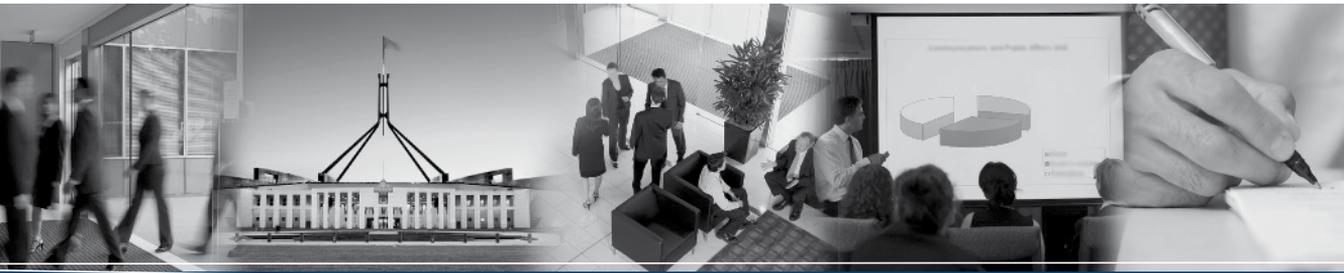


Australian Government Architecture Reference Models How to Use Guide



August 2011

Version 1.0

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Foreword

The Australian Government Architecture (AGA) Reference Models form part of the Australian Government Architecture Framework released in 2007 by the Department of Finance and Deregulation.

The AGA Reference Models provide a common language for Australian Government agencies so that their architectures can be described in a common and consistent manner. By agencies using the terms contained in the Reference Models to describe their business and its components, more effective identification, prioritisation and coordination of strategic capability development initiatives will be facilitated.

This guide has been developed to help you in successfully using the AGA Reference Models. It also aims to provide agency leaders with assistance in asking the right questions when considering capability development and investment initiatives, such as:

- Are information and communications technology (ICT) assets being duplicated?
- Will the new assets be reusable and interoperable?
- Are there any synergies between projects which can be exploited?
- What standards need to be considered?
- Is it clear how an investment will meet business requirements?

I hope you find this guide useful as you develop your agency architecture and plan major projects within your agency.

Ann Steward

Australian Government Chief Information Officer
Australian Government Information Management Office
Department of Finance and Deregulation

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one Introduction



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one Introduction

1.1 Purpose

The purpose of this guide is to help agencies initiate and develop Enterprise Architecture (EA) using the AGA Framework.

In April 2007, Australian Government Information Management Office (AGIMO) released the Australian Government Architecture (AGA) Framework. The documents released at that time included the Australian Government Architecture Reference Models (the AGA Reference Models) and the Cross-Agency Services Architecture Principles (the Principles).

Agencies are encouraged to use the AGA Reference Models, the AGA Metamodel and the AGA Investment Templates to document their current state and proposed architectures. These architectures can then be used to support business case development and investment decisions, and monitor capability development and service improvement.

1.2 Scope

This guide explains:

- EA and its relevance for government agencies;
- the AGA Reference Models;
- how agencies can use the AGA Reference Models to classify their architectures; and
- the AGA Metamodel and AGA Investment Templates.

1.3 Audience

This guide is intended for all Australian Government agencies, especially those that do not currently have an enterprise architecture practice or are just beginning to develop an EA.

The guide aims to promote EA within and between government agencies and facilitate executive and senior management understanding, commitment and support. It is designed to assist investment review committees as well as those involved in capability development and program/project management.

The document is organised as follows:

Section	Title	Description
Section 1	Introduction	Defines the purpose, scope, audience, and organisation of the document
Section 2	Definition of EA	Presents the context for the EA process
Section 3	Australian Government Architecture	Outlines the Australian Government Architecture framework and its components.
Section 4	Using the AGA Reference Models	Provides guidance on why, how and when agencies should use the AGA Reference Models.
Section 5	Using the AGA Metamodel	Demonstrates how agency-specific entities can be mapped to the AGA Reference Models.
Appendix A	AGA Investment Templates	Provides guidance on completing the AGA Investment Templates.
Appendix B	Acronyms	Provides a list of all acronyms used within this document.

1.4 Related documents

This document is to be read in conjunction with the AGA Reference Models.

1.5 Acknowledgements

This document has been developed in collaboration with the Australian Government Services Architecture Working Group (AGSAWG) a working group reporting to the Australian Government's CIO Committee.

1.6 Contact information

Questions regarding this document or suggestions for future enhancements are to be directed to aga@finance.gov.au.

two Enterprise Architecture



two

two Enterprise Architecture

Enterprise Architecture “is the process of translating business vision and strategy into effective change by creating, communicating and improving the key principles and models that describe the enterprises’ future state and enable its revolution.” *Gartner*

Enterprise Architecture (EA) is a discipline to guide and enable the high-level planning and relationship management necessary to realise the organisation’s strategic direction and its intended outcomes. EA also provides a mechanism for achieving the alignment of enterprise and solution architectures to the organisation’s strategic direction. As such, EA will need to link into an agency’s strategy or business planning cycles.

A well-implemented and effectively communicated EA can help overcome some of the common issues and problems that affect organisations by:

- informing strategic and corporate planning;
- promoting consistency in the use of language and concepts;
- enabling investment and capability development decisions;
- aligning business and ICT systems with organisational vision and strategy;
- improving transparency and utilisation of business and ICT systems; and
- supporting transformation, program and project management.

2.1 Enterprise Architecture components

2.1.1 Enterprise

An enterprise is an organisation (or a cross-organisational entity) that supports a defined business scope. It includes interdependent resources (people, organisations, and technologies) whose functions must be coordinated and information and knowledge resources shared to support common priorities and activities.

2.1.2 Enterprise Architecture Frameworks

EA Frameworks provide a functional guide on how EA should be structured and organised within an organisation. Industry recognised EA frameworks include, but are not limited to the:

- AGA framework;
- US Government’s Federal Enterprise Architecture framework (FEAF);
- Zachman Framework for Enterprise Architecture;
- The Open Group Architecture Framework (TOGAF);
- Gartner Enterprise Architecture Framework (GEAF); and
- Pragmatic Enterprise Architecture Framework (PEAF).

2.1.3 Baseline Architecture

Baseline Architecture is developed to portray the current state (“as is”). It captures and describes the systems, services, processes and people along with the relationships that exist between them. This involves the relationship of all systems, including the current capability elements, business processes, and enabling technologies.

2.1.4 Target Architecture

Target Architecture is the proposed future or end state enterprise (“to be”). This includes future capability elements, business processes, and enabling technologies, which should be represented in the agency’s strategic thinking and planning.

2.1.5 Road Map

A Road Map is the transition plan that outlines the strategy to move the enterprise from the “as is” state to the “to be” state (i.e. from the Baseline Architecture to the Target Architecture). It identifies and sequences the changes to business, services, systems, technology and processes necessary for the transition to be successful.

2.1.6 Enterprise Architecture artefacts or products

EA artefacts are the outputs of the EA practice. They include architecture principles, governance arrangements, standards and services catalogues, target and baseline architectures, assessments, analyses and other related documents.

2.2 Benefit of implementing Enterprise Architecture in Australian Government agencies

The primary purpose of an EA is to inform and guide the decisions for the enterprise, especially those related to ICT investment and capability development.

