

A long-exposure photograph of a city skyline at dusk or dawn, with blurred train tracks in the foreground leading towards the city. The sky is a mix of blue and orange, and the city lights are visible. The train tracks are in the foreground, leading towards the city skyline in the background.

**Whole of Business Review of Queensland Rail
Report prepared for the Citytrain Response Unit
July 2017**

Executive Summary

Recommendation 36(d) of the Strachan Inquiry requires the Citytrain Response Unit to undertake a whole-of-business review of Queensland Rail to identify any systemic organisational issues and develop actions to address these issues.

The Consultants were engaged to undertake a scan of the whole of Queensland Rail over a period of six weeks.

The purpose of the review was to build on the Strachan Inquiry recommendations to identify what other areas of Queensland Rail's business:

- are of immediate concern, and need immediate actions to address the identified issues
- are not of immediate concern, but should be considered for a deeper investigation



Review team



Oliver Schmidt – Project Lead/Stakeholder Management

Oliver is an experienced Senior Business Consultant and railway sales manager and will lead Deutsche Bahn's (DB) involvement in this review. Oliver has worked in international project management and has held leadership positions in passenger transport for DB for over 14 years. He has worked around the globe on various projects in countries such as Israel, Denmark and the United Kingdom.



Thomas Stassen – Infrastructure, HR Planning and Processes

Thomas is the Head of Operations at the railway infrastructure provider DB Netz. He has vast knowledge in crisis and change management and will be invaluable to this review as he was involved in a similar incident at DB relating to a shortage of train traffic controllers. Thomas was also part of a taskforce which conducted a company-wide investigation to identify whether this incident could happen again in other DB operations and set-up measures to mitigate any future risk. Thomas will lead the Infrastructure, HR Planning and Processes streams of the review.



Matthias Meyer – Operations and Maintenance, Business Continuity Management

Matthias is the Head of Operation and Maintenance Consulting at DB in Germany and has worked in countries right across the globe including the United Kingdom, Qatar, Iran and South Africa. As an experienced railway manager in public transport Matthias will be responsible for reviewing the operations and maintenance processes, organisation, risk-management, reporting structure and culture. Matthias also brings a wealth of experience in crisis management. Matthias still holds a current train driver ticket in Germany.



Yves Perret – Customer Service, IT, Procurement and Culture

Yves is a business consultant at DB Engineering & Consulting with experience in the development of KPIs, IT platforms and the development of strategic roadmaps. Yves spent 18 months working across the DB company structure to understand the various activities and challenges prior to going on assignment for projects such as tenders, process analysis, and the implementation of key software management systems. Yves will lead the Customer Service, IT, Procurement and Culture streams of the review



Uwe Ramin – Operations & Maintenance Analysis

Uwe is an experienced Senior Consultant in operations & Maintenance and a railway manager for over 40 years. An Engineer for transport technology he has held operational positions with Deutsche Bahn as station manager, shunting yard manager and operating manager with the ferry port of Sassnitz on the Baltic Sea. With DB E&C since 2012 he was involved in international rail projects in South Africa, Saudi Arabia, Qatar and Kazakhstan, where he conducted training for the freight division of Kazakh Railways on the Transformation Program.

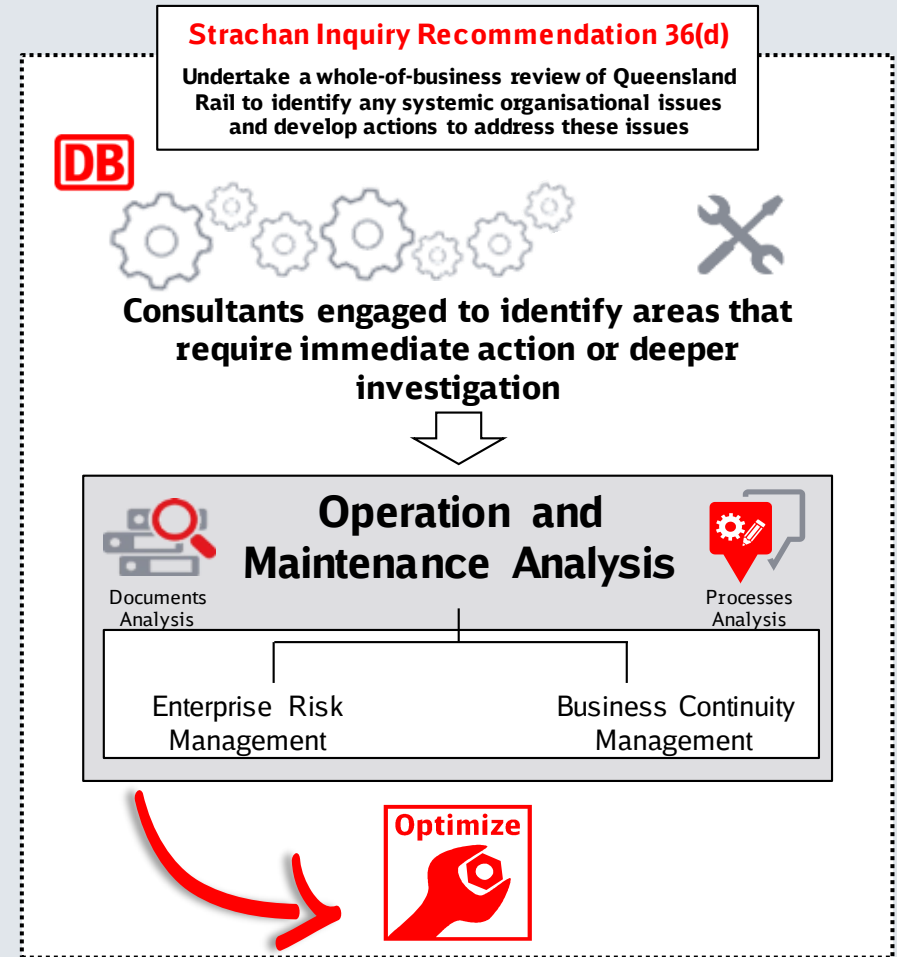
Review approach

The review approach was based on an Operation and Maintenance Analysis that focused on enterprise risk management and business continuity management.

The approach included:

- interviews with 78 managers from across Queensland Rail's business
- four on-site visits to Queensland Rail operational areas
- interviews with four managers from the Department of Transport and Main Roads
- the review of 250 documents from Queensland Rail and Department of Transport and Main Roads

A cultural diagnostic of Queensland Rail (value pattern analysis) was proposed as part of the review. However, as Queensland Rail conducted a cultural survey in late 2016, it was agreed not to undertake additional work in this area.



