

PART D

SCOPE OF SERVICES

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D1 INTRODUCTION

RailCorp Information Communication Technology (ICT) is responsible for the delivery of effective solutions to meet the organisation's information technology needs. The ICT program of work is dynamic and requires a broad set of specialist skills and experience to meet business needs. It requires a demonstrated ability to deliver effective solutions.

In order to provide RailCorp with an efficient and cost effective access to additional resources, Service requirements are divided into following six separate panels:

- Strategy and Architecture;
- Integration Competency Centre;
- Enterprise Resource Planning System Development and Support;
- Solution Delivery;
- Project Management; and
- Infrastructure Design, Development and Support.

The establishment of these panels will enable sourcing of:

- Individual roles required by various projects;
- Delivery of entire projects; or
- Completion of discrete packages of work.

This specification sets out the scope and service requirements for all panels. Each scope and service requirements statement is divided into:

- Services which all Panel Members must be able to deliver (“Mandatory”); and
- Services which may be requested from Panel Members from time to time, but are not considered by RailCorp to be essential for every Panel Member to be able to deliver (“Desirable”).

D2 PANEL REQUIREMENTS FOR STRATEGY & ARCHITECTURE

D2.1 Introduction

RailCorp's ICT Strategy and Enterprise Architecture services align ICT investment with corporate strategy and priorities, and set medium- and long-term direction through the delivery of enterprise-wide policy, standards and architectures.

Panel services will be called on to supplement RailCorp's internal Strategy and Architecture practice to support specific projects and initiatives, or to manage peaks in day-to-day business demand.

Strategy and Architecture Services consist of two areas of practice:

- Strategic Consulting; and
- Enterprise Architecture Services.

D2.2 Strategic Consulting

D2.2.1 Mandatory Services

There are no mandatory Services for this category.

D2.2.2 Desirable Services

(a) Governance and management

The provision of advice on the structuring, control, oversight, prioritisation and risk management of the ICT function.

(b) Services and Sourcing

The provision of advice on the procurement of ICT goods and services.

(c) Security and identity management

Provision of advice on the management and control of access to, protection of and authentication of the use of RailCorp's ICT assets.

(d) Information and knowledge management

Provision of advice on the creation, structuring, storage, access, use, re-use, and disposal of RailCorp's information and knowledge assets.

(e) ICT infrastructure

Provision of advice on the architecture, deployment, maintenance and management strategies of RailCorp's ICT infrastructure.

(f) Geospatial systems

Provision of advice on the design, acquisition, deployment, application, management, maintenance, desk and field use of geospatial technology.

(g) Real-time systems

Provision of advice on signaling, control, decision support, intelligent transport and rail management and other real-time application of real-time technologies.

(h) Rail traffic management systems

Provision of advice on structuring, modeling, analysis and decision making for rail traffic and the support of these functions through the application of ICT.

(i) Asset management systems

Provision of advice on the design, acquisition, deployment, use, management, maintenance and support of technology supporting RailCorp's asset management functions.

(j) ERP, CRM, SCM

Provision of advice on the design, acquisition, deployment, use, management, maintenance and support of Enterprise Resource Planning, Customer Relationship Management and Supply Chain Management systems.

(k) Mobile and wireless

Provision of advice on the design, acquisition, deployment, use, management, maintenance and support of mobile and wireless ICT technologies.

(l) Client platforms

Provision of advice on the design, acquisition, deployment, use, management, maintenance and support of client platforms and the strategic choices between deployment of fat, thin, mobile and alternative ICT client platforms.

(m) Extended enterprise

Provision of advice on the design, acquisition, deployment, use, management, maintenance and support of extended enterprise applications, or applications that span company boundaries to incorporate RailCorp's partners, customers, suppliers, and markets.

- (n) Emerging technologies

Provision of advice on the availability, architecture, application and suitability of emerging technologies for and the deployment of emerging technologies in RailCorp.

D2.3 Enterprise Architecture

D2.3.1 Mandatory Services

- (a) Analysis and modelling of current and future state architectures
- (b) Specification of supporting standards and protocols
- (c) Architectural transition planning
- (d) Business case analysis and development
- (e) Conceptual solution design
- (f) Solution feasibility analysis
- (g) High-level project scoping

D2.3.2 Desirable Services

There are no desirable Services for this category.

