



Frequently Asked Questions

This document seeks to provide answers to commonly asked questions about the ICT Total Cost of Ownership and Benefits Model (the TCO Model) and ICT Expenditure Financial Guidelines (Financial Guidelines) developed by the Department of Treasury and Finance (DTF).

Further information on the TCO Model or Financial Guidelines can be sought by contacting the Digital Transformation Unit at dcf@dtf.wa.gov.au.

What is the purpose of the Total Cost of Ownership and Benefits Model?

At the request of Government, DTF (in consultation with the Department of the Premier and Cabinet's Office of Digital Government (DGOV)) has developed the TCO Model as a standard tool for public sector agencies to outline the costs and benefits of acquiring and maintaining an ICT product through its lifecycle.

The TCO Model is intended to facilitate the analysis agencies are required to undertake in support of proposed ICT projects under the [Strategic Asset Management Framework](#) (SAMF) Business Case Guidelines. The TCO Model is not intended to introduce requirements that supersede or do not align with guidance provided under the SAMF.

The TCO Model is underpinned by two components of the broader whole-of-government ICT Modernisation Framework, which agencies are encouraged to review:

- The **ICT Expenditure Financial Guidelines**, which have been developed to improve the transparency and consistency of ICT expenditure tracking and reporting through standard categorisation and treatment of costs embedded in an agency's financial management environment. The Financial Guidelines are available via the [SAMF website](#); and
- The **ICT Modernisation Framework Benefits Framework**, which outlines the standardised approach to identifying and categorising ICT project benefits. This is available from the DGOV [website](#).

Adherence to this guidance is aimed at providing a clear view of the expected costs and benefits of project proposals, which is essential to informing Government's understanding of, and decision to invest in ICT projects. Completing the TCO Model should also assist agencies in planning and understanding the resources required throughout the project's lifecycle.

Is the TCO Model a mandatory component of all agencies' modernisation proposals?

Government has introduced a requirement for agencies to complete the TCO Model for all ICT projects with an estimated total cost of over \$5 million. At a minimum, agencies are asked to complete the TCO Model to include **all short-listed project options** outlined in the business case being presented for government consideration. A key purpose of this analysis is to justify the selection of the preferred project option.

As per the SAMF Business Case Guidelines, the depth of analysis agencies conduct should be commensurate with the complexity, risk profile and cost. In line with standard practice, agencies are encouraged to engage with DTF early in the development of the business case.

Must agencies use the template provided?

Agencies may use alternative templates to conduct analysis that is equivalent or comparable to the TCO Model. The template agencies use to present project analysis should allow adherence to both the ICT Expenditure Financial Guidelines and ICT Benefits Realisation Framework. In the early stages of business case development and prior to formal lodgement, agencies are encouraged to engage with DTF to clarify requirements relating to supporting documents and analysis.

Is a cost-benefit analysis required for all ICT modernisation proposals?

A key feature of the TCO Model is the functionality to perform cost-benefit analysis (CBA). The type and depth of analysis agencies are expected to undertake, however, will vary depending on the proposal.

For high-value, high-risk proposals, a CBA **may** be used to conduct the financial analysis. A CBA evaluates whether the proposal would make a sufficient contribution to society's welfare that justifies the expenditure. These impacts include both market and non-market specific impacts.¹

For lower value and lower risk proposals, it may be sufficient to provide a qualitative assessment of project costs and benefits. Where possible, agencies are encouraged to provide quantitative information and supplementary evidence in support of project proposals (and to include this information in the space indicated in the TCO Model).

Agencies proceeding with cost-benefit analysis should consult the SAMF (Business Case Guidelines), which outlines the standard approach and parameters set by the Western Australian Government (including, discounting cost and benefits and sensitivity analysis). Further guidance and reference materials on completing project and options analysis is provided.

Agencies are encouraged to engage with DTF early in the development of the business case, to clarify an appropriate approach to conducting the supporting economic and financial assessment.

¹ Department of Treasury and Finance, Strategic Asset Management Framework Business Case Guidelines (pp 24-26) <https://www.wa.gov.au/system/files/2025-01/samf-business-case-guidelines.pdf>

How many years of costs and benefits must be included?

The number of years over which agencies should identify costs and benefits is known as the 'analysis period'. The analysis period will vary across proposals and depend on project size and complexity. The TCO Model allows agencies to identify costs and benefits over a 10-year period. The number of years to be populated is determined at the agency's discretion and in line with project-specific parameters.