Positive areas



Recovery

QR has generally accepted the need for change and is working hard to overcome the crisis

- QR has established appropriate recovery and response measures



Operations

Positive impression of daily operations (random checks across the Citytrain network)

- Acceptable OTR performance
- Clean and modern station and train appearance
- Active and helpful customer service, including clear passenger information
- Seamless and on-time bus replacement service on Gold Coast line



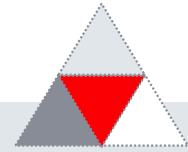
Expertise

QR has state of the art:

- Risk management software and system
- Policy Centre and organisation
- Rail Management Centre



Immediate action: Project inter-dependencies and NGR train approvals



Findings

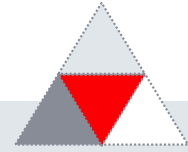
1.1 As NGR implementation coincides with the Commonwealth Games there is pressure on all parties for timely approval of the new fleet. At the time of interviewing, there were 140 deficiencies, including door control and brake control, that needed to be rectified in the NGR commissioning process. There appears to be a blockage in resolving the issues with the remaining deficiencies. In the Consultant's experience, this type of situation requires an independent mediator to assist the parties to resolve the matter.

1.2 From discussions with interviewees, it is understood that 18 NGR trains are required to service the proposed Commonwealth Games timetable (we note that the timetable is still being agreed and this number may change). There is a tight commissioning schedule for NGR trains as two to three are planned to be commissioned every month. Due to the current blockages and high risk of 'juvenile failures', a conservative view would be that 18 NGR trains will not be ready by April 2018. Furthermore, a number of interviewees identified the risk that not enough train crew would be available to meet the proposed timetable.

1.3 Given the need for the retiring EMU and ICE fleets to operate at 94% of availability for the Commonwealth Games, there is a high risk of delays due to failures. For example, the Citytrain rollingstock reliability report from May 2017, states that since April 2016, of the 19 highest delay contributing incidents, 16 were caused by the EMU fleet.

1.4 The QR NGR and Commonwealth Games project teams do not appear to be adequately staffed. In contrast, a major project such as ETCS appears to have sufficient staff at this early procurement tender stage. As the NGR and Commonwealth Games are priority projects, there may be an opportunity to temporarily redeploy staff between the project teams.

Immediate action: Project inter-dependencies and NGR train approvals



Recommendations



- 1.1.1** Although QR has engaged its own independent verifier, consider jointly engaging a verifier acceptable to both Bombardier and QR to assist the parties in resolving the remaining deficiencies.
- 1.1.2** That QR confirm whether there are adequate numbers and levels of engineers for the purposes of approving NGR trains (also consider the balance between outcomes, standards, safety and the customer).
- 1.2** That QR continue to closely monitor the commissioning of the NGR trains and the planning in relation to ensuring there are adequate numbers of train drivers for the purposes of the Commonwealth Games.
- 1.3** That QR develop options (including detailed action plans) to mitigate risks to the successful delivery of NGR/Commonwealth Games.
- 1.4** Consider whether resources from longer-term projects (e.g. ETCS) could be redeployed to support the NGR and Commonwealth Games operational readiness projects for the period up to May 2018.

Deeper investigation: ICT



Findings

2.1 QR lacks a central team responsible for ICT strategy and architecture. Each business unit has its own systems, data centres, server rooms, software upgrades or testing environment. The various ICT “islands” of Corporate ICT (e.g. for SAP and Microsoft programs), Network ICT (e.g. for signalling) and Operations ICT (e.g. for timetable design, OTR and duty rosters) result in disconnected systems. This fragmented approach leads to various issues such as:

- a) the increased risk of external threats such as cyber security attacks
- b) the potential for divergent standards and processes for management of critical ICT infrastructure
- c) the lack of coordinated strategy and approach to managing ICT assets
- d) the proliferation of manual processes to fill the gaps between the systems (e.g. when retrieving OTR data) resulting in the failure to share data between business units and increased potential for human error and data manipulation.

As an example, Exhibit 1 shows the ICT structure at DB Fernverkehr, the long-distance passenger service of Deutsche Bahn.

2.2 QR’s overall ICT maturity is not considered to be up to the current standards of other railways. Significant work is required in order to bring QR up to world class standards, prior to progressing to a digital railway.

Exhibit 2 shows the steps towards progressing to becoming a digital railway.

Exhibit 1: ICT structure at DB Fernverkehr, the long-distance passenger service of Deutsche Bahn

