. Asset existence and completeness issues must be resolved prior to embarking on asset valuation exercises. Reasonable and achievable time frames must be set for asset base identification.

Subsequently, the issue of valuation would arise. Whenever applied, valuation methodology must be credible and practical. It should be sufficiently rigorous and systematic to ensure appropriate compliance. This may take several years to complete. Valuation methodology must be systematized and it must contain built-in checks and an oversight review process which takes the help of specialists.

Obsolete assets need to be identified early and disposal action taken. A well thought-out methodology for identification, valuation and disposal of obsolete inventory needs to be in place, since this a major challenge in any defence organization.

Adequately systematizing and automating data is a prerequisite. Defence department may spend a lot on conducting systems upgrades on legacy or on newly developed systems, but the system must be totally compliant to accrual accounting. This system requires capture of data on an ongoing basis; and unless the defence organization develops the key system accordingly, asset management and accounting would run into difficulty. Data which may be required may relate to physical and financial assets, accrued liabilities and pension liabilities, information on salaries, subsidies, committed and contingent liabilities, etc.⁸

Capitalization thresholds and their suitability for capturing and reporting values for material asset categories have created difficulties in several defence organizations. In some cases, external auditors were not comfortable with the high level of these thresholds. They recommended

⁸ CGDA, 'Accrual Accounting in Defence Services', Concept Paper, 2006.

that the thresholds be revised downwards. The auditors felt that many assets were material, but had been left out in the financial statements since the capitalization thresholds were too high. The capitalization policy needs to be prepared very carefully after taking into consideration all aspects. It must ensure adequate coverage of all material asset categories. For example, individual capital assets which fall below capitalization threshold, but are clearly material in aggregate, should be grouped for capitalization purposes and recognized in the financial statements.

Business process review must be completed early for the implementation of accrual accounting policy. When this is done, defence department may come across business practices that are not effective and need to be changed, while other practices may be found to be useful and require enhancement so that they can be made compliant and useful. For example, methodology for recording of inventory, in case it is dysfunctional or sub-optimal, would create complications later. Hence, all processes and practices must be verified and corrected so that resultant systems work effectively. Only then should accrual accounting policies be put into practice.

Documentation must be adequate in order to smoothly implement the policies. Defence organization must adequately document all processes and gaps should not be allowed to remain. The policies must also be adequately documented, including supporting documentation for decision taken. The reason and rationale for taking a particular approach must also be defined and well documented, so that audit objections can be avoided at a later stage. Major problems must be discussed threadbare with all the stakeholders and solutions found. This process must be documented so that there is complete transparency in the process. Sufficient and appropriate documentation needs to be maintained to substantiate the methodologies used and also the underlying rationales to support the selected methodologies. Complex policy/methodologies need to be avoided as far as possible. A mechanism to monitor the application of the policies to promote their consistent application must be in place.

External auditors, in some cases, had to prepare guidance documents after reviewing contract agreements at a later stage. In case the external auditors had been involved upfront earlier on in the implementation of the policies, they could have provided relevant advice and guidance

and averted some difficulties that were later experienced. External auditors must, therefore, be involved in policy development. A joint working group could be formed, which includes external as well as internal auditors. Since the triggers for recognition and measurement of accrual transactions entail a certain degree of discretion on the part of the executive, internal audit simultaneously needs to be geared up.

All the key stakeholders must be brought on board and must work on this together. They must identify systems changes; verify that systems controls exist; the systems must support validated business process; all approximate systems documentation must be in place; and guidelines must be created for data integrity. The services need to be consulted, and kept familiar at each and every level. This would reduce resistance to implementation of the policies. Orders regarding providing of accounting information needs to be obtained on a regular basis from senior management and disseminated in all concerned departments, along with timelines for adherence. Accrual accounting is an initiative that requires the cooperation of all concerned. Its implementation is a learning process for each and everyone and would succeed only if all are partners in the exercise.

A proactive communication strategy needs to be made functional and usable at all times. The message that the policies are demonstrably usable and practical must reach all the concerned personnel. This is true for all levels, and for civil and military personnel alike that are involved in the implementation of the policies. Changes that are required to be made to processes must be made early and all concerned must be kept updated about the changes. Communication channels must always be kept open between all levels, and between departments, so that compliances are easier to implement and minor hassles can be sorted out without delay. Points of contact must be established early for easy communication between users and those responsible for systems development and revision.

Adequate and timely training is important for all the functionaries, as well as for officers/officials who would interact with those who would implement the policies. This would reduce errors and resistance to change. For military personnel with limited accounting knowledge, user-friendly approach and procedures may be designed. The advantages of policies may be explained in readily understandable terminology.

Sufficient and appropriate training must be provided to the management and the staff. Too much technical jargon and complex illustrations must be avoided in training capsules. Potential benefits of the new approach must be made clear to the participants. Personnel who would have the maximum involvement and who would deliver maximum impact on the organization must be trained first. Those who do not have a hands-on involvement can be trained later. Accrual accounting training may be made a part of core competency in military officers' training programme, so that they are adequately familiar and positively inclined towards the new approach. Staff in critical positions of financial responsibility must be made appropriately qualified and knowledgeable. Training for managing change/transition would also be required at appropriate levels.

An IT strategy that addresses the needs must be established professionally. It must focus on long-term development. It should provide an integrated systems approach which includes a sustainable methodology for future acquisition and standardization of data. A control framework for testing the systems must be put in place. External auditors input may be sought on this. Adopting an IT system requires an in-depth need analysis so that the system is flexible and is able to respond appropriately to future needs. Information would need to be systematized and automated for development of financial statements. Developing the IT system is a time-consuming and costly exercise, which must be undertaken by professionals. In a large, complex organization such as defence, an IT strategy has to be put in place to match expectations and requirements in order to ensure that funds are not wasted on unnecessary systems. An integrated systems approach is preferable to trying to interface several independent systems at the same time. The data contained in legacy systems must be validated before migrating it to new systems.

