ICT Assurance Framework

Including Gateway Coordination Agency Framework for ICT Projects under the NSW Gateway Policy

Version 1.2 FINAL | February 2017

Summary

Project Name	ICT Assurance Framework
Responsible Minister	The Hon Victor Dominello MP Minister for Finance, Services and Property
Cluster	Finance, Services and Innovation
Gateway Coordination Agency	Department of Finance, Services and Innovation
Sponsor contact details	Damon Rees Government Chief Information and Digital Officer
Priority	High
Objectives	The application of an independent risk-based assurance process for the State's capital and recurrent funded ICT projects to identify the level of confidence that can be provided to the nominated sub-committees of Cabinet that the State's ICT projects are being effectively developed and delivered in accordance with the Government's objectives.
Relationship with Government policies	NSW Gateway Policy NSW Treasury Guidelines for Capital Business Cases Commercial Policy Framework
Proposed commencement	Ongoing

Document Control

Version Name	Date	Purpose
Internal Draft version 1.0	13/06/2016	Internal DFSI working draft
Discussion Draft version 1.0		To IDLG for feedback, 1 July 2016 meeting
Draft version 2.0	25/07/2016	For 22 July IDLG workshop
Final Draft version 3.0	28/07/2016	For IDLG approval
Final Draft version 3.1	01/08/2016	Further updated for IDLG approval
IDLG-endorsed version 4.0	05/08/2016	Endorsed by IDLG, with additional proposed changes, delegated to ISSI for subsequent approval.
ISSI-approved version 4.0.1	12/08/2016	Approved by the ISSI Working Group, a sub-committee of IDLG, with updates to the Introduction, Glossary, Sec 2.3, Table 4, Sec 3.4.1.
DFSI Secretary Circular version 4.0.2	02/09/16	Approved by DFSI Secretary for implementation on 5 September 2016
Version 1.0 FINAL	18/10/2016	Final for ERC endorsement
Version 1.1 FINAL	09/11/2016	Final for ERC endorsement with minor edits in Table 1 and Sec 3.3.3
Version 1.2 FINAL	13/02/2017	Approved by ERC with formatting and minor edits

Contents

Acronyms

Abbreviation	Definition
CEO	Chief Executive Officer
CIO	Chief Information Officer
DFSI	Department of Finance, Services and Innovation
ERC	Cabinet Standing Committee on Expenditure Review
ETC	Estimated Total Cost
GCA	Gateway Coordination Agency
GCIDO	Government Chief Information and Digital Officer
HPHR	High Profile/High Risk
IAF	ICT Assurance Framework
ICT	Information and Communications Technology
INSW	Infrastructure NSW
IRRAG	Investment and Risk Review Advisory Group (a sub-group of the ISSI Working Group)
Portal	Reporting and Assurance Portal
SOC	State Owned Corporation

Glossary

Term	Definition
Clearance of gate	Notification to a Delivery Agency by DFSI that a Gateway Review or Health Check for a project has been cleared, i.e. an appropriate Close-out Plan is in place to assist with project development or delivery and critical recommendations are met.
Close-out Plan	Document outlining actions, responsibilities, accountabilities and timeframes that respond to recommendations identified in Gateway Review and Health Check Reports.
Complex project	A number of elements contribute to project complexity, such as delivery in multiple stages, varying time periods for stages, the degree of business change, and/or a number of inter-dependencies. Individual project stages may be identified during the development phase or during the procurement and delivery phases (when individual project stages are being procured and delivered under different contracts and potentially over different time periods). In some cases, these individual project stages may have a different Project Tier to the overall complex project.
Deep Dive Reviews	Deep Dive Reviews are similar to a Health Check but focus on a particular issue or limited terms of reference rather than the full range of issues normally considered at a Health Check. These Reviews are generally undertaken in response to issues being raised by key stakeholders to the project or at the direction of the relevant Government Minister.
Delivery Agency	The Government agency tasked with developing and / or delivering a project applicable under this Framework and the NSW Gateway Policy.
DFSI Assurance Unit	The dedicated team within DFSI responsible for implementing and administering the IAF including organising reviews.
Estimated Total Cost (ETC)	Total capital spend (including from capital envelopes) and recurrent spend of the project/program, including the non-ICT components, over the period of time defined in the project/program business case.
Expert Reviewer Advisory Group	An advisory group, convened by INSW and including DFSI, providing advice on Expert Reviewer capability, gaps and requirements to support a high performing Expert Reviewer Panel.
Expert Reviewer Panel	Panel comprising independent highly qualified Expert Reviewers established to cover all aspects of Gateway Review needs.
Gate	Particular decision point(s) in a project/program's lifecycle when a Gateway Review may be undertaken.
Gate 0 / Portfolio Review	Considers business need at a portfolio level to support effective project and solution selection, while assisting in the alignment with ICT and Digital Strategy and other relevant government reforms. These reviews will provide a collaborative approach to: • develop a view of the future project portfolio • provide guidance on how projects should be conceived and developed • identify opportunities for collaboration and shared solutions.
Gate 1	Strategic alignment gate. Ensures the project is conceived of in the right way and aligns with relevant Strategic Imperatives, Investment Principles and Enterprise Architecture.
Gate 2	Business case gate. Ensures the project has a robust business case, with clear plan to realise benefits, aligns with relevant Strategic Imperatives, Investment Principles and Enterprise Architecture.

Term	Definition
Gate 3	Pre-execution gate. Assesses delivery readiness and includes pre-tender review. Ensures the project is set up for successful delivery, identifies delivery problems early, and ensures procurement strategy and other planning is appropriate.
Gate 4	Tender Evaluation gate. Ensures project will be delivered effectively, checks against specific project requirements at key delivery milestones, includes tender evaluation.
Gate 5	Pre-Commissioning gate. Assesses the state of readiness to commission the project and implement the change management required.
Gate 6	Post-implementation gate. Confirms realisation or plan for realisation of benefits against those agreed at business case, ensures lessons learned have been sufficiently considered and documented.
Gateway Coordination Agency (GCA)	The agency responsible for the design and administration of an approved, risk-based model for the assessment of projects/programs, the coordination of Gateway Reviews and the reporting of performance of the Gateway Review Process, under the NSW Gateway Policy.
Gateway Review	A Review of a project/program by a Review Team at a specific key decision point (Gate) in the project/program's lifecycle. A Gateway Review is a short, focused, independent expert appraisal of the project/program that highlights risks and issues, which if not addressed may threaten successful delivery. It provides a view of the current progress of a project/program and assurance that it can proceed successfully to the next stage if any critical recommendations are addressed.
Gateway Review Manager	The Gateway Review Manager guides the implementation of the Gateway Review or Health Check. The Manager facilitates the Review, but does not participate in the Review.
GCA Framework	A framework, designed and operated by a GCA, that assesses the risks associated with a project or program of a particular nature in order to determine the application of Gateway. A GCA Framework defines the roles and responsibilities to deliver Gateway and aligns with the Gateway Review process outlined in the NSW Gateway Policy.
Health Check	Independent reviews carried out by a team of experienced practitioners seeking to identify issues in a project/program which may arise between Gateway Reviews.
ICT	This is the common term for the entire spectrum of technologies for information processing, including software, hardware, communications technologies and related services. In general, IT does not include embedded technologies that do not generate data for enterprise use.[1] This may include stand-alone Operational Technology projects and programs as agreed with INSW.
Investment and Risk Review Advisory Group (IRRAG)	A sub-group of the Infrastructure, Services and Strategic Investment (ISSI) Working Group, the IRRAG is an advisory group, comprising key CIOs, providing advice to the GCIDO on proposed Project Tier and Project Assurance Plans provided by Delivery Agencies and reviewed by DFSI.
Investor	The Government, representing the State of NSW.
Mixed project	A project or program that contains a material combination of elements relating to multiple GCA frameworks.

---

[1] Gartner IT Glossary – definition for IT (information technology)

Term	Definition
Modified Project Assurance Plan	Document prepared by Delivery Agencies and lodged with DFSI for endorsement after completion of a particular Gateway Review, after which a program or complex project may be considered in its component parts. For complex projects this would be individual stages, for programs this would be individual projects or sub-programs.
	The Modified Project Assurance Plan outlines the proposed Delivery Agency assurance arrangements for future Gateway Reviews for each individual component of work initiated (stage/project/sub-program).
Operational Technology	Systems used to control critical infrastructure[2]. Can include systems that relate to service delivery, such as tolling systems, rail signalling or technology to support a new school or hospital.
Policy Owner	For the purpose of the NSW Gateway Policy, the Policy owner is NSW Treasury.
Portfolio	The totality of an organisation's ICT investment program.
Program	A temporary, flexible organisation created to coordinate, direct and oversee the implementation of a set of related projects and activities in order to deliver outcomes and benefits related to the organisation's strategic objectives. A program is likely to be longer term and have a life that spans several years. Programs typically deal with outcomes, whereas projects deal with outputs.
	Projects that form part of a program may be grouped together for a variety of reasons including spatial co-location, the similar nature of the projects or projects collectively achieving an outcome. Programs provide an umbrella under which these projects can be coordinated.
	The component parts of a program are usually individual projects or smaller groups of projects (sub-programs). In some cases, these individual projects or sub-programs may have a different Project Tier to the overall program.
Project	A temporary organisation, usually existing for a much shorter duration than a program, which will deliver one or more outputs in accordance with an agreed business case. Projects are typically delivered in a defined time period on a defined site. Projects have a clear start and finish. Projects may be restricted to one site or cover a large geographical area, however, will be linked and not be geographically diverse.
	A particular project may or may not be part of a program.
	Where a project is delivered in multiple stages and potentially across varying time periods it is considered a 'complex project'. Refer to the definition for 'complex project'.
Project Assurance Plan	Document prepared by Delivery Agencies and lodged with DFSI for GCIDO confirmation when registering projects via the Reporting and Assurance Portal.
	Project Assurance Plans detail proposed Delivery Agency initiated project assurance arrangements in line with the IAF requirements.
Project Risk Profile Tool	Online tool as part of the Reporting and Assurance Portal available to Delivery Agencies to self-assess risk profile of projects/programs.
Project Sponsor	The Delivery Agency executive with overall responsibility for ensuring that a project meets its objectives and delivers the projected benefits. See Appendix B for details.
Project Sponsor-Commissioned Review	The Project Sponsor commissioning an independent milestone or health check review on the project using the relevant gateway workbooks as part of its internal assurance arrangements. These are required at certain gates for Tier 3 and Tier 4 projects.
	Reviewers must be independent of the Delivery Agency and the project team.

---

[2] New South Wales Auditor-General's Report - Performance Audit, Security of Critical IT Infrastructure (2015).

