



AUSTRALIAN RAIL TRACK CORPORATION LTD

7 February 2012

Australian Rail Track Corporation Limited ("ARTC") – Interstate Access Undertaking (2008 IAU), effective 1 August 2008 - Independent Internal Audit of Performance Indicators

REVIEW FINDINGS

In accordance with the 2008 IAU approved by the ACCC, ARTC is required to incorporate into its annual internal audit process a review of performance indicator reporting (Clause 8.2(b) refers). The internal audit is to be conducted by ARTC's internal auditor, an entity independent of ARTC. The auditor is to prepare a written report on the process and the reporting of the performance indicators together with a finding on the measurement of the performance indicators. ARTC is to publish the findings on its website and make the report available to the ACCC upon request, and last year published the findings of the internal audit in relation to performance indicator reporting between 1 October 2008 and 30 September 2009.

ARTC instructed its internal auditors, Ernst & Young (E&Y), to conduct an independent review based on agreed procedures of performance indicator reporting occurring within the 12 month period of reporting between 1 October 2009 and 30 September 2010. The findings of the agreed procedures are shown at Attachment 1. ARTC has also included a broad description of the process used by ARTC for KPI reporting at Attachment 2.

It should be noted that as a result of this audit for the previous year (2008/09), some reporting procedural changes have been implemented. One of these changes is that ARTC commenced the creation of 'snapshots' of data used to create the quarterly ACCC KPI reports, the first one of these being created for the December 2009 quarter. These snapshots are required because whilst the KPI data is current at the time of reporting, ARTC's RAMS operational reporting system is a dynamic reporting tool and rightly permits post-adjustments to be made by appropriate staff to correct initial data errors as part of ARTC's ongoing data quality review. Variations may also arise as a result of some trains not having finished their journey at the time of KPI reporting.

Due to the procedural changes, ARTC has ceased to create some of the spreadsheets that were referred to in the Agreed Upon Procedures, which were not updated to reflect this change. Accordingly, the E&Y report has detailed where there are deviations from the specified procedure due to a change in the name of a report or report format.

The E&Y audit tested ARTC public reporting in relation to 436 data points in the audit period. ARTC's response with regard to specific exceptions noted by the auditors is as follows.



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- **Exception 1** (Section 2.1.1, Attachment 1) – The auditors noted some discrepancies between the ACCC Report and the ACCC Report Trend spreadsheets for the December 2009 and September 2010 quarters, and the ‘Sum of minutes delay unable to be attributed to a cause or beyond either party’s control – Total minutes per hour of transit” was not included in the ACCC Report Trend spreadsheet for the Sydney – Brisbane corridor in the September 2010 quarter.

This exception is not an issue. In December 2009, the ACCC Data Repository was created with the purpose of taking ‘snapshots’ of the KPI data at the point in time where the *ACCC Report [Qtr][Year].xls* were published. This was foreshadowed in the previous report. From this time, the *ACCC Report Trend [Qtr][Year].xls* spreadsheet became unnecessary and was no longer distributed due to it being fed from the dynamic ARTC RAMS data that is subject to post-reporting additions and edits.

Future Agreed Upon Procedures will take the redundancy of the *ACCC Report Trend [Qtr][Year].xls* spreadsheets into account, and the quarterly snapshots will ensure consistency between reporting and audit data.

- **Exception 2** (Section 2.1.3, Attachment 1) – The auditors found some discrepancies between the *ACCC Report [Qtr][Year].xls* and the *KPI Performance_BO_Ops.xls* spreadsheets for the December 2009 and March 2010 quarters.

It has been assumed that there is a direct association between the ACCC Report and the Business Object Report, however this is not the case, as the ACCC Report is created based on the ACCC Repository and the *KPI Performance_BO_Ops.xls* is generated directly from the dynamic RAMS database, so the two cannot be effectively compared.

Also, it is worth noting that the variances in question are minor and considered immaterial.

