Government of **Western Australia**
Department of **Treasury and Finance**

ICT Expenditure Financial Guidelines

For the Western Australian Government

ICT Expenditure Financial Guidelines

Acknowledgement of Country

This report was prepared by the Department of Treasury and Finance (DTF) on the traditional Country of the Whadjuk people of the Noongar Nation.

DTF respectfully acknowledges the Traditional Custodians of Country throughout Western Australia and their continuing connection to Country, Culture and Community.

We pay our respects to all members of Western Australia's Aboriginal communities and their cultures and to Elders past and present.

We acknowledge and pay tribute to the strength and stewardship of Aboriginal people in sustaining the world's oldest living culture and value the contribution Aboriginal people make to Western Australia's communities and economy.

We recognise our responsibility as an organisation to work with Aboriginal people, families, communities, and organisations to make a difference and to deliver improved economic, social and cultural outcomes for Aboriginal people.

Further information relating to this guidance may be obtained by emailing dcf@dtf.wa.gov.au

Contents

1. Purpose

The purpose of this Financial Guideline (Guideline) is to provide Western Australian (WA) Government agencies with a framework to drive:

- **Improvements to the transparency and consistency of ICT expenditure tracking and reporting** through the categorisation and treatment of costs, embedded in an agency's financial management environment; and
- **Identification of cost-saving and investment opportunities** through greater ability to assess and benchmark expenditure and inform ICT planning, including benefits in the efficiency and effectiveness of ICT expenditure.

2. Scope

The Guideline is relevant for all ICT expenditure incurred across the ICT lifecycle including:

- Business-as-Usual (BAU) ICT Expenditure (Recurring Expenditure)
- ICT Project Expenditure (Non-recurring Expenditure).

The Guideline comprises of recommendations for agencies to consider when managing and reporting their ICT expenditure (budget and actuals) across the ICT lifecycle.

The following sections are supplementary to the Guideline and provide additional information on the application of the recommendations.

- **Supplementary Information 1 – ICT Expenditure Framework** – Outlines the Technology Business Management (TBM) Taxonomy and provides details on how agencies may utilise their Chart of Accounts (CoA) within their General or Sub-Ledgers to capture this information.
- **Supplementary Information 2 – Accounting Treatment for ICT Expenditure** – Provides prompts to consider for the accounting treatment of ICT expenditure incurred across the ICT lifecycle.

The Guideline should be considered alongside other key guidance material including the ICT Modernisation Framework, ICT Outcomes Framework, ICT Benefits Realisation Framework, ICT Project Delivery Framework, and broader Strategic Asset Management Framework.

A visual representation of the relationship between the ICT Expenditure Guidelines and Supplementary Information is provided in Appendix 2.

3. Audience

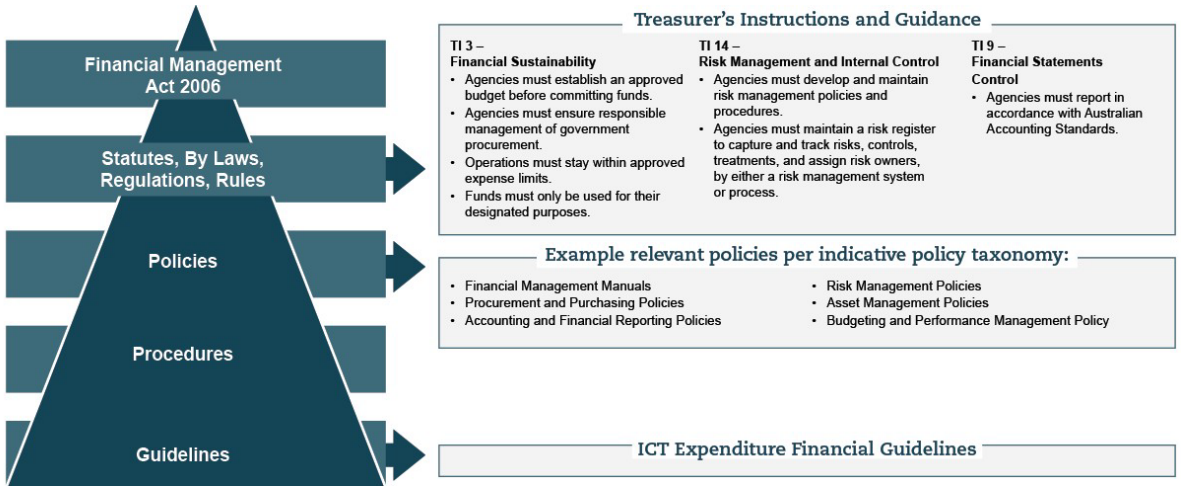
The Guideline aims to support agency leaders involved in managing and reporting ICT expenditure and benefits, including but not limited to:

- Chief Information Officers (CIO)
- Chief Technology Officers (CTO)
- Chief Financial Officers (CFO)
- Agency Executives as appropriate
- ICT Project Management Leaders.

4. Context

This Guideline does not impose mandatory obligations. The recommendations operate within the broader WA public sector governance landscape as indicated below (Figure 1) and should be considered within the existing financial governance, data, process, and technology landscapes of individual agencies. If a conflict arises between the recommendations detailed in the Guideline and the governance landscape of an agency, the agency's internal governance frameworks will take precedence.