The benefits of developing an EA include:

- **Strategic Alignment:** ensuring the operations of the enterprise align to the strategic intent and that the business shapes and drives ICT planning and service delivery;
- **Agency and/or Cross-Agency Collaboration:** guiding and enabling decisions regarding business processes, services and technologies within and across agency boundaries;
- **Capability Development:** allowing agencies to target investments and develop capabilities that contribute to achieving strategic and corporate objectives;
- **Business Systems Integration:** ensuring that enterprise business rules are consistently applied, that the integrity of data is not compromised, interfaces and information flows are standardised, and that connectivity and interoperability requirements are managed;
- **Change Management:** facilitating and managing enterprise change and transformation processes; and
- **Technology Convergence:** striving towards a standard ICT product portfolio, as contained for example in the AGA Technical Reference Model (TRM).

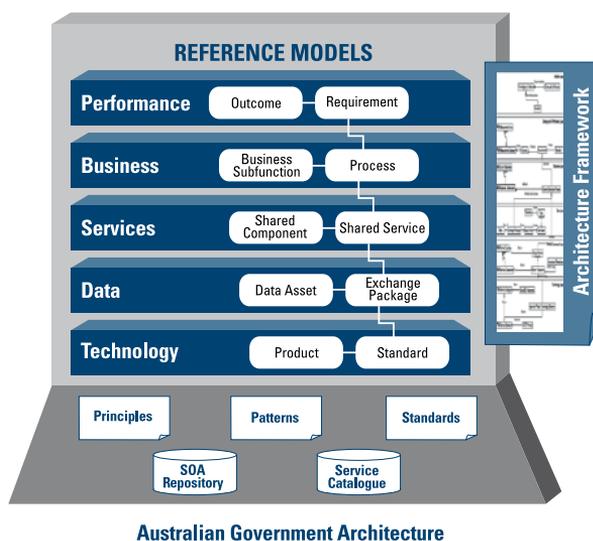
three the Australian Government
Architecture Framework



three

three The Australian Government Architecture Framework

Figure 3-1: AGA Framework



The AGA Framework comprises:

- AGA Reference Models, made up of the Performance Reference Model (PRM), Business Reference Model (BRM), Service Reference Model (SRM), Data Reference Model (DRM), and the Technical Reference Model (TRM);
- AGA Metamodel;
- Cross-Agency Services Architecture Principles;
- AGA Investment Templates; and
- AGA Reference Models How to Use Guide.

The AGA Framework (*Figure 3-1*) was adapted from the US Government's Federal Enterprise Architecture Framework (FEAF) and has been endorsed by the Australian Government's Chief Information Officer Committee (CIOC).

3.1 Whole of Government Enterprise Architecture

The AGA framework is a high-level conceptual framework. The framework recognises that government agencies require the flexibility to build their enterprise architectures to meet specific, shared and whole of government business requirements.

3.2 Enterprise Architecture methodology

The flexibility of the AGA Framework includes its ability to be used with any of the standard EA methodologies. There are a number of well-established EA methodologies which government agencies may use separately, or in combination, to inform, manage and develop their EA practice.

3.3 Use of the Australian Government Architecture Framework within and across agencies

A sound architecture framework will support government by providing a useful context for decision-making and help agencies develop capabilities needed for the future. In particular, it will support agencies to operate across traditional boundaries to improve service delivery and deliver more responsive policy implementation.

Ann Steward (Australian Government Chief Information Officer) December 2009

The Government expects that agencies should be able to classify and represent their architectures using the AGA Reference Models. This will result in a common language and shared concepts within and between government agencies. However, the Government does not require replacement of existing frameworks or rigid adherence to uniform 'requirements'.

The AGA Framework should be used by agencies to guide and enable cross-agency collaboration in the delivery of services, such as services to Indigenous Australians and border management.

3.4 Architecture Principles

Architecture Principles have been developed to govern architecture implementation and provide the basis for establishing policies and relationships within and between agencies. These principles align with the Australian Government's ICT strategic direction.

Agencies should incorporate and refine the principles to meet intra- and cross-agency business needs.

3.5 AGA Reference Models

The AGA Reference Models provide a classification system for Australian Government agencies to describe their architectures in a common and consistent manner. This assists the identification, prioritisation and coordination of business initiatives by:

- assisting agency and cross-agency capability and service delivery analysis;
- establishing opportunities for collaboration and interoperability;
- defining common business activities, functions and processes;
- identifying information flows and ability to exchange information; and
- targeting investments and eliminating gaps, duplication and inefficiency.

The five AGA Reference Models are:

- Performance Reference Model (PRM);
- Business Reference Model (BRM);
- Service Reference Model (SRM);
- Data Reference Model (DRM); and
- Technical Reference Model (TRM).

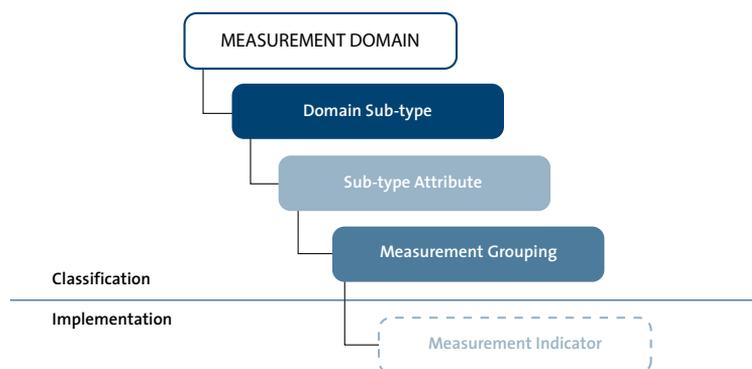
3.5.1 Performance Reference Model

The PRM (*Figure 3-2*) is an outcome-focused measurement framework that can assist government agencies to design and implement effective business measurement systems and performance architectures.

The PRM comprises:

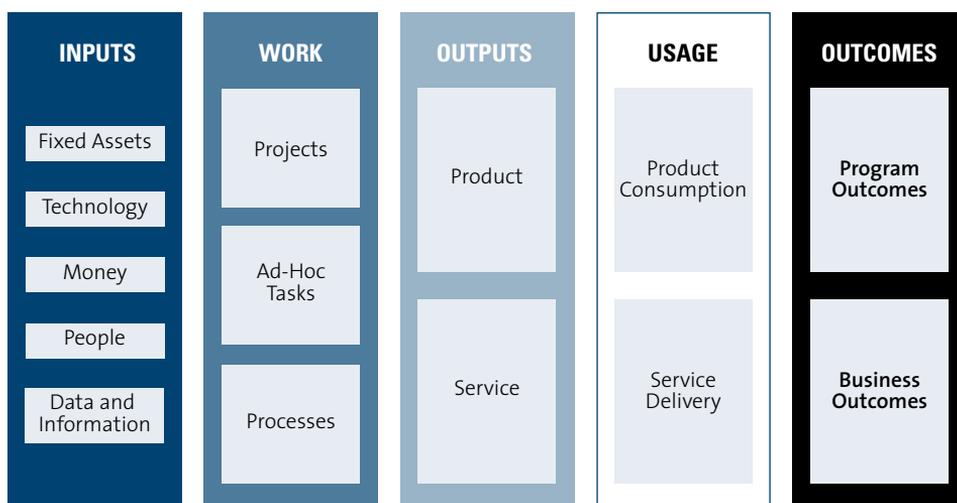
- a hierarchical structure that helps identify measurement needs;
- a classification framework that describes the types of measurement that can support the identified needs; and
- a measurement framework that helps define effective measurement indicators.

Figure 3-2: PRM Structure



The objective of the PRM is to provide measurement of the pathway through inputs, work, outputs, usage and outcomes (Figure 3-3).