- **Exception 3** (Section 2.1.6, Attachment 1) – The auditors found a discrepancy between the *ACCC Report March 2010.xls* and the *KPI Performance_BO_Ops.xls* for the sum of minutes delay and % delay for the March 2010 quarter for the Melbourne – Brisbane corridor.

As for Exception 2 above, it has been assumed that there is a direct association between the ACCC Report and the Business Object Report, however this is not the case, as the ACCC Report is created based on the ACCC Repository and the *KPI Performance_BO_Ops.xls* is generated directly from the dynamic RAMS database, so the two cannot be effectively compared.

Also, it should be noted that the variances identified are minor and considered immaterial.



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- **Exception 4** (Section 2.1.9, Attachment 1) – The auditors found some discrepancies between the spreadsheets relating to the Transit Time performance indicators for the December 2009 and March 2010 quarters.

These discrepancies have occurred due to the ACCC Report relying on input from three sources for these performance indicators. All three of these sources were feeding the ACCC Data Repository by virtue of a 'link' to a series of spreadsheets. The differences have occurred because the relevant spreadsheet cells were being over-written and the old versions not preserved.

This exception will not occur in future as these files will now be stored in a purpose-built directory in a read only format, preventing the files from being over-written and the contents of the cells from being modified.

- **Exception 5** (Section 2.3.1 and 2.3.2 Attachment 1) – The auditors noted that they did not follow the specific agreed procedure. It was found that the Detailed KPI report prescribed in the agreed procedure no longer existed as it was not required due to changes made since the completion of the previous audit.
- **Exception 6** (Section 2.3.3, Attachment 1) – The auditors found some discrepancies between the relevant spreadsheets relating to number of services, number of healthy services and number of unhealthy services for the June 2010 quarter.

As for Exceptions 2 and 3, it was assumed in the business processes applied that there was a direct association between the ACCC Report and the Business Object Report, which is not the case, and once again the variances identified are minor and considered immaterial.

ARTC has taken steps to ensure that all associated files are captured in situ and preserved in a protected directory. Each individual reporting quarter will have its own appropriately named directory and all associated files will be copied and verified at the end of the reporting period.

- **Exception 7** (Section 2.4.1, Attachment 1) – The auditors note that the procedures do not include guidelines on creating a number of relevant spreadsheets.
 - Guidelines for the creation of the *ACCC Report Trend [Year].xls* will be developed and added to the existing set of written procedures;
 - *KPI Performance_BO_Ops[quarter].xls* is a Business Objects report is based upon raw RAMS data and is not relevant to ACCC reporting;
 - Guidelines for the creation of *KPI_Net_Time_Trend.xls* will be developed and added to the existing set of written procedures;
 - Guidelines for the creation of *KPI_NetAv_Speed_trend.xls* will be developed and added to the existing set of written procedures.

ATTACHMENT 1 – REVIEW FINDINGS

(Extract from Ernst & Young report)

1.1 KPI procedures

Procedure specified by ARTC		Results of testing
All KPI's		
2.1.1	Trace and agree the number or percentage recorded per corridor for each of the 18 KPI's contained within the "ACCC Report Trend 0910.xls" spreadsheet to the number or percentage recorded per corridor in the "ACCC Report [month] Quarter2010.xls" spreadsheet. Perform this step for the December 2009 quarter and the March, June and September 2010 quarters.	<p>The following exceptions were noted:</p> <ul style="list-style-type: none"> ▶ The percentage of services which exit the network no later than schedule was reported as 44.9% in the "ACCC Report Dec 2009.xls" spreadsheet but reported as 46.1% in the "ACCC Report Trend 0910.xls" spreadsheet for the Melbourne-Brisbane corridor in the December 2009 quarter. ▶ The percentage of services which exit the network no later than schedule was reported as 91.4% in the "ACCC Report Sep 2010.xls" spreadsheet but reported as 93.6% in the "ACCC Report Trend 1011.xls" spreadsheet for the Sydney-Brisbane corridor in the September 2010 quarter. ▶ The "Sum of minutes delay unable to be attributed to a cause or beyond either party's control - Total Minutes per hour of transit" was not included in the "ACCC Report Trend 1011.xls" spreadsheet for the Sydney-Brisbane corridor in the September 2010 quarter. The data was reported as 1.3 in the "ACCC Report Sep 2010.xls" spreadsheet.
2.1.2	Trace and agree the number or percentage recorded within each of the 27 performance indicator graphs from the 27 graphs contained in the "ACCC Report [month] Quarter 2010.xls" spreadsheet to the 27 performance indicator graphs published on ARTC's website. Perform this step for the December 2009 quarter and the March, June and September 2010 quarters.	No exceptions noted.