Figure 1: Indicative WA Public Sector Financial Governance Hierarchy



5. Recommendations

It is recommended that agencies:

- Manage their ICT expenditure in accordance with their legislative, policy, governance, and risk and controls environment.
- Utilise their Financial Management Information System (FMIS) and Chart of Accounts to record and manage ICT expenditure per the TBM Taxonomy (refer Supplementary Information 1 – ICT Expenditure Framework) using at a minimum:
  - the Service Tower Level; and
  - Cost Pool Level.
- Are prepared to report their ICT expenditure in line with the above, if requested including:
  - over full 12-month reporting periods;
  - approved budgets and any subsequent variations; and
  - ICT vendor expenditure data (by public name of vendor).

6. Supplementary Information 1 – ICT Expenditure Framework

6.1 Overview

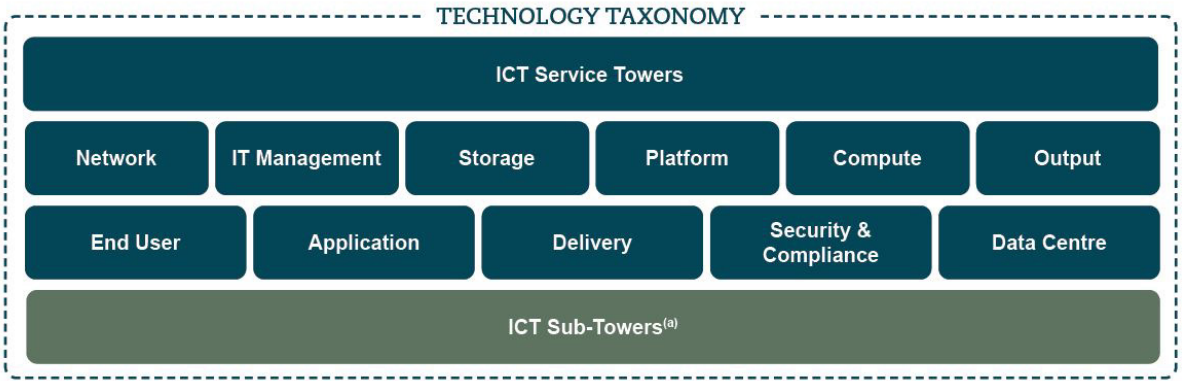
The ICT Expenditure Framework details the TBM Taxonomy's Technology Taxonomy (Figure 2) and Expenditure Categories (Figure 3) for the consistent capture and reporting of ICT expenditure. When ICT expenditure is transacted in an agency's FMIS, it can be mapped concurrently to both the Technology Taxonomy and Expenditure Categories via an agency's Chart of Accounts, enabling the reporting against either or both views simultaneously.

6.2 Technology Business Management Taxonomy

The TBM Taxonomy provides a standardised taxonomy for the capturing and reporting of ICT expenditure per the below layers.

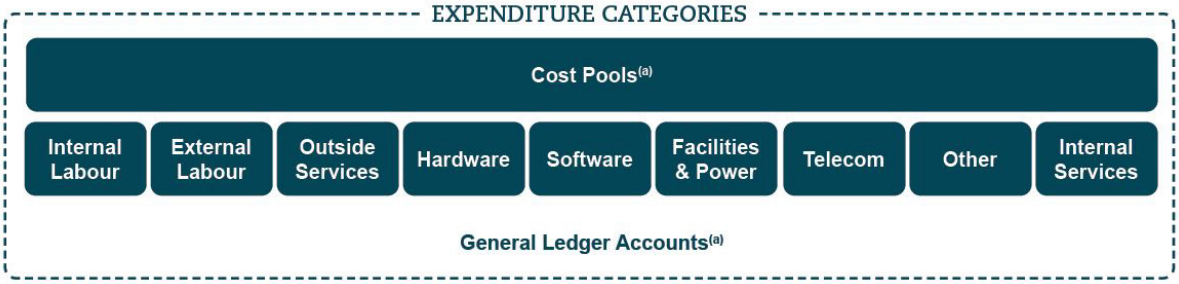
1. Technology Taxonomy reflected in the following:
    a. **ICT Service Towers** – The basic building blocks of services and applications.
    b. **ICT Sub-Towers** – A more detailed level of the basic building blocks of services and applications.
2. Expenditure Categories reflected in the Cost Pools and accounts.

Figure 2: TBM Taxonomy – Enables IT leaders to assess the costs across ICT Service Delivery



(a) Refer to ICT Towers and Sub-Towers in Appendix 3 and Appendix 5.

Figure 3: TBM Taxonomy Expenditure Categories – Enables Finance to consistently capture and allocate costs



(a) Refer to cost pools and ICT related accounts defined in Appendix 4.

6.2.1 Examples

The below examples (Figure 4) demonstrate the capture and reporting of ICT Expenditure utilising the TBM's technology taxonomy (Service Towers) and expenditure categories (Cost Pools). This can be applied to both BAU ICT Expenditure and/or ICT Project Expenditure.