Term	Definition
Project Tier	Tier-based classification of project profile and risk potential based on the project's estimated total cost and qualitative risk profile criteria (level of government priority, interface complexity, sourcing complexity, agency capability, technical complexity and change complexity). The Project Tier classification is comprised of four Project Tiers, where Tier 1 encompasses projects deemed as being the highest risk and profile (Tier 1 – High Profile/High Risk projects), and Tier 4 with the lowest risk profile.
Reporting and Assurance Portal	ICT Assurance online portal for project registration and risk profiling, and reporting.
Review Team	A team of expert independent reviewers, sourced from the Expert Reviewer Panel engaged to undertake a Gateway Review, Health Check or Deep Dive Review.

1   INTRODUCTION

On 8 June 2016, the Cabinet Standing Committee on Expenditure Review (ERC) approved a strengthened NSW Government ICT Investment Governance Model to improve ICT investment outcomes and deliver better value ICT projects. This model requires all ICT projects to be assessed under a new risk based ICT Assurance Framework (IAF) in accordance with the NSW Gateway Policy.

The objective of the IAF is to ensure NSW Government's ICT projects are delivered on time and on budget through the implementation of this risk-based independent assurance framework. The state invests approximately $2.4 billion in ICT each year, which provides essential support for business operations and government service delivery. The IAF will provide the NSW Government effective tools to monitor this investment, receive early warning of emerging issues, and act ahead of time to prevent projects from failing.

This framework document sets out the principles and arrangements for the IAF, and covers:

- Gateway Review of ICT projects as per NSW Gateway Policy
- application of best practice in project governance and delivery such as due diligence and milestone reviews requested by a Project Sponsor. In these cases, the review is commissioned by and for the Project Sponsor using the IAF workbooks, and
- strategic imperatives and delivery-focused investment principles that NSW Government ICT investments must comply with.

Under the proposed NSW Gateway Policy three risk based assurance frameworks will focus on specific areas of investment, with Infrastructure NSW the coordinating agency for capital infrastructure projects, DFSI the coordinating agency for ICT projects (capital and recurrent funded), and Treasury for major recurrent programs. Figure 1 summarises the interaction between the NSW Gateway Policy [3], Gateway Coordination Agency (GCA) Frameworks and delivery of Gateway reviews.
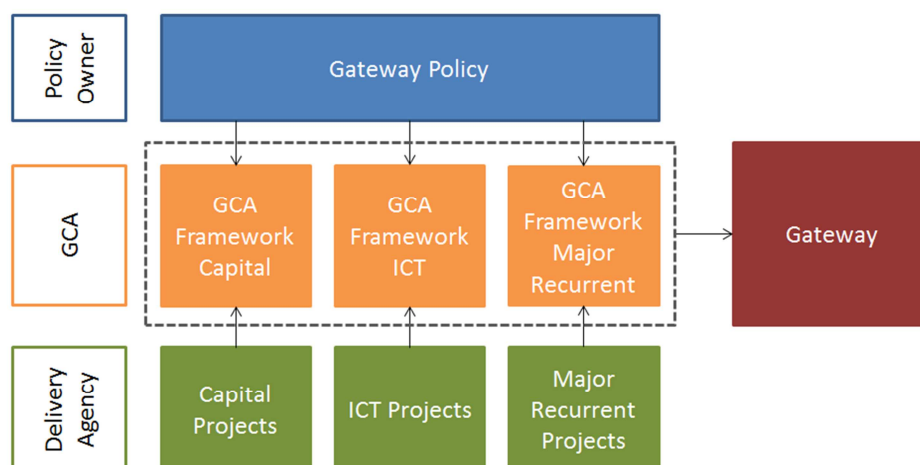

Figure 1. Proposed NSW Gateway framework

---

[3] TPP 17-01

2 FRAMEWORK PRINCIPLES

2.1 Investor assurance for ICT projects

The *ICT Assurance Framework* (IAF) is an independent[4] risk-based assurance process for the State's capital and recurrent ICT projects. It identifies the level of confidence that can be provided to the Cabinet Standing Committee on Expenditure Review (ERC) that the State's ICT projects are being effectively developed and delivered in accordance with the Government's objectives.

The key features of the framework are:

- a single point of accountability for independent assurance across all NSW Government ICT projects/programs
- a focus on what matters by taking a tiered approach based on risk assessment
- ensuring collective accountability among Delivery Agency Secretaries/CEOs/CIOs for best-for-Government outcomes through the ICT governance arrangements, reporting through DFSI to the Minister for Innovation and Better Regulation and ERC
- delivery Agencies retaining direct accountability for particular projects and programs
- ensuring alignment to the NSW Government ICT and digital strategic direction, the NSW Government Enterprise Architecture and other relevant government reforms, also enabling opportunities to reduce risk and cost through better collaboration, re-use or shared solutions
- ensuring alignment with ICT strategic imperatives and investment principles set out in Appendix A
- escalating the levels of scrutiny and/or interventions applied to projects as and when emerging risks are reported/detected
- improved reporting and data collection through the development of a standardised fit-for-purpose reporting tool, and
- ensuring Project Sponsors complete project sponsor training coordinated by DFSI.

The IAF is applied through a range of tools including:

- a portfolio review of each Cluster's current and planned ICT investments
- a series of focused, independent reviews at key project milestones, which are independent of Delivery Agencies and projects and include Gateway Reviews and periodic Health Checks
- risk-based project reporting provided by Delivery Agencies and
- risk-based project monitoring conducted by DFSI.

The IAF process seeks to complement project development and delivery to prevent project failure.

The IAF does not take away from:

- delivery Agency assurance requirements to meet internal governance arrangements or
- the need to prepare business cases to support funding decisions in the event that a project does not require a Gateway Review under the IAF.

2.2 Benefits

Moving to a risk-based approach, managed by a centralised independent body, will achieve the following benefits for the Government and the public:

- a consistent whole-of-government approach to investor assurance for ICT projects

---

[4] Independent means independent of a Delivery Agency and a project unit.

- a focus on investment outcomes, not outputs
- provides a portfolio level view of the Government's ICT investment to drive strategic whole of government opportunities and reduce risk and cost through better collaboration, re-use or shared solutions
- a regular level of due diligence that reflects the level of budget risk and complexity for each project, focusing investor assurance resources towards high risk complex projects
- increasing transparency regarding project development/delivery risks and progress
- contributing to improved levels of compliance with the Gateway Review process applied from the commencement of project development to project implementation
- fostering the sharing of skills, resources, experience and lessons learned within and across the government sector
- more systematic and transparent metrics
- greater analytic support for the Government as an investor, before and after an investment decision has been made, rather than project-level assurance only
- improving public confidence in the timely provision of value for money ICT investments, and
- contributing to jobs growth and the State's competitiveness through ICT.

2.3   Application

The IAF applies to all ICT projects being developed and/or delivered by:

- general Government agencies and Government Businesses, and
- State Owned Corporations as required by NSW Treasury under NSW Treasury's Commercial Policy Framework.

Secretaries and Chief Executives are accountable for ensuring all ICT projects meet the requirements of the IAF.

ICT projects include:

- ICT[5]
- Operational Technology, or
- other projects or programs as directed by Cabinet[6].

Projects will fall within the scope of the IAF if they meet the following criteria:

- new projects
- projects yet to submit a business case to NSW Treasury, unless excluded by the GCA
- projects currently in procurement or in delivery, unless excluded by the GCA, and
- projects otherwise nominated by the Policy Owner.

The ICT component of a Mixed project or program[7] administered by other GCAs will be referred by the GCA to DFSI for assessment. If an ICT Gateway Review is required for the ICT component, Section 3.4.1 (Modified Project Assurance Plan for complex projects and programs) applies.

---

[5] Refer to definitions in Glossary.

[6] Or as directed by ERC, the Premier or Minister for Finance, Services and Property.

[7] A project or program that contains a material combination of elements relating to multiple GCA frameworks (TPP 17-01 NSW Gateway Policy).

2.4　Threshold

All ICT projects valued at an Estimated Total Cost (ETC) of $10 million and above are to be registered with DFSI via the Reporting and Assurance Portal. It is mandatory for these projects to be reviewed to consider the Project Tier and the Project Assurance Plan. This is to determine the applicability of Gateway Reviews and level of project reporting and monitoring required.

ICT Projects with ETC under $10million that are of strategic importance or of concern may be subject to Gateway Reviews and other assurance arrangements if nominated by the Premier, Treasurer, Minister for Finance, Services and Property, Responsible Minister, Delivery Agency, the GCIDO, or IDLG. For purposes of determining Project Tier, projects under $10 million will be assessed under the $10m - $20m category.

2.5　Project Tier and Project Assurance Plan

Initial project tier assessments are made by Delivery Agencies through an online Project Risk Profile Tool when registering a project on the Reporting and Assurance Portal. Delivery agencies also lodge an initial Project Assurance Plan for endorsement when registering. The Project Assurance Plan must meet the minimum requirement for Gateway Reviews outlined in this Framework.

Following review by DFSI Assurance Team and advice from the Investment and Risk Review Advisory Group, the GCIDO will confirm the tier and Project Assurance Plan for each project[8]. Project Assurance Plans will be reported to ERC for noting. Delivery agencies will then be notified of the endorsed Project Tier and Project Assurance Plan for each project. This process is detailed in Appendix B.

Delivery agencies are to update the Project Tier on the Portal, in consultation with DFSI, for all projects:

- where there are material changes to project risk/profile criteria, scope, procurement or budget, or
- upon request by DFSI.

2.6　Confidentiality

Investor assurance is a confidential process. Gateway Review and Health Check reports are confidential between the nominated Delivery Agency Project Sponsor and DFSI.

Regular project reporting and the reporting of findings from final Gateway Review and Health Check reports[9] are provided to ERC and are therefore Cabinet Sensitive.

The outcomes of Gateway Reviews and Health Checks may be provided to the Secretaries Board, IDLG, and IRRAG. Refer to 'Section 3.3.2 Reporting' for details.

2.7　Ownership

Expert reviewers, engaged by DFSI, prepare Gateway Review and Health Check Reports on behalf of DFSI. These reports remain the property of DFSI until finalised. Once finalised, reports become the

---

[8] Refer to 2.9 Responsibilities.

[9] Final Gateway Review and Health Check Reports refers to reports that have been reviewed by the nominated Delivery Agency.

property of relevant Delivery Agencies. Project Sponsors (as owners of reports) are able to distribute reports at their discretion, having regard to the confidential nature of the reports.