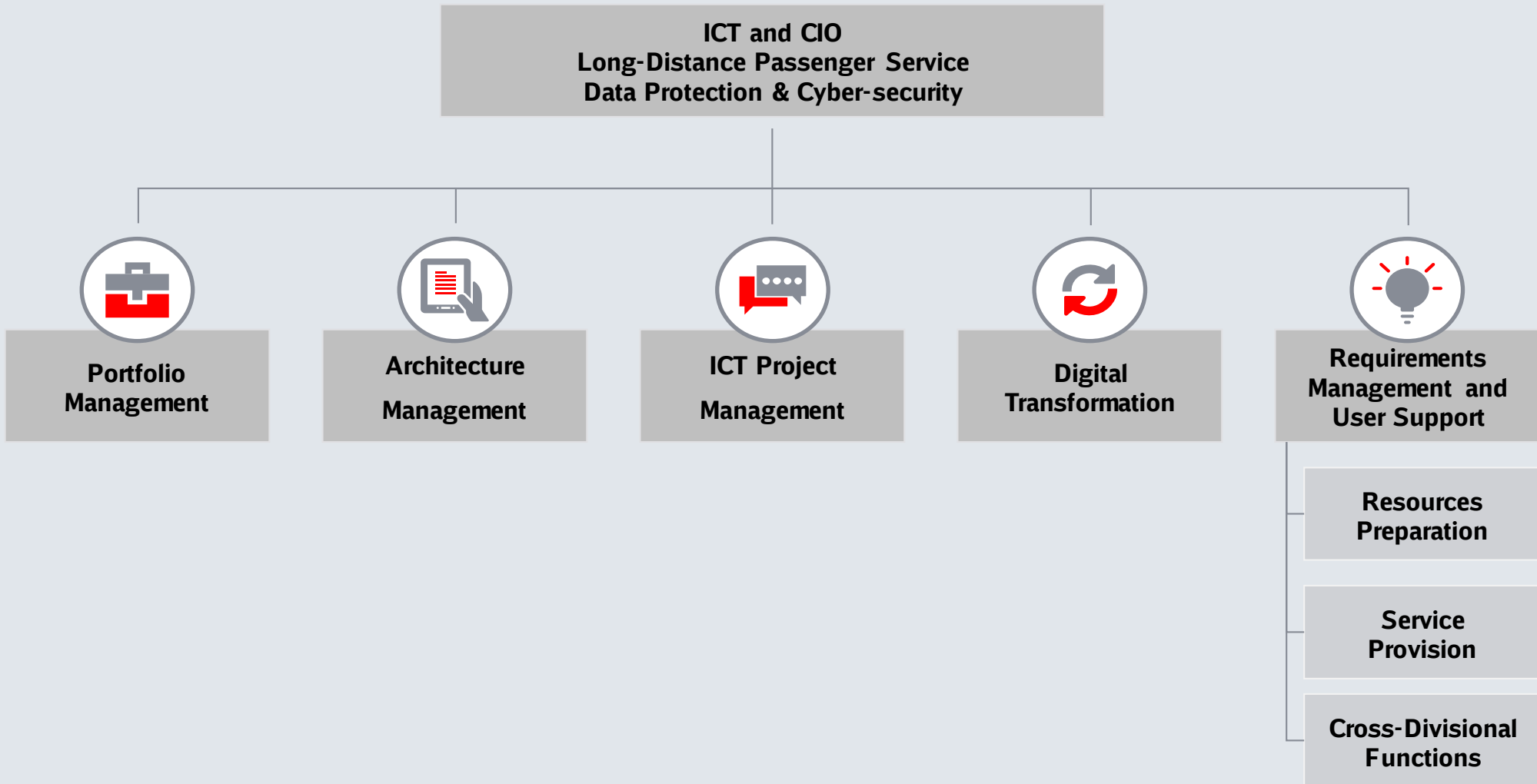


Exhibit 2: Progression towards becoming a digital railway



I Process driven organisation

- Decision making related to processes in place:
 - decisions based on intuition when there are gaps in the processes in place
 - limited use of existing information

II Data driven organisation

- Decisions based on existing information. This requires:
 - inter-operability of existing systems
 - standardised data management

III Digital railway

- Decisions based on real-time information and forecasting models developed from existing information. This requires:
 - performance data management systems in place
 - technology investments (e.g. ECTS 3 or predictive maintenance software)



- QR is slowly moving toward a data driven organisation
- QR doesn't yet aggregate the amount of data available across the organisation, especially in the fields of HR and maintenance, to support a more efficient planning process

Deeper investigation: ICT



Recommendation

- 2.** Undertake a review of ICT standards, strategies and procedures across the whole organisation and consider whether ICT strategy, architecture and security should be combined together under one responsible area (e.g. establishing the role of a Chief Information Officer or a Chief Digital Officer). The remit for this area could include:
- a) putting in place comprehensive whole of business ICT strategies, such as for cyber security
 - b) optimising the inter-operability of existing systems and identifying and implementing new systems.

Implementing this recommendation would enable QR to move towards being a data driven organisation before taking the next step in becoming a digital railway.

Note that this does not limit Network and Operations from operating ICT systems in their respective areas. However, this should be overseen by one responsible area to ensure there is integration and a whole-of-business strategy is achieved.

Deeper investigation: QR relationship with TransLink/TMR



Findings



3. The Consultants observed a general lack of trust and partnership between QR and TransLink/TMR. This appears to have developed over time with the changing relationship between the parties and the shifting of responsibilities away from QR. The tension between the parties was observed in relation to matters such as:
- a) Major project interfaces not working as effectively as they need to (e.g. for NGR acceptance - QR considers that they are being pressured to accept the trains whereas in TMR's view the QR engineers are being overly cautious)
 - b) Clarity of roles, responsibilities and accountabilities between the parties (e.g. who is responsible for the development of strategy and which aspect of strategy)
 - c) There is general confusion and competition for the customer (e.g. in the area of customer communications).

Deeper investigation: QR relationship with TransLink/TMR

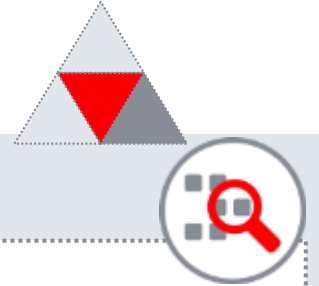


Recommendation



3. Use the upcoming review of the Integrated Public Transport Model (Recommendations 36(a) and (b) of the Strachan Inquiry) as an opportunity to provide greater clarity of the respective roles and tasks, and a more effective structure, in relation to rail policy, planning and delivery on behalf of the government.

Deeper investigation: Maintenance



Findings

4.1 In the field of infrastructure maintenance, the Consultants identified a lack of standardised line categorisation for the QR network. It is understood that neither axle load (or perhaps load per track length) nor speed limit are subject to a classification of line segments, including in relation to the maintenance of tracks and the overhead catenary system.

In the Consultant's experience, a standardised line categorisation is important for the purposes of guiding the network maintenance schedule. Without this approach, problems can occur in relation to inconsistent and inefficient maintenance cycles.

A modern standard for line categorisation is the European Standard EN 15528 which describes methods of classification of existing and new railway lines and the categorisation of vehicles. The standard specifies the technical requirements for ensuring the compatibility of the interface between a vehicle and infrastructure with respect to the vertical load carrying capacity of a line. The standard is suitable for use on freight, passenger and mixed traffic lines, but would need to be adopted for narrow gauge lines as existing on the QR network.

4.2 In reviewing the Operating Assets Rollingstock Strategy document from 2015, the Consultants identified a potential risk in QR's preferred city network fleet strategy of a 40-year lifespan for the SMU and IMU fleets. The current reliability statistics from QR indicate that the technical problems for these fleets are at a usual level and the yearly mileage is not too high. However, the typical "bathtub curve" applies to this fleet, as there is an increasing risk of problems and mounting expenses towards the end of fleet life.

Deeper investigation: Maintenance



Recommendations

- 4.1** Consider adopting a standardised line categorisation to guide the network maintenance schedule. Include consideration of European Standard EN 15528 which describes methods of classification of existing and new railway lines and the categorisation of vehicles. Adopting this approach would further strengthen a preventive network maintenance strategy.
- 4.2** Undertake a review of the current Citytrain rollingstock fleet strategy with regards to the technical obsolescence risks already identified in the Operating Assets Rollingstock Strategy 2015.

Deeper investigation: Workforce



Findings

5.1 It is understood that QR is developing a new workforce management plan. This plan was not available to be considered as part of this review. The Consultants identified a number of workforce challenges common to various parts of the organisation including:

- a) the risk of the significant loss of expertise, including due to pending retirements, and difficulties in quickly replacing this expertise - this was particularly evident with respect to engineers and train controllers - for example:
 - i. the significant time it takes to develop staff capability e.g. it can take 10 years to develop well-rounded engineering experience
 - ii. the competition for experienced staff with other industries or within QR e.g. QR graduate recruits are paid at market rates but after several years the pay rates fall below market average. There is a recent example of a QR engineer applying to become a driver - which is suspected to be due to the attraction of the pay rates and conditions
- b) similar to train crew, there is a heavy reliance on the use of overtime in parts of the organisation e.g. train controllers are averaging 23% overtime
- c) also similar to train crew, there are opportunities to accelerate and modernise training approaches e.g. reducing the 18 month training time for train controllers through the use of the new simulators and tightening up competency requirements.