Outsourcing of certain processes is inevitable. However, they must only be facilitators for the work process. Outsourcing for asset verification work needs to be carefully assessed. Costs and benefits need to be thought through before engaging contractors to conduct this work. Some tasks can only be handled by internal experts. External experts must supplement, rather than replace, the resident expertise or knowledge. Gaps in the knowledge of permanent staff can be filled

by transfer of knowledge to them. This would facilitate the implementation of the process.

Testing the application of key policies in selected small areas before initiating full implementation will minimize the impact of the testing process on the entire organization. It will also increase the eventual consistency in policy application across the organization.

Inventory nomenclature must be standardized wherever required. Categorization of inventory must also be standardized and consistently applied across the organization. This needs to be constantly monitored for adherence. Overall, this would ensure consistency and consolidation of inventory information across the organization.

Thus, a lot of value is to be gained from studying the experience of other defence/civil organizations that have already implemented accrual accounting. The best practices followed by these organizations can then be absorbed into our own systems by which our organization stands to benefit in the long run. Lessons learned from other organizations which have made the conversion to accrual accounting assists our own progress.⁹ The experience of others is a good fortune for us because we are able to avoid the blind alleys and follow the successful avenues, and replicate the practices which have yielded best results. This leads to fewer difficulties at the operational level and inefficiencies may be averted.

PRESENT STATUS¹⁰ AND CONCLUSION

In a recent development, the 32nd meeting of GASAB held in May 2018 approved the ‘Guidance Note on Accounting for Fixed Assets’¹¹.

⁹ Chief Review Services, ‘Best Practices and Lessons Learnt in Surveyed Defence Organizations Implementing Accrual Accounting: Canada’, 2002, at http://publications.gc.ca/collections/collection_2015/mdn-dnd/D58-95-2002-eng.pdf (last accessed on 15 May 2019).

¹⁰ Discussion with senior officers of MoF, C&AG (GASAB), CGDA and relevant officers of the service headquarters.

¹¹ <http://gasab.gov.in/gasab/pdf/FixedAssets2018.pdf>, (last accessed on 15 May 2019).

Fixed assets are valuable resources of any organization. Though the Finance Accounts at union as well as state levels reflect information on capital expenditure, as well as on financial assets and liabilities, it is not captured in the present system of cash basis of accounting. Therefore, government organizations do not have complete information about the fixed assets which they possess.

The 12th and 14th Finance Commissions had proposed that additional statements, in the form of statements, should be appended to the existing statements in the Finance Accounts to enable informed decision-making. The FRBM Act prescribes the preparation of asset register by an entity. The Expenditure Management Commission¹², constituted in September 2014, has also recommended that the ‘government should move towards an IT-enabled e-Asset Register’. Further, as per IPSAS, ‘Financial Reporting under Cash Basis of Accounting’¹³, an entity is encouraged to disclose information about its fixed assets.

The ‘Guidance Note on Accounting of Fixed Assets’ is with the Ministry of Finance, awaiting notification. The Ministry of Finance considers this to be a matter of priority and sufficient importance. Comments and implementation issues have been sought from various departments before notification.

A number of concepts of accrual accounting have been introduced by this guidance note of the C&AG (GASAB), such as capital works-in-progress, threshold, leased assets, recognition and derecognition of an asset, heritage assets, intangible assets and strategic assets. It has also clarified as to which assets do not qualify, such as biological assets (plants and living animals). Guidelines for classification of assets have been clearly laid out. It has also spelt out the measurement of cost at initial recognition for preparation of FAR, and measurement of cost subsequent to initial recognition.

¹² See <https://doe.gov.in/divisions/recommendation-expenditure-management-commission-emc> (last accessed on 15 May 2019).

¹³ See ‘Financial Reporting under the Cash Basis of Accounting’, at <https://www.ifac.org/system/files/publications/files/IPSASB-Exposure-Draft-61-Marked-up-IPSAS-2.pdf>, (last accessed on 15 May 2019).

It is clear that cash accounts do not give the complete picture required by the government and therefore, as a manager of public resources, the Government of India has taken upon itself the responsibility to gradually make the transition to accrual accounting. In this spirit, the Ministry of Defence, being a very large and complex part of the government, cannot afford to lag behind. An overarching framework needs to be developed for the parallel accounts to be tested in various institutions within defence, some of which are already mentioned in this chapter. Defence must be in a position to take timely and informed decisions by relying on detailed financial information through their accounts, which truly reflect the reality as on ground.

Changes in public financial management across the globe have necessitated India to revisit its traditional methods of managing and depicting its public finances. One of the major changes envisaged is a quest to migrate gradually to accrual accounting from the traditional cash-based accounting. Successive Finance Commissions in India have been supportive of the idea, though it is recognized that the advantages would become more evident only in the long run. It would be beneficial to adopt an incremental approach in migrating to accrual accounting, which would enable the policymakers to adopt the best practices of various other countries which are ahead of India in this regard as well as to avoid the problems that would be encountered in achieving this complex transformation. Financial reporting in India would then be synchronized with this modernistic change in the government sector across the world, which is marked by a conscious emphasis on transition from cash-based to standard-based accrual accounting in public finance. The government invests enormous resources in defence which predicates the need to keep pace with such financial reforms. This is a highly challenging task, given the nature and complexity of this core area of the government. This monograph attempts to explore the way forward despite constraints and the constant need to reprioritize allocating resources to match needs.



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