PART D

ECM PLATFORM REQUIREMENTS

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D1 INTRODUCTION

D1.1 Background

Rail Corporation New South Wales (RailCorp) is the new rail entity established to provide passenger rail services for metropolitan NSW. It has been formed through the merger of the State Rail Authority of NSW (SRA) and the Rail Infrastructure Corporation (RIC).

On 1st January 2004, RailCorp was formally established as a new state-owned corporation that has as its main focus the provision of a safe, clean, secure and reliable metropolitan passenger rail service.

RIC and SRA both independently commissioned requirement and scoping studies in March and June 2003 to capture Electronic Document Management (EDMS) requirements for their respective organisations. A decision to merge this project at a shared business services level and then the subsequent RailCorp merger put this requirement on hold.

The RailCorp merger brings together two substantial organisations, each with their own business processes, technologies and information management practices, in addition to a range of internally and externally facing websites. As a result, RailCorp's information environment today lacks integration and suffers substantial inefficiencies and quality shortfalls. Specifically:

- Relevant, reliable information is not always readily available to business process owners;
- Information that is available is highly distributed (across many different web sites and repositories), and therefore difficult to locate;
- A great deal of human effort is required to manage information stored in multiple locations (this information is often duplicated many times)
- ICT support is stretched across an excessive number of applications and technologies, thereby reducing its overall effectiveness and efficiency;
- Various information management related projects are working in isolation from each other towards goals that may not be aligned.

Addressing these problems requires an approach that effectively tackles high priority issues, while working towards a strategic, whole-of-enterprise outcome. This is the approach taken for the Enterprise Content Management (ECM) project.

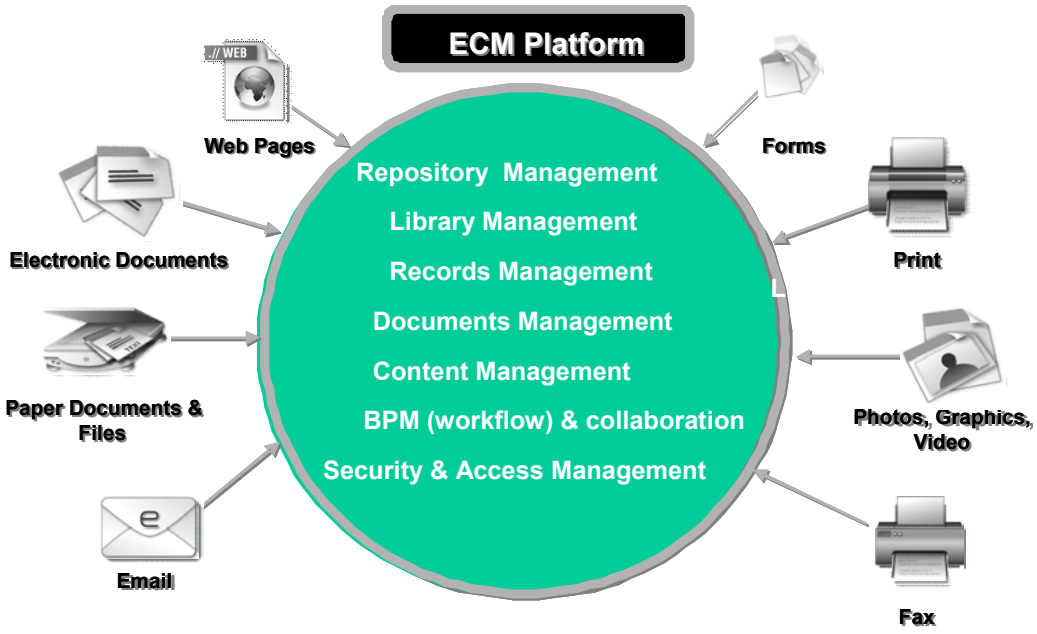
D1.2 Business Rationale

The implementation of an enterprise-wide content management strategy will enable RailCorp to manage its content (including electronic documents, records, and web content) consistently and effectively across the organisation. It will also support business improvement efforts through the strategic adoption of web technology. This will deliver the following benefits:

- Provide business divisions with a greater degree of control and confidence over the integrity of information;
- Provide a single view of organisational information with a single source;
- Improve the value of information over time by supporting its re-use, improving quality and relevance, and ensuring ease of use;

- Support the organisation's needs for collaboration, knowledge management and process improvement;
- Reduce the time and effort involved and improve efficiency in creating, storing, accessing, using and disposing of information;
- Improve RailCorp's compliance with corporate policy and legislative requirements, and
- Provide a consistent foundation for future technology investments and enable better Return on Investment (ROI)

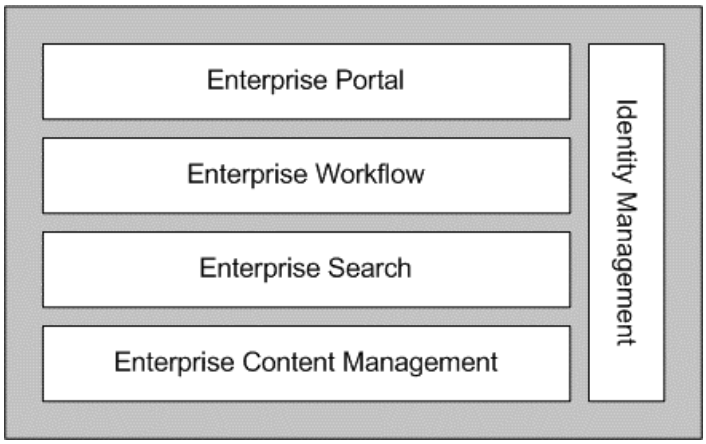
The following diagram represents a generic architecture of an Enterprise Content Management platform that provides the capability to store and manage all RailCorp's structured and unstructured content in a central repository using the same tools across the organisation.



D2 IMPLEMENTATION STRATEGY

The strategy will see the deployment of common information management policy and standards, and common ECM and Enterprise Search technology across key information categories within a two-to-three year timeframe. All or most of RailCorp's controlled documents, corporate records, engineering drawings, and web content are within the scope of this strategy.

ECM will be implemented within a broader technology architecture, represented below, comprising enterprise portal, workflow and identity management components. These additional technologies are pre-existing in RailCorp, however they are yet to be implemented as a single integrated stack.



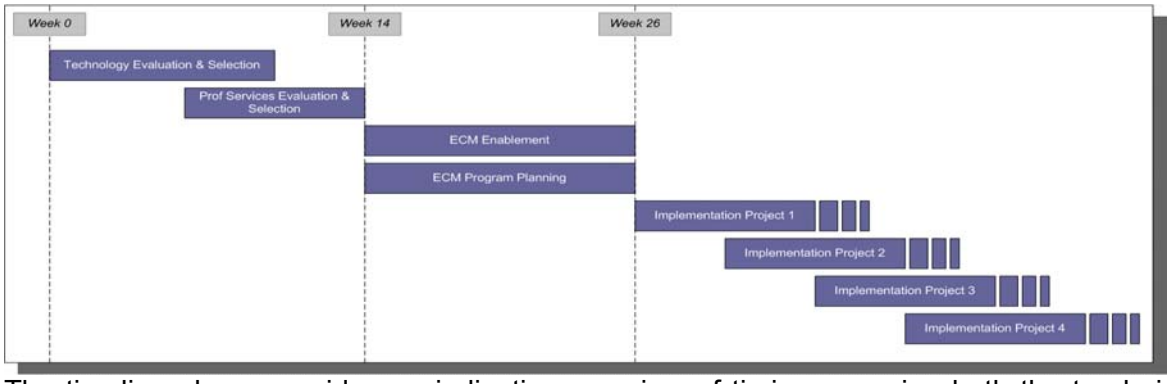
The scope of this RFT covers the selection and procurement of the ECM technology platform only.