5.2 QR engaged Ernst and Young in 2016 to undertake a review of the risks associated with contractor management practices (referred to as 'contingent workforce'). QR advised that a program manager is being recruited to progress the areas for improvement. The Consultants identified current concerns in relation to contractor management such as:

- a) examples where work undertaken by contractors has not been sufficiently quality assured prior to payment
- b) the lack of clear and concise safety requirements for contractors (the current requirements are approximately 80 pages) which are not tailored to the types of work being undertaken.

Deeper investigation: Workforce



Recommendation

5.1 In finalising the workforce management plan, that the plan include consideration of the need for:

- a) effective succession planning, including targeting areas in the organisation where there is an imminent loss of expertise
- b) innovative staff recruitment and retention practices
- c) a robust review of the heavy reliance on the use of overtime in parts of the organisation, including consideration of the impacts of this practice
- d) methods to modernise and streamline in-house training programs.

5.2 Consider whether there are short-term actions that should be undertaken as part of the Contingent Workforce Management Program to:

- a) more closely monitor the quality of contractors' work and ensure there are effective financial controls (e.g. consideration of the 'four-eye principle')
- b) revise contractor safety requirements to ensure that they are clear, concise and appropriate to the types of work being undertaken.

Deeper investigation: Culture



Findings

6.1 In many of the interviews the Consultants identified examples of QR's siloed working culture, where divisions are primarily focused on the achievement of their own targets. This lack of alignment, combined with the failure to share information between divisions, is preventing QR from fully addressing the challenges faced by the organisation.

It is considered that QR would benefit from targeted actions designed to break down the silos.

Exhibit 3 describes examples of measures that could be used to break down silos in the organisation.

Exhibit 4 describes the approach used by DB to develop a shared focus and commitment to OTR.

Exhibit 5 provides an overview of DB's organisation wide training centre covering the induction of new employees, the development of rail expertise and supporting managers in the development of their leadership capabilities. Although a similar model may not be appropriate for QR, the principle of a whole of enterprise approach to training, with potential partnerships with TMR, could be explored.

6.2 QR has been going through a sustained period of intense change (e.g. recent changes of CEOs and government strategies) and will continue to do so in the foreseeable future. Coupled with rapid technological change and more demanding customer expectations this generates insecurity and change fatigue amongst employees. There also appears to be a lack of experienced change managers able to guide employees through the transformation process.

Exhibit 3: Measures to break down silos

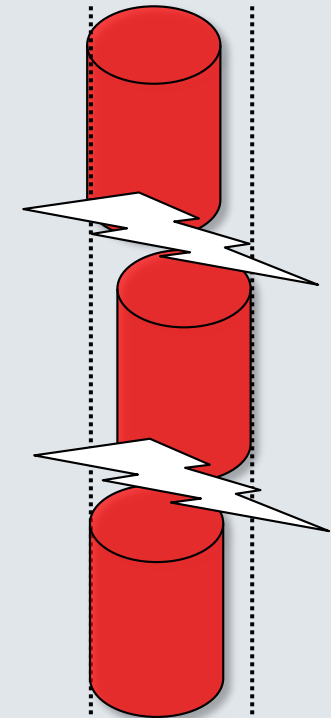
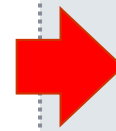
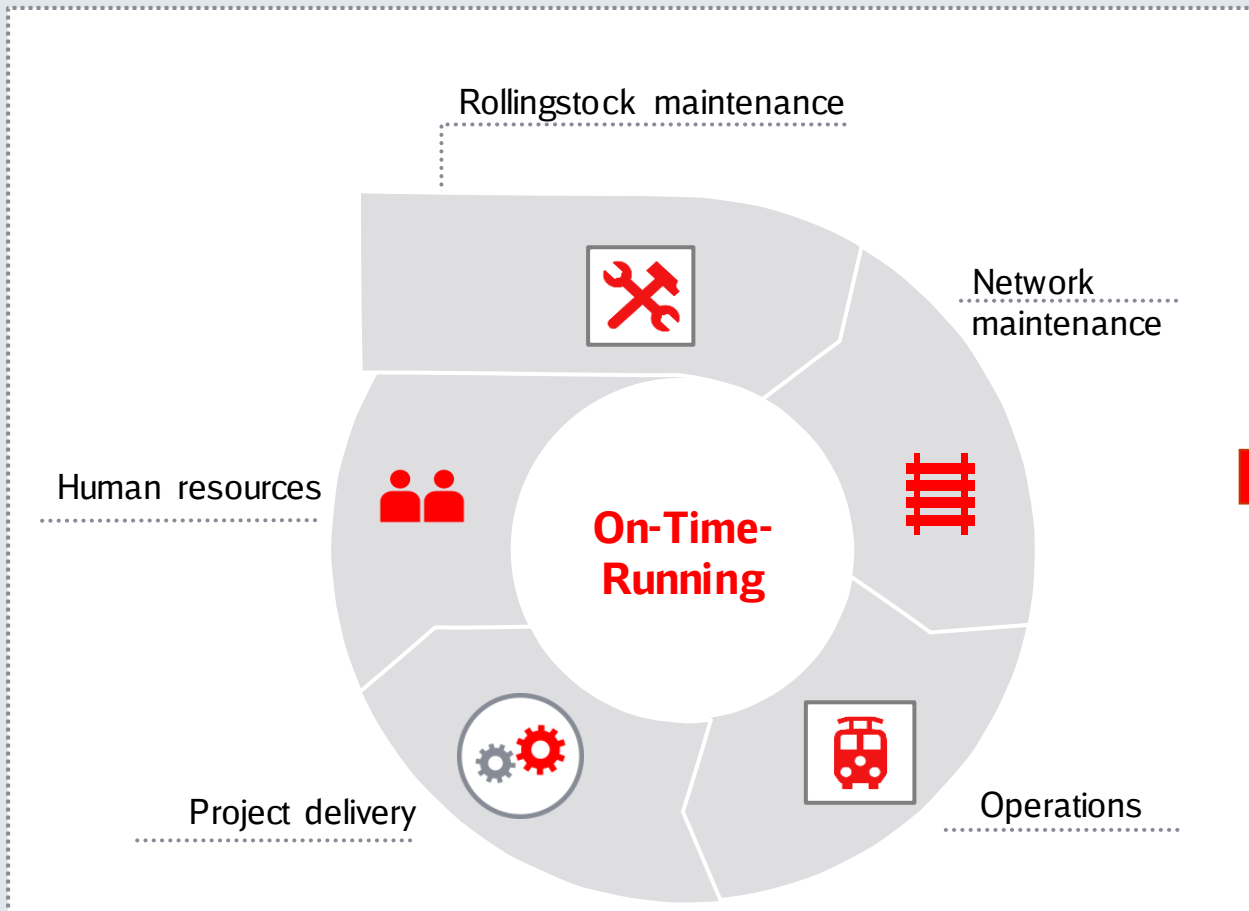