2.8   Governance

The Framework is supported by governance arrangements to guide high performing assurance, which is illustrated broadly in Figure 2. The functions of the key governance groups are outlined, along with other responsibilities, in Table 1 below.
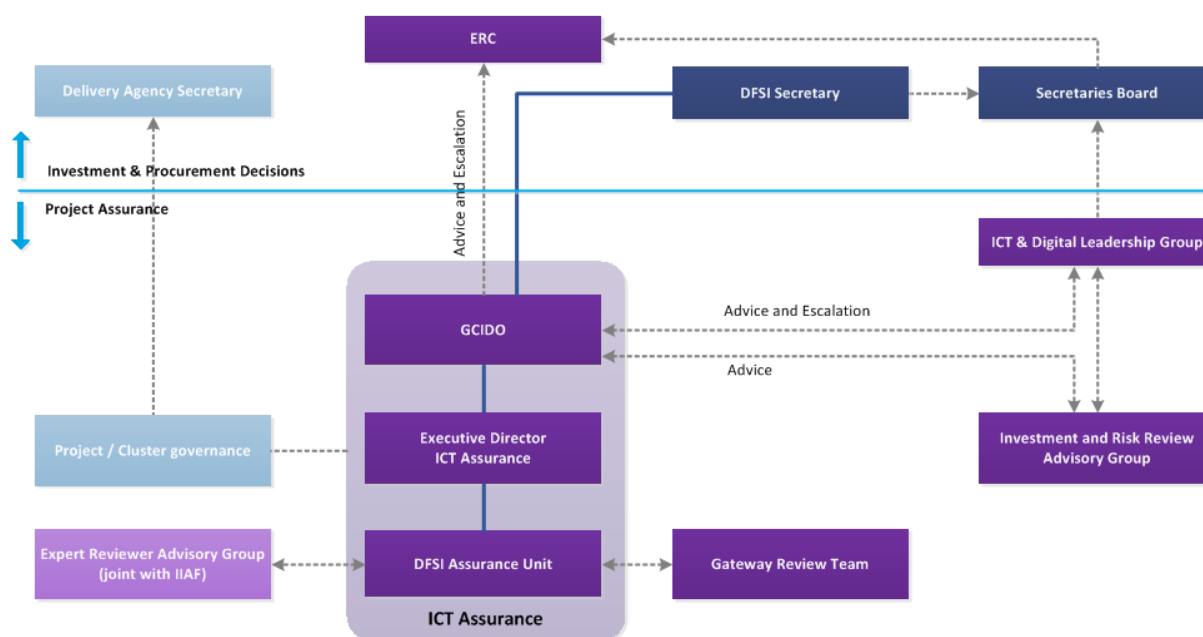

Figure 2.   Framework Governance

An Assurance Unit has been established within DFSI to conduct the assurance functions required under the IAF. Senior staff within the Assurance Unit are assigned to particular sectors to provide a single point of contact for Delivery Agencies and central government. The Assurance Unit will be responsible for:

- regularly meeting with Delivery Agency program managers, project directors, project sponsors, project teams, stakeholders/customers.
- liaising with Delivery Agencies in the preparation for ICT portfolio reviews
- organising Gateway Reviews, Health Checks and other due diligence reviews as required
- preparing summary reports post-Gateway Reviews/Health checks
- overseeing close-out plan sign-off and reporting
- overseeing regular project reporting (traffic light), and
- providing a single point of contact for Delivery Agencies and central government.

2.9   Responsibilities

The responsibilities of the various bodies involved in the IAF are described in Table 1.

Table 1   IAF Responsibilities

Group	Responsibilities

Government Chief Information and Digital Officer (GCIDO),
 	
Department of Finance, Services and Innovation
	Responsible for IAF administration and performance, including:
	• confirms Project Tier and corresponding Project Assurance Plan
	• monitors Tier 1 – High Profile/High Risk projects, Tier 2 and Tier 3 (Gate 1) project performance through independent Gateway Reviews and Health Checks
	• maintains oversight of Close-out Plans
	• endorses projects to proceed at certain gates for Tier 1 and Tier 2 projects:
	
	   - Tier 1 – require GCIDO endorsement at Gates 1, 2 and 3
	   - Tier 2 – require GCIDO endorsement at Gates 1 and 3
	
	   GCIDO endorsement may be subject to conditions checked at the next gate or withheld until conditions are met. DFSI Secretary approval is required to withhold endorsement.
	• provides independent analysis and advice on key risks and any corrective actions recommended for Tier 1 – High Profile/High Risk, Tier 2 and Tier 3 projects
	• escalates projects to IDLG, Secretaries Board and ERC if required, where projects present 'red flag issues' and where corrective action is needed
	• provides advice to ERC on all ICT projects being considered by ERC, based on Gateway Review and Health Check reports, to ensure effective investor-level assurance advice and risk mitigation strategies
	• may nominate Tier 3 project for closer scrutiny (eg treat as Tier 2 for future gates)
	• commissions Gateway and other assurance reviews
	• Works with Delivery Agencies to ensure all ICT projects and other projects of concern or strategic importance are registered and ensures they are risk profiled and assigned a risk-based project tier with an endorsed Project Assurance Plan
	• undertakes annual Cluster portfolio reviews of ICT investment (annual and ad hoc), consistent with Gate 0 (NSW Gateway Policy) focusing on business need and project justification, to ensure alignment to NSW ICT and Digital Strategy and other relevant government reforms, identifying/enabling opportunities to reduce risk and cost (e.g. re-use; sharing of solutions)
	• provides a dedicated Assurance Unit to coordinate Reviews
	• establishes and maintains an appropriate Expert Reviewer Panel
	• monitors the performance of individual expert reviewers
	• determines appropriate expert reviewers, and manages scheduling, commissioning and administration of Gateway Reviews and Health Checks
	• maintains and continuously improves the IAF process
	• implements approaches to improving sector capability such as Project Sponsor/manager training, cross-sector knowledge sharing and skills planning initiatives.
	• reports to IDLG including:
	   - results of Cluster portfolio reviews
	   - proposed Project Tier and corresponding Project Assurance Plan
	   - gateway Reviews, Health Checks and Close-out Plans (Section 3) or Tier 1 – High Profile/High Risk projects (monthly) and Tier 2 projects (quarterly)
	   - project status and mitigation strategies for red flag issues
	   - gateway Reviewer Performance
	   - trends and analysis of the key issues, and
	   - overall performance of the assurance framework.
	
	• reports to the Secretaries Board, Minister for Finance, Services and Property, and/or ERC on projects with red or deteriorating status, by exception.
	• regularly reports to NSW Treasury on the performance of the IAF.

Group	Responsibilities
Secretaries Board	The primary role for the Secretaries Board in relation to the IAF is to consider any strategic, whole-of-government issues escalated by the ICT and Digital Leadership Group or the GCIDO. By exception, the Board also considers red or deteriorating status for Tier 1 – High Profile/High Risk projects and may provide advice to ERC if required.
ICT and Digital Leadership Group (IDLG)	The IDLG supports the achievement of best-for-Government outcomes from the development and delivery of ICT projects. In relation to the IAF: - the Group provides advice on submissions to ERC - endorses Tier 1 – High Profile/High Risk project reports for scrutiny by ERC.
Investment and Risk Review Advisory Group (IRRAG)	The Group provides advice to the GCIDO on the Project Risk Profiles and Project Assurance Plans provided by Delivery Agencies. Provides advice to the GCIDO and IDLG on ICT projects based on Gateway Review and Health Check reports to ensure effective investor-level assurance advice and risk mitigation strategies. Provides advice on the need to escalate the levels of scrutiny, reporting and/or interventions. Monitors ICT projects endorsed for scrutiny by ERC to avoid project failure and support success. The Investment & Risk Review advisory group is a sub-group of the Infrastructure, Services and Strategic Investment (ISSI) working group.
NSW Treasury	As Policy Owner, NSW Treasury has overarching policy responsibility for NSW Gateway Policy, Economic Appraisals and Business Cases. The role includes: - monitoring the application of the NSW Gateway Policy - reviewing GCA Frameworks submitted for review and where appropriate provide its endorsement prior to final approval by the relevant Cabinet Committee - confirming the applicable GCA Framework and informing the concerned parties where there is dispute or confusion as to the appropriate GCA to deliver Gateway - determining the appropriate GCA Framework a mixed project should follow (i.e. where it contains a material combination of more than one element of different frameworks) - reporting on the performance of the NSW Gateway Policy, including the performance of the GCA Frameworks, after one year of operation and annually. Treasury will coordinate the review of GCIDO-managed projects within DFSI. A GCIDO-managed project is one that is led and/or delivered by a team or unit that has a reporting line to the GCIDO as its Deputy Secretary. For other DFSI-managed projects, Treasury may elect to delegate the Gateway Review coordination to the GCIDO. ServiceNSW projects are not considered DFSI-managed. Treasury retains ability to request independent review where appropriate.
Expert Reviewer Panel / Expert Review Teams	The Panel comprises independent highly qualified expert reviewers established to cover all aspects of Gateway Review needs. A Review Team, for Gates 1 through 6, is drawn from the panel. A Review Team conducts high performing Gateway Reviews and Health Checks. Panel members can also be drawn upon to provide advice to DFSI on projects and to the various assurance committees on an as needs basis. Panel member performance is to be reviewed regularly and membership updated.
Expert Reviewer Advisory Group	A joint group with INSW, provides advice on the expert reviewer capability, gaps and requirements to support a high performing Expert Reviewer Panel. The Group also considers Expert Reviewer Panel member nominations and recommendations as well as the performance of individual panel members.

Group	Responsibilities

Delivery Agency	The Delivery Agency must identify the appropriate GCA Framework for a project/ program and adhere to the approach in the relevant GCA.
	
	The Delivery Agency is responsible for meeting IAF requirements, including:
	
	- registration and risk profiling of projects:
	  - registers all ICT projects with ETC of $10 million and above, and other projects of concern or strategic importance. This applies to projects being planned, developed and/or delivered
	  - self-assesses Project Tier and prepares corresponding Project Assurance Plan
	  - updates DFSI on changes of project risk criteria that may affect the Project Tier, and
	  - updates DFSI on proposed changes to Project Assurance Plan requirements.
	
	- IAF Gateway Reviews, Health Checks[10]:
	  - registers in a timely manner for Gateway Reviews and Health Checks
	  - provides in a timely manner all relevant information to support Gateway Reviews and Health Checks
	  - responds to requests for fact checks of the draft Reports in a timely manner
	  - provides a Delivery Agency endorsed response to recommendations in a timely manner
	  - prepares formal Close-out Plan, for endorsement by DFSI, for each Gateway Review or Health Check
	  - implements Close-out Plans
	  - provides regular updates to DFSI on the status of Close-out Plans, and
	
	- regular reporting:
	  - provides timely and comprehensive project reports consistent with Project Tier frequency reporting requirements and agreed format.
	
	- ensuring Project Sponsors and project managers within the Delivery Agency complete the required training coordinated by DFSI.
	
	The Delivery Agency is responsible for paying any direct costs of Gateway Reviews, Deep Dive Reviews and Health Checks. This includes time and expenses relating to the engagement of independent reviewers, as well as disbursements relating to a Review such as venue hire, catering and administrative support services (e.g. scribe). DFSI will initially pay for these direct costs. These will then be recovered in full by invoicing the Delivery Agency at the completion of a Gateway Review, Health Check or Deep Dive Review.
	
	The Delivery Agency is responsible for ensuring that appropriate internal assurance arrangements, distinct from the Gateway Review process, are designed into the project to ensure its successful delivery.