The ECM Program of Works will begin on completion of the tendering process, and will cover three major phases:

a. *Planning and Enablement* (0-3 months): Covering the core architecture, design, standards development, environment set-up, and base integration.

b. *Core Program Implementation* (3-18 months): Covering migration from existing technologies, and the implementation of priority business projects.

c. *Extended Business Implementation* (18-36 months): Covering ongoing business solution deployment.



The timeline above provides an indicative overview of timing, covering both the tendering process and the planning and enablement phases of the ECM Program.

D3 ECM SCOPE

The scope covers the acquisition of a single, scalable Enterprise Content Management technology platform containing the following components:

- Electronic Document Management Services (EDMS); for all electronic document classes;
- Engineering Document and Drawing Management Services; for all engineering CAD drawings and Asset related technical documents;
- Records Management Services (RMS); for all physical and electronic records;
- Web Content Management Services (WCMS); for RailCorp's web sites content;
- Workflow Services (WS); content centric workflow for all controlled documents, web site content and engineering drawings lifecycle management, and
- Document-centric Collaboration Services.

D4 DEPLOYMENT / LICENSING CONSIDERATION

RailCorp's proposed deployment of the ECM platform will be based on a staged approach as outlined below:

Stage	Timeline	Scope	Estimated No of users
1	0 - 3 months	Baseline deployment	1 - 100 users
2	3 - 18 months	Prioritised projects	101 - 500 users
3	18 - 36 months	Full corporate deployment	501 – 5000 users

	User Categories*						
Stage	**Light" Users**	**Regular Authors**	**Advanced Authors**	**External Authors**	**Workflow participants**	**System Admin**	**Specialist Users**
1	30	50	2	2	30	2	2
2	100-150	100-150	10	10	100-150	5	5
3	4000	500	100	100	3000	10	20

**** Please note that a user can be a party to more than one category**.*

The detailed description for the user categories is as follows:

1. **Light users**: 'Limited functionality' authors provided with a "simple" authoring interface
2. **Regular authors:** Performing check-in/check-out, document authoring and workflow participation
3. **Advanced authors:** Eg. authors using an XML editing tool, etc
4. **External authors:** Eg. accessing the CMS via the Extranet directly or via collaboration facilities, and at times having "light" participating (ie, no document authoring)
5. **Workflow participants**: Cooperating in workflows as approvers, creating notes, submitting forms, attaching documentation
6. **System administrators:** monitoring, configuring, reporting (exception, audit), resolving lock-outs, etc
7. **Specialist's users:** Eg. web designers, information architects, taxonomists and associated roles.

D5 DELIVERABLES

The Contractor will deliver the following as part of the proposed solution:

- ECM Software Platform (1 or more products)
- Infrastructure Specification in accordance with Section D6.
- Training Services (System and End User) in accordance with Section D7.
- System and User documentation and/or manuals in accordance with Section D8.
- Maintenance and Support Services in accordance with Section D9.
- Proof of Concept (POC), if requested by RailCorp.

D6 INFRASTRUCTURE SPECIFICATION

D6.1 Services Required

The Contractor shall provide RailCorp with an Infrastructure Specification outlining the hardware and software configuration required to support the base level deployment of the ECM platform. The response must be aligned to RailCorp's architectural standards as detailed in the RailCorp's Technical Reference Model - Appendix 5 of Part D.

The specification needs to include but will not restricted to the following:

- Hardware Requirements – eg hardware sizing, CPU capability, storage requirements etc
- Additional software requirements – e.g. Web Server
- Network Requirements
- Security
- System Administration
- Integration.

D6.2 Deliverables

- Hardware Specification in accordance with D7.1.

D6.3 Review of Deliverables

On receipt of the deliverables, RailCorp will review them for quality and completeness and seek further clarification as necessary.