Figure 3-3: PRM Classification Framework



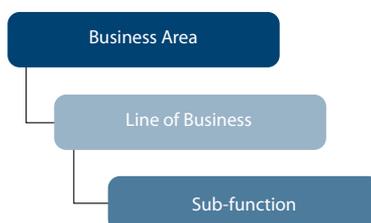
The PRM can be used to:

- promote strong alignment between business initiatives, and agency and government strategies and outcomes;
- facilitate efficient and effective business operations;
- develop accurate cost models for ICT capabilities and services;
- increase effectiveness of intra- and cross-agency capital investments; and
- increase transparency in operations and reporting on progress and performance.

3.5.2 Business Reference Model

The BRM (Figure 3-4) provides the taxonomy for classifying a functional (as opposed to organisational) view of the Australian Government’s Lines of Business (LoB). This includes both internal operations and services for citizens, individuals, businesses and other organisations. The BRM describes government business functions as Business Areas, Lines of Business and Business Sub Functions.

Figure 3-4: BRM Structure



The BRM allows agencies to classify the functions of government programs into a defined structure. It provides value to business architecture by providing:

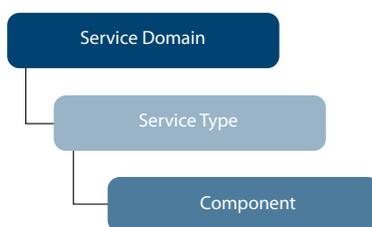
- a functional view of agency business;
- a standard classification of business functions; and
- a common understanding of the business functions of other agencies.

3.5.3 Service Reference Model

The SRM (*Figure 3-5*) provides a framework for classifying services according to how they support business and performance objectives. The model helps to identify opportunities for re-use of business components and services.

The SRM is organised across horizontal service areas, independent of the business functions, providing a foundation for sharing and re-use of business services, applications, service capabilities and components.

Figure 3-5: SRM Structure

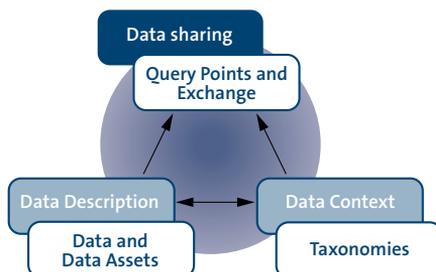


The SRM provides value to services architecture by providing a framework for:

- cataloguing services;
- identifying gaps, and duplicate or redundant services; and
- identifying reusable services.

3.5.4 Data Reference Model

The DRM (*Figure 3-6*) is a flexible, standards-based framework that supports information sharing and re-use across the Australian Government. The DRM provides a standard description for common data. It promotes uniform data management practices by enabling agencies to agree, establish and support a common language and standards for information sharing.

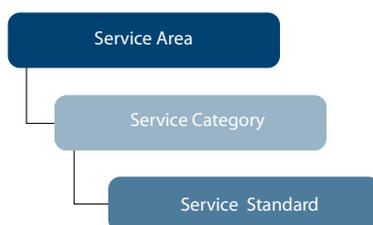
Figure 3-6: DRM Structure

The DRM provides value for agency data architecture initiatives by:

- providing a means to consistently describe data architectures. The DRM's approach to Data Description, Data Context and Data Sharing enables data architecture initiatives to uniformly describe their data and information, resulting in increased opportunities for cross-agency interactions.
- bridging data architectures. The DRM provides the capability to enable cross-agency communications about data and data architecture.
- enabling greater commonality of cross-agency architectures. The DRM's standardisation areas provide a foundation for increased compatibility between agency data architectures.

3.5.5 Technical Reference Model

The TRM (*Figure 3-7*) is a framework for categorising standards and technologies.

Figure 3-7: TRM Structure

The TRM can be used to:

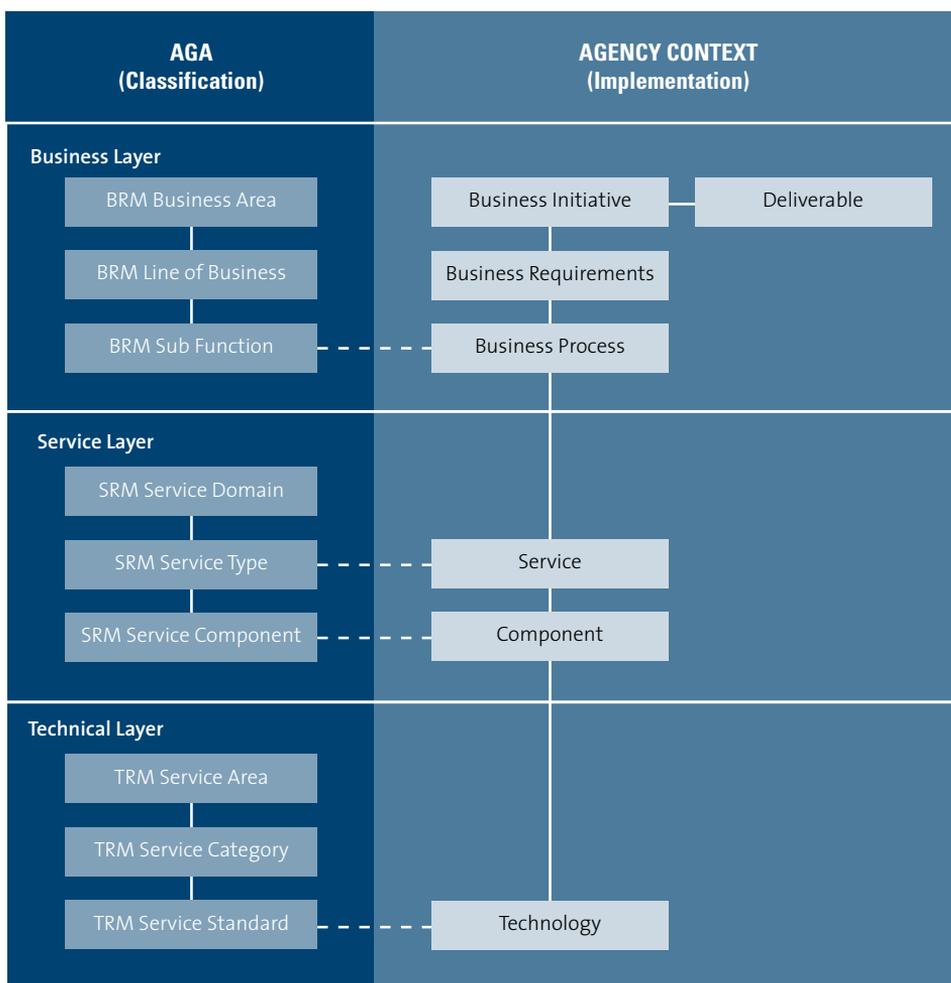
- generate software and hardware inventories;
- classify ICT standards; and
- identify gaps, duplicate and redundant technology components.

3.6 AGA Reference Models agency context diagram

The AGA Reference Models agency context diagram (Figure 3-8) shows a high-level overview of the AGA Metamodel. The context diagram shows how agency architectures may align with the AGA Reference Models. Section 5: Using the AGA Metamodel provides more information on using the AGA Metamodel.

To align an agency’s architecture to the AGA Reference Models, agency architects should identify Business Processes, Capabilities, Components and Technology Standards and classify them using the appropriate AGA Reference Models terminology.