D3 PANEL REQUIREMENTS FOR INTEGRATION COMPETENCY CENTRE

D3.1 Introduction

Integration Competency Centre (ICC) services provides the key mechanism by which RailCorp drives enterprise-wide integration of information, business processes and applications. The ICC enables the organisation to maximise the value of information assets through improvements in re-use, process efficiency, quality, useability and business relevance.

Services sourced as part of the panel contract will supplement RailCorp's internal competencies in these areas, and will be leveraged across multiple projects, initiatives and business-as-usual activities. Service providers will be expected to establish collaborative relationships with RailCorp staff, contributing knowledge to the ICC through skills transfer, mentoring, standards development, and recommendations for improving practice.

D3.2 Enterprise Content Management

D3.2.1 Mandatory Services

(a) Content architecture & integration

Analysis of distributed content sources, objects and relationships, and establishment of integration architectures, migration strategies, and interoperability standards to eliminate redundancy, and improve quality and useability.

(b) Information lifecycle management

Application of rules and processes for content acquisition, storage management, publication and archiving/disposal across multiple content repositories, in consultation with key business and ICT stakeholders.

(c) Metadata management

Developing and administering metadata standards and content classes in consultation with RailCorp's ICT Strategy & Architecture function, and establishing systems and processes to manage changes to metadata standards and ensure compliance.

(d) Taxonomy management

Design and administration of RailCorp's corporate taxonomy in consultation with business users to provide a consistent, effective and efficient means for users to locate content.

(e) Search configuration and tuning

Establishment and maintenance of an optimised and effective enterprise search system through repository integration, and configuration of search parameters, relevance weightings, query interfaces, results listings etc.

(f) Workflow management

Design and monitoring of content management workflows to support business process efficiency and compliance

(g) Security management

Administration of content security functions to protect content from unauthorised access, modification or deletion. Includes user and role management.

(h) Information design and template management

Design and administration of content items, presentation templates, forms and other content input and output channels to ensure effectiveness and ease of use.

(i) User support services

Providing training and support to users and distributed content managers to support effective content lifecycle management, searching, publishing, workflow, access control etc.

(j) Standards development

Development of standard processes, systems and models relating to the above in consultation with RailCorp's ICT Strategy & Architecture function.

D3.2.2 Desirable Services

There are no desirable Services for this category.

D3.3 Business Intelligence

D3.3.1 Mandatory Services

(a) BI needs analysis

Consulting with business users to identify and document information needs in the area of reporting and data analysis.

(b) Data modelling

Development of data models (eg cubes, star schemas etc) to support the delivery of customer focussed BI solutions.

(c) Data architecture and integration

Analysis of data sources and targets, and establishment of semantic integration architectures, interfaces specifications, and data transformation code.

(d) Data analysis

Performing ad hoc or complex analyses in consultation with business users to meet specific BI needs.

(e) Report design and development

Design and development of reports using existing BI tools, including report presentation, data element specification, data transformations, report scheduling and related tasks.

D3.3.2 Desirable Services

(a) Metadata management

Coordinating the use and re-use of metadata enterprise wide, administering RailCorp's metadata repositories, and assisting in the specification and integration of data elements (including semantic definition).

(b) User support services

Providing training and support to users in terms of data sourcing, data analysis, query building, software usage and other areas to support BI needs.

(c) Standards development

Development of standard processes, systems and models relating to the above in consultation with RailCorp's ICT Strategy & Architecture function.

(d) Data warehouse administration

Monitoring, configuring and tuning data warehouses and data marts, and managing data back-up, restoration and access controls etc.

D3.4 Enterprise Application Integration

D3.4.1 Mandatory Requirements

(a) Requirements Management

The purpose of Requirements Management is to manage the requirements of the project's products and product components and to identify inconsistencies between those requirements and the project's plans and work products.

- (i) Develop an understanding with the requirements providers on the meaning of the requirements.
- (ii) Obtain commitment to the requirements from the project participants.
- (iii) Manage changes to the requirements as they evolve during the project.
- (iv) Maintain traceability among the requirements and the project plans and work products.
- (v) Identify inconsistencies between the project plans and work products and the requirements.

(b) Requirements Development

The purpose of Requirements Development is to produce and analyse customer, product, and product-component requirements.