Project Sponsor	- ensures that the project is focused throughout its life on achieving its objectives and delivering a product that will achieve the forecasted benefits - ensures that the project gives value for money - participates in Gateway Reviews and Health Checks - commissions an independent review at specified gates for Tiers 3 and 4 (Project Sponsor-Commissioned Review) and reports to DFSI. - completes the required Project Sponsor training coordinated by DFSI - ensures the project meets the objectives of the business case and may initiate due diligence checks as required, such reviews are termed Project Sponsor Commissioned Reviews

---

[10] This relates to the IAF conducted reviews and checks and does not relate to reviews and checks that are conducted under the Delivery Agencies protocols.

3 FRAMEWORK ARRANGEMENTS

3.1 Framework outline

The IAF incorporates a risk-based approach to ICT investment assurance consistent with NSW Gateway Policy and the NSW ICT Governance Model approved by ERC in June 2016. Assurance arrangements for the state's ICT investment supports the Premier, the Treasurer, the Minister for Finance, Services and Property, and ERC in ensuring that this investment is maximised and programs are delivered effectively. The IAF is designed to support both the Delivery Agencies' own decision-making and assurance processes and to support Budget processes throughout the project lifecycle (depicted in Figure 3. below).
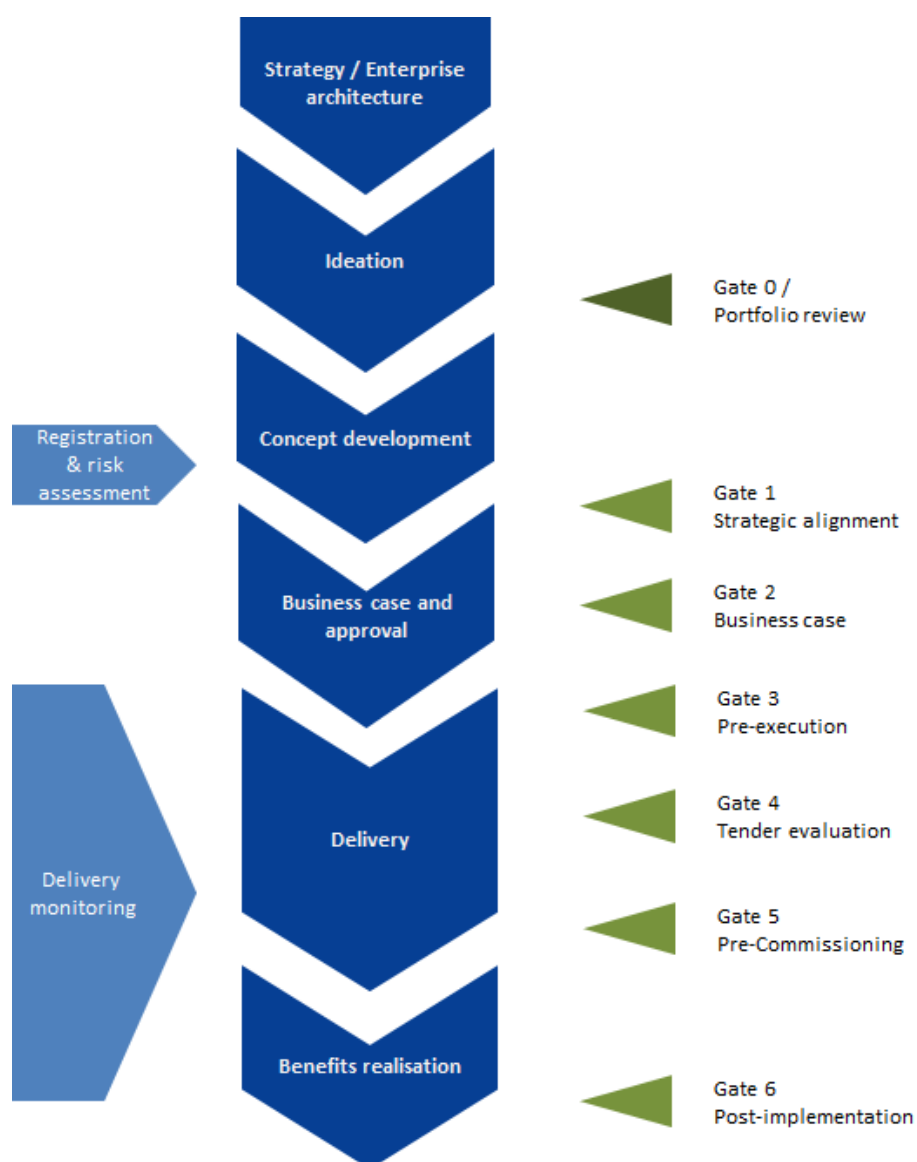

Figure 3   Project Lifecycle Assurance

3.2 Risk-based approach to investor assurance

Risk-based assurance means that different levels of assurance and reporting are applied proportionate to a potential risk profile.

Initial Project Tier assessments are made by Delivery Agencies through an online Project Risk Profile Tool when registering a project on the Reporting and Assurance Portal. Delivery agencies also lodge an initial Project Assurance Plan for endorsement when registering. The Project Assurance Plan must meet the minimum requirement for Gateway Reviews outlined in this Framework.

Following review by the DFSI Assurance Unit and advice from the Investment and Risk Review Advisory Group, the GCIDO will confirm the Project Tier and Project Assurance Plan for each project. The GCIDO may refer a project to the IDLG for further advice.

Delivery agencies will then be notified of the endorsed Project Tier and Project Assurance Plan for each project. This process is detailed in Appendix C.

Delivery agencies are required to update the Project Tier in the Portal, in consultation with DFSI, for all projects:

- where there are material changes to project risk/profile criteria, scope, commercial/administrative environment, procurement or budget or other significant impacts, or
- on request by the GCIDO.

Project Tiers will be routinely reviewed by Delivery Agencies and the DFSI Assurance Unit after each Gateway Review. If a change is considered to be required, advice from the Investment and Risk Review Advisory Group will be sought before the GCIDO makes recommendations to the IDLG seeking endorsement of the amended Project Tier and corresponding Project Assurance Plan.

The qualitative risk profile criteria are outlined in Table 2 below.

Table 2   Qualitative risk profile criteria

Criteria	Definition
Level of Government Priority	▪ The level **and** timing of project or program priority, where: - the level of priority for a project is specifically mandated (or where a Ministerial authority has been given to mandate that a project is a priority) in documents such as the NSW Budget, Premier's Priorities, State Infrastructure Strategy, NSW ICT and digital strategy, Election Commitment, or is a response to a Legislative Change, or - the project is a direct enabler of a mandated priority project.
Interface Complexity	▪ The extent to which the project or program's success will depend on the management of complex dependencies with other: - agencies, clusters or non-government sector organisations - contributing to the funding of the project or will be given operational responsibility, and/or - projects or services - there are fundamental interdependencies with other projects or services that will directly influence the scope and cost of the project. ▪ The extent to which the project impacts on the success of the program.
Sourcing Complexity	▪ The extent to which a project or program requires sophisticated, customised or complex procurement methods (non-traditional), thereby increasing the need for a careful assessment and management of risk. ▪ Sourcing complexity may also be influenced by contractual complexity, especially

Criteria	Definition
	• if multiple suppliers are involved in the delivery of the solution with varying service levels. • Sourcing complexity may also be influenced by the extent of agency experience and capability. For example, some procurement methods (e.g. Early Contractor Involvement) may be used more commonly by some agencies and represent a lower procurement risk.
Agency Capability	• The extent to which the sponsor agency has demonstrated capability (skills and experience), or can access through recruitment or procurement the required capability in the development and / or delivery of the type of project or program proposed and/or its delivery strategy.
Technical Complexity	• The extent to which a project or program requires new or unproven technology, customised technology, or complex or lengthy integration with other solutions, thereby increasing the need for a careful assessment and management of risk.
Change Complexity	• Sensitivity to the degree of business change required for the success of the project. This could be complex business or process changes internal to government or in the service delivery to government customers. • Risk or perception of risk to service delivery, security and privacy, or similar issues that may impact the change management aspects. • The degree of criticality of services impacted by the project such as front-line services to citizens. • The degree of unknowns involved with the chosen approach.

A weighted score for the above criteria is determined based on the weightings and scores outlined in Appendix D. This weighted score is compared against ETC to determine a preliminary Project Tier based on the matrix shown in Table 3.

Table 3   IAF project tier weighted risk score matrix

Risk score	ETC ($m)				
	200+	>100-200	>50-100	>20-50	10-20 (including <10 that are of strategic importance or of concern)
4.0 - 5.0	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1
3.0 - 3.9	Tier 1	Tier 2	Tier 2	Tier 2	Tier 2
2.5 - 2.9	Tier 1	Tier 2	Tier 2	Tier 2	Tier 3
2.3 - 2.4	Tier 2	Tier 2	Tier 2	Tier 3	Tier 4
2.1 - 2.2	Tier 2	Tier 2	Tier 3	Tier 3	Tier 4
0.0 - 2.0	Tier 2	Tier 3	Tier 3	Tier 3	Tier 4

The initial risk profiling self-assessment process is by Delivery Agencies through the online tools on the Reporting and Assurance Portal. The process involves giving each project a risk-based score against these criteria, and undertaking further qualitative analysis, enabling projects to be grouped into risk-based tiers to which different levels of project assurance can be applied. The risk-based tiers are as follows:

- Tier 1 – High Profile/High Risk
- Tier 2
- Tier 3
- Tier 4.

This tiered approach is designed to ensure that the right balance is struck between a robust approach correctly focused on highest risks, and achieving value for money.

Throughout their lifecycle, projects may move between tiers depending on changing risk profiles.

A project may be nominated as a Tier 1 – High Profile/High Risk project by the:

- Premier, Treasurer, Minister for Finance, Services and Property, Responsible Minister,
- relevant Delivery Agency Secretary, Chief Executive Officer, or Project Sponsor[11], or
- the GCIDO.

For a project to be removed from the Tier 1 – High Profile/High Risk list, before it is operational, the relevant Delivery Agency Secretary or Chief Executive Officer must request the removal in writing to the GCIDO. The request may also be referred to the Investment and Risk Review Advisory Group [12] for advice.

3.3 Assurance and reporting requirements

There are three main components to the independent investor assurance process:

- Gateway Reviews and Health Checks
- Project Reporting based on inputs provided by Delivery Agencies, and
- Monitoring conducted by DFSI.

3.3.1 Gateway Reviews, Health Checks, and Project Sponsor-commissioned Reviews

The IAF Gateway Review process provides for a series of focused, independent expert reviews, held at key decision points in a project's lifecycle (as depicted in Figure 3.). The Gateway Reviews are appraisals of ICT projects, that highlight risks and issues, which if not addressed may threaten successful delivery.

The Gateway Review process is in place to strengthen governance and assurance practices and to assist Delivery Agencies to successfully deliver major projects and programs. Gateway Reviews are part of an assurance process which provides confidence to Government in the information supporting their investment decisions, the strategic options under consideration, and the Delivery Agency's capability and capacity to manage and deliver the project.