Figure 3-8: Agency Context Diagram



four Using the Australian Government Architecture Reference Models



four

four Using the Australian Government Architecture Reference Models

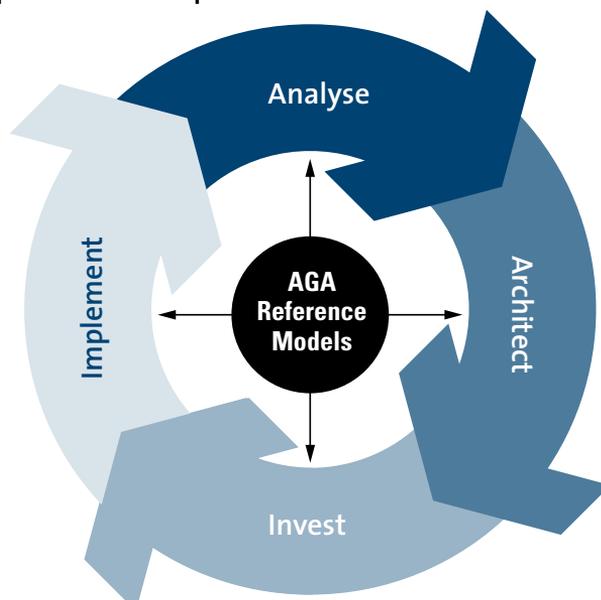
4.1 Applying the AGA Reference Models to EA

This section provides guidance on why, how and when agencies would use the AGA Reference Models. The focus is identifying a generic EA process (Figure 4-1) to describe how the AGA Reference Models can support each of the key steps:

- Analyse;
- Architect;
- Invest; and
- Implement.

The EA process should not be confused with a generic project management process.

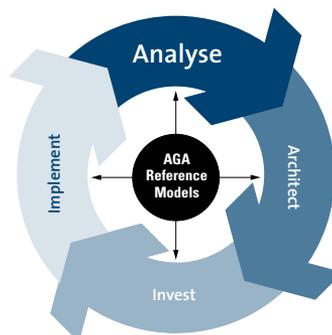
Figure 4-1 Enterprise Architecture process



4.1.1 Analyse

The Analysis phase of EA typically includes activities such as:

- developing a high level overview of the organisation and its primary business functions;
- identifying change drivers;
- documenting a baseline or current architecture for the change or impact area;
- identifying improvement opportunities including any resultant impacts, gaps and requirements listing the business outcomes targeted for the impact area.



Using the AGA Reference Models

During the Analysis phase of EA, the current architecture of the change or impacted area can be classified against AGA Reference Models terminology. Architects can then classify the change or impacted area's Business Processes, Capabilities, Components, etc., against the appropriate AGA Reference Model, using the AGA Metamodel as a guide.

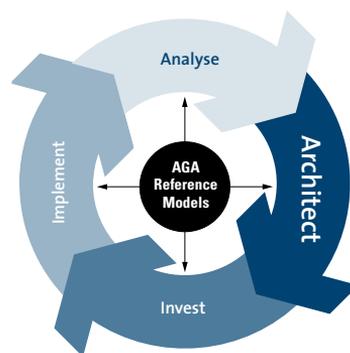
Benefits of using the AGA Reference Models in the Analysis phase include:

- providing a common view of the impacted business processes, services and technical resources in a standard language by classifying agency assets against the AGA Reference Models;
- identifying gaps, duplicate and redundant services by classifying services using the SRM;
- identifying synergies between projects, priorities and opportunities by classifying services using the SRM;
- identifying opportunities for re-use by using the SRM Service Type; and
- supporting cross-agency initiatives by mapping agency primary functions to the BRM to provide a common frame of reference.

4.1.2 Architect

The Architect phase of EA typically includes activities such as:

- setting out the performance goals for the proposed change area;
- providing alternative design options for the proposed change area;
- finalising the target architecture for the proposed change area;
- developing a road map for the proposed change area; and
- aligning the target architecture of the proposed change area with the overall EA of the organisation.



Using the AGA Reference Models

The PRM supports a planning framework with definitions of measurable outcomes, outputs, work, usage and inputs. The new business processes, capabilities, services, etc., resulting from the design options and target architecture for the change area, can be classified against the appropriate AGA Reference Model, using the AGA Metamodel as a guide.

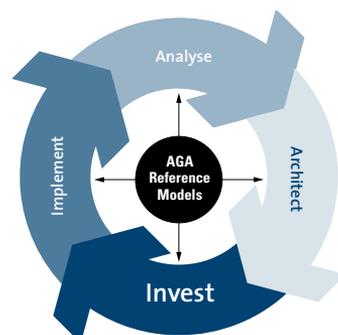
Benefits of using the AGA Reference Models in the Architect phase include:

- increased alignment between strategic vision and intent, business priorities and initiatives and ICT capability and services;
- providing and promoting a common language and understanding of the proposed solution; and
- understanding the contributions and responsibilities of different business areas within and across agencies.

4.1.3 Invest

The Invest phase of EA typically includes activities such as:

- prioritising projects to be undertaken for the financial year;
- assessing costs for each individual project;
- considering synergies and common elements across programs, projects and priorities;
- creating a funding strategy for priority projects;
- developing business cases for investment approval.



Using the AGA Reference Models

All capability development projects scheduled on the road map and any new strategic initiatives can be mapped to the AGA Reference Models using the AGA investment templates (Attachment A) to assist prioritisation. Priority projects can include the mapping of service and business functions to costs when submitting business cases for approval. The costing framework of the PRM can be used to measure the costs of the project by measuring resource utilisation, value costs, costs attributed to Business Process execution and costs to promote the use of output by customers.

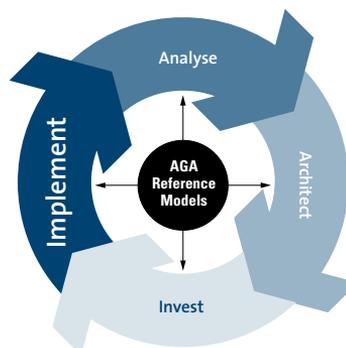
Benefits of using the AGA Reference Models in the Invest phase include:

- enhanced ability to analyse proposed investments;
- reduced costs and enhanced interoperability by identifying synergies and common elements;
- improved prioritisation; and
- development of accurate cost models for ICT activities.

4.1.4 Implement

The Implement phase of EA typically includes activities such as:

- developing implementation plans for projects;
- project execution and management
- assurance that projects are achieving performance goals;
- assurance that the project implementation is on target.



Using the AGA Reference Models

The PRM can be used to define the performance measures and determine the process for gathering measurement information.

The benefit is increased transparency in operations and reporting on progress and performance.

4.2 AGA Reference Models and catalogues

As well as supporting the standard EA process illustrated above, the taxonomy detailed within the AGA Reference Models can be used to populate catalogues.

Catalogues typically produced by agencies include:

- business process registers;
- services directories;
- capabilities catalogues;

- ICT asset registers; and
- software registers.

The AGA Reference Models classification system can be used by agencies to develop:

- business processes register classified against the BRM;
- capabilities classified against the SRM;
- service directory classified against the SRM;
- ICT asset registers classified against the TRM; and
- software registers classified against the SRM / TRM.

4.3 AGA Reference Models and the AGA Investment Templates

The AGA Investment Templates have been designed to assist in the development of business cases requiring significant investment in ICT. They are a series of spreadsheets that provide guidance to agencies on the identification and classification of ICT architecture components, their costing and implementation risks.

The AGA Investment Templates enable agencies to specify and document two types of services within their business case:

- **Business services** – those services required to deliver the outcomes of the business case
- **ICT services** – those services required to execute the work of the business services.

In order to complete the templates agencies will need to:

- identify the business processes involved in the business initiative;
- define services that will be re-used or developed for use by the business processes; and
- align business processes to the relevant AGA Reference Model.

Most of the fields in the templates align to the AGA Reference Models. Agencies that have mapped their architecture to the AGA, or are using the AGA Metamodel for their architecture, will find the templates logical and straightforward. A detailed explanation on how to populate the Investment Templates is provided at Appendix A: Guide to Completing the AGA Investment Templates.