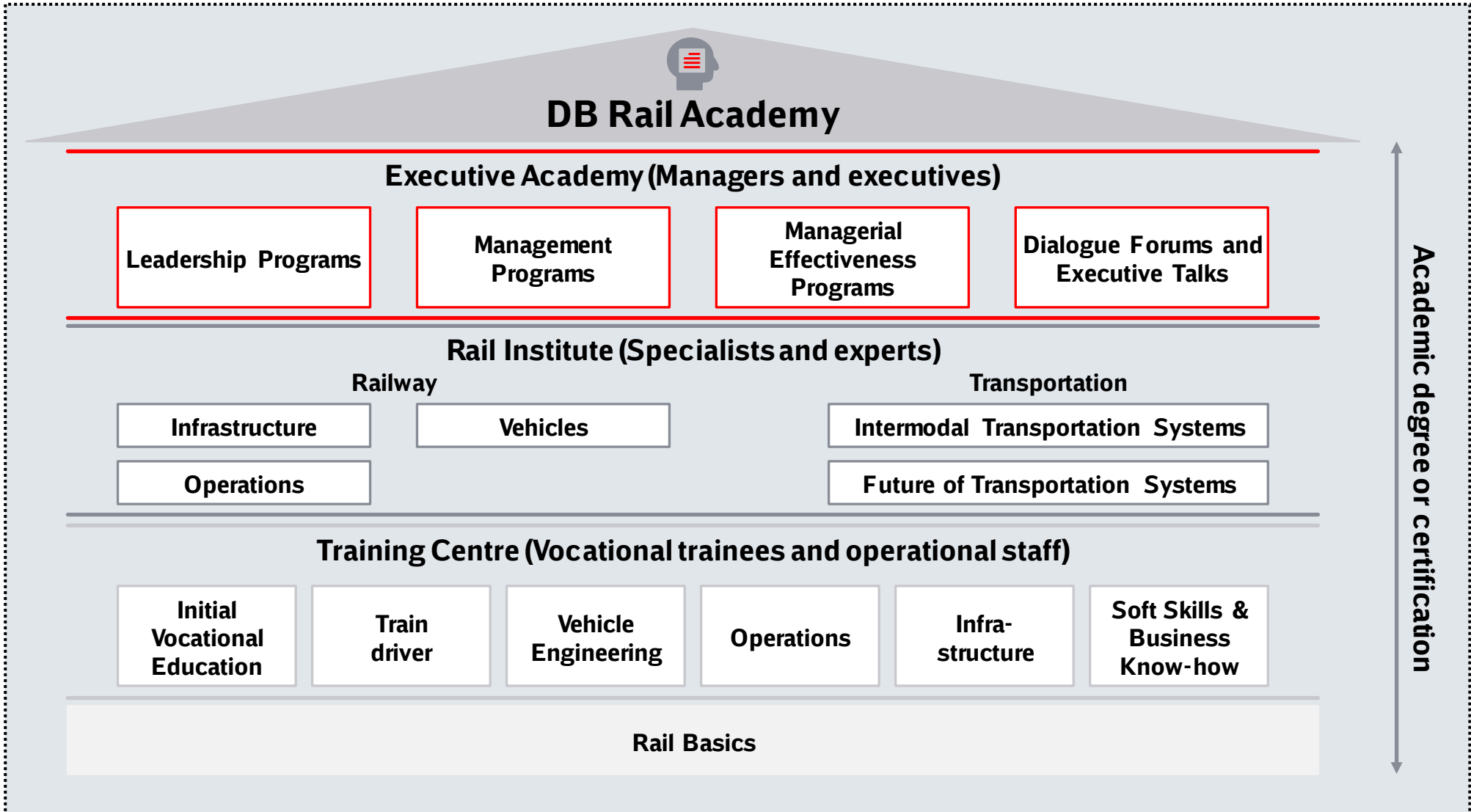
Exhibit 4: Shared commitment to OTR performance

OTR performance targets are more achievable if all parties are accountable



- **All divisions have a direct or indirect impact** on the achievement of OTR and therefore their performance should be measured against it
- By making **all parties accountable for the success of this KPI**, engagement and collaboration will increase
- Instead of working at the expense of other divisions, **employees will contribute to the “whole”**

Exhibit 5: DB Rail Academy



Deeper investigation: Culture



Recommendations

6.1 In order to assist in addressing the issue of silos at QR:

- a) investigate whether managers have an existing shared commitment toward the achievement of a common goal (e.g. OTR KPI) and develop measures to develop or enhance this commitment
- b) review whether the set-up of a management trainee program for newly recruited or promoted managers, including job shadowing and project involvement in other divisions, could be adopted to enhance their understanding of other business units' remits and challenges
- c) consider whether it is appropriate to make a change to the organisational structure

6.2 To develop change management capability in QR, consider:

- a) hiring change specialists to support senior leaders/managers
- b) evaluating the change management capabilities of managers as a specific criteria when considering them for promotion
- c) exploring the option of strengthening links between different divisions and business units through shared change management training and the exchange of best practice.

Deeper investigation: Dilution of Responsibility



Findings



7.1 The Consultants identified a dilution of responsibilities at QR which appears to be the result of a fragmented organisation. For example, positions related to safety and assurance are spread across divisions, making several managers only partly accountable for the successful delivery of their tasks (e.g. besides the Safety, Assurance & Environment division, there are multiple safety (eight) and assurance (five) positions within Network, Operations and Legal & Governance).

The Consultants were also concerned by the high number of general and senior managers throughout the organisation involved in major projects such as NGR and the Commonwealth Games, making it difficult to have a clear understanding of the roles and responsibilities.

7.2 Endorsing Strachan Inquiry Recommendation 22(d), the Consultants identified concerns with the leadership span between managers and employees of Train Service Delivery (understood to be an average of 1:350). This very high leadership span ratio makes it difficult to effectively plan and manage workforce issues, such as high rates of absenteeism. It also makes it extremely difficult to effectively manage staff including communications during times of intense change.

Deeper investigation: Dilution of Responsibility



Recommendations

7.1 QR should consider whether to:

- a) concentrate all safety functions (e.g. Operating Assets Safety, Citytrain Safety, and Network Safety) in a corporate unit and anchor the division specific responsibilities for safety to each manager's position description - this action could be taken as part of Strachan Inquiry Recommendation 22(b)
- b) establish one clear project leader per major project to take full responsibility for its successful delivery and instead of embedding project managers into QR's organisational structure, set up separate project teams reporting to the one project leader.

7.2 In relation to Strachan Inquiry Recommendation 22(d), from the Consultant's experience a recommended train crew leadership span target ratio is 1:50 to 1:75. It is considered that this would significantly improve manager/employee communications, increase leadership visibility and ensure effective management of workforce issues.