Gateway Reviews are supported by Health Checks which assist in identifying issues which may emerge between decision points. Health Checks will be carried out by an independent team of

---

[11] and /or in accordance with individual Delivery Agency policy

[12] Refer to 2.9 Responsibilities

experienced practitioners (peers, industry experts including from the private sector), appointed by the GCIDO.

The risk-based application of Gateway Reviews and Health Checks under the IAF are depicted in Table 4. Delivery agencies can nominate additional Gateway Reviews and Health Checks beyond those mandated by the IAF.

Table 4   Application of Gateway Reviews and Health Checks under the IAF

Shaded boxes are mandatory.
Blue boxes are Gateway requirements.

		Tier 1[1]	Tier 2[1]	Tier 3[1]	Tier 4[1]
	Gate 0 / Portfolio Reviews	External review (by GCIDO), agency decision to proceed			
Planning Phases	Gate 1	Gateway Review + GCIDO endorsement[3]	Gateway Review + GCIDO endorsement[3]	Gateway Review	Optional[4]
	Gate 2	Gateway Review + GCIDO endorsement[3]	Gateway Review	Optional[4]	Optional[4]
Delivery Phases	Gate 3	Gateway Review + GCIDO endorsement[3]	Gateway Review + GCIDO endorsement[3]	Optional[4]	Optional
	Gate 4 tailored at Gate 2	Gateway Review	Optional	Optional	Optional
	Gate 5 tailored at Gate 2	Gateway Review	Optional	Optional	Optional
	Gate 6	Gateway Review	Gateway Review	Optional[4]	Optional
	Health Checks / Deep Dives	External review[2]	External review[2]	Optional	Optional

1. Risk tier determined between Gate 0 / Portfolio review and Gate 1 using risk assessment tool completed by agency; Confirmed / revised at subsequent gates as additional information becomes available
2. Review commissioned by the GCA and conducted by a party other than or "external" to the agency in question; may include a mix of peer and independent resources depending on the tier. Accredited IQA organisations can perform external reviews.
3. GCIDO endorsement may be subject to conditions checked at next gate OR withheld until conditions are met. DFSI Secretary approval required to withhold endorsement.
4. See section on Project Sponsor-commissioned Reviews below for internal assurance requirements for Tiers 3 and 4.

Delivery agency assurance

The IAF Gateway Reviews and Health Checks relate to those conducted under the IAF and do not relate to reviews and checks conducted under individual Delivery Agency protocols.

Gate 0 / Portfolio Reviews

The pre Gateway Portfolio Review is undertaken by the GCIDO. Pre Gateway Portfolio Reviews incorporate, and align to, the Gate 0 under the NSW Gateway Policy. The purpose of this process is to consider business need at a portfolio level to support effective project and solution selection, while assisting in the alignment with ICT and Digital Strategy, the NSW Government Enterprise Architecture and other relevant government reforms. These reviews will provide a collaborative approach to:

- develop a view of the future project portfolio
- provide guidance on how projects should be conceived and developed
- identify opportunities for collaboration and shared solutions.

Gate 1 – 6 Reviews

Reviews include interviews with significant project stakeholders and the examination of project documents. Review Teams assess the progress of projects against the criteria set out in the guidance material for the relevant Gateway Reviews and are conducted in accordance with the IAF Gateway Review Toolkit and Reviewer Workbooks.

DFSI will develop Terms of Reference for a Review in consultation with the responsible Delivery Agency and key stakeholders. The Terms of Reference are used to guide the selection of appropriate reviewers and will be provided to reviewers in advance of the Review.

Good governance and project/program assurance calls for the need to have an individual as the single point of accountability and strategic responsibility: the Project Sponsor.

To enable a successful Review to take place, it is essential that the Delivery Agency's Project Sponsor participates in the Gateway Review process.

Optional Gateway Reviews or a Project Sponsor-commissioned Review can be called for at the direction of any of the following:

- Premier, Treasurer, Minister for Finance, Services and Property, ERC
- the GCIDO
- IDLG
- Project Sponsor.

Independent reviewers

Reviews are to be conducted by a highly experienced independent Review Team where independent refers to the individuals being independent of a Delivery Agency and a project team. Reviewers could be drawn from peers or independent of government.

The selected review team will possess the skills, capability and experience to enable it to provide relevant assessment and advice.

For Tier 1 – High Profile/High Risk projects, independent reviewers forming the Review Team should be drawn from high profile industry experts and may, with the approval of the GCIDO, involve a NSW Government expert.

For Tier 2 and 3 projects, independent reviewers forming the Review Team can include individuals currently employed with the NSW Government if they are independent of the Delivery Agency and project team.

Health Checks and Deep Dive Reviews

At least one Health Check is mandatory for Tiers 1 and 2, tailored at Gate 2 for each project. Health Checks should be conducted at regular intervals (minimum 6 months) for Tier 1 – High Profile/High Risk projects when in the delivery phase of the project lifecycle. Independent reviewers forming the Review Team can include individuals currently employed with the NSW Government if they are independent of the Delivery Agency and project team.

Triggers for optional Health Checks may include:

- Where a Gateway Review Team recommends a Health Check to be completed before the next Gateway Review.
- If there is overall low or medium delivery confidence and there are a significant number of critical and essential recommendations raised at a Gateway Review or Health Check. The Health Check would focus on ensuring recommendations have been closed effectively.
- If insufficient progress is being demonstrated in closing out recommendations from a previous Gateway Review or Health Check.
- If there is a major incident or major event or major change in the project or its environment. including change of governance or change in Delivery Agency responsibility.
- If a Delivery Agency self-nominates.

Optional Health Checks can be called for at the direction of any of the following:

- Premier, Treasurer, Minister for Finance, Services and Property, ERC
- the GCIDO
- IDLG
- Project Sponsor.

Deep Dive Reviews are similar to a Health Check but focus on a particular issue or limited terms of reference rather than the full range of issues normally considered at a Health Check. These are generally undertaken in response to issues being raised by key stakeholders to the project or at the direction of the relevant Government Minister.

Gateway Review / Health Check Reports

The results of each Gateway Review and Health Check are presented in a report that provides a snapshot of the project's progress with recommendations to strengthen the project.

Close-out Plans

Close-out Plans are required to be prepared in response to the recommendations set out in each Gateway Review and Health Check report. Close-out Plans are supplied by Delivery Agencies as approved by the Delivery Agency Secretary, Chief Executive Officer or nominated Project Sponsor [13], these Plans will detail specific actions, timelines and accountabilities that respond to the recommendations provided in these reviews. DFSI will:

- endorse the Close-out Plans and the closing out of recommendations
- monitor the progress towards closing out these actions and recommendations, and
- report on this activity.

Confirmation of clearance of Gate

The GCIDO will provide a confirmation of clearance that a project can move to the next Gate or Health Check. This clearance reflects that a Delivery Agency has completed a Gateway Review for a particular stage of the project and an appropriate Close-out Plan is in place to assist with project development or delivery. Gateway Reviews are independent reviews and the project remains the responsibility of the Delivery Agency.

For Tier 1 and Tier 2 projects, the GCIDO will endorse projects to proceed at certain gates:

- Tier 1 – require GCIDO endorsement at Gates 1, 2 and 3
- Tier 2 – require GCIDO endorsement at Gates 1 and 3.

GCIDO endorsement may be subject to conditions checked at the next gate or withheld until conditions are met. DFSI Secretary approval is required to withhold endorsement.

Project Sponsor-commissioned Reviews

Agencies are responsible for putting in place appropriate internal assurance arrangements. Tier 3 and Tier 4 projects are required as part of their internal assurance arrangements to carry out Project Sponsor-commissioned Reviews for the following gates:

- Tier 3 – at Gates 2, 3 and 6
- Tier 4 – at Gates 1 and 2

The Project Sponsor is required to provide a copy of the report to DFSI as part of the oversight of projects.

---

[13] And /or in accordance with individual Delivery Agency policy

3.3.2 Reporting

Regular project reporting (traffic lights)

Reporting will be conducted for projects and programs, with data gathered and maintained by DFSI in a central repository. These reports will record and assess implementation against time, cost, quality, risks and impediments to project development/delivery. Alerts for management attention and/or intervention will be based on analysis of data as well as Gateway Reviews and project Health Checks. Reporting will reflect the tiered approach with greater analysis and strategic advice provided for Tier 1 – High Profile/High Risk projects.

Regular project reporting (traffic light reports) for Tier 1 – High Profile/High Risk (HPHR) projects (monthly) and Tier 2 projects (quarterly) is provided to the IDLG, and for endorsement before presentation to the Secretaries Board (by exception reporting only).

Summary of reviews

A summary of the outcomes of Gateway Reviews and Health Checks for Tier 1 – High Profile/High Risk projects is provided to IDLG for noting and submitted to ERC (by exception only).

Advice will be provided to ERC on Tier 1 and 2 projects' business cases based on Gateway Reviews and Health Check reports.

The Project Sponsor commissions reviews at most Gates for Tiers 3 and Tier 4 projects with summary reports provided to the GCIDO.

Distribution of reports

DFSI will only distribute reports for the following as indicated in Table 5:

- final regular project reports (traffic light)
- summary of the outcomes of Gateway Reviews and Health Checks, and
- full final Gateway Review and Health Check reports

Table 5   Distribution of regular project reports and Gateway Review and Health Check reports

Project-Tier	Final regular project reports	Summary of outcomes of Gateway Reviews and Health Checks	Final Gateway Review and Health Check reports
NSW Treasury	Routinely	Routinely	To support investment or financing decisions made by ERC, when required
Delivery agency Secretaries / CEOs[14]	Routinely	Routinely	Routinely[15]
Secretaries Board	On request	By exception	On request
Minister for Finance, Services and Property	Routinely	By exception	On request[16]

---

[14] Only for projects within the Cluster

[15] Copies are initially provided to the nominated Delivery Agency Project Sponsor

[16] On request to the GCIDO

To support reporting arrangements, Delivery Agencies will be required to provide:

- timely and comprehensive project reporting in the agreed format
- Close-out Plans which document actions and accountabilities that respond to recommendations identified in Gateway Review and Health Checks
- Mitigation Plans for red flag issues identified in Tier 1 – High Profile/High Risk project status reports or Tier 2 reports.

3.3.3   Monitoring

DFSI will monitor project status (including mitigation plans) and the findings of Gateway Reviews and Health Checks (including Close-out Plans). DFSI will provide regular project reports and summary findings of Gateway Review and Health Checks to:

- investment and Risk Review Advisory Group for:
    - endorsement of regular project reports, and
    - noting of findings of project Gateway Review and Health Checks
- IDLG by exception for findings of project Gateway Review and Health Checks
- the Secretaries Board by exception for projects with red status or deteriorating status
- ERC through a bi-annual summary report.

The GCIDO may escalate a project to the IDLG, Secretaries Board and ERC if required, where projects present 'red flag issues' and where corrective action is needed.