Figure 4: ICT Expenditure Reporting example by Service Tower (% of total ICT Expenditure) – ICT View

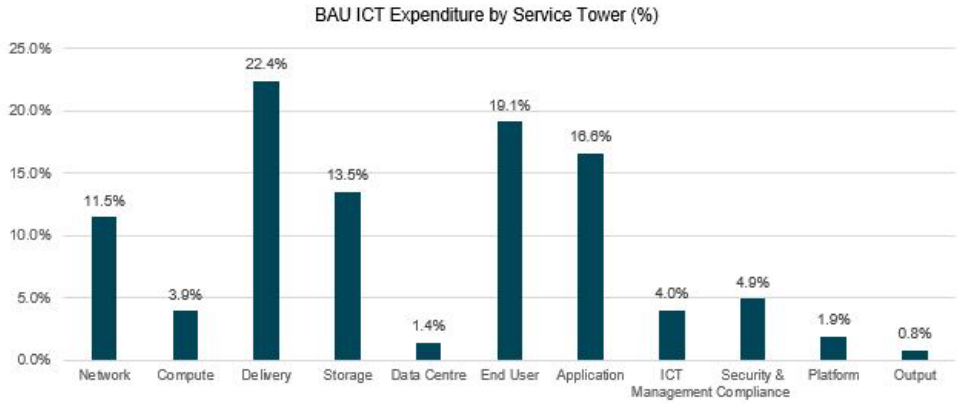
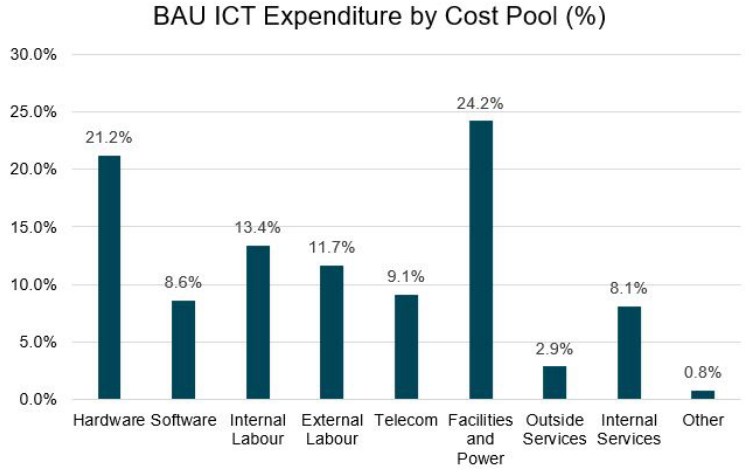


Figure 5: ICT Expenditure Reporting example by Cost Pool (% of total ICT Expenditure) – Finance View



6.3 Chart of Accounts

6.3.1 Overview

A Chart of Accounts (CoA) is an organised listing of all accounts used by an organisation's accounting system. It provides a framework for recording and reporting financial transactions by categorising them into various account types. Agencies are recommended to utilise their CoA within their General or Sub-Ledgers to record ICT lifecycle expenditure in a manner consistent with the ICT Expenditure Framework detailed in section 6.2.

6.3.2 ICT Expenditure Chart of Accounts

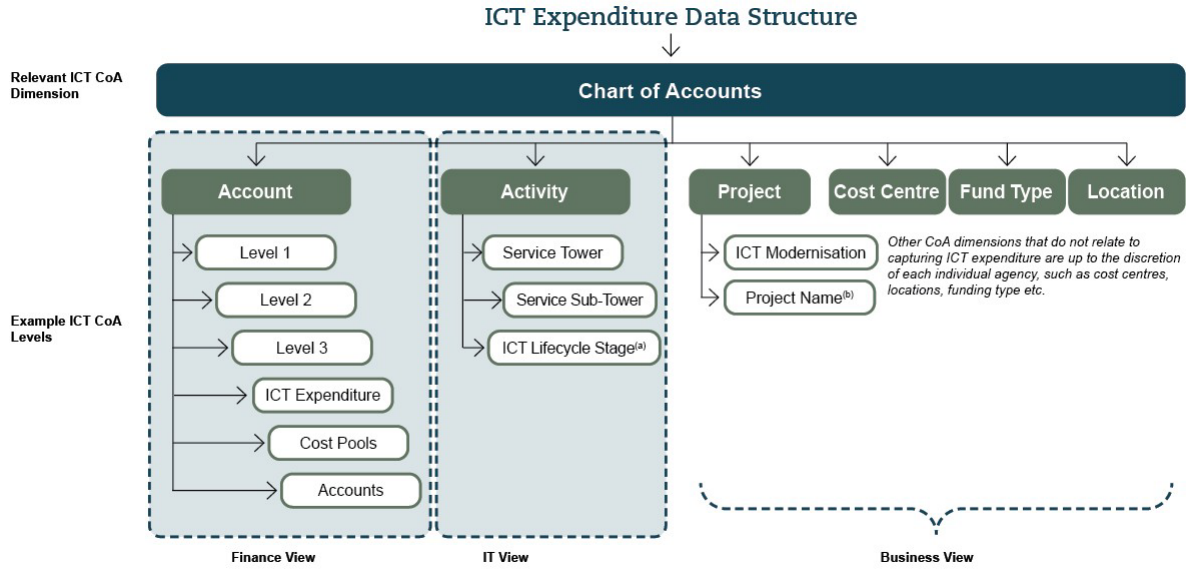
The below diagram (Figure 5) provides an overview of how a Chart of Accounts, and relevant dimensions and levels, may be used to capture ICT Expenditure per the ICT Expenditure Framework for both the technology taxonomy and expenditure categories.