- (i) Identify and collect stakeholder needs, expectations, constraints, and interfaces for all phases of the product life cycle.
- (ii) Transform stakeholder needs, expectations, constraints, and interfaces into customer requirements.
- (iii) Establish and maintain product and product-component requirements, which are based on the customer requirements.
- (iv) Allocate the requirements for each product component.
- (v) Identify interface requirements.

(c) Analyse Requirements

- (i) Establish and maintain operational concepts and associated scenarios.

- (ii) Establish and maintain a definition of required functionality.
 - (iii) Analyse requirements to ensure that they are necessary and sufficient.
 - (iv) Analyse requirements to balance stakeholder needs and constraints.
 - (v) Validate requirements to ensure the resulting product will perform appropriately in its intended-use environment.
- (d) Technical Solution Design, Development and Implementation

The purpose of Technical Solution is to design, develop, and implement solutions to requirements. Solutions, designs, and implementations encompass products, product components, and product-related life-cycle processes either singly or in combinations as appropriate.

- (i) Develop alternative solutions and selection criteria.
- (ii) Evolve the operational concept, scenarios, and environments to describe the conditions, operating modes, and operating states specific to each product component.
- (iii) Select the integration solutions that best satisfy the criteria established.
- (iv) Develop a design for the integration solution.
- (v) Establish and maintain a technical data package.
- (vi) Implement the designs of the integration solutions using the appropriate technology (TIBCO, CICS TX, WebSphere, Weblogic).
- (vii) Develop and maintain the end-use documentation.

D3.4.2 Desirable Services

- (a) Verification and Testing

The purpose of Verification and Testing is to ensure that selected work products that comprise the integration solution meet their specified requirements.

- (i) Select the work products that make up the integration solution to be verified and tested and the verification and testing methods that will be used for each.

- (ii) Establish and maintain the environment needed to support verification and testing.
- (iii) Establish and maintain verification and testing procedures and criteria for the integration solution.
- (iv) Prepare for peer reviews of selected work products.
- (v) Conduct peer reviews and cross testing on selected work products and identify issues resulting from the peer review.
- (vi) Analyse data about preparation, conduct, and results of the peer reviews and cross testing.
- (vii) Perform verification and testing against requirements on the selected work products.
- (viii) Analyse the results of all verification and testing activities and identify corrective action.

(b) Validation and Acceptance Testing

The purpose of Validation and Acceptance Testing is to demonstrate that the integration solution fulfils its intended use when placed in its intended environment.

- (i) Select integration solutions to be validated and acceptance tested and the validation methods that will be used for each.
- (ii) Establish and maintain the environment needed to support validation and acceptance testing.
- (iii) Establish and maintain procedures and criteria for validation and acceptance testing.
- (iv) Perform validation and acceptance testing on the selected integration solutions.
- (v) Analyse the results of the validation and acceptance testing activities and identify issues.

D3.5 Workflow

The purpose of workflow technology application is to analyse design, automate and monitor business processes and workflows to support business process efficiency and compliance.

D3.5.1 Mandatory Services

(a) Requirements Management

The purpose of Requirements Management is to manage the requirements of the project's workflow and business processes and to identify inconsistencies between those requirements and the project's plans and work products.

- (i) Develop an understanding with the requirements providers on the meaning of the requirements.
- (ii) Obtain commitment to the requirements from the project participants.
- (iii) Manage changes to the requirements as they evolve during the project.
- (iv) Maintain traceability among the requirements and the project plans and work products.
- (v) Identify inconsistencies between the project plans and work products and the requirements.

(b) Requirements Development

The purpose of Requirements Development is to produce and analyse customer, workflow and business process requirements.

- (i) Identify and collect stakeholder needs, expectations, constraints, and interfaces for all phases of the product life cycle.
- (ii) Transform stakeholder needs, expectations, constraints, and interfaces into customer requirements.
- (iii) Establish and maintain product and product-component requirements, which are based on the customer requirements.
- (iv) Allocate the requirements for each product component.
- (v) Identify interface requirements.

(c) Analyse Requirements and Processes

- (i) Establish and maintain operational concepts and associated scenarios.
- (ii) Establish and maintain a definition of required functionality.

- (iii) Analyse requirements to ensure that they are necessary and sufficient.
- (iv) Analyse requirements to balance stakeholder needs and constraints.
- (v) Validate requirements to ensure the resulting product will perform appropriately in its intended-use environment.

(d) Workflow and Business Process Modelling

The purpose of workflow and business process modelling is to design, develop, and implement business processes via appropriate technologies to meet requirements.