The benefits of using the AGA Investment Templates include:

- standard approach to inform investment decisions,
- improved cost attribution to business initiatives;
- improved cost estimation.

five Using the AGA Metamodel



five

five Using the AGA Metamodel

The AGA Metamodel is recommended for agency architecture development and implementation. It:

- provides guidance on how to identify the architecture components across the architectural layers;
- promotes alignment between agency defined architectures and the AGA Reference Models; and
- enables agency mapping against the terminology used in the AGA Reference Models.

The AGA Metamodel shows how to align an agency's specific architecture with the AGA Reference Models. The steps involved include:

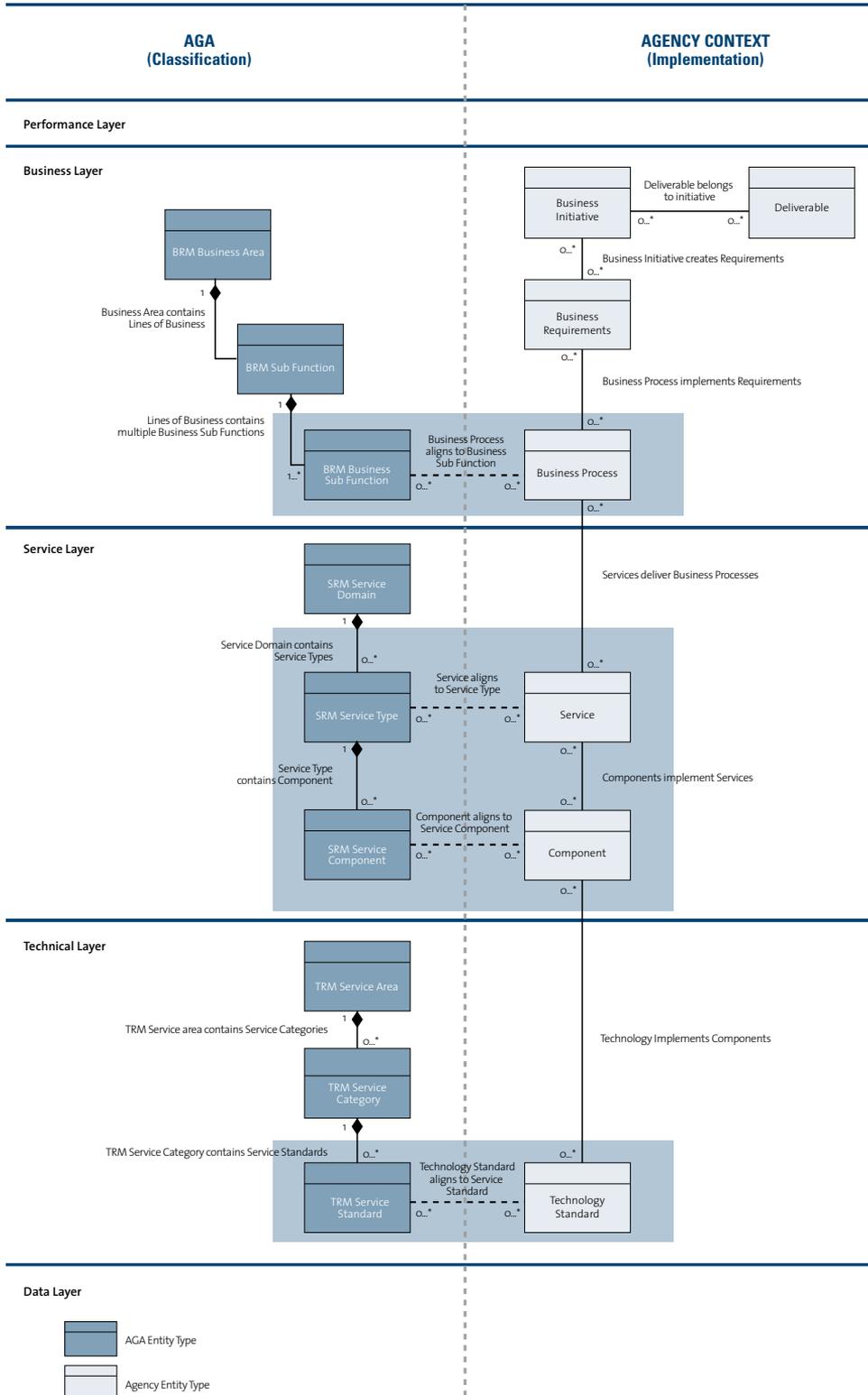
- identification of entity types represented in the AGA Metamodel (e.g. business processes, capabilities, service components, etc);
- identification of the relationship between the entity types;
- identification of the AGA Reference Models classification for each of the entity types (i.e. map business processes to BRM, capabilities to service types, etc.);
- the option to store this data in a structured repository for producing catalogues or submitting investment proposals.

5.1 Why the AGA Metamodel is needed

The AGA Metamodel (Figure 5-1) reflects and supports specific Australian Government work practices. It provides agencies with a:

- relationship between agency-specific entities and the AGA Reference Models; and
- a pathway through all the layers of the AGA Metamodel to the agency environment.

Figure 5-1: AGA Metamodel



5.2 Mapping an architecture to the AGA Metamodel

Agencies describe their business imperatives and development initiatives in different ways, and typically use different terminology to describe their resources, processes, outputs, outcomes, and technology and the relationships that exist between them.

Mapping the agency architecture to the AGA Reference Models will ensure that all agencies use consistent terminology to describe their business when they interact with other agencies.

The following guidance shows how to identify the agency entities that align to the AGA Reference Models, and how to map these entities to the AGA Reference Models.

5.2.1 Mapping a Business Process to the BRM

This section describes how to identify an agency Business Process and how to map the identified Business Process to the BRM Sub Function (Figure 5-2).