Regular project reports as well as Gateway Review and Health Check summary findings will be owned by DFSI. In providing this reporting, DFSI will undertake the necessary steps to verify the information provided by Delivery Agencies or prepared by Review Teams. This may include:

- detailed assessment of each Tier 1 – High Profile/High Risk project with direct input from Panel experts (this will include Health Checks and the results of Deep Dive Reviews)
- independent analysis and advice on key risks, recommended corrective actions and mitigation strategies.

3.4   Treatment of projects and programs

ICT projects must be registered under the IAF as either a project or a program. After a project or program is risk-profiled and assigned, a Project Tier it is required to comply with the assurance and reporting requirements outlined in Section 3 according to its Project Tier.

3.4.1   Modified Project Assurance Plan for complex projects and programs

Under the IAF, the assurance process for complex projects and programs begins with registration and risk profiling of the project/program in its entirety to establish its Project Tier. For assurance purposes (Reviews, regular reporting and monitoring), a complex project or a program may need to be considered both as a single project or program and in its component parts (project stages, individual projects or sub-programs) at various stages in the program lifecycle.

In some cases, these project stages, individual projects or sub-programs may have a different Project Tier to the overall complex project or program. This may result in the need for a Modified Project Assurance Plan.

As the different component parts (project stages, individual projects or sub-programs) are typically developed and/or delivered over varying timeframes, they may not be able to be considered in a single Gateway Review. It may therefore be necessary to have multiple Reviews to accommodate a

program/project's needs. In some cases, a smaller stage of work or individual project may not warrant the application of these separate Gates.

For complex projects, the application of separate tiering for certain identified stages allows the Delivery Agency to access Reviews for a distinct stage (dependent on the risk-profiling of that stage) to accommodate a project's specific needs. For example, larger stages of work within a complex project may warrant the application of certain Gates, particularly at the procurement and delivery stages of a project's lifecycle, whereas a smaller stage of work may not require a Review. This adaptation provides for greater assurance and efficiency across a complex project.

When stages of a complex project are identified as needing separate tiering for assurance purposes, the stages are split off and undergo risk profiling, where each stage is assigned a Project Tier, and subsequently included as such in a Modified Project Assurance Plan. Importantly, a stage's tiering is assessed on its own merits, and therefore may be tiered at any level. Splitting off a stage of a complex project for risk profiling may occur at any time. Typically, this would be after the complex project's strategic or final business case. A complex project should only be considered as a linear program of staged outputs in accordance with an agreed business case.

This process is similar for programs needing to be considered as separate projects or sub-programs. For instance, a large program that is considered in its entirety during the development of strategic business cases may require the development of a series of separate final business cases for individual projects and sub-programs due to these being progressed and delivered at different times.

Where a complex project is been split into stages or a program into individual projects or sub-programs, and those component parts have their own tier assessment, it is important, for satisfaction of the originating objective of the complex project/program, to return to a single Review step. This occurs as Gate 6 - the benefits realisation stage of its lifecycle, allowing the benefits realisation assessment to be undertaken for the entire complex project or program.

Complex projects/programs include mixed projects/programs[17].

3.4.2 Endorsement of a Modified Project Assurance Plan

Determining the extent or need to apply the mandatory gates for complex projects or programs to the project stages, individual projects or sub-programs will require:

- Delivery agencies to provide a Modified Project Assurance Plan with self-nominated assurance arrangements for each project stage, individual project or sub-program as relevant
- DFSI to assess the Modified Project Assurance Plan may refer to the IRRAG for advice and recommend to the GCIDO for endorsement.

3.5 Reporting and Assurance Portal

The Infrastructure NSW Reporting and Assurance Portal provides an online environment to manage assurance information and reporting for ICT projects under the IAF. The Portal will enable Clusters, appointed Gateway Reviewers, governance body members and DFSI to actively and efficiently manage assurance activities within a secure online environment.

Full functionality for the Portal will feature the following capabilities:

---

[17] Ibid., p. 3.

- **'Project registration/ profiling' module** – Delivery Agencies will have the ability to add, edit and review project registrations, risk profiles and Project Assurance Plans. This module will also calculate a preliminary Project Tier rating for registered projects. DFSI will update the Project Tier and Project Assurance Plans as they move through the ratification process.
- **'Project reporting' module** – Delivery agencies will be able to prepare, edit, review and approve regular project report data (frequency determined by Project Tier). This functionality will apply to Tier 1 – High Profile/High Risk, as well as Tier 2 and 3 projects. DFSI will review and finalise reports and generate project reporting.
- **'Gateway Reviews' module** – This module will allow for all activities associated with Gateway Reviews and Health Checks including:
    - Registration of need for Review
    - Review details – name of reviewers, location, date and agenda
    - Secure area for Review documentation provided by Delivery Agencies and Review Terms of Reference
    - Collaboration space for reviewers, stakeholders and project team
    - Copies of Review reports and summaries of Review outcomes (secure access only)
    - 360 degree feedback

    A forward calendar of upcoming Reviews will also be made available.
- **'Close-out plan' module** – Delivery agencies will be able to upload approved Close-out Plans in response to Review recommendations, as well as report on progress against implementing the actions in the Plan. DFSI will be able to monitor and report on Delivery Agency performance in closing out Review recommendations.
- **'Committee' module** – Papers for the various IAF committee meetings will be made available for committee members to access through the Portal. By virtue of this, committee members will also have access to historical editions of papers. A forward calendar of committee meetings will also be made available on the Portal.
- **'Dashboard' module** – A live dashboard reporting key project/program metrics will be available. The dashboard will be developed to have bespoke reporting for IDLG members, Delivery Agency Secretary or Chief Executive Officer and other key stakeholders as required.
- **'Performance' Module** – Performance reports prepared by DFSI will be uploaded in this area for collaboration and sharing.
- **'Expert Reviewer Panel' module** – This module will allow potential reviewers to register their interest for inclusion on the Expert Reviewer Panel and facilitate DFSI management of the panel. This will include capability matrices on reviewer capabilities that will allow for searches of reviewers with specific expertise and capabilities, as well as tracking reviewer involvement on Reviews. Feedback on reviewers will be tracked and will assist in managing reviewer performance.
- **'Analytics' module** – Using historical reporting data, portal users will be able to monitor and track historical performance of projects. This will allow the identification of common themes and trends, which will feed into the broader analytics work of DFSI.

3.6   Project Sponsor training

DFSI will coordinate training for Project Sponsors and project managers. Delivery Agencies need to ensure that project managers complete the relevant training and Project Sponsors for Tiers 1 -3 projects complete training on project sponsorship (required for new and in-flight projects).

3.7   Performance

3.7.1   First 12 Month operational review

Following the first 12 months of operation from the finalisation of the IAF, the GCIDO will review the implementation of the IAF with NSW Treasury and Delivery Agencies.

3.7.2   Annual framework performance

A crucial part of the IAF will be to regularly evaluate the performance of the IAF itself and contribute to the analysis of project and assurance issues and trends. To this end, the key aspects of the performance management approach are outlined in Table 6.

Table 6   Performance reporting

Report	Description	Frequency	Primary Audience
Assessment of Expert Reviewer Panel capability	Confirm that reviewers on the Expert Review Panel have the requisite experience and skills set to provide high performing advice for the projects they review. Evaluations will be prepared by DFSI and assessed by the Expert Reviewer Advisory Group.	Annual - to match Cluster Assurance Plans.	IDLG, Treasury
Gateway Reviewer Performance	Continually monitor the robustness and timeliness of individual expert reviewer performance. 360° feedback will be obtained for each expert reviewer at the conclusion of a Gateway Review or Health Check. Collated reports on reviewer performance will be prepared by DFSI for the consideration of the Expert Reviewer Advisory Group.	Six monthly	IDLG, Treasury
Performance of closing out recommended actions for all projects undergoing a Review	Close-out plans are confirmed by the relevant Delivery Agency and approved by DFSI to identify actions and mitigation measures to address review recommendations. A report on the performance of Delivery Agencies and Clusters in closing out Review recommendations will be prepared by DFSI.	Six monthly	IDLG
Trends and analysis of the key issues	Analysis of systemic issues identified in assurance reviews and offer recommendations to address these issues. Trends and analysis reports will be prepared by DFSI.	Six monthly	ERC Minister for Finance, Services and Property
DFSI performance in the operation of the IAF	Report card on DFSI's performance in key areas such as project registration, risk profiling, Gateway Reviews, Health Checks, and project reporting.	Six monthly	IDLG, Treasury Minister for Finance, Services and Property
Efficacy of the IAF	Improvement in project delivery across the sector.	Six monthly	ERC Minister for Finance, Services and Property

Appendix A   Whole of government ICT Strategic Imperatives and Investment Principles and Guidelines

Under the NSW ICT Investment Governance Model, the IDLG ensures best practice in the development of ICT strategic plans and alignment with government priorities and digital direction. Secretaries are accountable for ensuring ICT investments meet service and corporate priorities, including through applying effective program and project governance arrangements. Clusters and agencies will develop ICT strategies and plans to support service and government priorities.

All NSW Government ICT investment decisions must demonstrate the application of whole of government strategic imperatives and investment principles in ICT strategic plans and specific ICT and digital initiatives.

Agencies may seek the advice of the GCIDO in relation to investment decisions at any stage.

Strategic Imperatives

1. **Comply with relevant whole of government ICT policies and standards, including Information Management, Data Centre Reform, Corporate and Shared Services Reform, Information Security and Enterprise Architecture.**

   ICT investments will demonstrate consistency with whole of government policies, including but not limited to:

   - *M2012-15 Digital Information Security Policy*
   - *M2012-10 Open Government*
   - *NSW Government Social Media Policy and Guidelines*
   - *DFS C2013-4 NSW Government Cloud Services Policy and Guidelines*
   - *DFS C2012-1 Data Centre Reform Strategy*
   - NSW Government Procurement policies and directions
   - NSW Government Information Management Framework
   - NSW Government Enterprise Architecture Strategy and Framework

Key considerations
Consider the objectives of *the State Priorities*.
Consider the objectives of the *NSW Government ICT Strategy*.
Ensure proposed investments are consistent with applicable whole of government policies and standards.

2. **Align to a service orientation, including 'as a service' sourcing models, as a primary option.**

   The *NSW Government ICT Strategy* outlines a new and more flexible approach to ICT procurement, including 'as a service' solutions. It positions government to take advantage of two major industry trends being driven by technology commodification and the adoption of web services by consumers:

   - a move to a service orientation by both vendors and buyers
   - the deployment of cloud technologies into mainstream business.

   Cloud based ICT services provide opportunities for agencies to achieve better value, flexibility and reliability, and make sustainable service delivery improvements. Potential benefits include:

   - cost – moving from customising and operating in-house ICT, to using the best available 'off the shelf' commodity solutions will reduce the total cost of ownership
   - agility – on-demand, scalable and flexible services that can be implemented quickly provide agencies with the ability to respond to changing requirements and peak periods
   - innovation – innovation will be facilitated by rapid and continuous system development
   - resilience - a large, highly resilient environment reduces the potential for system failure.