The Chart of Account dimensions and levels are defined as follows for the purposes of capturing ICT Expenditure:

- **CoA Dimensions** – A unique category of information assigned to the accounts to enhance the granularity and flexibility of data capture and reporting.
- **CoA Level** – Levels are a hierarchy of components within a dimension that can be rolled up to group transactions. Levels provide a Parent-Children relationship within a dimension.
- **Accounts** – A descriptive record used to organise and summarise all financial transactions of a specific type, which can be further rolled-up to revenue, expenses, assets, liabilities, or equity, for clear tracking and reporting.
- **Project** – Projects are temporary efforts with specific objectives, tracked as a dimension to provide detailed insights into non-BAU related ICT Expenditure.
- **Activity** – The activity dimension captures financial data related to operational activities, categorising costs that are distinct from projects.

Agencies that do not have access to the dimensions referenced above or per Figure 5 below, are recommended to consider how they may utilise their existing CoA to capture ICT Expenditure per the TBM Taxonomy defined in section 6.2.

Figure 5: Example ICT Chart of Accounts



(a) Figure 5: Example ICT Chart of Accounts

(b) Refers to the name of the relevant ICT Project, or 'Default' if relating to BAU ICT expenditure.

6.3.3 Examples

The below examples detail how ICT expenditure may be transacted through the CoA detailed in section 6.3.

Example 1: (ICT Project Expenditure)

Agency A purchases a subscription to the value of $100 for cloud storage that relates to an ICT-Modernisation program titled 'Project X'.

NB: The sequence of how costs are allocated to the various dimensions in the account string is not important.

Account:

Agency A would capture the $100 cost in the appropriate account, for example 'Subscriptions', that rolls-up to the appropriate cost pool 'Cloud Services', that rolls-up to 'ICT Expenditure'.

Project:

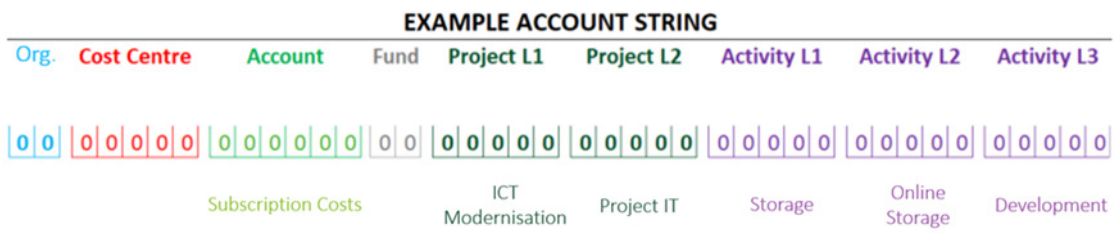
Agency A will create a relationship between the $100 posted to the subscription account and the project through posting of the expenditure to 'Project X', that rolls-up to 'Modernisation'.

Activity:

Agency A will create a relationship between the $100 posted to subscription account and the activity through posting of the expenditure to 'Development' that rolls-up to the appropriate Service Sub-Tower 'Online Storage', that rolls-up to the appropriate Service Tower 'Storage'.

Account string example:

The costs are only posted to the lowest level project and activity dimension. The example account string presents how the cost would roll-up to higher levels to demonstrate how the account string works in theory.



Example 2: (ICT BAU Expenditure)

Agency B performed maintenance services on ICT software worth $200.

NB: The sequence of how costs are allocated to the dimension in the account string is not important.

Account:

Agency B would capture the $200 cost in the appropriate account, for example "Maintenance", that rolls-up to the appropriate cost pool 'Software', that rolls-up to "ICT Expenditure".

Project:

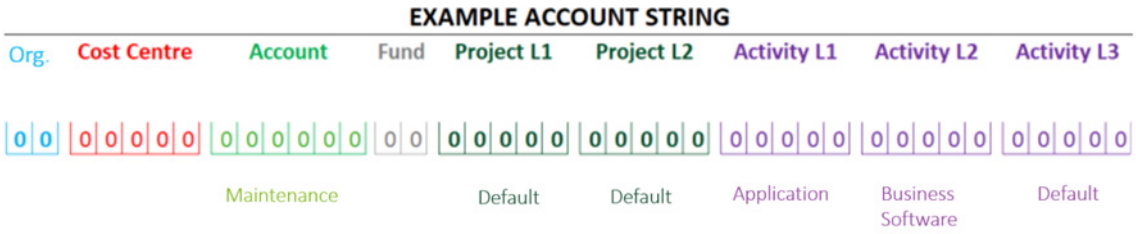
Agency B will not create a relationship between the $200 posted to the maintenance account and a specific project as the cost doesn't relate to a specific ICT project. Agency B will however still need to post to a 'default/general' project account for completeness of the account string.

Activity:

Agency B will create a relationship between the $200 posted to the software account and the activity through posting of the expenditure to the appropriate Service Sub-Tower 'Business Software' that rolls-up to the appropriate Service Tower 'Application'. The cost does not relate to a specified ICT project lifecycle stage and would therefore be allocated to a 'Default/General' or 'BAU ICT Expenditure' activity level 3.