The analysis period chosen should capture all significant costs and benefits that can be directly attributed to each project option and should inform Government's investment decision. For example, smaller or less complex projects may only incur costs and yield benefits over a 5-year period. In this instance, populating the TCO Model for up to 5 years (of costs and benefits) would be appropriate.

For most ICT projects, an analysis period of 2-5 years and not longer than 10 years is recommended (in line with the typical lifecycle of ICT products).²

How many project options should be presented in the TCO Model?

The TCO Model should be completed for all short-listed options presented for Government consideration. Tabs for up to six options have been provided in the spreadsheet (the 'base case' and five additional options). Agencies should designate 'Option 1' in the TCO Model as the 'maintain' or 'base case' option. Options 2 and onwards should refer to the short-listed options outlined in the business case.

In line with to the SAMF, agencies are encouraged to include at least two other options for Government consideration, in addition to the 'base case'³ (SAMF Business Case Guidelines; page 20). For streamlined business cases, it may be reasonable to limit the number of short-listed options to the recommended solution and the base case. Agencies are also asked to indicate, and justify the selection of, the preferred option.

How are costs to be outlined in the TCO Model?

Agencies should identify all project costs according to the ICT Expenditure Framework (within the ICT Expenditure Financial Guidelines). It is important that agencies undertake rigorous scoping to comprehensively identify all costs associated with the project, including both implementation and ongoing expenditure.

² NSW CBA Guidelines (page 32) - https://www.treasury.nsw.gov.au/sites/default/files/2023-04/tpg23-08_nsw-government-guide-to-cost-benefit-analysis_202304.pdf

³ According to the SAMF Business Case Guideline, the 'base case' is defined as 'business as usual' but may also be defined as 'do minimum,' 'do nothing', or 'keep safe and operational'.



Agencies should identify and categorise costs using the **two standardised Technology Business Management (TBM) taxonomies** as outlined on **pages 6 to 8** of the Financial Guidelines.

For all cost items, agencies should specify both the appropriate Cost pool (Finance view) and the Resource tower (ICT view). This is to be completed using the drop-down menus under the 'cost pool' and 'resource tower' columns in the cost tabs of the TCO Model.

Agencies are encouraged to supplement cost figures with as much qualitative and quantitative information as possible in the appropriate column (such as unit price, capex or opex and quantity). Once all expenditure items are identified and quantified, the TCO Model enables users to specify the year(s) in which the cost is expected to be incurred (by noting the dollar figure(s) in the appropriate 'year' column).

How are benefits to be outlined in the TCO Model?

Agencies should outline benefits attributable to the project as comprehensively as possible and in accordance with the ICT Modernisation Benefits Framework. As per the SAMF Business Case Guidelines, benefits are the direct advantage secured as a result of undertaking a particular investment to address the identified problem. Agencies should highlight and clearly state the causal link between the stated benefit and the initiative(s) being implemented.

Benefits tabs in the TCO Model have been structured to enable agencies to outline project benefits in line with the ICT Modernisation Benefits Framework. Specifically, agencies are encouraged to systematically identify and categorise benefits according to the three benefits tiers outlined in the Benefits Framework:

- Tier 1: Cash-releasing benefits.
- Tier 2: Non-cash releasing benefits.
- Tier 3: Wider economic, social and environmental benefits.

The benefits tabs in the TCO Model are pre-populated with example benefits under each benefit tier. These are intended as suggestions for consideration and as examples of the sorts of specific benefits under each tier. Users may delete, edit or add to pre-populated benefits as necessary for the specific project.

Tiers 1 and 2 include benefits that accrue to agencies resulting from implementation of the ICT project. These relate to resource or time savings, reduced expenditure on external goods or services or other business efficiencies. Agencies should carefully consider whether the expected benefit will result in the release of cash for the agency and categorise the benefit accordingly.



Tier 3 includes all other project benefits to the broader Western Australia community, economy or environment directly resulting from the ICT project. This is broad category of benefits, especially for large or complex projects relating to public services (such as health and education). As a general definition, a ‘benefit’ refers to an increase in welfare associated with an initiative’s economic, social, environmental, and cultural outcomes.⁴ Benefits may be monetary or non-monetary and an initiative’s key benefits should flow directly from meetings its objectives.

How are benefits to be valued for the TCO Model?

A key feature of the TCO Model is enabling agencies to calculate and assign dollar values to the individual benefits arising from ICT project options. Providing reliable dollar-value estimates for project benefits is an important consideration to ensure that investment decisions made by Government deliver overall net benefit to Western Australia (even if a full cost-benefit analysis is not undertaken). Agencies are further asked to apportion the total value of individual benefits to the specific year(s) in which the benefit is expected to be realised.