Key considerations
Plan to minimise physical ICT infrastructure, considering virtualisation as an option.
Consider 'as a service' solutions, including cloud, when determining investment options to meet the business need. Further information is outlined in the *NSW Government Cloud Policy* and *As a service ICT Sourcing Guide*.
Consider similar service offerings from the Data Centre Marketplace as cost benchmark against the solution options.
Ensure that total cost of ownership is factored, including (but not limited to): • additional agility, scalability and upgrades provided by as a service solutions • the costs of owning and maintaining stand-alone infrastructure • the maturity of available as a service solutions for government application • the security of both 'as a service', agency IT environments and business requirements. Actively plan to rationalise and standardise agency software applications.

3. **Provide for online and mobile access and the sharing of data across government and externally, as appropriate.**

Under Premier's Memorandum *M2012-10 Open Government*, agencies are required to:

- identify priority datasets for publication at data.nsw.gov.au
- increase open access information available at opengov.nsw.gov.au
- facilitate public participation in the policy development process
- make greater use of social media to communicate with staff, customers and industry
- increase online access to government services
- collaborate with community, industry and research partners to co-design service solutions.

Improving service quality, particularly availability and reliability, will become increasingly important as government delivers more services through electronic means and becomes more dependent on ICT. Improving the management of government information will help to ensure it is consistent, and can be shared across the sector and with industry for improved service delivery outcomes. Agencies will be able to share financial and performance information with central agencies to build a comprehensive picture of how government is performing.

Key considerations
Plan for services to be delivered online, and for services and information to be accessed through multiple channels.
Prioritise the use of Service NSW as the default delivery channel for new and existing services.
Ensure that proposed investments support simple, straightforward customer transactions that can be accessed through multiple channels.
Consider how digital channels can improve industry and community consultation, participation and access to information.
Ensure that activities support increasing the public release of agency data and information, for example through the opengov.nsw.gov.au and data.nsw.gov.au websites.

4. **Ensure collaboration and re-use by demonstrating that there are no existing ICT solutions that can be leveraged.**

Improving collaboration between agencies can help to ensure that maximum value is obtained from existing investments, and reduce duplication of investment in similar solutions.

The ICT Leadership Group provides a forum for identifying existing ICT services and solutions that agencies may be able to adopt, reuse or share. This will reduce the cost and time required to acquire new services, and support the use of more common platforms across government.

A whole of government ICT service catalogue will define the essential characteristics of each service, including cost. Delivering services through a whole of government service catalogue will leverage NSW Government purchasing power to secure the most effective pricing, and support common approaches, technologies and systems.

Key considerations
Identify whether existing solutions are available for extension or reuse.
Identify opportunities for wider collaboration.
Utilise the NSWBuy Service Catalogue to purchase common ICT services.
Maximise ICT contract alignment of the whole of government procurement and technical standards, and the ProcureIT framework.

5. **Demonstrate standardisation and interoperability of technologies and solutions.**
   Leveraging ICT to share information can deliver productivity savings and service delivery improvements. Realising these benefits requires a more consistent approach to both technology and data management.

   The *NSW Government ICT Strategy* is focused on:

   - developing the framework and supporting policies to enable agencies to readily procure standardised ICT Services
   - standardisation as new procurement arrangements for IT hardware, software and telecommunications are developed and aligned with the NSW Government ICT Strategy
   - ensuring that recommendations for standards and standardisation in ICT procurement effectively address business needs and requirements for service delivery
   - developing data standards and a common approach to information management.

Key considerations
Actively support the information management framework by demonstrating interoperability between cluster/agency systems and those used for central reporting.
Build information management responsibilities into ICT strategic planning and investment decision making.
Maintain common definitions and a standardised approach to the classification and collection of information.

6. **Demonstrate better value to government and/or citizens over the life of the investment.**
   Consistent with the objectives of the NSW Government priorities and reflected in the *NSW Government ICT Strategy*, ICT investment will be focused on business requirements, value for money and service delivery. Value is determined by considering all of the costs and benefits associated with an ICT investment, including both price and non-price factors. The value of alternative options will also be considered in deciding the preferred ICT investment. The NSW Procurement Board's *Statement on Value for Money* gives agencies guidance about assessing and measuring benefits, costs and risks across the lifecycle of an investment.

   Costs and benefits will be considered across the lifecycle of the investment, including acquisition, installation, operation, maintenance, refurbishment and disposal. In other words, agencies will evaluate the total cost of ownership when considering different ICT enabled solutions.

Key considerations
Consider all costs and benefits in determining the value of investment options, including both price and non-price factors.
Consider staged implementation, including pilots or 'proof of concept' solutions that enables evaluation before investment proceeds.

Investment Principles

1. **Business cases must be developed with sufficient resourcing given the complexity of the project (including via seed funding if necessary).**

2. **Projects must be modular with individual modules not exceeding two years duration to enable them to demonstrate specific benefits for discrete investment. Exemptions may be sought from the GCIDO and may involve additional scrutiny under the IAF.**

3. **All business cases must include the full set of technology and business change costs along with asset, development and other costs.**

4. **Agencies must not release full funding to projects until set up for success.**

Appendix B   Role of the Project Sponsor in the IAF

The governance and oversight of a project/program is ordinarily exercised by a project board, which includes three major parties: a 'project sponsor', 'senior supplier' and 'senior user'. The project board's authority and responsibility are in accordance with the instructions (initially contained in the project mandate) set by corporate or program management. The typical responsibilities/functions of these parties are described in **Table B1**.

Table B1 Typical responsibilities of major parties to a project/program

Party	Typical responsibilities and functions of parties to a project[18]
Project Sponsor	- ultimately responsible for the project's success and is the key decision maker - secures the funding - owns the business case - ensures that the project is focused throughout its life on achieving its objectives and delivering a product that will achieve the forecasted benefits. - ensures that the project delivers value for money - chairs the project board
Senior User	- represents the interest of those who will use the project's products (including operations and maintenance) or those for whom the products will achieve an objective - commits user resources and monitors products against requirements - specifies the benefits and is held to account by demonstrating to corporate or program management that the forecasted benefits that were the basis of project approval are realized. This is likely to involve a commitment beyond the end of the project's life
Senior Supplier	- represents the interests of those designing developing, facilitating, procuring and implementing the project's products - accounts for the quality of products delivered by the supplier/s and is responsible for the technical integrity of the project - provides supplier resources and ensuring that proposals for designing and developing the products are feasible and realistic

The role performed by each of these parties may be emphasised depending on the particular project life cycle point a project/program is in. Further, the roles performed by each party often have necessary interdependencies with each other to enable the successful delivery of a project/program. This is depicted in **Figure B1**.
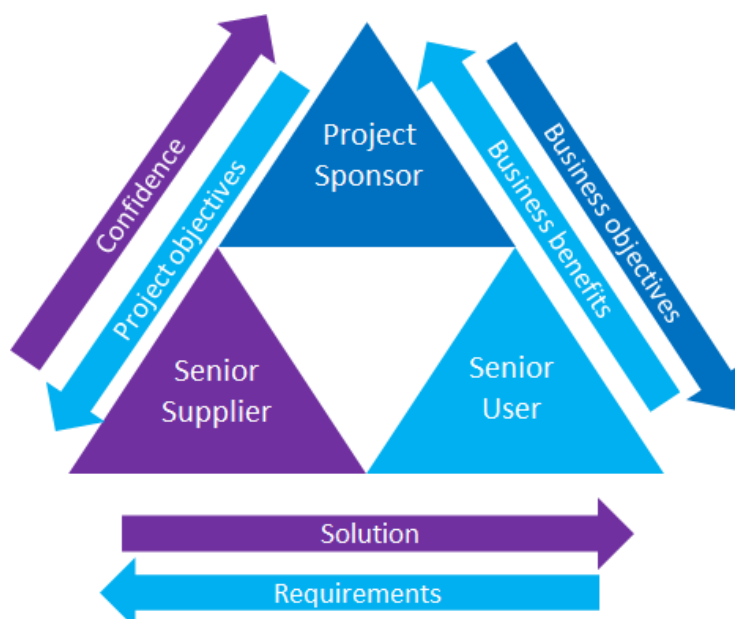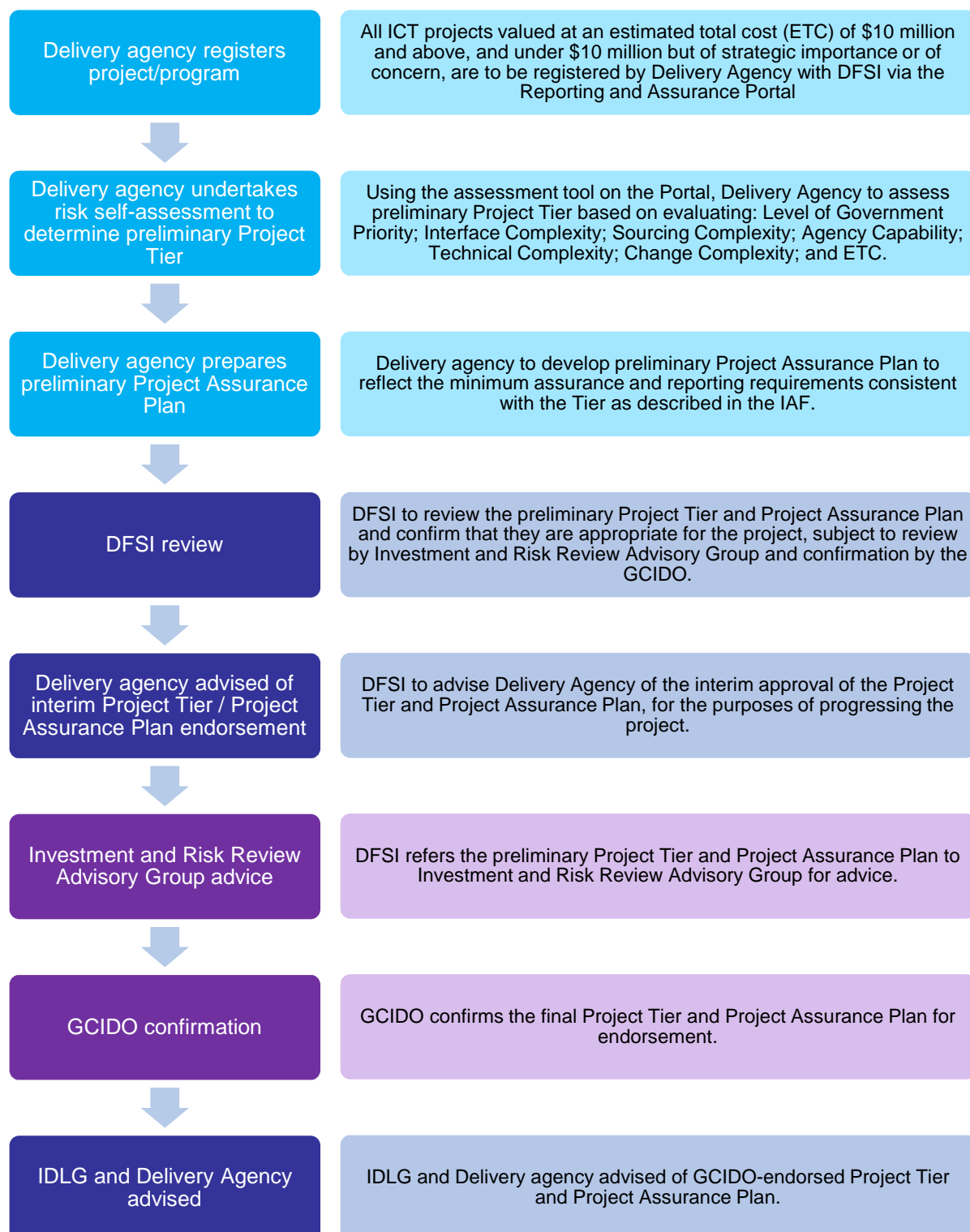

