Network Rail and Office of Rail Regulation

Part A Independent Reporter

Mandate AO/031: Review of 2012 Annual Return

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1 Introduction

Network Rail is required to produce the Annual Return document at the end of each financial year under the terms of Condition 12 of the Network Licence. The Annual Return reports Network Rail's performance against a range of regulatory parameters, which relate to the outputs for Control Period 4 (2009-14) specified in the ORR Periodic Review 2008.

ORR and Network Rail have asked the Part A Independent Reporter to review the quantitative outputs and process used by Network Rail to compile the 2012 Annual Return, including reference to previous processes. It was also expected that the review should include a summary of confidence gradings for all Annual Return measures (where reviewed by the Part A Reporter in 2011-2012). The mandate also suggested that recommendations should be made that support the continuous improvement of processes and the accuracy / reliability of measures. The ORR's mandate for this review is attached in **Appendix A**. This report presents the findings of the review.

1.1 Acknowledgements

We are grateful to the various Data Champions in Network Rail, who made time to speak to us and send data at fairly short notice, especially during this holiday period.

1.2 Overview

We observed a significant improvement in the process and accuracy of the data presented, as compared to last year's Annual Return. Our review found that data for a majority of the measures was recorded accurately in the Annual Return this year. There is clear evidence of the processes being improved to take account of last year's recommendations.

1.3 Structure of Report

Following this Introduction, the remaining structure of this report is as below:

- Section 2 reports on progress made on last year's recommendations for the Annual Return. It also describes the method for this year's review;
- Section 3 presents our findings for chapters 1 to 5 of the 2012 Annual Return;
- Section 4 reviews the chapter on the Enhancement Programme;
- Section 5 reviews the Confidence Grades that have been reported;
- Section 6 presents our findings and comments from the proof reading of the final draft of Annual Return 2012;
- Section 7 summarises our conclusions; and
- Section 8 presents our recommendations.

2 Annual Return Review Process

2.1 Review of Last Year's Recommendations

No.	*Recommendation to Network Rail*	*Data Champion Responsible*	*Due Date*	*July 2012 Progress*
2011.AR.1	Proof read final version of Annual Return prior to publication.	Arup	July 2012	Arup have reviewed the final draft which picked up a number of typographical and grammatical errors and also identified some missing data. **Status:** Closed
2011.AR.2	Data Champions to file their source datasets along with their tables and text for the Annual Return. A note explaining how the data was used to produce the report should also be filed in the same place. This should provide greater assurance on the accuracy of reporting.	Strategic Planner (NR)	June 2012	A significant improvement (with a couple of exceptions) was observed in the quality and accuracy of the data provided by Network Rail for the purposes of our audit. The data champions had generally filed their source datasets used to produce the Annual Return, which they were then able to send to us immediately upon request. **Status:** Closed and replaced with a new recommendation
2011.AR.3	To investigate opportunities for further automation of the process for compiling the Annual Return in order to avoid as much as possible having to manually copy figures in tables. This should help to minimise typographical errors.	Strategic Planner (NR)	April 2012	Network Rail has used the newly implemented CCMS2 system, which is a central document management system accessible by all the data champions, in order to update their section in the Annual Return. However, NR has advised that there were technical issues with the version control in CCMS2 and hence they had to revert to using emails to collate data and text for the Annual return. **Status:** Closed and replaced with a new recommendation

No.	*Recommendation to Network Rail*	*Data Champion Responsible*	*Due Date*	*July 2012 Progress*
2011.AR.4	Consider with Data Champions the practicalities of introducing any route-based disaggregation of results, where disaggregated data is available.	ORR & Strategic Planner (NR)	Dec 2011	NR has agreed with ORR that the disaggregated data is supplied to ORR and published in the ORR website portal (National Rail Trends portal). **Status:** Closed
2011.AR.5	Remove the 'dampening' factor in calculating the SICA score to be reported (Signalling Asset Condition M10).	ORR & Senior Business Planning Specialist [S&T]	Dec 2011	NR and ORR have agreed to make the changes at the start of CP5. **Status:** Closed
2011.AR.6	In future Annual Returns, quote all the Confidence Grades awarded by Arup and Halcrow, whichever is the most recent.	Strategic Planner (NR)	June 2012	Not all of the grades awarded by the Independent Reporters have been reported in the Annual Return. **Status:** Closed and replaced with a new recommendation