¹ The '[month]' bracket is used to represent the December 2009 quarter or the March, June and September 2010 quarters, as each report is titled with the relevant reporting quarter.

Procedure specified by ARTC

Results of testing

KPIs 1 – 10: Reliability and transit time KPIs (excluding KPI 6, 7 and 10)

2.1.3 Agree the totals for each rail corridor in the "ACCC Report [month] Quarter 2010.xls" spreadsheet to the 'Qtr total' in the "KPI_Performance_Modified_Ops_report.xls" spreadsheet for the December 2009 quarter and the March, June and September 2010 quarters.

The following exceptions were noted:

- ▶ The *number of services which exit on time* (KPI 4) in the "ACCC Report Dec 2009.xls" spreadsheet does not agree to the "KPI_Performance_BO_Ops.xls" spreadsheet in the December 2009 quarter for all corridors. Please refer to the table below for details:

Corridor	ACCC Report	KPI Performance BO Ops.xls
East – West	985	978
Melb – Syd	224	220
Syd – Brisb	549	544
Melb - Brisb	204	199

- ▶ The *sum of minutes delay - slow run* (KPI 9) was reported as 25,737 in the "ACCC Report Dec 2009.xls" spreadsheet but reported as 25,730 in the "KPI_Performance_BO_Ops.xls" spreadsheet in the December 2009 quarter for the East-West corridor.
- ▶ The *sum of minutes delay and % delay - Operator Performance* (KPI9) were reported as 2,260 and 2.6% respectively in the "ACCC Report March 2010.xls" spreadsheet but reported as 2,212 and 2.5% respectively in the "KPI_Performance_BO_Ops.xls" spreadsheet in the March 2010 quarter for the Melbourne-Brisbane corridor.

KPI 6: Reliability KPI

2.1.4 Agree the totals for each rail corridor contained in the "ACCC Report [month] Quarter 2010.xls" spreadsheet to the 'less than 1 hour' total in the following spreadsheets for the December 2009 quarter and the March, June and September 2010 quarters:

No exceptions noted.

- ▶ "ACCC_KPIs_East_West.xls"
- ▶ "ACCC_KPIs_Melbourne_Brisbane.xls"
- ▶ "ACCC_KPIs_Melbourne_Sydney.xls"
- ▶ "ACCC_KPIs_Syd-Bris.xls"