- (i) Design the processes and identify the systems accessed and updated and the data to be reported via process monitoring.
- (ii) Model the process and select the integration solutions that best satisfy the access, update and reporting criteria.
- (iii) Establish and maintain a technical data package.
- (iv) Implement the models using the appropriate technology (TIBCO Staffware,, WebSphere, Weblogic).
- (v) Develop and maintain the end-use documentation.

D3.5.2 Desirable Services

(a) Verification and Testing

The purpose of Verification and Testing is to ensure that selected workflow products that comprise the business process solution meet their specified requirements.

- (i) Select the workflow products that make up the business process solution to be verified and tested and the verification and testing methods that will be used for each.
- (ii) Establish and maintain the environment needed to support verification and testing.
- (iii) Establish and maintain verification and testing procedures and criteria for the workflow solution.
- (iv) Prepare for peer reviews of selected workflow products.
- (v) Conduct peer reviews and cross testing on selected workflow products and identify issues resulting from the peer review.

- (vi) Analyse data about preparation, conduct, and results of the peer reviews and cross testing.
- (vii) Perform verification and testing against requirements on the selected workflow products.
- (viii) Analyse the results of all verification and testing activities and identify corrective action.

(b) Validation and Acceptance Testing

The purpose of Validation and Acceptance Testing is to demonstrate that the workflow solution fulfils its intended use when placed in its intended environment.

- (i) Select workflow solutions to be validated and acceptance tested and the validation methods that will be used for each.
- (ii) Establish and maintain the environment needed to support validation and acceptance testing.
- (iii) Establish and maintain procedures and criteria for validation and acceptance testing.
- (iv) Perform validation and acceptance testing on the selected workflow solutions.
- (v) Analyse the results of the validation and acceptance testing activities and identify issues.

D3.6 Security

The purpose of security services is the design, implementation and administration of security functions to protect applications, content and workflows from unauthorised access, modification or deletion.

D3.6.1 Mandatory Services

- (a) Security review and strategy development
- (b) Security solution design including user authentication and role management
- (c) Security solution implementation

D3.6.2 Desirable Services

There are no desirable Services for this category.

D4 PANEL REQUIREMENTS FOR ENTERPRISE RESOURCE PLANNING SYSTEM DEVELOPMENT AND SUPPORT

D4.1 Introduction

RailCorp's Enterprise Resource Planning application supports the majority of the back-office and resource management functions. RailCorp has recently implemented Ellipse, upgrading from Mincom's earlier MIMS products.

Panel services will be called on to supplement RailCorp's internal ERP team to support specific projects and initiatives, or to manage peaks in day-to-day business demand.

D4.2 Technologies

RailCorp's requires ERP services in a range of technology areas including:

- Package/ Environment: MIMS-Ellipse on IBM AIX;
- Development: J2EE;
- Database: Oracle, SQL;
- Integration and Transaction Processing: CICS, WEBSphere, Mincom Adapters

D4.3 Functions

RailCorp requires domain-specific services in all MIMS-Ellipse functional areas, in particular:

- Assets and Works Management;
- Supply and Logistics;
- Human Resources;
- Financial; and
- Business Intelligence.

D4.3.1 Mandatory Services

(a) Requirements Management

The purpose of Requirements Management is to manage the requirements of the project's products and product components and to identify inconsistencies between those requirements and the project's plans and work products.

- (i) Develop an understanding with the requirements providers on the meaning of the requirements.
- (ii) Obtain commitment to the requirements from the project participants.
- (iii) Manage changes to the requirements as they evolve during the project.
- (iv) Maintain traceability among the requirements and the project plans and work products.
- (v) Identify inconsistencies between the project plans and work products and the requirements.

(b) Requirements Development

The purpose of Requirements Development is to produce and analyse customer, product, and product-component requirements.

- (i) Identify and collect stakeholder needs, expectations, constraints, and interfaces for all phases of the product life cycle.
- (ii) Transform stakeholder needs, expectations, constraints, and interfaces into customer requirements.
- (iii) Establish and maintain product and product-component requirements, which are based on the customer requirements.
- (iv) Allocate the requirements for each product component.
- (v) Identify interface requirements.