Account string example:

The costs are only posted to the lowest level project and activity dimension. The example account string presents how the cost would roll-up to higher levels to demonstrate how the account string works in theory.



7. Supplementary Information 2 – Accounting Treatment for ICT Expenditure

7.1 Overview

This section details various prompts for agencies to consider when accounting for ICT expenditure across the ICT Lifecycle.[1] It is recommended that agencies refer to their internal accounting policies and consult with their external auditor when accounting for ICT expenditure.

The accounting treatment of ICT Expenditure can vary significantly due to the increased use of cloud versus on-premises. The ICT Lifecycle Cost Matrix Template (Appendix 6) provides agencies with a template that may be used by their Finance teams to capture ICT expenditure. This can assist agencies when assessing the accounting treatment of costs incurred across both ICT projects and BAU.

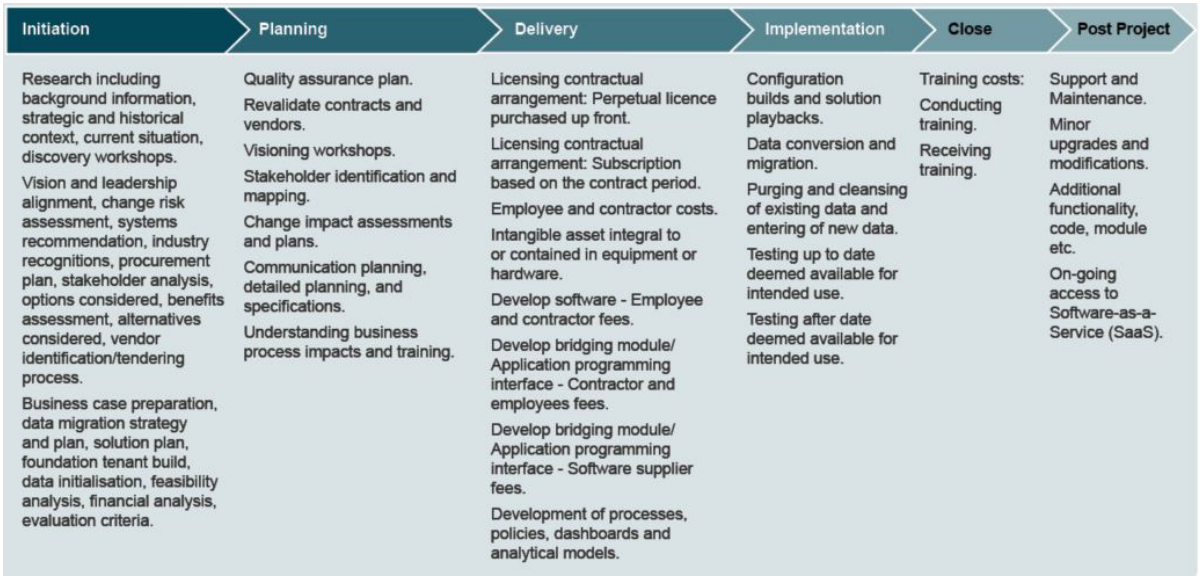
7.2 Accounting Treatment Considerations

Figure 6 details example costs that may be incurred across the ICT Lifecycle. Agencies should consider the following key variables and their combinations when assessing the accounting treatment of ICT expenditure.

- ICT lifecycle stage
- The specific expenditure incurred
- The nature of the ICT Solution, for example:
  - On Premise – Acquired vs Internally Generated
  - Cloud – Controlled vs Not-Controlled

[1] ICT Lifecycle stages per the DPC ICT Project Delivery Framework.

Figure 6 Example Costs across the ICT Lifecycle Stages per the DPC – ICT Project Delivery Framework



8. References

TBMC Standards Committee. “TBM Taxonomy Version 4.0”. Technology Business Management Council. 2020.

AASB 138 *Intangible Assets* (“AASB 138”).

March 2019 IFRS Interpretations Committee Agenda Decision [Customer’s Right to Receive Access to the Suppliers Software Hosted on the Cloud (IAS 38 Intangible Assets) – Agenda Paper 7 (“2019 IFRIC decision”).