Figure 5-2: Business Layer

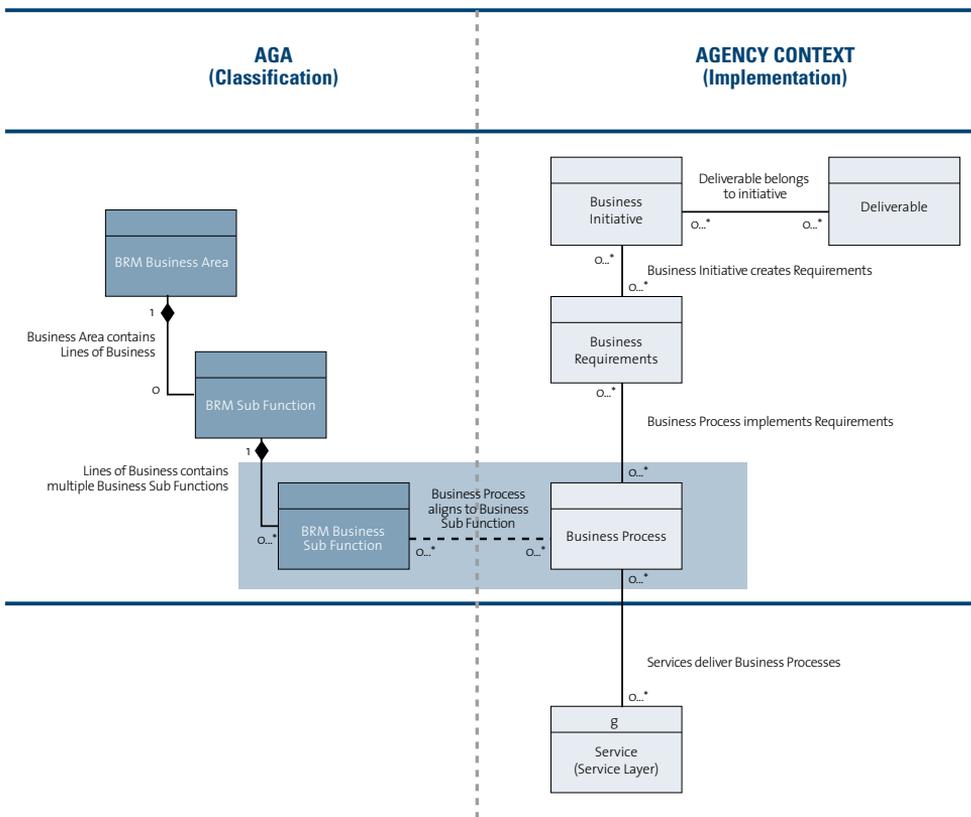


Table 5-1: Mapping a Business Process to the BRM

Entity Name	Business Process
Description	A Business Process is a chain of tasks performed in a logical fashion to achieve an end goal.
Characteristics	<ul style="list-style-type: none"> • Should have clearly identifiable inputs and outputs; • Should have more than one process steps; • Outputs should be consumed; • The output should add value to the outcome directly or indirectly; and • Should not be a self-contained service with a couple of process steps.
Mapping to the AGA REFERENCE MODELS	<p>A Business Process should be mapped to the BRM Sub Function entity.</p> <p>These BRM Sub Functions are grouped by BRM Line of Business and then further grouped by the BRM Business Area.</p> <p>The primary focus of a Business Process should be mapped to appropriate BRM Sub Function.</p>
Examples	Primary Business Process: Providing Immunisation Services
	<i>BRM Sub Function</i> <i>BRM LoB</i> <i>BRM Business Area</i>
	Public Health Services Health Care Service for Citizens
	Immunisation Program: Auditing Process
	<i>BRM Sub Function</i> <i>BRM LoB</i> <i>BRM Business Area</i>
	Inspections and Auditing Regulatory Compliance and Enforcement Service Paths
	Immunisation Program: Consultation with Community Organisations
	<i>BRM Sub Function</i> <i>BRM LoB</i> <i>BRM Business Area</i>
	Public Consultation Public Affairs Services Support
	Immunisation Program: Payment to Doctors
	<i>BRM Sub Function</i> <i>BRM LoB</i> <i>BRM Business Area</i>
	Payment Function Financial Management Management of Government Resources

5.2.2 Mapping a Service and a Component to the SRM

While agencies use the term “capability” to define their ability to deliver Services and Components, capabilities do not form part of the AGA Metamodel. This section describes how to identify Services and Components and map them to the corresponding SRM Service Type and SRM Service Component respectively (Figure 5-3).

A Business Process is comprised of various Service layer Services and Components. A bottom-up approach to identifying the Services involves mapping each Business Process

step first to a Component, and then by mapping the Component with its associated Service.

Alternatively a top-down approach can be used, where the Service is mapped first to a Component and the Component being mapped to each Business Process step.

Figure 5-3: Service Layer

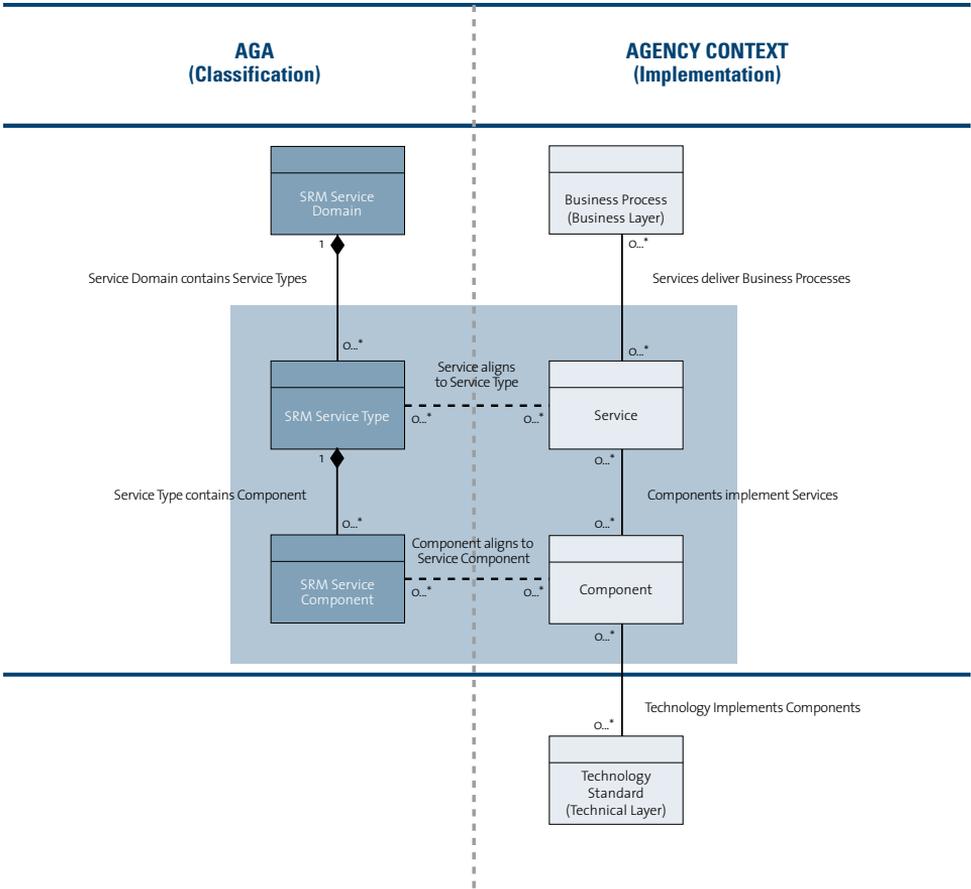


Table 5-2: Mapping Services and Components to the SRM

Entity Name	<i>Service</i>		
Description	<p>A Service delivers outputs for a particular focus area by coordinating people, processes and systems. A Service utilises different SRM Service Components.</p> <p>A Capability is the ability of an agency to deliver a Service or a Service Component.</p>		
Characteristics	<ul style="list-style-type: none"> • Provides a comprehensive group of services for running the focus area. • Contains one or more Business Processes for running various functions of the focus area. • A capability is the ability of an agency to deliver a Service or a Component. • Contains one or more personnel or roles who are responsible for maintaining the Service. 		
Mapping to the AGA REFERENCE MODELS	<p>A Service aligns to the SRM Service Type.</p> <p>The SRM provides a comprehensive list of Service Types to choose from.</p> <p>The focus area that the Service supports should be mapped to the listed SRM Service Type.</p>		
Examples	Agency Customer Management Service		
	<i>SRM Service Type</i>	<i>SRM Service Domain</i>	
	Customer Relationship Management	Customer Services	
Entity Name	<i>Component</i>		
Description	<p>A Component (or a service) is a function that is well defined, self-contained and does not depend on the context or state of any other services. Components can belong to a Service.</p>		
Characteristics	<ul style="list-style-type: none"> • Consumed by at least one or more than one client; • Self-contained; • Able to be integrated with other services; and • Not dependent on other services to deliver the output. 		
Mapping to the AGA REFERENCE MODELS	<p>The Component aligns to the SRM Service Component.</p> <p>The SRM provides a comprehensive list of SRM Service Components to choose from.</p> <p>The main function provided by the Component should be aligned to the SRM Service Component.</p>		
Examples	The Customer Feedback Form		
	<i>Service Components</i>	<i>Service Type</i>	<i>Service Domain</i>
	Customer Feedback	Customer Relationship Management	Customer Services

5.2.3 Mapping a Technology Standard to the TRM

This section describes how to identify a Technology Standard used in an agency and map it to the corresponding TRM Service Standard.