(c) Analyse Requirements

- (i) Establish and maintain operational concepts and associated scenarios.
- (ii) Establish and maintain a definition of required functionality.
- (iii) Analyse requirements to ensure that they are necessary and sufficient.
- (iv) Analyse requirements to balance stakeholder needs and constraints.
- (v) Validate requirements to ensure the resulting product will perform appropriately in its intended-use environment.

(d) Technical Solution Design, Development and Implementation

The purpose of Technical Solution is to design, develop, and implement solutions to requirements. Solutions, designs, and implementations encompass products, product components, and product-related life-cycle processes either singly or in combinations as appropriate.

- (i) Develop alternative solutions and selection criteria.
- (ii) Evolve the operational concept, scenarios, and environments to describe the conditions, operating modes, and operating states specific to each product component.
- (iii) Select the product-component solutions that best satisfy the criteria established.
- (iv) Develop a design for the product or product component.
- (v) Establish and maintain a technical data package.
- (vi) Establish and maintain the solution for product-component interfaces.
- (vii) Evaluate whether the product components should be developed, purchased, or reused based on established criteria.
- (viii) Implement the designs of the product components.
- (ix) Develop and maintain the end-use documentation.

(e) Product Integration

The purpose of Product Integration is to assemble the product from the product components, ensure that the product, as integrated, functions properly, and deliver the product.

- (i) Determine the product-component integration sequence.
- (ii) Establish and maintain the environment needed to support the integration of the product components.
- (iii) Establish and maintain procedures and criteria for integration of the product components.
- (iv) Review interface descriptions for coverage and completeness.

- (v) Manage internal and external interface definitions, designs, and changes for products and product components.
- (vi) Confirm, prior to assembly, that each product component required to assemble the product has been properly identified, functions according to its description, and that the product-component interfaces comply with the interface descriptions.
- (vii) Assemble product components according to the product integration sequence and available procedures.
- (viii) Evaluate assembled product components for interface compatibility.
- (ix) Package the assembled product or product component and deliver it to the appropriate customer.

D4.3.2 Desirable Services

(a) Verification and Testing

The purpose of Verification and Testing is to ensure that selected work products meet their specified requirements.

- (i) Select the work products to be verified and tested and the verification and testing methods that will be used for each.
- (ii) Establish and maintain the environment needed to support verification and testing.
- (iii) Establish and maintain verification and testing procedures and criteria for the selected work products.
- (iv) Prepare for peer reviews of selected work products.
- (v) Conduct peer reviews and cross testing on selected work products and identify issues resulting from the peer review.
- (vi) Analyse data about preparation, conduct, and results of the peer reviews and cross testing.
- (vii) Perform verification and testing against requirements on the selected work products.
- (viii) Analyse the results of all verification and testing activities and identify corrective action.

(b) Validation and Acceptance Testing

The purpose of Validation and Acceptance Testing is to demonstrate that a product or product component fulfils its intended use when placed in its intended environment.

- (i) Select products and product components to be validated and acceptance tested and the validation methods that will be used for each.
- (ii) Establish and maintain the environment needed to support validation and acceptance testing.
- (iii) Establish and maintain procedures and criteria for validation and acceptance testing.
- (iv) Perform validation and acceptance testing on the selected products and product components.
- (v) Analyse the results of the validation and acceptance testing activities and identify issues.

D5 PANEL REQUIREMENTS FOR SOLUTION DELIVERY

D5.1 Introduction

Solution Delivery means:

- Project Delivery; and
- Solution Development.

Project delivery combines the disciplines covered by the other panels to provide innovative total solutions in response to RailCorp's requirements. All project delivery work shall be carried out be within the framework of RailCorp's enterprise architecture, associated technical and product standards and business processes.

Solution Development includes all the activities associated with the development of the business and IT systems that are to be delivered. RailCorp are currently assessing their approach and processes for solution development.

D5.2 Services

D5.2.1 Mandatory Services

(a) Business Modelling

Encompasses the business and information modelling techniques to define the current state, requirement and future states. The RailCorp business modelling standard is UML and as a minimum comprises Business Object Models, Activity Diagrams, Business and Use Cases. Business modelling is captured and managed with the Rational toolset.

(b) Solution Architecture

The solution architecture equates to the 'product' to be delivered by the project. It comprises the business, information, application and technology models and how they integrate. Key deliverables of the Solution Architecture activities are the Solution Options Architecture Paper and the Solution Architecture.