Procedure specified by ARTC		Results of testing
KPI 7: Transit time KPI		
2.1.5	<p>Agree the totals for each rail corridor contained in the “ACCC Report [month] Quarter 2010.xls” spreadsheet to the ‘transit within tolerance’ total in the following spreadsheets for the December 2009 quarter and the March, June and September 2010 quarters:</p> <ul style="list-style-type: none"> ▶ “ACCC_KPIs_East_West.xls” ▶ “ACCC_KPIs_Melbourne_Brisbane.xls” ▶ “ACCC_KPIs_Melbourne_Sydney.xls” ▶ “ACCC_KPIs_Syd-Bris.xls” 	No exceptions noted.
KPI 10: Transit time KPI		
2.1.6	<p>For the ‘sum of minutes delay’ part of the KPI, agree the totals contained in the “ACCC Report [month] Quarter 2010.xls” spreadsheet to the “KPI_Performance_Modified_Ops_report.xls” spreadsheet for the December 2009 quarter and the March, June and September 2010 quarters.</p> <p>For the ‘total transit time’ part of the KPI, agree the totals contained in the “ACCC Report [month] Quarter 2010.xls” spreadsheet to the ‘total transit hours’ recorded in the following spreadsheets for the December 2009 quarter and the March, June and September 2010 quarters:</p> <ul style="list-style-type: none"> ▶ “ACCC_KPIs_East_West.xls” ▶ “ACCC_KPIs_Melbourne_Brisbane.xls” ▶ “ACCC_KPIs_Melbourne_Sydney.xls” ▶ “ACCC_KPIs_Syd-Bris.xls” <p>Recalculate the ‘total minutes per hour of transit’ by dividing the ‘sum of minutes delay’ by the ‘total transit time’.</p> <p>KPI 10 is displayed separately to KPI 8 and 9 due to additional “total transit time” data that is included in the ACCC report for each quarter.</p>	<p>The following exception was noted:</p> <ul style="list-style-type: none"> ▶ The <i>sum of minutes delay</i> and <i>% delay</i> (KPI 10) were reported as 31,525 and 36.2% respectively in the “ACCC Report March 2010.xls” spreadsheet but reported as 31,573 and 36.3% respectively in the “KPI_Performance_BO_Ops.xls” spreadsheet in the March 2010 quarter for the Melbourne-Brisbane corridor.
KPI 11: Temporary speed restriction KPI		
2.1.7	<p>Agree the totals contained in the “ACCC Report [month] Quarter 2010.xls” spreadsheet to the ‘total minutes lost’ column in the “TimeLoss [month] 10.xls” spreadsheet for the December 2009 quarter and the March, June and September 2010 quarters.</p>	No exceptions noted.
KPI 12: Track condition KPI		
2.1.8	<p>Agree the totals contained in the “ACCC Report [month] Quarter 2010.xls” spreadsheet to the “ACCC TQI Reporting 2009-2010 to [month]10.xls” spreadsheet for the December 2009 quarter and the March, June and September 2010 quarters.</p>	No exceptions noted.

Procedure specified by ARTC		Results of testing
KPIs 13-14: Network availability KPIs		
2.1.9	<p>Agree the totals contained in the "ACCC Report [month] Quarter 2010.xls" spreadsheet to the 'Summary' tab in the "ACCC Dynamis Report [month] 10.xls"¹ for the December 2009 quarter and the March, June and September 2010 quarters.</p>	<p>The following exceptions were noted:</p> <ul style="list-style-type: none"> ▶ The Transit Time – Infrastructure Configuration Capability (Time) in "ACCC Report [month] Quarter [year].xls" spreadsheet does not agree with the "KPI_NetAv_Time_Trend.xls" spreadsheet for all corridors in the December 2009 and March 2010 quarters. ▶ The Transit Time – Infrastructure Configuration Capability (Avg Speed) in "ACCC Report [month] Quarter [year].xls" spreadsheet does not agree with the "KPI_NetAv_Speed_Trend.xls" spreadsheet for all corridors in the December 2009 and March 2010 quarters. ▶ The Transit Time – Infrastructure Practical Capability (Time) in "ACCC Report [month] Quarter [year].xls" spreadsheet does not agree with the "KPI_NetAv_Time_Trend.xls" spreadsheet for all corridors in the December 2009 and March 2010 quarters. ▶ The <i>Transit Time – Infrastructure Practical Capability (Avg Speed)</i> in "ACCC Report [month] Quarter [year].xls" spreadsheet does not agree with the "KPI_NetAv_Speed_Trend.xls" spreadsheet for all corridors in the December 2009 and March 2010 quarters. <p>Details of exceptions noted have been forwarded separately to management.</p>
KPI 15: Network availability KPI		
2.1.10	<p>Agree the totals contained in the "ACCC Report [month] Quarter 2010.xls" spreadsheet to the 'Main' tab in the "Availability to Market [month] 2010 qtr.xls"¹ spreadsheet for the December 2009 quarter and the March, June and September 2010 quarters.</p>	<p>No exceptions noted.</p>
KPIs 16 – 18: Unit Cost KPIs		
2.1.11	<p>Agree each component of the calculation in the "Unit Cost Calculation 2010.xls" spreadsheet to the General Ledger system. Confirm that allocations have been carried out on a consistent basis (refer to Hunter Valley allocation method).</p> <p>Agree the GTK (Gross Tone per 1,000 Kilometres) in the "Unit Cost Calculation 2010.xls" spreadsheet to RAMS.</p> <p>Agree the Track Km (a set number of track kilometres) in the "Unit Cost Calculation 2010.xls" spreadsheet to RAMS.</p>	<p>We note that the processes adopted by ARTC to record the ACCC Unit Cost KPI's are consistent with the same KPI data reported to the IPART.</p> <p>No exceptions noted.</p>