Figure B1 Interaction of the responsibilities and functions of key parties to a project/program

---

[18] Derived from Prince2

Appendix C   Project registration and risk-profiling process

Delivery agency registers project/program	All ICT projects valued at an estimated total cost (ETC) of $10 million and above, and under $10 million but of strategic importance or of concern, are to be registered by Delivery Agency with DFSI via the Reporting and Assurance Portal
Delivery agency undertakes risk self-assessment to determine preliminary Project Tier	Using the assessment tool on the Portal, Delivery Agency to assess preliminary Project Tier based on evaluating: Level of Government Priority; Interface Complexity; Sourcing Complexity; Agency Capability; Technical Complexity; Change Complexity; and ETC.
Delivery agency prepares preliminary Project Assurance Plan	Delivery agency to develop preliminary Project Assurance Plan to reflect the minimum assurance and reporting requirements consistent with the Tier as described in the IAF.
DFSI review	DFSI to review the preliminary Project Tier and Project Assurance Plan and confirm that they are appropriate for the project, subject to review by Investment and Risk Review Advisory Group and confirmation by the GCIDO.
Delivery agency advised of interim Project Tier / Project Assurance Plan endorsement	DFSI to advise Delivery Agency of the interim approval of the Project Tier and Project Assurance Plan, for the purposes of progressing the project.
Investment and Risk Review Advisory Group advice	DFSI refers the preliminary Project Tier and Project Assurance Plan to Investment and Risk Review Advisory Group for advice.
GCIDO confirmation	GCIDO confirms the final Project Tier and Project Assurance Plan for endorsement.
IDLG and Delivery Agency advised	IDLG and Delivery agency advised of GCIDO-endorsed Project Tier and Project Assurance Plan.

Indicative timings for these steps are to be established and documented in guidance documents.

Appendix D   Project profile/risk criteria, criteria scores and weightings

The below project profile/risk criteria has been extended from the criteria referenced in The Treasury Gateway Policy to be directly relevant for ICT projects under this framework.

Criteria and Weighting	Priority and Risk level	Score

Government priority: 15%
 	
▪ The level **and** timing of project or program priority, where:
 	
  - the level of priority for a project is specifically mandated (or where a Ministerial authority has been given to mandate that a project is a priority) in documents such as the NSW Budget, Premier's Priorities, State Infrastructure Strategy, NSW ICT and digital strategy, Election Commitment, or is a response to a Legislative Change, or
  - the project is a direct enabler of a mandated priority project.
	<u>Very high Government priority</u>
	
	▪ mandated priority project, or a direct enabler, and final business case or construction to be <u>completed</u> within forward estimates.
		5

	<u>High Government priority</u> ▪ mandated priority project, or a direct enabler, and final business case or construction to <u>commence</u> within forward estimates.	**4**
	<u>Medium Government priority</u> ▪ mandated priority project, or a direct enabler, and final business case or construction to be completed outside forward estimates but within the next 1-2 years beyond forward estimates.	**3**
	<u>Low Government priority</u> ▪ mandated priority project, or a direct enabler, and final business case and construction to commence outside forward estimates but within the next 3-6 years beyond forward estimates.	**2**
	<u>Very low Government priority</u> ▪ Agency priority, or a direct enabler, in Agency Strategic Plan over the next 10 years.	**1**
	<u>Extremely low Government priority</u> ▪ not a documented Government priority or a direct enabler.	**0**

Criteria and Weighting	Priority and Risk level	Score
Interface complexity: 10% The extent to which the project or program's success will depend on the management of complex dependencies with other: ▪ agencies, clusters or non-government sector organisations - contributing to the funding of the project or will be given operational responsibility, and/or ▪ projects or services - there are fundamental interdependencies with other projects or services that will directly influence the scope and cost of the project. The extent to which the project impacts on the success of the program or other project.	<u>Very high interface complexity risk</u> ▪ high degree of external dependencies (Federal, local, private or inter-agency), or ▪ fully interdependent on other projects or services, or ▪ very high degree of impact on the program's or other project's success.	**5**
	<u>High interface complexity risk</u> ▪ many external dependencies (Federal, local, private or inter-agency), or ▪ important interdependencies with other projects or services, or ▪ high degree of impact on the program's or other project's success.	**4**
	<u>Medium interface complexity risk</u> ▪ external dependencies (Federal, local, private or inter-agency), or ▪ some interdependencies with other projects or services, or ▪ moderate impact on the program's or other project's success.	**3**
	<u>Low interface complexity risk</u> ▪ single external dependency (Federal, local, private or inter-agency), or ▪ minor interdependence with other projects or services, or ▪ minor impact on the program's or other project's success.	**2**
	<u>Very low interface complexity risk</u> ▪ very little or infrequent external dependency, or ▪ very little interdependence on other projects or services, or ▪ very little impact on the program's or other project's success.	**1**
	<u>Extremely low interface complexity risk</u> ▪ no interface complexity, or ▪ extremely low impact on the program's or other project's success.	**0**
Sourcing complexity: 10% The extent to which a project or program requires, sophisticated, customised or complex procurement methods (non-traditional), thereby increasing the need for a careful assessment and management of risk. Sourcing complexity may also be influenced by contractual complexity, especially if multiple suppliers are involved in the delivery of the solution with varying service levels. Sourcing complexity may also be influenced by the extent of agency experience and capability. For example, some procurement methods (e.g. ECI) may be used more commonly by some agencies and represent a lower procurement risk.	<u>Very high sourcing complexity risk</u> ▪ highly complex sourcing involving multiple suppliers.	**5**
	<u>High sourcing complexity risk</u> ▪ unconventional complex sourcing. For example an Alliance or hybrid Alliance.	**4**
	<u>Medium sourcing complexity risk</u> ▪ some sourcing complexity. For example, sourcing as a service.	**3**
	<u>Low sourcing complexity risk</u> ▪ minor sourcing complexity. For example Directly Managed Contract.	**2**
	<u>Very low sourcing complexity risk</u> ▪ business as usual sourcing. For example sourcing from the ICT Services Catalogue.	**1**
	<u>Extremely low sourcing complexity risk</u> ▪ no sourcing complexity. For example routine procurement method for a routine ICT solution that is purchased.	**0**

Criteria and Weighting	Priority and Risk level	Score
Agency capability: 20% The extent to which the sponsor agency has demonstrated capability (skills and experience), or can access through recruitment or procurement the required capability in the development and / or delivery of the type of project or program proposed and/or its delivery strategy.	Very high agency capability risk ▪ no projects of this type previously delivered over the last 10 years.	**5**
	High agency capability risk ▪ few number of projects of this type previously delivered over the last 10 years.	**4**
	Medium agency capability risk ▪ at least 5 projects of this type over the last 5 years.	**3**
	Low agency capability risk ▪ multiple recurring projects.	**2**
	Very low agency capability risk ▪ business as usual type projects.	**1**
	Extremely low agency capability risk ▪ no agency capability risk for routine.	**0**
Technical Complexity: 15% The extent to which a project or program requires new or unproven technology, customised technology, or complex or lengthy integration with other solutions, thereby increasing the need for a careful assessment and management of risk.	Very high technical complexity ▪ extremely new technology proposed or an unproven solution and/or complex inter-operability requirements across multiple platforms.	**5**
	High technical complexity ▪ new technology proposed with numerous inter-operability requirements.	**4**
	Medium technical complexity ▪ proven technical solution with several inter-operability requirements.	**3**
	Low technical complexity ▪ proven technical solution with few inter-operability requirements.	**2**
	Very low technical complexity ▪ proven solution with known inter-operability requirements.	**1**
	Extremely low technical complexity ▪ no technical complexity, known and proven solution with no inter-operability requirements.	**0**

Criteria and Weighting	Priority and Risk level	Score
Change Complexity: 30% Sensitivity to the degree of business change required for the success of the project. This could be complex business or process changes internal to government or in the service delivery to government customers Risk or perception of risk to service delivery, security and privacy or similar issues that may impact change management aspects. The degree of criticality of services impacted by the project such as front-line services to citizens. The degree of unknowns involved with the chosen approach.	Very high change complexity risk ▪ transformational changes in business processes with potential impact on service delivery processes ▪ very high risk or perception of risk to service delivery, security and privacy or similar issues that may impact change management aspects ▪ very high degree of criticality of services impacted by the project, or ▪ there is a significantly high level of unknowns and/or assumptions involved.	**5**
	High change complexity risk ▪ significant changes required to business processes with no impact on service delivery processes ▪ high risk or perception of risk to service delivery, security and privacy or similar issues that may impact change management aspects ▪ high degree of criticality of services impacted by the project; or ▪ there is a high level of unknowns and/or assumptions involved.	**4**
	Medium change complexity risk ▪ changes required to some business processes with impacts to connected systems requiring rework ▪ medium risk or perception of risk to service delivery, security and privacy or similar issues that may impact change management aspects ▪ medium degree of criticality of services impacted by the project, or ▪ there is a moderate level of unknowns and/or assumptions involved.	**3**
	Low change complexity risk ▪ minimal changes required to either business process or service delivery processes. Low technology change ▪ low risk or perception of risk to service delivery, security and privacy or similar issues that may impact change management aspects, or ▪ low degree of criticality of services impacted by the project, or ▪ there is a low level of unknowns and/or assumptions involved.	**2**
	Very low change complexity risk ▪ no changes required to business or service delivery processes, minimal systems impacted ▪ very low risk or perception of risk to service delivery, security and privacy or similar issues that may impact change management aspects, or ▪ very low degree of criticality of services impacted by the project; or ▪ there is a very low level of unknowns and/or assumptions involved.	**1**
	Extremely low change complexity risk ▪ no changes required to business or service delivery processes, no other systems impacted ▪ no risk or perception of risk to service delivery, security and privacy or similar issues that may impact change management aspects ▪ extremely low degree of criticality of services impacted by the project, or ▪ there are no assumptions involved.	**0**