Appendices – List of interviews conducted

Date	Time	Organisation	Topic
01.06.2017	15.30 - 16.30	QR Legal & Governance	GRC Risk management
07.06.2017	15.00 - 16.00	TransLink	Transport Service Contract
12.06.2017	09.00 - 10.00	QR Network	Asset planning & Engineering
12.06.2017	11.00 - 12.00	QR Operations	Station & Customer Service
12.06.2017	15.00 - 16.00	QR Project Delivery	EGM Projects
12.06.2016	16:00 - 17:30	QR ELT	CEO
13.06.2017	09.30 - 10.30	QR Commercial & Strategy	Property
13.06.2017	10.30 - 11.30	QR Operations	EGM Operations
13.06.2017	12.30 - 13.30	QR Network	EGM Network
13.06.2017	14.00 - 15.00	QR Safety Assurance & Environment	Rail Safety
13.06.2017	15.00 - 16.00	QR General counsel	EGM Governance
13.06.2017	15.30 - 17.00	QR Network	Safety Network
14.06.2017	09.00 - 10.00	QR Legal & Governance	Risk, Insurance, Compliance
14.06.2017	11:00 - 12:00	QR Project Delivery	Transport Services Contract
14.06.2017	13.00 - 14.00	QR Project Delivery	Program delivery - projects
14.06.2016	14.00 - 15.00	QR Legal & Governance	Risk&Assurance Network
14.06.2017	15.30 - 16.30	QR Safety, Assurance & Environment	Workplace Health & Safety
14.06.2017	16:00 - 17:00	QR People & Culture	EGM P&C
15.06.2017	09.00 - 10.00	QR Safety, Assurance & Environment	GM Safety, Assurance & Environment
15.06.2017	10.30 - 11.30	QR Operations	Operational Coordination, Risk and Assurance
15.06.2017	13.30 - 14.30	QR HR Training	Workforce Planning Analytics
15.06.2017	15.00 - 16.00	QR Operations	Strategic Operational Planning
15.06.2017	16.00 - 17.00	QR Network	SEQ Network
16.06.2017	09.00 - 10.00	QR People & Culture	Employee relations
16.06.2017	10.00 - 11.30	QR Network	Assurance & Capability
16.06.2017	11.30 - 12.30	QR Response&Recovery	Response & Recovery
16.06.2017	14.00 - 15.00	QR Commercial & Strategy	Financial Control
16.06.2017	15.15 - 16.00	TMR	NGR Project
19.06.2017	10.00 - 14.00	QR Operations	Operating Assets, Rollingstock Maintenance, Engineering, Certification
19.06.2016	15.30 - 17.00	QR Operations	ETCS Project
20.06.2017	09.00 - 10.00	QR Operations	CTR, T&T, RMC Safety
20.06.2017	10.00 - 11.00	QR Projects	Commonwealth Games Project
20.06.2016	11.00 - 12.00	QR Safety Assurance & Environment	Assurance & Investigation
20.06.2017	14.00 - 15.30	QR Commercial & Strategy	ICT, Delivery, Architecture, Operations
20.06.2017	15.30 - 17.00	QR Network projects	Signalling/Rail Systems
21.06.2017	08.30 - 10.00	QR Project Delivery	Rail Ops Projects/Rollingstock
21.06.2017	10.00 - 11.00	QR Operations	Reliability
21.06.2017	15.30 - 16.30	QR Project Delivery	NGR project
22.06.2017	09.00 - 10.00	QR Legal & Governance	Policy center

Date	Time	Organisation	Topic
22.06.2017	11:15 - 12:00	QR Network	Quality Assurance
22.06.2017	12.00 - 13.00	QR Project Delivery	Quality Assurance
22.06.2017	13.00 - 14.30	QR Network	Tracks and Civil Engineering
22.06.2017	14.30 - 15.30	QR Commercial & Strategy	Strategy & Insights
26.06.2017	09.00 - 10.00	QR Operations	Travel & Tourist
26.06.2017	10:00 - 11:00	QR Operations	Security & Emergency Preparedness
26.06.2017	13:00 - 16:00	QR Network	Network IT
26.06.2017	13.30 - 14.30	QR Operations	Rollingstock maintenance
26.06.2017	14.30 - 15.30	QR Operations	Rollingstock engineering
26.06.2017	16.30 - 17.30	QR Operations	Rollingstock certification
27.06.2017	08.30 - 09.30	QR Commercial	Procurement
27.06.2017	12.00 - 12:45	QR Legal & Governance	GRC Risk Register
27.06.2017	15.00 - 16.30	QR HR/Network	Employee relations
29.06.2017	10:00 - 11:00	TMR	DG TMR
29.06.2017	14:00 - 15.00	QR Operations	Train Service Delivery
30.06.2017	10:00 - 11:00	QR Operations	Rail Management Center
30.06.2017	14.30 - 15.30	TransLink	Call enter/Ticketing
04.07.2017	09:00 - 10:00	QR Chair and CEO	
05.07.2017	13:00 - 13:45	QR Network	Townsville Train Control
05.07.2017	14:00 - 14:30	QR Network	Freight Operations North
06.07.2017	16:00 - 17:00	QR ELT	Final presentation

Appendices – List of on-site visits

Date	Time	Site
19/06/2017	10.00 - 14.00	Rollingstock Maintenance, Mayne
20/06/2017	12.00 - 12.30	ICT Data Centre, Brisbane
23/06/2017	10.00 - 14.00	Rail Management Centre, Mayne
26/06/2017	13.00 - 14.00	Network IT Server and Test Rooms

Appendices – List of Documents reviewed (1/4)

Document	Document title
A	General documentation
01	Moreton bay independent investigation signalling report
02	Training & Recruitment Consultative Committee
03	Timetable sustainability discussion
04	Supply & demand model of train crews
05	Integrated operations work stream overview
06	SEQ train crew availability and productivity workshop
07	Rail traffic crew traffic optimization
B	Recovery PMO documents
08	Response & Recovery program briefing
09	Response and recovery presentation
10	General work stream overview from response and recovery PMO
11	Response and recovery change management strategy
12	Training and recruitment work stream
13	Workforce arrangement
14	Stakeholder management plan
15	Response and recovery PMO Issues
16	Response and Recovery PMO risk register
17	Near-term Operations improvement
18	Program risk and issues Management Plan
19	QR Executive Presentation Employee Survey
C	Asset management
20	Queensland Rail Asset Management Training Issued
21	Asset Management Presentation
D	Business Continuity Management plans
23	Manage RMC Train Control Centre - BCP 4th draft (2 Procedures Removed)
24	MD-12-342 Pandemic Management Plan
25	MD-14-138 ICT Service BCP
26	MD-14-209 RC1 Business Operations Centre BCP
27	MD-14-515 Crisis Management Procedure
28	MD-14-811 Payroll BCP
29	MD-15-355 Townsville Train Control BCP
30	MD-15-539 RMC BCP old
31	MD-16-236 Business Continuity Framework