1.2 IT Access control procedures

Procedure specified by ARTC		Results of testing
IT Access controls		
2.2.1	<p>Examine who has access to make changes to the following spreadsheets for the December 2009 quarter and the March, June and September 2010 quarters:</p> <ul style="list-style-type: none"> ▶ "ACCC Report Trend 0910.xls" ▶ "ACCC Report [month] Quarter 2010.xls" ▶ "KPI_Performance_Modified_Ops_report.xls" ▶ "ACCC_KPIs_East_West.xls" ▶ "ACCC_KPIs_Melbourne_Brisbane.xls" ▶ "ACCC_KPIs_Melbourne_Sydney.xls" ▶ "ACCC_KPIs_Syd-Bris.xls" ▶ "TimeLoss [month] 10.xls" ▶ "ACCC TQI Reporting 2009-2010 to [month] 10.xls" ▶ "ACCC Dynamis Report [month] 10.xls" ▶ "Availability to Market [month] 2010 qtr.xls" ▶ "Unit Cost Calculation 2010.xls" 	No exceptions noted.

1.3 Detail testing procedures

Procedure specified by ARTC		Results of testing
Detail testing		
2.3.1	<p>From the live train inclusions table, record the train identification number for:</p> <ul style="list-style-type: none"> ▶ 1 train from the East – West corridor ▶ 1 train from the Melbourne - Sydney corridor ▶ 1 train from the Sydney – Brisbane corridor ▶ 1 train from the Melbourne – Brisbane corridor <p>This will be performed for the December 2009 quarter and each of the March, June and September 2010 quarters, resulting in a total of 16 trains tested.</p>	<p>No exceptions noted. Note: our specific procedure was not followed as the Detailed KPI report was not available for testing.</p>
2.3.2	<p>Using the train identification number, we will trace each of the trains selected back to either the NRAMS or ARAMS system (this will be dependent on the train path) and select a date that each train operated within the December 2009 quarter and the March, June and September 2010 quarters.</p> <p>We will check that each train selected is included in the “<i>Detailed KPI report</i>” for each quarter created by the Network Performance Analyst, by using the train identification number and date run to individually identify each train. This report is a detailed version of the “<i>KPI Modified Ops</i>” report which is used to generate the final ACCC Report.</p>	

Procedure specified by ARTC

Results of testing

2.3.3

To check completeness and accuracy of the "Detailed KPI report":