D7 TRAINING SERVICES

D7.1 Services Required

The Contractor must provide ECM training based upon a proposal aligned with the ECM staged deployment plan. Training may occur either on or off site and may include:

- Specific End-User training courses
- Train the Trainer Training
- System Administration Training
- Tailored Training, etc.

D7.2 Deliverables

The deliverables include:

- Training Course Materials - PowerPoint presentation and accompanying Notes;
- User Guides, incorporating the modifications to the software package, and
- Training Sessions – on or off-site

Training will be required as a business-readiness activity prior to deployment. Post-implementation, the Contractor may be requested on a needs basis to re-train RailCorp resources or conduct training for new users.

D7.3 Review of Deliverables

On receipt of the staged Training Proposal, RailCorp will review it for quality and completeness and may seek further clarification as necessary in order to finalise it.

D8 SYSTEM & USER DOCUMENTATION

D8.1 Services Required

In addition to the hard copies, the Contractor shall provide RailCorp with a soft copy of all system and user documentation for the proposed ECM platform. Version control will apply to all documents.

The Contractor shall grant RailCorp a perpetual licence to copy the system documentation for use by RailCorp in the maintenance and operation of the system, and for future changes to the system. The Contractor will provide documentation that covers but is not limited to the following:

- Installation of the product
- General architectural and system interfaces
- Configuration, general and security administration.
- Customisation and troubleshooting information, such as error message descriptions and troubleshooting techniques.
- Minimum documentation specification required from the business for the ECM system administration team to integrate the business application.

D8.2 Deliverables

- System Documentation
- User Guides or Manuals

D8.3 Review of Deliverables

On receipt of these deliverables, RailCorp will review them for quality and completeness and seek further clarification as necessary.

D9 MAINTENANCE & SUPPORT SERVICES

D9.1 Maintenance & Support Services

D9.1.1 Services Required

The Contractor will be required to provide ongoing maintenance and support services for the ECM platform over an initial three (3) year period from the end of the Warranty Period or as otherwise agreed.

After the implementation of the ECM platform, RailCorp will enter into an agreement with the Contractor for ongoing maintenance and support of the system. The maintenance and support agreement will include but is not limited to:

- Technical Services Support
- Help Desk Support
- Warranty Support
- Implementation support
- Upgrades and Version Changes

RailCorp shall retain the option to delay or not to accept any subsequent software releases (upgrades), without jeopardising the maintenance and support agreement.

The Contractor must as a minimum ensure that the:

- Supported Software conforms to and performs in accordance with the Contract Specifications;
- Supported Software performs in accordance with the agreed Service Levels; and
- Documentation is provided in accordance with the Maintenance and Support Agreement.

D9.1.2 Deliverables

- List of all types of services supplied relevant to the ECM platform;
- For each type of service, details of level of support/service and applicable costs, and
- Proposal indicating Maintenance and Support plans offered for the ECM platform. This proposal shall also include both technical services and help desk support services.

D9.2 Warranty Period Support

The Contractor shall provide software support for the ECM platform during the Warranty Period, in accordance with the following service levels:

Severity Type	Response Time	Resolution Time
Critical	30 minutes from initial notification	Within 24 hours.
High	60 minutes from initial notification	Within 48 hours.
Medium	4 hours from initial notification	By end of 5 business days hence
Low	1 day from initial notification	By end of 10 business days hence

The Warranty period will be one hundred and twenty (120) working days from the date of notification of acceptance of the system by RailCorp.

Problems raised by RailCorp during the Warranty Support Period that are classified as a defect will be corrected by the Contractor at no cost to RailCorp.

Note: “Fixes” shall be delivered to RailCorp via a medium such as CD.

D9.3 Implementation Support

D9.3.1 Services Required

The Contractor will provide access to an on-call technical expert for the duration of ECM Enablement (3-18 months) to ensure expedient resolution of any technical queries and issues. The expected services will include installation, testing, implementation support and problem resolution activities.