Agencies are encouraged to consult suitable economic expertise on benefits valuation and to provide as much evidence as possible to support dollar-value estimates. Further guidance on preparing analysis and benefits valuation is outlined in the SAMF Business Case Guidelines. Broader cost-benefit analysis guidance may also provide useful information on conducting benefits valuation (even if a full cost-benefit analysis is not undertaken).⁵

Benefits that cannot be reliably valued should be described in qualitative terms (in the space provided below the main benefits table). This will allow decision-makers to understand the full economic impact of project options.

What assistance is available to complete the TCO Model?

DTF has prepared a guidance document, which provides step-by-step instructions for agencies on completing the TCO Model. In addition to the ICT Expenditure Framework, other documents agencies should consult include:

- the SAMF for general guidance on conducting economic and financial analysis for project proposals; and
- the ICT Modernisation Benefits Framework and the ICT Benefits Realisation Framework (from DGov) – for guidance on benefits identification, tracking and reporting.

⁴ NSW Cost-Benefit Analysis Guidelines (page 20) [<https://www.nsw.gov.au/sites/default/files/noindex/2025-03/tpg23-08-nsw-government-guide-to-cost-benefit-analysis.pdf>]

⁵ For example, the NSW Cost-Benefit Analysis Guidelines. Section 2.3 describes the approach that should be undertaken to identify and describe project costs and benefits.



Agencies are also encouraged to consult internally as necessary, including the relevant finance and ICT teams. Additional guidance, particularly on technical aspects of the TCO Model (such as benefits valuation and cost-benefit analysis) may also be sought from the economic literature, case studies from other jurisdictions or third-party expertise.

What is the purpose of the ICT Expenditure Financial Guidelines?

The ICT Expenditure Financial Guidelines (Guidelines) aims to improve the transparency and consistency of ICT expenditure tracking and reporting through standard categorisation and treatment of costs, embedded in an agency's financial management environment. Key components of the Guidelines are:

- **The ICT Expenditure Framework**, which outlines the TBM taxonomies for the standard categorisation of ICT project costs (including both the 'ICT' view and the 'finance' view).
- **Accounting Treatment for ICT Expenditure**, which provides prompts to consider for the accounting treatment of ICT expenditure incurred across the ICT lifecycle.

These Guidelines do not introduce new obligations on agencies and operate within the broader public sector governance landscape. Agencies should consider these Guidelines within their existing financial governance, data, process, and technology landscapes.

How are agencies expected to apply the Guidelines?

At a minimum, agencies should consult and adhere to the Financial Guidelines when completing the TCO Model and presenting ICT projects for Government consideration. Cost tabs in the TCO Model have been structured in accordance with the ICT Expenditure Framework as outlined in the Guidelines (specifically, the TBM taxonomies). When presenting project costs, agencies should list all individual project costs by specifying the relevant 'service tower' (ICT view) and 'cost pool' (finance view).

- 'Resource Towers' (under the ICT view) represent the basic building blocks of ICT services and applications.⁶
- 'Cost Pools' (under the Finance view) represent the standard categorisation of resources or inputs for ICT projects.

⁶ The TBM Taxonomy and Model also allows agencies to specify the relevant "ICT Sub-Tower" and "ICT Cost Sub-Pool". These represent the next level of categorisation under "Resource Tower" and "Cost Pool", respectively. Where possible, agencies are encouraged to specify the relevant Resource Sub-Tower or Sub Cost-Pool, noting that this level of detail may not be available for all project costs.



The Guidelines also provide details on how agencies may utilise their Financial Management Information Systems (FMIS) and Chart of Accounts (CoA) within their General or Sub-Ledgers to capture and represent ICT expenditure. Agencies are encouraged to record and manage their ICT expenditure in accordance with the TBM taxonomies mentioned above, using both the ICT view (resource towers) and the finance view (cost pools). Examples of how ICT expenditure may be transacted through the CoA is detailed in section 6 of the Guidelines.

The Guidelines provides further information and prompts for agencies to consider relating to the accounting treatment of ICT expenditure. Agencies are recommended to refer to internal accounting policies, internal finance teams and consult external auditors (as necessary) when accounting for ICT expenditure.

What assistance is available to agencies when applying the Guidelines?

The Financial Guidelines provide information on how agencies FMIS and CoA should be restructured to reflect the standardised approach represented by the TBM taxonomy. Agencies are encouraged to consult their internal finance teams in the first instance or contact DTF for more information on how adopting the financial and accounting standards within the Guidelines.