- ▶ Check whether the changes to the query used to generate the "Detailed KPI report" are only to provide additional detail within the report.
- ▶ Sum the following fields within the "Detailed KPI Report" and compare each total to the corresponding total in the "KPI Modified Ops report" for each corridor in the December 2009 quarter and the March, June and September 2010 quarters:
Services:
 - ▶ Number of services
 - ▶ Number of healthy services
 - ▶ Number of force majeure services
 - ▶ Number of unhealthy services
 Delays:
 - ▶ Late entry
 - ▶ ARTC track fault
 - ▶ Third part delay
 - ▶ Force majeure

- ▶ Testing of these items could not be performed.
- ▶ Exceptions were noted in the following:
 - ▶ The number of services, number of healthy services and number of unhealthy services in the "Operations Reporting_v3.xls" spreadsheet did not agree with "KPI Performance_BO_Ops [quarter].xls" spreadsheet for the East-West corridor in the June 2010 quarter. Please refer to the table below for details:

Corridor	Operations Reporting	KPI Performance BO Ops
No. of Services	1551	1555
No. of healthy services	1100	1102
No. of unhealthy services	437	439

- ▶ Late entry, ARTC track fault and third party delays in the "Operations Reporting_v3.xls" spreadsheet did not agree with "KPI Performance_BO_Ops [quarter].xls" spreadsheet for all corridors in all quarters. Details of exceptions noted have been forwarded separately to management.
- ▶ Force majeure could not be agreed as the data was not available.

1.4 Confirmation of a KPI policy

Procedure specified by ARTC		Results of testing
Confirmation of a KPI policy		
2.4.1	Confirm whether a policy or procedure for the process of reporting the 18 KPI's has been developed by ARTC.	<p>The following exceptions were noted:</p> <ul style="list-style-type: none">▶ The procedures do not include guidelines on creating the following spreadsheets:<ul style="list-style-type: none">▶ "ACCC Report Trend 0910.xls"▶ "KPI Performance_BO_Ops [quarter].xls"▶ "KPI_NetAv_Time_trend.xls"▶ "KPI_NetAv_Speed_trend.xls"



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ATTACHMENT 2 – OVERVIEW OF THE ARTC PROCESS TO COMPILE PERFORMANCE INDICATORS

(Extract from ARTC's "Network Capability and Performance Reporting Procedures")

DATA EXTRACTION

The Data Extraction process is the first phase of the report preparation process. In this process data is prepared by analysts from different departments and then submitted to the Network Performance. The preparation of this report is estimated to take a maximum of 15 days. The report preparation timeline commences with the sending of an email to contributing parties and concludes with publishing of the report to ARTC's Website.

Reliability and Transit Time measures

The data which supports the Reliability and Transit Time measures is extracted from National RAMS and TRIMS databases into the 'KPI Data Warehouse'. Once the data is loaded into the KPI Data Warehouse the Reliability and Transit Time reports are run and a copy of the original files is saved to the Network Capability and Performance Reporting working directory.

Temporary Speed Restriction measure

The 'Train Speed Restriction' measure is comprised of data extracted from RailCorp's RICSPEED database (for the NSW TSR data) and ARTC's National RAMS database (for SAWA VIC TSR data). Once this data is extracted it is then processed by the Performance Engineer to produce the TSR measure. The time loss reported reflects the Train Speed Restrictions as at 1pm on the last business day of the month.

Track Condition measures

The track condition measure is based on data recorded from the Track Recording Car. The Track Recording Car gathers information about track condition across ARTC's rail network. This information is loaded into a database for calculation of the Track Quality Index.



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Network Availability measures

- Infrastructure Configuration and Practical Capability

In order to generate the 'Infrastructure Configuration Capability' and the 'Infrastructure Practical Capability' measures data is extracted from the following sources:

- GPS Survey reports (internal and external)
- Internal TOC & TOA2 manuals
- Temporary Speed Restriction reports
- Tractive effort and other locomotive specifications from the manufacturer's locomotive manuals
- Internal curve and gradient reports

- Availability to Market

The 'Availability to Market' measure is based on the Master Train Plan and operator requested dwell data. Train schedule data is extracted from the National RAMS databases via a number of queries. Operator dwell data is extracted from operator dwell reports.