A Service layer Component is implemented using Technology Standards, where comprise the technologies, standards and specifications used by agencies.

Figure 5-4: Technical Layer

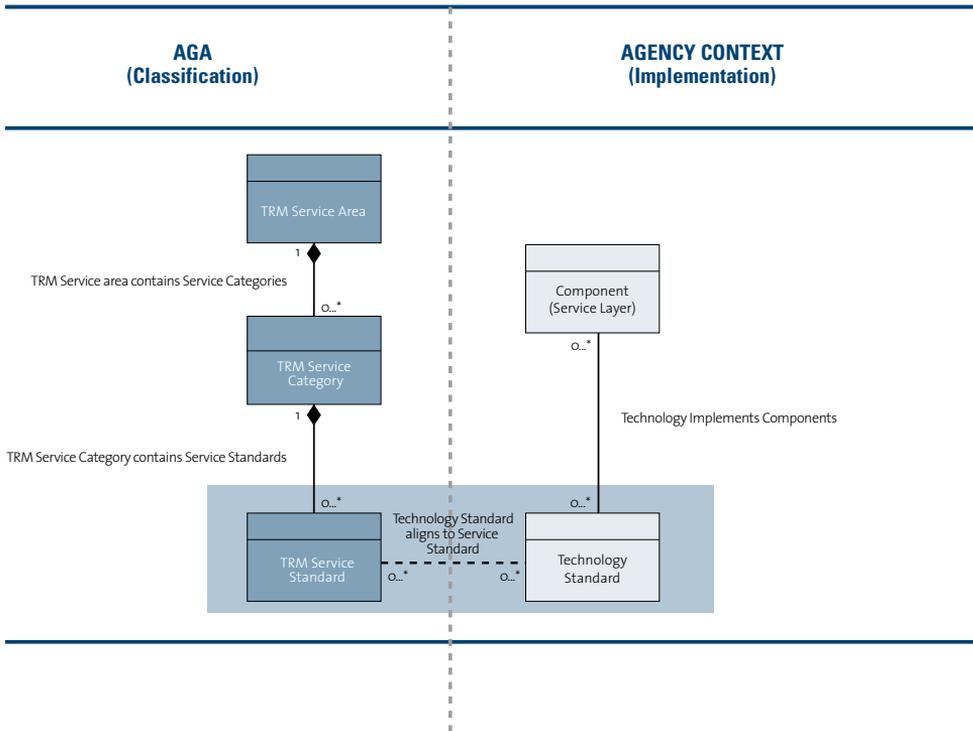


Table 5-3: Mapping a Technical Standard to the TRM

Entity Name	<i>Technology Standard</i>		
Description	All technical components and Technology Standards used for developing the Service Components should be made available here.		
Characteristics	<ul style="list-style-type: none"> • Provides technical support to deliver the components of the Service layer. • Purely technical (software or hardware) in nature. • Provides a standard for implementing the technology to support Service layer. 		
Mapping to the AGA REFERENCE MODELS	<p>Technology should align to the TRM Service Standards.</p> <p>The core technical functionality that the technology delivers should be aligned with the TRM Service Standards.</p>		
Examples	Mail Transfer Protocol		
	<i>TRM Service Standards</i>	<i>TRM Service Categories</i>	<i>TRM Service Areas</i>
	Supporting Network Services	Service Transport	Service Access and Delivery
	Browser technology		
	<i>TRM Service Standards</i>	<i>TRM Service Categories</i>	<i>TRM Service Areas</i>
	Web Browser	Access Channels	Service Access and Delivery

Appendix A: Guide to completing the AGA Investment Templates



Appendix A: Guide to completing the AGA Investment Templates

This Appendix has been provided to assist agencies in completing the AGA Investment Templates. For an introduction to the AGA Investment Templates, refer to Section 1.2 Reference Models and AGA Investment Templates.

A preview of the Investment Template fields is at Appendix A4. AGA Investment Template Preview.

The Investment Templates will be available to download in spreadsheet format from the Department of Finance and Deregulation website.

A-1 First Pass BRM form

This form maps agency business processes to the AGA BRM and provides a business process costing model. The fields are:

Column	Description
Business Process	The first step in completing the template is to identify all the Business Processes of the Initiative. A Business Process is a chain of tasks performed in logical fashion to achieve an end goal. A Business Process can be represented as a series of steps in a flow chart. For a detailed explanation on how to identify Business Processes refer to the Section 5.2 Mapping a Business Process to the BRM.
Business Area	Select the AGA BRM Business Area the Business Process belongs to.
Line of Business	Select the AGA BRM Line of Business the Business Process belongs to.
Sub Function	Select the AGA BRM Sub Function that the Business Process aligns to. Information on how to align a Business Process to the BRM can be found in Section 5.2 Mapping a Business Process to the BRM. Note: The primary Business Process should be aligned to the Sub Functions under the BRM Services for Citizen's Business area.
Business Process Description	Provide a very brief description of what this Business Process does.
Associated Legislation	List any new/changed legislation associated with the Business Process implementation.
Development / Modernisation / Enhancement / BAU	<ul style="list-style-type: none"> If the Business Process is being built for the first time it should be specified as development. If the funding is to change an existing Business Process it should be specified as enhancement. If the funding is to modernise and redevelop a Business Process it should be specified as modernisation. If the funding is to make routine maintenance or minor changes to an existing Business Process it should be listed as BAU.
Costs Capex(\$'000)	List the total costs of building/developing this Business Process.
Opex Costs(\$'000)	List the total costs of operating this Business Process for one year. The costs included here should be the projected operational costs after implementing the initiative.

A-2 First Pass SRM form

It is envisaged that agencies will not have a clear picture of every service that will be required when completing the First Pass Business Case. Accordingly, the First Pass SRM form requires agencies to list the service types or capabilities that will be required to implement the business initiative.

Column	Description
Business Process	Enter the Business Process listed in the BRM form.
Service Domain	Specify the AGA SRM Service Domain this Service Type belongs to.
Service Type	List the AGA SRM Service Type required to implement the Business Process.
Buy/Build/Re-use	Specify the agency's intention to buy, build or re-use an existing Service to deliver the Business Process.

A-3 Second Pass SRM form

Agencies completing Second Pass business cases will have a more detailed understanding of the Service Components required. Below is a detailed explanation of the additional fields required for completion of the Second Pass SRM form.

Column	Description
Business Process	Enter the Business Process listed in the BRM form.
Agency Service Capability	Specify the Service in the agency where the Service Components belong. The Service need not be generic (i.e. if each Initiative in the agency has its own customer management system then it should be specified as customer management Service for that initiative). This enables agencies to identify duplicate Services existing across multiple Initiatives in the organisation. For additional information on identifying Services refer to Section 5.3: Mapping a Service and a Component to the SRM.
Agency Service Components	Specify the Service Components that the Business Process will require. A Service Component is a function that is well defined, self contained and does not depend on any other services. For additional information on identifying the Service Components required refer to Section 5.2: Mapping a Service and a Component to the SRM.
Service Domain	Select the AGA SRM Service Domain the Agency Service Component belongs to.
Service Type	Select the AGA SRM Service Type the Agency Service Component belongs to.
Service Component	Select the AGA SRM Service Component the Agency Service Component belongs to. For more information on mapping agency Components to the SRM refer to Section 5.2: Mapping a Service and a Component to the SRM.
Buy/Build/Re-use	Specify the intention of agency whether to buy, build or re-use an existing Agency Service Component.
Why Build?	Specify the reasons for building the Service Component as opposed to buying or reusing an existing Component.
Costs Capex(\$'000)	List the total costs of building/developing the Service Components.
Opex Costs(\$'000)	List the total costs of operating this Service Component for one year. The costs should be the projected operational costs after implementing the Initiative.