D9.3.2 Deliverables

- Provision of a technical expert as outlined in D9.3.1

D9.4 Review of Deliverables

On receipt of these deliverables, RailCorp will review them and may seek further clarification as necessary.

Appendices

APPENDIX 1 – GLOSSARY

Term	Definition
ECM	Enterprise Content Management
EDRM	Electronic documents and records management
RFT	Request for Tender
VPR	Virtual Plan Room The Virtual Plan Room Project - will utilise ECM, Search and Portal technologies to establish and provide distributed access to a secure repository of engineering plans and drawings. The VPR system will be integrated with existing CAD, ERP and GIS systems. It will provide workflow support to engineering business processes and will enable a smooth transition from existing paper-based processes. Dependencies exist between this project and a tactical project to implement an Interim Engineering Drawing Management System (TRIM-based). Plans – already underway - to improve and upgrade the RailCorp GIS environment will also impact this project.
WCMS/Web Channel Redevelopment	The Web Channel Redevelopment project will progressively redevelop RailCorp's web channels beginning with the Employee Web Channel (intranet) and moving on to Public (internet) and Third Party (extranet) Channels. The project will establish a common technology platform (based on ECM, Search and Portal technology) and governance model across all Web Channels. The implementation of this technology platform will include migration from and decommissioning of existing web technologies (including current websites and related technologies, the Red Dot and My Source Matrix content management systems, and Windows Sharepoint Services).
Safety Document & Records Management Compliance	This project will deliver a document and records management solution to support the compliant management and distribution of Safety information in RailCorp, covering electronic and hardcopy documents and records. The project will include the integration of the ECM platform with SKMS.

APPENDIX 2 – SUMMARY OF NSW RECORDKEEPING METADATA STANDARD

Elements, qualifiers and value components in the NRKMS

This section provides a summary listing of all elements, element qualifiers and value components contained in the *NSW Recordkeeping Metadata Standard*.
All the standard's elements are further described in Part 2, the technical specification. The technical specification lists each element, element qualifier and value component in the standard in detail. It also provides guidance regarding their implementation.

Version control

All data values in this standard have the version number of *NSW Recordkeeping Metadata Standard Version 1.0*

Record entity

Record entity metadata is used to describe records or aggregations of records in a public office. Record entity metadata can be applied to individual record items such as email messages through to files, records series, record systems or other aggregations of records.

Number	Element	Number	Qualifiers and/or components
NRKMS 1	Category Type	None	None
NRKMS 2	Identifier	NRKMS 2.1 NRKMS 2.2	*Element qualifiers* Barcode Domain
NRKMS 3	Title	NRKMS 3.1 NRKMS 3.2 NRKMS 3.3	*Element qualifiers* Alternative Title Abbreviated Title Title Date
NRKMS 4	Date	NRKMS 4.1 NRKMS 4.2 NRKMS 4.3 NRKMS 4.4	*Element qualifiers* Creation Date Registration Date Transfer Date Contents Date Range
NRKMS 5	Mandate	NRKMS 5.1 NRKMS 5.2 NRKMS 5.3 NRKMS 5.4 NRKMS 5.5 NRKMS 5.6	*Value components* Mandate Title Mandate Type Mandate Identifier Mandate Date Mandate Description Mandate Jurisdiction
NRKMS 6	Place	NRKMS 6.1 NRKMS 6.2 NRKMS 6.3	*Element qualifiers* Store Location Current Location *Value component* Place Date
NRKMS 7	Function	NRKMS 7.1 NRKMS 7.2 NRKMS 7.3 NRKMS 7.4 NRKMS 7.5 NRKMS 7.6	*Element qualifiers* Function Descriptor Activity Descriptor Transaction Descriptor *Value components* Identifier Date Description