The Solution Options Architecture Paper defines the strategic and tactical choices available for implementing the solution so that it contributes to business and IT strategy within the constraints such as time, money, technology, and propensity for change.

The Solution Architecture Paper defines the product to be delivered for the chosen option. It provides the basis for the project to be clear on what is to be developed, how this will be done, who will do it, the changes to be managed and estimations of time and cost.

(c) Analysis and Design

These activities follow on from the solution architecture and address the detail of the solution.

(d) Requirements Management

A systematic approach to eliciting, organising and documenting the software requirements of the system, and establishing and maintaining agreement between the stakeholders and the project team on changes to those requirements.

(e) Design and Build

The development and unit testing of software, data and infrastructure of the solution. It incorporates the related business changes to meet the requirements as specified in the detailed design specifications.

(f) Test

To integrate and test the system.

D5.2.2 Desirable Services

(a) Useability & Accessibility Services

The investigation and analysis of useability issues and needs; the application of user-centred design methods in the design of user interfaces; and the testing of designs, prototypes and completed systems to identify useability problems and recommend solutions. Includes the specification of accessibility requirements, and the testing of completed systems to identify accessibility problems and recommend solutions.

(b) Implementation

To implement software components that meet an appropriate standard of quality.

(c) Configuration and Change

To identify, define, and baseline items; control modifications and releases of these items; report and record status of the items and modification requests; ensure

completeness, consistency and correctness of the items; and control storage, handling and delivery of the items. Controlling and tracking changes.

(d) Deployment

To ensure a successful transition of the developed solution into the business and IT production environment.

(e) IT Development Environment

To define and manage the environment in which the system is being developed. Includes process descriptions, configuration management, and development tools.

D6 PANEL REQUIREMENTS FOR PROJECT MANAGEMENT

D6.1 Introduction

Project management is the overall coordination and management of a project throughout its lifecycle. The project management methodology (PMM) phases employed by RailCorp ICT are:

Pre Define: The identification of innovations and formulation into coherent project initiatives for consideration and evaluation. The initial analysis and feasibility study to enable the business to decide whether to proceed with the initiative. The filtering, prioritisation and refinement of project initiatives into an approved Program of Work (PoW).

Define: The elaboration of project initiatives through the investigation of requirements, solution options on the PoW into fully defined projects. The preparation and approval of business cases to provide funding for the project to proceed.

Design: The translation of business requirements in to technical designs that adhere to RailCorp ICT's enterprise architecture and technical and product standards.

Construct: The development and testing of deliverables and solutions.

Commission: The hand over of project deliverables and solutions to customers and RailCorp ICT operational groups (ie production).

The project management of application development projects includes all the activities associated with the development of IT systems and solutions.

In addition, Project management resources could also be required for the development, implementation and maintenance of methodologies within RailCorp ICT and the coordination of the annual program of work.

D6.2 Services

D6.2.1 Mandatory Services

(a) Integration Management

The processes required to ensure that the various elements of the project are properly coordinated. Project plan development; project plan execution; overall change control.

(b) Scope Management

The processes required to ensure the project includes all the work required, and only the work required, to complete the project successfully. Initiation; scope planning; scope definition; scope verification; scope change control are all linked to the architecture of the solution as it delivers to the business change opportunity defined in the business IT planning and business case.

(c) Time Management

The processes required to ensure timely completion of the project. Activity definition; activity sequencing; activity duration estimating; schedule development; Schedule Control.

(d) Cost Management

The processes required to ensure that the project is completed within the approved budget. Resource planning; cost estimating; cost budgeting; cost control.

(e) Quality Management

The processes required to ensure that the project will satisfy the needs for which it was undertaken. It includes quality planning; quality assurance; quality control.

(f) Communications Management

The processes required to ensure timely and appropriate generation, collection, dissemination, storage and ultimate disposition of project information. It includes communications planning; information distribution; performance reporting; administrative closure.

(g) Risk Management

The processes concerned with identifying, analysing and responding to project risk. It includes risk identification; risk qualification; risk response development; risk tracking and reporting, and risk response control.

(h) Procurement Management

The processes required to acquire goods and services from outside the performing organisation. It includes procurement planning; solicitation planning, solicitation, source selection; contract administration; contract close out.

(i) IT Project Portfolio Management

Managing the portfolio of IT related business projects for RailCorp. This includes maintaining a register for periodic review and prioritisation by the RailCorp ICT Executive Steering Committee.