A-4 AGA Investment Templates preview

Figure A-4-1: BRM Template: 1st Pass

<i>sample business case</i>		BUSINESS REFERENCE MODEL TEMPLATE: 1st Pass <small>Note: Do not delete/add rows or columns</small>						
AGA BRM			Agency filled					
Business Area	Lines of Business	Sub-Function	Business Process	Business Process Description	Associated legislation*	Development / Modernisation / Enhancement / BAU	Costs Capex (\$'000)	Opex Costs (\$'000)
Services for Citizens	Community Services	Transport Access Schemes	Transport Booking and Invoicing Pilot/Rollout	Enable online booking and reservation of transport	N	Dev	\$900.00	
Service Paths	Information and Knowledge Exchange	Information from Citizens	MyAccount	Online Access to information regarding clients, ability to review and change	N	Dev	\$450.00	
Service Paths	Information and Knowledge Exchange	Information from Citizens	Request Replacement Card	Clients can request replacement payment cards online	N	Dev	\$650.00	
Service Paths	Information and Knowledge Exchange	Information from Citizens	Request Form/ Publication	Clients can request a copy of a publication using online facility	N	Dev	\$650.00	
Service Paths	Government Financial Assistance	Rebates	Claim Transport Reimbursement	Provide a facility for the client to claim reimbursement on-line for travel costs in connection with treatment.	N	Dev	\$3,350.00	
Service Paths	Information and Knowledge Exchange	Information from Citizens	Submit Feedback	Clients can use an online facility to provide feedback regarding their use of agency services	N	Dev	\$450.00	
Service Paths	Information and Knowledge Exchange	Information from Citizens	Change Contract Details and Preferences	Allow clients to change their address via the self-service website	N	Dev	\$750.00	
Service Paths	Information and Knowledge Exchange	Knowledge Presentation	Personalised View of Static Information	Present clients with a somewhat personalised view of static website information (e.g. only relevant factsheets).	N	Dev	\$950.00	
Service Paths	Community Services	Financial Assistance	Entitlement Self-Assessment	Allow clients and prospective clients to self-assess entitlements based on an interactive questionnaire.	N	Dev	\$1,250.00	

Figure A-4-2: SRM Template: 2nd Pass

sample business case									
SERVICE REFERENCE MODEL TEMPLATE: 2nd Pass									
Note: Do not delete/add rows or columns									
Agency filled			AGA			Agency filled			
Business Process	Agency Service Capability	Agency Service Components	Service Domain	Service Type	Service Component	Buy / Build / Reuse	Why Build?	Capex costs	Total function Capex
Transport Booking and Invoicing Pilot/Rollout	Client	retrieve client data	CUSTOMER SERVICES	Customer Relationship Management	Customer/Account Management			\$500	\$900.00
	Authentication	verify client	SUPPORT SERVICES	Security Management	Identification and Authentication			\$100	
	Authorisation	retrieve permissions for client	SUPPORT SERVICES	Security Management	Access Control			\$100	
	Authentication	verify provider	SUPPORT SERVICES	Security Management	Identification and Authentication			\$100	
MyAccount	Client + Provider	Register client	CUSTOMER SERVICES	Customer Relationship Management	Customer/Account Management			\$175	\$450.00
		Retrieve client data and context	CUSTOMER SERVICES	Customer Relationship Management	Customer/Account Management			\$175	
		Change client data	CUSTOMER SERVICES	Customer Relationship Management	Customer/Account Management			\$100	
Request Replacement Card	Card	make a request for a card	CUSTOMER SERVICES	Customer Initiated Assistance	Self -Service			\$450	\$650.00
		process request	PROCESS AUTOMATION SERVICES	Tracking and Workflow	Case Management			\$200	
Request Form/ Publication	Forms	request form/publication	CUSTOMER SERVICES	Customer Initiated Assistance	Self -Service			\$450	\$650.00
		process request	PROCESS AUTOMATION SERVICES	Tracking and Workflow	Case Management			\$200	
Claim Transport Reimbursement	Authentication	verify client (authorisation)	SUPPORT SERVICES	Security Management	Identification and Authentication			\$250	\$3,350.00
	Claims / Requests	lodge a claim	CUSTOMER SERVICES	Customer Initiated Assistance	Self -Service			\$1,000	
	Assessment	assess claim	PROCESS AUTOMATION SERVICES	Tracking and Workflow	Process Tracking			\$1,600	
	Payment	pay claim	BACK OFFICE SERVICES	Financial Management	Payment/Settlement			\$500	
Submit Feedback	Website	submit feedback	CUSTOMER SERVICES	Customer Relationship Management	Customer Feedback			\$450	\$450.00
	Claims / Requests	request commemoration	CUSTOMER SERVICES	Customer Initiated Assistance	Self -Service			\$250	
	Assessment	assess eligibility	PROCESS AUTOMATION SERVICES	Tracking and Workflow	Process Tracking			\$400	
	Invoicing	Receive, authorise, pay	BACK OFFICE SERVICES	Financial Management	Payment/Settlement			\$300	
		support contract	BACK OFFICE SERVICES	Assets/Materials Management				\$250	
Change of Address	Authentication	verify client (authorisaton)	SUPPORT SERVICES	Security Management	Identification and Authentication			\$250	\$850.00
	Client + provider	change address	CUSTOMER SERVICES	Customer Relationship Management	Contact and Profile Management			\$450	
	Assessment	assess implications of change	PROCESS AUTOMATION SERVICES	Tracking and Workflow	Process Tracking			\$150	
Change Contact Details and Preferences	Authentication	verify client (authorisaton)	SUPPORT SERVICES	Security Management	Identification and Authentication			\$250	\$750.00
	Client + provider	change contact details	CUSTOMER SERVICES	Customer Relationship Management	Contact and Profile Management			\$250	
	Client + provider	change preferences	CUSTOMER SERVICES	Customer Preferences	Personalisation			\$250	
Personalised View of Static Information	Authentication	verify client (authorisaton)	SUPPORT SERVICES	Security Management	Identification and Authentication			\$250	\$950.00
	Client	retrieve client data and context	CUSTOMER SERVICES	Customer Relationship Management	Customer/Account Management			\$700	
Entitlement Self-Assessment	Authentication	verify client (authorisaton)	SUPPORT SERVICES	Security Management	Identification and Authentication			\$250	\$1,250.00
	Assessment	assess eligibility	PROCESS AUTOMATION SERVICES	Tracking and Workflow	Process Tracking			\$1,000	

Appendix B: Acronyms

AGA	Australian Government Architecture
AGSAWG	Australian Government Services Architecture Working Group
BRM	AGA Business Reference Model
CIOC	Chief Information Officers' Committee
Col	Community of Interest
DRM	AGA Data Reference Model
EA	Enterprise Architecture
FEAF	US Government's Federal Enterprise Architecture Framework
GEAF	Gartner Enterprise Architecture Framework
ICT	Information and Communication Technology
LoB	Line of Business
OTS	Off the Shelf
PEAF	Pragmatic Enterprise Architecture Framework
PRM	AGA Performance Reference Model
SRM	AGA Service Reference Model
TOGAF	AGA The Open Group Architecture Framework
TRM	AGA Technical Reference Model