NRKMS 8	Relation		*Value components* Related Entity Identifier Relationship Type
		NRKMS 8.1	Relationship Date
		NRKMS 8.2	Relationship Mandate
		NRKMS 8.3	Relationship Business Rules
		NRKMS 8.4	
		NRKMS 8.5	
NRKMS 9	Description	None	None
NRKMS 10	Language	None	None
NRKMS 11	Agent *	NRKMS 11.1	*Element qualifiers*
		NRKMS 11.2	Creator
		NRKMS 11.3	Contributor
		NRKMS 11.4	Recipient
		NRKMS 11.5	Authorising Agent Organisation Responsible
		NRKMS 11.6	*Value components*
		NRKMS 11.7	Identifier Digital signature
NRKMS 12	Subject	NRKMS 12.1	*Value components*
		NRKMS 12.2	Subject Identifier
		NRKMS 12.3	Subject Date Subject Description
NRKMS 13	Documentary Form	None	None
NRKMS 14	Preservation	NRKMS 14.1	*Element qualifiers*
		NRKMS 14.2	Storage Original Creation Environment
		NRKMS 14.3	Conversion
		NRKMS 14.4	Refreshment
		NRKMS 14.5	Migration
		NRKMS 14.6	Conservation Value components Preservation Statement Preservation Date
		NRKMS 14.7	Preservation Mandate
		NRKMS 14.8	Preservation Business Rules
		NRKMS 14.9	Preservation System Specifications
		NRKMS 14.10	
		NRKMS 14.11	
NRKMS 15	Retrieval	NRKMS 15.1	Element qualifiers
		NRKMS 15.2	Rendering
		NRKMS 15.3	Representation
		NRKMS 15.4	Value components
		NRKMS 15.5	Retrieval Statement
		NRKMS 15.6	Retrieval Date
		NRKMS 15.7	Retrieval Mandate Retrieval Business Rules Retrieval System Specifications
NRKMS 16	Disposal	NRKMS 16.1	*Element qualifiers*
		NRKMS 16.2	Disposal Authorisation
		NRKMS 16.3	Disposal Sentence
		NRKMS 16.4	*Value components*

		NRKMS 16.5 NRKMS 16.6 NRKMS 16.7	Disposal Statement Disposal Date Disposal Mandate Disposal Business Rules Disposal Systems Specifications
NRKMS 17	Control	NRKMS 17.1 NRKMS 17.2 NRKMS 17.3 NRKMS 17.4 NRKMS 17.5 NRKMS 17.6 NRKMS 17.7 NRKMS 17.8 NRKMS 17.9 NRKMS 17.10 NRKMS 17.11	*Element qualifiers* Registration Classification Indexing Context Description Metadata Management Arrangement *Value components* Control Statement Control Date Control Mandate Control Business Rules Control Systems Specifications
NRKMS 18	Access	NRKMS 18.1 NRKMS 18.2 NRKMS 18.3 NRKMS 18.4 NRKMS 18.5 NRKMS 18.6 NRKMS 18.7 NRKMS 18.8 NRKMS 18.9	*Element qualifiers* Access Rights Access Restrictions Access Conditions Security Classification *Value components* Access Statement Access Date Access Mandate Access Business Rules Access Systems Specifications
NRKMS 19	Use	NRKMS 19.1 NRKMS 19.2 NRKMS 19.3 NRKMS 19.4 NRKMS 19.5 NRKMS 19.6 NRKMS 19.7 NRKMS 19.8	*Element qualifiers* Use Rights Use Restrictions Use Conditions *Value components* Use Statement Use Date Use Mandate Use Business Rules Use Systems Specifications
NRKMS 20	Event History	NRKMS 20.1 NRKMS 20.2 NRKMS 20.3 NRKMS 20.4 NRKMS 20.5 NRKMS 20.6 NRKMS 20.7 NRKMS 20.8	*Value components* Event Type Event Description Event Identifier Event Date Event History Mandate Event History Business Rules Event History Systems Specifications Action Officer
*	The Agent metadata element should only be used if Agent entity metadata is not employed.		

Agent entity

Agent entity metadata is used to describe all agents in a public office. Agent entity metadata can be applied to individual staff, workgroups or organisations.