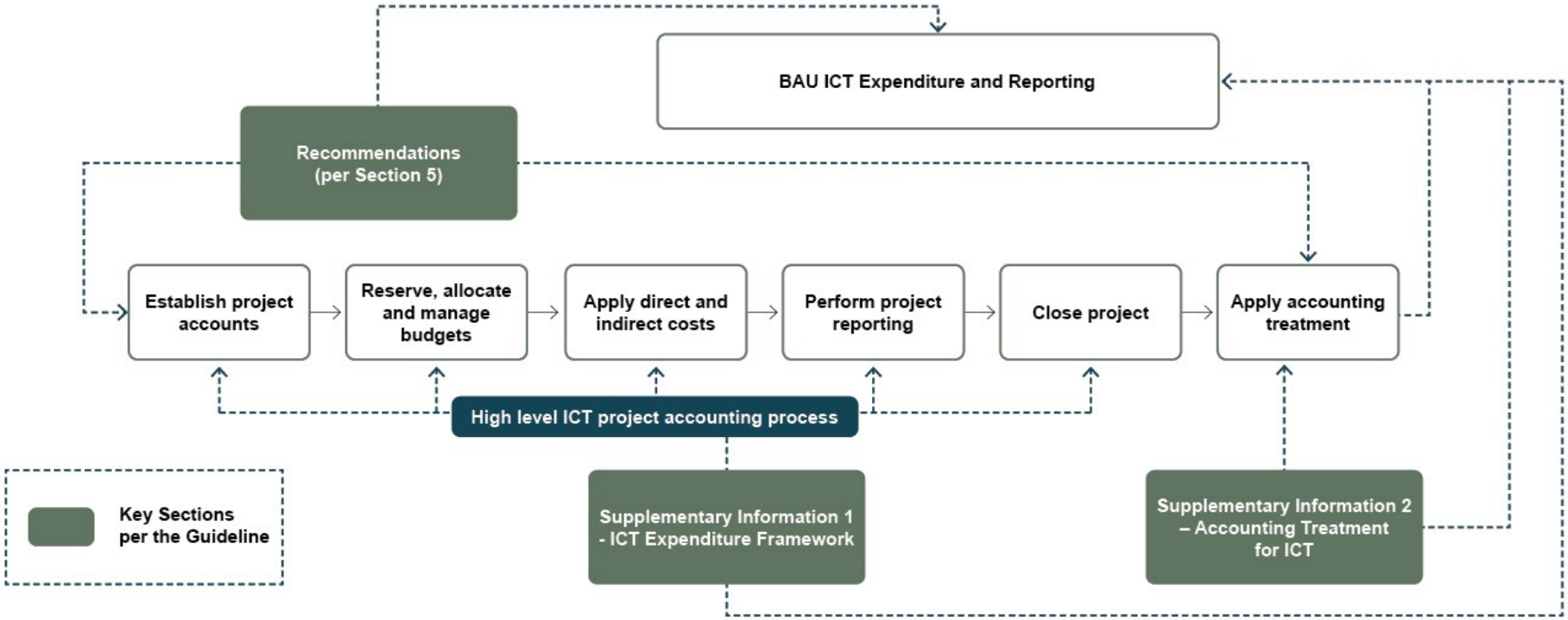
March 2021 IFRS Interpretations Committee Agenda Decision [Configuration or Customisation Costs in a Cloud Computing Arrangement (IAS 38 Intangible Assets) – Agenda Paper 2 (“2021 IFRIC decision”).

The Department of Premier and Cabinet. “ICT Project Delivery Framework”. 2023.