(j) Project Management Support

- (i) Select and implement project management and solution deliver tools
- (ii) Establish standard project reporting requirements
- (iii) Monitor and review project schedules
- (iv) Monitor and review project finances
- (v) Establish and manage project documentation repository
- (vi) Provide feedback and guidance to project managers re project performance and related issues
- (vii) Co-ordinate post implementation reviews
- (viii) Monitor benefits realisation reviews
- (ix) Establish process for project manager mentoring
- (x) Co-ordinate project manager development and certification
- (xi) Manage the QA of project delivery processes.

(k) Improvement Program

Co-ordinate intra/inter-business and external communications from RailCorp ICT. Identify and implement business improvement opportunities and Innovation.

(l) Metrics

Collate, review and report on RailCorp ICT performance metrics, particularly project delivery metrics.

D6.2.2 Desirable Services

(a) Human Resource Management

The processes required to make the most effective use of people involved with the project. It includes organisational planning; staff acquisition; team development.

(b) Methodology Definition and Compliance

Manage the review, definition, implementation, education and communication for methodologies in the following areas:

(i) System Development - System Development activities include:

- Package Selection
- Project Management
- Change Management
- Incident Management

(ii) Define IT Governance and IT Project Governance and compliance processes.

(c) IT Resource Allocation

Co-ordination allocation of specialist skills and resources to project teams

(d) Change Management

Management of the impact of technological and business process change on the business, organisational culture and individuals.

D7 PANEL REQUIREMENTS FOR INFRASTRUCTURE DESIGN, DEVELOPMENT AND SUPPORT

D7.1 Introduction

Infrastructure design, development and support activities are primarily carried out in RailCorp's IT operational groups. Appropriate elements of the PMM and application development methodology (ADM) are employed in delivering services. Operations are generally conducted in accordance with the principles outlined in the Information Technology Infrastructure Library (ITIL):

- Incident management
- Problem management
- Configuration management
- Change management
- Release management
- Service Level management
- Capacity management
- IT Service Continuity management
- Availability management

D7.1.1 Technologies

RailCorp's requires infrastructure design, development and support services in a range of technology areas including:

Data Network

- Ethernet
- MPLS
- Wireless
- IP protocols
- DNS
- Traffic prioritisation
- Checkpoint Firewall

Voice Network

- CDMA - 1X
- DPNSS
- VoIP

Application and Infrastructure Servers

- NT
- Windows 2000
- Windows 2003

- Active Directory
- Exchange 2003
- SMS 2003
- SQL 2000
- MOM 2005
- Quest Tools
- Veritas Netbackup

Desktop

- Windows 2000
- Windows XP
- MS Office
- RailCorp Standard Operating Environment (SOE)

Unix

- SUN-Solaris
- IBM AIX
- HP-UX
- BMC Patrol
- Perl
- Linux
- Veritas Netbackup

Enterprise Systems Management

- HP Openview
- BMC Patrol
- MOM
- Spotlight for Exchange

Database

- Oracle
- DB2
- MS SQL
- Quest tools

Storage

- Openview Storage Area Manager

Middleware

- TIBCO
- Weblogic
- Websphere
- CICS TX

COTS-based Enterprise Applications

- Mincom Ellipse (ERP System)
- Primavera

D7.2 Services

D7.2.1 Mandatory Services

- (a) Data Network Design, Plan, Build and Support
 - (i) Design of data network including links to Local Area Networks, Wide Area Networks, Internet and Extranet across wired and wireless medium.
 - (ii) Wireless network solutions
 - (iii) Firewall solutions and support services
 - (iv) Traffic monitoring, prioritisation and capacity planning.
 - (v) Network monitoring solutions
 - (vi) Project development eg: VoIP, Bluetooth.
- (b) Voice Network Design, Plan, Build and Support
 - (i) Design of voice network including links to existing PABX infrastructure.
 - (ii) Project development eg: Wireless LANs, Wireless WANs, VoIP, Bluetooth, Traffic prioritisation.
- (c) Server Design, Plan, Build and Support – Windows 2000/2003
 - (i) Systems monitoring, availability & performance monitoring, tuning and capacity management.
 - (ii) Storage, file management and archiving solutions.
 - (iii) Identify, design and implement server consolidation opportunities utilising VmWare or MS Virtual Server.
 - (iv) Electronic mail and calendaring infrastructure solutions .
 - (v) System management server (SMS) infrastructure solutions.
 - (vi) Management of E-mail and associated infrastructure.