Number	Element	Number	Qualifiers and/or components
NRKMS 21	Category Type	None	None
NRKMS 22	Identifier	NRKMS 22.1	*Element qualifier* Domain
NRKMS 23	Title	NRKMS 23.1 NRKMS 23.2 NRKMS 23.3	*Element qualifiers* Alternative Title Abbreviated Title *Value component* Title Date
NRKMS 24	Date	NRKMS 24.1 NRKMS 24.2 NRKMS 24.3	*Element qualifiers* Commencement Cessation Operational Period
NRKMS 25	Mandate	NRKMS 25.1 NRKMS 25.2 NRKMS 25.3 NRKMS 25.4 NRKMS 25.5 NRKMS 25.6	*Value components* Title Type Identifier Date Description Jurisdiction
NRKMS 26	Place	NRKMS 26.1 NRKMS 26.2 NRKMS 26.3	*Element qualifiers* Business Address Contact Address *Value component* Place Date
NRKMS 27	Function	NRKMS 27.1 NRKMS 27.2 NRKMS 27.3 NRKMS 27.4 NRKMS 27.5 NRKMS 27.6	*Element qualifiers* Function Descriptor Activity Descriptor Transaction Descriptor *Value components* Identifier Date Description
NRKMS 28	Relation	NRKMS 28.1 NRKMS 28.2 NRKMS 28.3 NRKMS 28.4 NRKMS 28.5 NRKMS 28.6	*Value components* Related Entity Identifier Relationship Type Relationship Definition Relationship Date Relationship Mandate Relationship Business Rules
NRKMS 29	Description	None	None
NRKMS 30	Language	None	None

Function entity

Function entity metadata is used to describe all business functions performed by a public office. Function entity metadata can be applied to individual transactions, business activities or broad business functions.

Number	Element	Number	Qualifiers and/or components
NRKMS 31	Category Type	None	None
NRKMS 32	Identifier	NRKMS 32.1	*Element qualifier* Domain

NRKMS 33	Title	NRKMS 33.1 NRKMS 33.2 NRKMS 33.3	*Element qualifiers* Alternative Title Abbreviated Title *Value component* Title Date
NRKMS 34	Date	NRKMS 34.1 NRKMS 34.2 NRKMS 34.3	*Element qualifiers* Date of Execution Date of Implementation Dates of Validity
NRKMS 35	Mandate	NRKMS 35.1 NRKMS 35.2 NRKMS 35.3 NRKMS 35.4 NRKMS 35.5 NRKMS 35.6	*Value components* Title Type Identifier Date Description Jurisdiction
NRKMS 36	Place	NRKMS 36.1 NRKMS 36.2 NRKMS 36.3	*Element qualifiers* Business Activity Area Service Delivery Point *Value component* Place Date
NRKMS 37	Function	NRKMS 37.1 NRKMS 37.2 NRKMS 37.3 NRKMS 37.4 NRKMS 37.5 NRKMS 37.6	*Element qualifiers* Function Descriptor Activity Descriptor Transaction Descriptor *Value components* Identifier Date Description
NRKMS 38	Relation	NRKMS 38.1 NRKMS 38.2 NRKMS 38.3 NRKMS 38.4 NRKMS 38.5 NRKMS 38.6	*Value components* Related Entity Identifier Relationship Type Relationship Definition Relationship Date Relationship Mandate Relationship Business Rules
NRKMS 39	Description	None	None
NRKMS 40	Language	None	None
NRKMS 41	Business Rules	NRKMS 41.1 NRKMS 41.2 NRKMS 41.3 NRKMS 41.4	Business Rules Identifier Business Rules Date Business Rules Description System Specifications

APPENDIX 3 - KEY CRITERIA FOR ECM PLATFORM

APPENDIX 4 – DETAILED CRITERIA FOR ECM PLATFORM

APPENDIX 5 – RAILCORP TECHNICAL REFERENCE MODEL