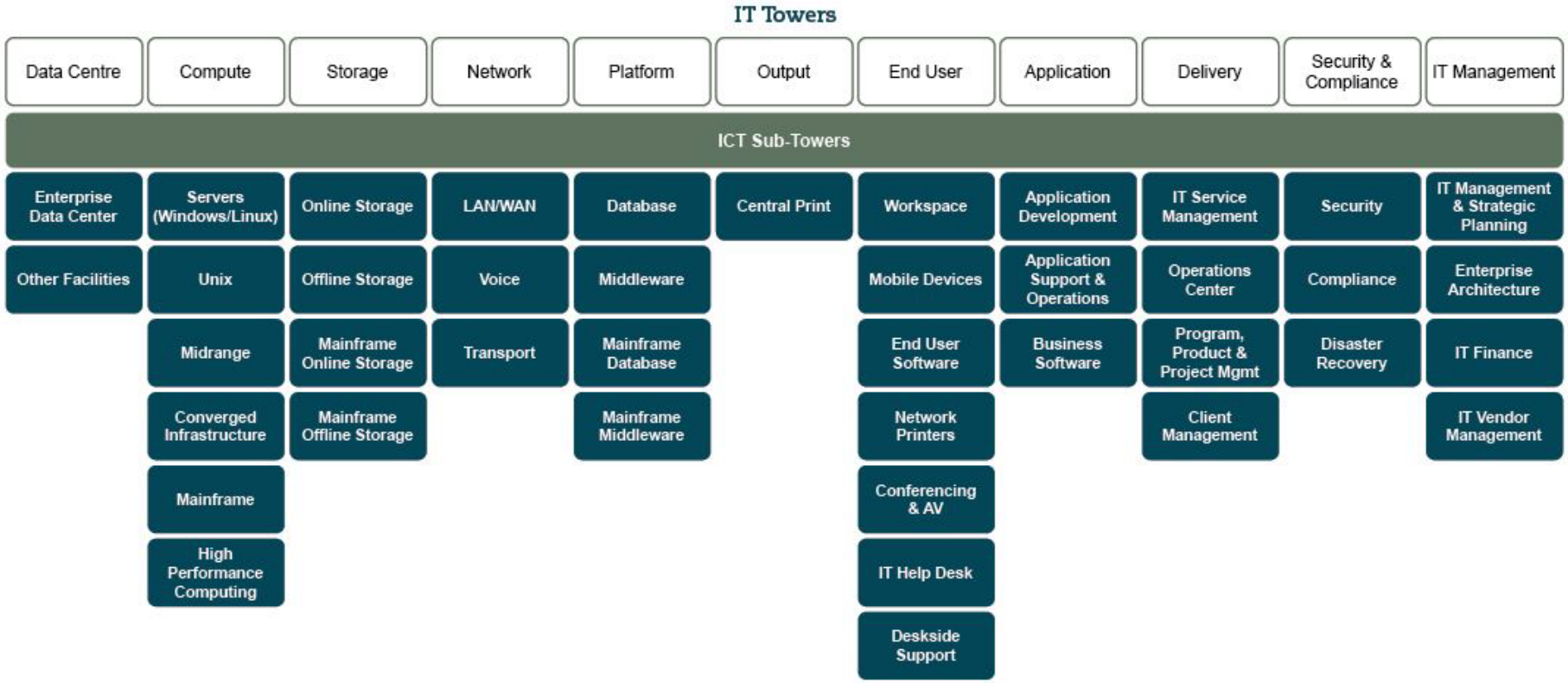
9. Appendix 1 – Glossary

Term	Explanation
Agency	For the purpose of this guideline and per the FMA 2006, an 'agency' refers to a department, sub-department, or statutory authority.
Available for intended use	The asset is in the condition and location required to operate as intended by management.
Cloud-based services	Cloud-based services are software, infrastructure and platforms that are delivered over the internet to provide access to resources like storage, servers, software, and databases.
Controlled	An agency controls an asset if they have the power to obtain the future economic benefits flowing from the underlying resource and to restrict the access of others to those benefits.
ICT BAU Expenditure	ICT-related expenses incurred on a day-to-day basis to maintain the current ICT capability of an agency.
ICT Expenditure	ICT-related expenses incurred in providing business enabling ICT-services. This includes: Operating and capital expenses. Internally and externally sourced ICT-services. The costs to provide those service.
ICT Lifecycle Stage	The ICT Lifecycle Stages referred to in this Guidance include: • Initiation • Planning • Delivery • Implementation • Close • Post-Project.
ICT Project Expenditure	ICT-related expenditure incurred to enhance the current ICT-capability. This is usually done through ICT initiatives and projects.
Internally generated asset	An asset generated within an organisation where the research phase and development phase of the project can be clearly distinguished from each other.
Software as a Service	A software licencing and delivery model in which software is licenced on a subscription basis and is centrally hosted.

10. Appendix 2 – ICT Guidelines and Supplementary Information Visual Overview



11. Appendix 3 – TBM ICT Towers and Sub-Towers[2]



[2] TBMC Standards Committee. “TBM Taxonomy Version 4.0”. Technology Business Management Council. 2020.

12. Appendix 4 – Cost Pool Definitions[3]

Cost Pool	Example Expenses
Hardware	All physical technology assets excluding property, office space or raised floor facilities. Infrastructure costs, including Servers Storage, Data Protection, Networking Hardware, Load Balancers, Firewalls, Maintenance and Support, Firmware.
Software	Includes licensing, customisation fees, cloud-based subscriptions, maintenance and support costs for all software including operating system, middleware, databases, system management and administration tools, desktop applications and utilities and business applications.
Internal Labour	Includes the range of personnel costs and activities, such as staff costs, staff functions, and training and delivery related to delivering or supporting the IT-services.
External Labour	Includes the cost of external personnel such as contractors, required to deliver or support the IT services.
Telecom	All telecommunications charges including circuits and associated usage fees to provide services between data centre and other locations, internet and express route connectivity, maintenance and support as well as telephony systems (e.g. contract centres, corporate telephone systems, etc).
Facilities and Power	Includes the floor space as well as the power, cooling, and other utilities costs, environmental control (fire suppression), power distribution, rack infrastructure, outside services and personnel costs related to managing the data centre environment.
Outside Services	Includes IT services purchased from external service providers including consulting services, managed services, cloud services, system integrators, application development and testing services.
Internal Services	Miscellaneous charges received from other internal shared services groups.
Other	Miscellaneous or non-standard expenses, including insurances.

[3] TBMC Standards Committee. “TBM Taxonomy Version 4.0”. Technology Business Management Council. 2020.

13. Appendix 5 – ICT Service Towers and Sub-Towers Definitions[4]

ICT Service Towers and Sub-Towers		
Network	LAN/WAN	Physical and wireless local area network connecting equipment within the core data centres and connecting end users in office working areas to the organization's broader networks. Wide area network equipment, labour and support services directly connecting data centres, offices and third parties.
	Voice	Voice resources which enable or distribute voice services through on premise equipment.
	Transport	Data network circuits and associated access facilities and services.
Compute	Servers	Physical and virtual servers running a version of Microsoft's Windows Server or the Linux operating system.
	Unix	Servers running vendor-specific, proprietary Unix operating systems.
	Midrange	Servers running IBM AS/400 platform.
	Converged Infrastructure	Purpose-built appliances that provide compute, storage and network capabilities in one box.
	Mainframe	Traditional mainframe computers and operations running legacy operating systems.
	High Performance Computing (HPC)	The use of massive concurrent computing resources and parallel processing techniques for solving complex computational problems. HPC technology is applied in areas such as scientific and industrial research, product engineering and development, and complex business modelling, simulation, and analysis. HPC hardware and software technologies are specialized and optimized for massively parallel computing and processing vast amounts of data.
Delivery	IT Service Management	Resources involved with the incident, problem and change management activities as part of the IT Service Management process.
	Program, Product & Project Management	Resources involved with managing and supporting IT related projects and/or continuous product development across business and IT-driven initiatives.
	Client Management	Resources or 'account managers' aligned with the lines of business to understand business needs, communicate IT products, services and status of IT projects.
	Operations Centre	Centralized IT Operations Centre resources including monitoring and intervention.
Storage	Online Storage	Central storage such as SAN, NAS and similar technologies for the distributed compute infrastructure.
	Offline Storage	Offline storage resources used for archive, backup and recovery to support data loss, data corruption, disaster recovery and compliance requirements of the distributed storage.
	Mainframe Online Storage	Mainframe attached storage arrays and the associated equipment, software and labour to run and operate.
	Mainframe Offline Storage	Any storage resources used for archive, backup and recovery to support data loss, data corruption, disaster recovery and compliance requirements of the mainframe storage.