- (vii) Active directory infrastructure solutions
 - (viii) DNS/DHCP infrastructure solutions
 - (ix) Enterprise backup and replication solutions
 - (x) High availability system solutions utilising a variety of technologies, eg, Geo cluster, SAN replication, hardware redundancy
 - (xi) Development of Wintel technical disaster recovery processes.
- (d) Desktop Design, Plan, Build and Support
- (i) Desktop management solutions, eg, Zero-touch provisioning centralised software distribution.
 - (ii) Development of workstation SOE and software test, build and distribution processes based on ITIL guidelines.
- (e) Unix Support
- (i) System performance monitoring, tuning and capacity management solutions.
 - (ii) Storage, file management and archiving solutions.
 - (iii) Installation and maintenance of operating system software.
 - (iv) Installation of new application software on Unix servers.
 - (v) Ensure adherence to architecture and security policies / standards.
- (f) Enterprise Systems Management (ESM) Support
- (i) Enterprise systems management (ESM) solutions to facilitate application availability, performance monitoring and the automation of problem notification, escalation, resolution and reporting.
 - (ii) Ensure project adherence to ESM standards.
 - (iii) Automated nightly jobstream, incorporating automated starting, problem notification, escalation and reporting.
- (g) Database Design, Plan, Build and Support

- (i) Database Management services including availability and performance monitoring, tuning & capacity management.
 - (ii) Database backup solutions
 - (iii) Database design and construction to meet project development needs
 - (iv) Ensure adherence to architecture and security policies / standards.
 - (v) Database upgrade services.
- (h) Storage Support Design, Plan, Build and Support
- (i) Storage management, lifecycle and backup solutions to reduce total cost of ownership and improve data restoration time.
 - (ii) Storage management services including availability and performance monitoring, tuning and capacity management
 - (iii) Policy management for the archival of records, databases and files to meet the statutory requirements set out in the State Records Act.
 - (iv) Problem resolution.
 - (v) Ensure adherence to architecture and security policies / standards.
- (i) Middleware Support
- (i) Provide technical support services to manage and maintain the Middleware software environment, including software support, vendor liaison, performance monitoring and tuning and application deployment
 - (ii) Installation and configuration of middleware software.
 - (iii) Ensure adherence to architecture and security policies / standards.
 - (iv) Problem Resolution, including out of hours support.
- (j) Application Support
- (i) Provide application support services to ensure availability of applications as per Service Level Agreements (SLA) with our customers.
 - (ii) Problem resolution.
 - (iii) Application availability monitoring and tuning to maintain performance at the server.

- (iv) Maintenance of application interface integrity.
- (v) Support of job schedules
- (vi) Coordinate the resolution of application errors with service providers
- (vii) System administration
- (viii) Implementation of enhancements/upgrades of RailCorp approved application software

D7.2.2 Desirable Services

- (a) Data Network Design, Plan, Build and Support
 - (i) Configuration and installation services for routers and switches
 - (ii) Network fault diagnosis, configuration and network monitoring
- (b) Desktop Design, Plan, Build and Support
 - (i) Application packaging services
 - (ii) Packages PC lifecycle services (cost per PC/laptop and per service)
 - Delivery, installation and removal
 - Installation of SOE
 - Managed hardware support Call history and asset reporting
 - Hardware and software asset tracking and management
 - PC lifecycle management
 - Call history and asset reporting
- (c) Server Support – Windows 2000/2003
 - (i) Problem resolution, upgrades and support services
- (d) Database Support Services
 - (i) Problem resolution, including out of hours support
 - (ii) Database conversion services (eg Oracle to SQL or vice versa)
- (e) Unix Support
 - (i) Problem resolution, including out of hours support

D8 PERFORMANCE REQUIREMENTS

Requirements to be met or exceeded by Panel Members in performing services will be implemented on a Contract by Contract basis. The following performance requirements will apply to all Panel Members for all panels.

- Timely provision of personnel to meet RailCorp's business requirements
- On time delivery of projects
- On time delivery of quotations
- Overall work quality (defects rate)
- Promptness of reporting

Performance will be monitored and taken into consideration when assessing the suitability of Panel Members for the provision of future services.