Document	Document title
32	Official QR DRAFT RMC Procedure for Loss of Site Access - Activation of ...
33	Official QR DRAFT RMC Procedure for Loss of Train Control
34	Official QR DRAFT RMC Procedure for the Loss of Critical Individuals
35	Official QR DRAFT RMC Procedure for the loss of Essential or Desirable R...
36	Official QR DRAFT RMC Procedure for the loss of Remote Controlled
37	QR Data Centre Disaster Recovery Guidelines 1 9 Final
38	QR Data Centre Disaster Recovery Procedures v1 6 Final
39	Queensland Rail Guide to Dealing with Industrial Action 2016
40	Queensland Rail Industrial Action Crisis Response Protocols
E	Corporate Risk management
41	My Risk Profile (ELT) Dashboard Instruction - MD-16-520
42	Project Risk Management Standard - MD-16-87
43	Reviewing & Refreshing Functional & Safety Discipline Risk Registers - MD-
44	Risk Assessment Criteria Specification - MD-13-561
45	Risk Assessment Ready Reckoner Guideline - MD-14-674
46	Risk Assessment Tool - MD-13-562
47	Risk Assessment Tool User Instruction - MD-16-298
48	Risk Management - Plant Guideline - MD-14-95
49	Risk Management Policy - MD-11-1337
50	Risk Management Procedure - Environment - MD-11-5077
51	Risk Management Procedure - General - MD-11-1340
52	Risk Management Procedure - Project Delivery - MD-16-587
53	Risk Management Procedure - Safety - MD-11-1339
54	Risk Management Procedure - Security - MD-11-5078
55	Risk Management Standard - MD-11-1338
56	Simple Safety Risk Assessment Procedure - MD-12-89
246	Assurance Lessons Learnt: Functional risk Register review
F	NGR testing and commissioning
57	Doc26AU Testing Program Daily Progress 170519_Draft
58	NGR Train Crew Demand Assumptions 20170524
59	QNGR-ROS-06-PG-0002_QNGR C&T Program_rev AE
60	wc20170619 NGR schedule
61	Integrated NGR Critical Path v2.1 20170622
62	NGR_Change Readiness Assessment_R3-PCG
247	NGR Business Readiness Activities (29 June)

Appendices – List of Documents reviewed (2/4)

Document	Document title
G	<i>Plans for Commonwealth Games</i>
63	COMMERCIAL -IN-CONFIDENCE_QR_OPERATOR OPERATIONS PLAN V
H	<i>Process approval NGR</i>
64	MD-10-140 Standard Rollingstock Compliance Validation and Certification
65	MD-11-50 Procedure a Guide to the Preparation of a Compliance Plan
66	MD-11-52 Application for new CIDER numbers for conformance certificate
67	MD-11-53 Documents Applicable to Standard MD-10-140
68	MD-11-55 Procedure Applying for Certificates of Engineering Compliance
69	MD-11-69 Typical Certificate of Construction Conformance
70	MD-11-70 Typical Certificate of Design Conformance
71	MD-11-71 Typical Certificate of Type Testing Conformance
72	MD-11-77 Typical Compliance Plan for Certificate of Rollingstock
73	MD-11-218 Application for a Certificate of Engineering Compliance
74	MD-11-273 Application for an Interim Certificate of Engineering Compliance
75	MD-11-5144 Standard Index of Applicable Rollingstock Standards
76	MD-11-5145 Application for Certification of Containers - Removable
77	MD-14-101 Rollingstock Registration Process
I	<i>Procurement processes planning and emergency procedures</i>
78	Centre Led Procurement Procedure MD-16-467
79	Procurement Policy MD-11-7030
80	Procurement Standard MD-10-926
81	QLDProcurementPolicy
82	Transactional Purchasing Guideline MD-16-105
J	<i>Quality Management Plan</i>
83	Checklist - Type 1 and 2 Projects_MD-14-782
84	Checklist - Type 3 Projects_MD-14-786
85	Guideline - Projects Document Control_MD-14-821
86	PM Manual - Old
87	PM Manual
88	Policy - Strategic Asset Management_MD-11-7029
89	Portfolio Program Project and Benefits Management_MD-12-379
90	Project Fit_Program Brief_FINAL Signed
91	Project Management Reference Guide (PMRG) Appendix A - OnQ
92	Project Management Reference Guide (PMRG)
93	Standard - Assurance_MD-16-24
94	Template - Type 1 and 2 Projects 4in1

Document	Document title
K	<i>Rail management center (RMC)</i>
95	EL T Info Paper RMC Scan v1
96	P Final_RMC Scan - February 2017 v1
97	RMC - Loss of Train Control communications systems
L	<i>Safety at work</i>
98	MD-10-106 Operational Integrity of Trains Standard
99	MD-12-189 Queensland Network Rules and Procedures
100	MD-12-1049 Separation of People and Mobile Plant
101	MD-14-38 Rail Traffic Crew Manual
102	MD-14-514 BMN Train Unit Preparation Certificate
M	<i>Safety management system</i>
103	SEMS Documents
104	SEMS Overview
N	<i>Signalling manual</i>
105	MD-10-109 Standard - Observance of Signals Manual
O	<i>Track side maintenance</i>
106	MD-11-938 Procedure - Possession Planning Protocols
107	MD-13-545 SEQ Scheduled Corridor Access System SCAS Shutdown
P	<i>Train and track maintenance plans</i>
108	20150428_Decision Minute D15-34 Operating Assets Rollingstock
109	City Network Fleet Strategy
110	City Network Fleet Strategy_Addendum recoding value changes
111	City Network Maintenance Strategy
112	Citytrain_Fleet Plan Model_Data Input (1.0) 2017 - 23.08.2016
113	EMU & ICE Transition Strategy
114	Final Signed Version - Recommendation - CRM Workforce Planning Strategy
115	OASIS Charter - Signed Copy COO 16-0092
116	Operating Assets Fleet Action Plan and Contracts - CRU Copy
117	P OATS Group Charter Final - Signed Copy
118	PDD_Final Approved
119	Regional Rollingstock Interim Fleet Strategy
120	RE-WI-021
121	S15-34 Operating Assets Strategy Board Paper V3
248	Citytrain Rollingstock Reliability report

Appendices – List of Documents reviewed (3/4)