[4] TBMC Standards Committee. "TBM Taxonomy Version 4.0". Technology Business Management Council. 2020.

ICT Service Towers and Sub-Towers		
Data Centre	Enterprise Data Centre	Purpose-built data centre facilities that house and protect critical IT equipment.
	Other Facilities	Computer rooms and MDF/IDF/telco closets that house IT equipment in corporate headquarters, call centres or other general purpose office buildings.
End-User	Workspace	Client compute physical desktops, portable laptops, thin client machines, peripherals used by individuals to perform work.
	Mobile Devices	Client compute tablets, smart phones and apps used by individuals to perform work.
	End User Software	Client related software used to author, create, collaborate, and share documents and other content.
	Network Printers	Printers located on or near users' desktops.
	Conferencing & AV	Audio and video conferencing equipment typically used in conference rooms and dedicated telepresence rooms to enable workforce communications.
	IT Help Desk	Centralized Tier 1 help desk resources that handle user requests, answer questions, and resolve issues.
	Deskside Support	Local support resources that provide on-site support for moves, adds, changes and hands on issue resolution.
Application	Application Development	Resources involved with the analysis, design, development, code, test and release packaging services associated with application development projects.
	Application Support & Operations	The operations, support, fix, and minor enhancements associated with existing applications.
	Business Software	Software expenditures including licensing, maintenance and support related to off-the-shelf software purchases.
IT Management	IT Management & Strategic Planning	IT management and administration resources.
	Enterprise Architecture	Enterprise architecture services.
	IT Finance	Resources involved in the planning, budgeting, spend management and chargeback of IT expenditures and the costing of IT products and services.
	IT Vendor Management	Resources involved in the selection, contract management, oversight, performance management and general delivery of services by 3rd party vendors and external service providers.
Security and Compliance	Security	IT Security resources setting policy, establishing process and means, measuring compliance and responding to security breaches and providing real-time operational security.
	Compliance	IT Compliance resources setting policy, establishing controls and measuring compliance to relevant legal and compliance requirements.
	Disaster Recovery	IT Disaster Recovery resources setting DR policy, establishing process & means, dedicated failover facilities, performing DR testing.

ICT Service Towers and Sub-Towers		
Platform	Database	Distributed database services focused on the physical database.
	Middleware	Distributed platform, application, and system integration resources enabling cross application development, communications and information sharing.
	Mainframe Database	Mainframe database services focused on the physical database.
	Mainframe Middleware	Mainframe platform, application and system integration resources enabling cross application development, communications, and information sharing.
	Container Orchestration	Tools and resources for managing the lifecycles of containers.
	Big Data	Systems and resources for integrating, managing and analysing high volumes of low density, unstructured data that is received at high rates of velocity.
Output	Central Print	Central print services; often provided to support customer billing or customer documentation support processes.

14. Appendix 6 – ICT Lifecycle Cost Matrix Template

Stages of ICT Lifecycle	Example Costs	On premise		Cloud based	
		Acquired	Internally Generated	Not Controlled	Controlled
Initiation	Research including background information, strategic and historical context, current situation, discovery workshops. Vision and leadership alignment, change risk assessment, systems recommendation, industry recognitions, procurement plan, stakeholder analysis, options considered, benefits assessment, alternatives considered, vendor identification/tendering process. Business case preparation, data migration strategy and plan, solution plan, foundation tenant build, data initialisation, feasibility analysis, financial analysis, evaluation criteria.				
Planning	Quality assurance plan, revalidate contracts and vendors, visioning workshops, stakeholder identification and mapping, change impact assessments and plans, communication planning, detailed planning, and specifications, understanding business process impacts and training.				
Delivery	Licensing contractual arrangement: Perpetual licence purchased up front.				
	Licensing contractual arrangement: Subscription based on the contract period.				
	Employee and contractor costs.				
	Intangible asset integral to or contained in equipment or hardware.				
	Develop software - Employee and contractor fees.				
	Develop bridging module/ Application programming interface – Contractor and employees fees.				
	Develop bridging module/ Application programming interface – Software supplier fees.				
	Development of processes, policies, dashboards and analytical models.				

Stages of ICT Lifecycle	Example Costs	On premise		Cloud based	
		Acquired	Internally Generated	Not Controlled	Controlled
Implementation	Configuration builds and solution playbacks.				
	Data conversion and migration.				
	Purging and cleansing of existing data and entering of new data.				
	Testing up to date deemed available for intended use.				
	Testing after date deemed available for intended use.				
	Training costs - Conducting and receiving.				