The train schedule and the operator dwell data are combined in a spreadsheet in preparation for data transformation by the Network Performance Analyst.

DATA TRANSFORMATION

The second phase of the report preparation process is the Data Transformation process. In this phase all of the report measures are calculated. Once these measures have been calculated they are then verified in the next phase of report preparation process.

Reliability and Transit Time measures

Calculations are performed on the data that is extracted from National RAMS and TRIMS prior to inserting this data into the KPI Data Warehouse. These calculations calculate the following: healthy/unhealthy services; services that transit within



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tolerance; on time entry and exit of services; and ARTC/Operator delays by Delay Category.

The resulting data produced by these calculations is inserted into the KPI Data Warehouse. Once the data is inserted into the KPI Data Warehouse Repository the Reliability and Transit Time reports are run and then saved to Network Capability and Performance Reporting working directory.

Temporary Speed Restriction measures

Once the data is collected from the various sources it is processed through a number of databases in order to calculate time loss and track length under restriction on ARTC's network.

Track Condition measure

The track condition measure 'Track Quality Index' is calculated based on data which is recorded by the Track Recording Car. Data from the Track Recording Car is imported into a database before processing.

Network Availability measures

- Infrastructure Configuration and Practical Capability

In order to calculate these measures data is collected from a number of sources and imported into the Dynamis system via a CSV file. The imported data includes: train schedule data; GPS survey data; curve and gradient data; tractive effort data; information from the TOC and TA02 manuals; and locomotive data from the manufacturer.

Once the data is loaded into the Dynamis system the Network Modeller then runs the Dynamis train simulations in order to generate the transit time measures. The Dynamis system simulates the running of a specified train given a specified train environment and track conditions.

- Availability to Market

Once the train schedule and operator delay data is extracted into the Availability to Market spreadsheet it is then processed. Operator delays and



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dwell time is extracted from the train running times. This is necessary in order to calculate the average transit time offered to market for the reporting corridors.

DATA VERIFICATION

Reliability and Transit Time measures

The Network Performance Analyst and the Operations Business Analyst check the Reliability and Transit Time data for consistency by comparing the data to previous quarters. Additionally, the recipients of these reports send feedback in relation to their reliability and accuracy. This feedback is considered and forms part of the quality assurance process in the creation of these measures.

Temporary Speed Restriction Measures

The Temporary Speed Restriction report is reviewed by the Network Performance Manager. This report is checked against past reports for consistency and accuracy as part of the review process. Once the report is reviewed it is then forwarded to the Business Performance Committee.

Track Condition measures

The Track Condition report is reviewed by the Network Performance Manager. As part of the review process this report is checked against past reports for consistency and accuracy. Once the report is reviewed it is then forwarded to the 'Operational Performance and Asset Condition Committee'.

Network Availability measures

Infrastructure Configuration and Practical Capability

In relation to data verification, the North South data for these measures has been verified as part of the 'Sectional Run Time's' review. However, the East West data for these measures has not been formally verified. It is expected that the verification of this data will take place in the near future.

The Network Modeller and the Operations Planning manager check the result of the Dynamis report against previous months' reports to ensure that the report



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data is consistent. In addition, the Network Modeller compares the Dynamis report data to the specifications outlined in the TOC and TA02 manuals. This ensures that the resulting Dynamis report data is within the scope of realistic train run times.

Availability to Market

The Availability to Market report is compared to previous months' reports for consistency. The Train Planner and Network Performance analyst check the report for irregularities. If there are any irregularities found in the report they are investigated and fixed.

The train schedule query limits the schedule data to active trains. This ensures that only active train schedules are used in the Availability to Market report. The final Availability to Market report is checked by the train planning team to ensure its reliability.