Document	Document title
Q	<i>Train cycle runs</i>
122	90000351.D13.EN_01.00_Test Train Running Movements_Final
123	TN16-10971
124	TrainCyclesRunRO 02 Jun
125	TrainCyclesRunRO 03 Jun
126	TrainCyclesRunRO 04 Jun
127	TrainCyclesRunRO 05 Jun
R	<i>Train driver training and education plans</i>
128	RTC Training Optimisation - Program Overview
129	RTC Training Optimisation (Progress & Plan) March 2017
S	<i>Train preparation process</i>
130	3 Month Shutdown Notification - June to August 2017 Updated 13.06.2017
131	07. Bus for Rail Process Planned Closures -v2
132	09. Bus for Rail Process Unplanned Closures effective 1 January 2016- v1
133	10. Bus for Rail template - as at 21 August 2015
134	90000351.D13.EN_01.00_Test Train Running Movements_Final
135	Airport_Bus_Route_Maps 24 06 13
136	ALTERNATE TRANSPORT INTERFACE ROSTER PKR-VYS 24th 25th June
137	Beenleigh
138	Bus for Rail template - BHI-GYN-KPR-BDT-3rd, 4th June 2017.
139	Bus Routes as at September 2014 Incl Springfield
140	Bus Stops Sept 2014
141	Caboolture maps with exclusion zones
142	Caboolture_Bus_Route_Maps 24 06 13
143	ClevelandLine_BusRoutes 05 09 12
144	COMMERCIAL-IN-CONFIDENCE_QR_OPERATOR OPERATIONS PLAN V
145	Darra_To_Springfield_Central
146	Doomben_Bus_Route_Maps 24 06 13
147	Facilitators Guide RTDs Module 2.2 (version 3.1)
148	Facilitators Guide RTDs Module 2.5 (version 4.1)
149	Ferny Grove Branch Bus Routes 05 09 12
150	Final Signed Version - Recommendation - CRM Workforce Planning Strategy
151	Information for CRU
152	Ipswich_Line_Bus_Routes 05 09 12
153	Kippa-RingLine with exclusion zones
154	MD-10-106 Standard - Operational Integrity of Trains
155	MD-12-390 Procedure - Station Customer Service Standards

Document	Document title
156	MD-12-1040 - Certificate of service
157	MD-13-232 Terminating Trains and Bus Transfers
158	MD-13-529 - Serviceability Certificate - Management Procedures
159	MD-13-652 Procedure - Travel and Tourist Unplanned Event Management
160	MD-13-658 Management of Alternate Transport
161	MD-14-38 Rail Traffic Crew Manual
162	MD-14-196 Guidelines for Unplanned Incident Flowchart
163	MD-14-514 BMN Train Unit Preparation Certificate
164	MD-14-678 Guidelines for the Review of Bus Routes and Bus Stops
165	MD-15-94 Customer Communications During a Disruption to the Network
166	MD-16-248 Road Coaches Manifest
167	RTDs Module 2.2 Train Serviceability - Start-up MPU (version 3.1)
168	RTDs Module 2.3 Train Serviceability - Preparation (version 7.1)
169	RTDs Module 2.5 Train Serviceability - Test Train Braking System (version
170	TN16-10971
171	TrainCyclesRunRO 02 Jun
172	TrainCyclesRunRO 03 Jun
173	TrainCyclesRunRO 04 Jun
174	TrainCyclesRunRO 05 Jun
175	Varsity Lakes 9(Mar 13)
176	WP4101-03-R0 - Manage Unit Allocations
T	<i>Major projects timeline</i>
177	CRU Major Projects Summary
U	<i>KPI operations</i>
178	20161128_Attachment2A - AtwoB ELT Key Initiatives for Board
179	FY 2016-17 Performance Payment KPIs - Commercial & Strategy 2016-11-16
180	FY 2016-17 Performance Payment KPIs - Human Resources 2016-11-16
181	FY 2016-17 Performance Payment KPIs - Legal & Governance 2016-11-16
182	FY 2016-17 Performance Payment KPIs - Operations 2016-11-16
183	FY 2016-17 Performance Payment KPIs - Projects 2016-11-16
184	FY 2016-17 Performance Payment KPIs - Queensland Rail 2016-11-16
185	Performance Payment KPIs_COO_2016-17.
186	Performance Payment KPIs_EGM Commercial Strategy_2016-17.
187	Performance Payment KPIs_EGM HR_2016-17.
188	Performance Payment KPIs_EGM Legal_2016-17.
189	Performance Payment KPIs_EGM Network_2016-17.
190	Performance Payment KPIs_EGM Projects_2016-17.

Appendices – List of Documents reviewed (4/4)

Document	Document title
V	<i>10 year capital plan</i>
191	2017-18 Draft Capital Plan TMR Submission
W	<i>Approach for RAMS Standard EN50126</i>
192	Explanation RAMS
193	P.05.1300.03
194	P.05.4120.01
195	P.05.4210.02 RE Design Control
196	QR SiD Gap Analysis by E.S.M.
197	QR SiD Volume 2 Appendices
198	RE-D-099
199	RE-D-196
200	RE-I-007
201	RE-I-154
202	RE-MR-449
203	RE-MR-474
204	RE-R-201622
205	RE-R-201628
206	RE-R-201629
207	RE-WI-021
208	W.05.1300.11
X	<i>Audit undertaken of TSD</i>
209	7.1 IAP 17-18 TSD MAS
210	7.2 Position Description
211	7.3 RACI draft
212	7.4 ATWOB - TSD
213	7.5 A Change Consultation Brief - CM1
214	7.6 Levels of Work Guide - 2016 v1.4
215	Leadership Capabilities - Skilled Unskilled Descriptors November 2015
216	Levels of Work Guide - 2016 v1.4
217	TSD Report including findings54
Y	<i>Contingent Workforce Management</i>
218	Contingent Workforce Management Program Business Case V1.0
219	Contingent workforce management review_current state report
220	Contingent workforce management review_Draft future state report
221	Contingent workforce management review_Implementation Program_v0.2

Document	Document title
Z	<i>Operational readiness</i>
222	Integrated Project Delivery Timeline v3.1 20170605 (4)
223	L2P and MBRL Operations Plan
ZA	<i>Rail operating System papers</i>
225	Integrated Rail Operations Strategic Assessment May 2017 (For Review)
226	Integrated Rail Ops Simple Diagram v1.0 (For Review)
ZB	<i>Data from Internet</i>
227	04 12 isolation of train protection systems
228	Direct Traffic Control - An Overview
229	DirectTrafficControl
230	New Generation Rollingstock (Department of Transport and Main Roads)
231	NGR train images and videos (Department of Transport and Main Roads)
232	Queensland Rail RIW - Signaling and Operational systems competency v3.0
233	UTC System
234	Wulkuraka Maintenance Centre (Department of Transport and Main Roads)
ZC	<i>Other files</i>
235	20170420 CRU Operating Model - FINAL
236	Final Signed Version - Recommendation - CRM Workforce Planning Strategy
237	FutureState_Planning
238	Org Chart to GLT as of 03.05.17
239	RTC Training Optimisation (Progress Plan) March 2017
240	TSD RTC Training Process Optimisation Report_updated
241	Updated Gov Structure
242	Commission of Inquiry Report on Train Crewing Practices (Strachan Report)
243	Fixing the Trains - High Level implementation plan
244	QR FY2015-16 Annual and Financial report
245	2015 to 19 QR Strategic Plan
249	City network OTR - Statistical report May 2017
250	OTR % March 2013 to June 2017
251	Customer satisfaction survey