2.2 Method for Reviewing 2011/12 Annual Return

An initial meeting was held with the Network Rail's Data Champion for the Annual Return on the 3rd July to discuss and agree the following:

- Scope of each area to review (noting any changes to last year);
- Additional reviews for renewal volumes following recent audit (Electrical Power and Telecoms);
- Progress made on last year's recommendations; and
- To obtain the contact details for data champions.

The Data Champions for each of the sections were then contacted to obtain the text, tables and any supporting data for their sections, so that we could verify the quantitative outputs and text presented in the Annual Return.

If the main Data Champion was on leave, we contacted alternative people in Network Rail, as suggested by the Data Champions, for them to send us copies of relevant data for checking.

3 Review of 2011/12 Annual Return

A summary of our findings by individual section of the Annual Return is shown in the table below. For the sections marked as 'Consistent', the figures and text reported in the Annual return matched the underlying data provided to us. For the sections where we identified discrepancies with the data provided to us, or other issues, a brief description follows the table.

Report Sections	Data Consistent with Annual Return 2012?	Observations/Comments
Section 1 – Operational performance and stakeholder relationships		
Public Performance Measure (PPM)	Consistent	-
Delay minutes	Consistent	-
Delays to passenger train services	Consistent	-
Delays to freight train services	Consistent	-
Delay category	Consistent	-
Infrastructure incidents causing delay	Consistent	-
Cancellations & Significant Lateness (CaSL)	Consistent	-
Customer satisfaction	Consistent	-
Passenger satisfaction	Consistent	-
Section 2 – Network capability and network availability		
Linespeed capability (C1)	Consistent	-
Gauge capability (C2)	Consistent	Table 2.7 - Some of the data for Scotland was manually rounded for the purposes of presentation
Route availability value (C3)	Consistent	Tables 2.8 and 2.10 - Some of the data was manually rounded for the purposes of presentation
Electrified track capability (C4)	Consistent	-
Network change	Consistent	-
Discrepancies between actual and published capability	Consistent	-
Ongoing short-term network change proposals	Consistent	-
Platform lengths	Consistent	-
Network availability	Consistent	-
Section 3 – Asset management		
Excellence in asset management	Consistent	Figure 3.1 was included following Arup's initial review
Broken rails (M1)	Consistent	
Rail defects (M2)	Minor Discrepancy	Table 3.6 unit missing (Yards)
Track Geometry – Good Track Geometry (M3)	Consistent	Minor typographical and grammatical errors in text
Track geometry quality – Poor Track Geometry (M3)	Consistent	Minor typographical and grammatical errors in text

Report Sections	Data Consistent with Annual Return 2012?	Observations/Comments
Track geometry faults (M5)	Consistent	-
Track buckles	Consistent	-
Track failures	Consistent	-
Condition of asset temporary speed restriction sites (M4)	Consistent	-
Earthwork failures (M6)	Consistent	-
Earthwork condition (M33)	Consistent	-
Tunnel condition	Consistent	TCMI score for Scotland was manually rounded down for the purposes of presentation
Bridge condition (M8)	Discrepancy	Incorrect data published in Table 3.24 of the Annual Return
Signalling failures (M9)	Consistent	-
Signalling asset condition (M10)	Consistent	-
Points failures	Consistent	-
Train detection failures	Consistent	-
Telecoms condition	Consistent	-
Telecoms failures	Consistent	-
Alternating current traction power incidents causing train delays (M11)	Consistent	-
Direct current traction power incidents causing train delays (M12)	Consistent	-
Electrification condition – AC traction feeder stations and track sectioning points (M13)	Discrepancy	Table 3.39 - Average condition grade (2.66) for E&W is missing in the table
Electrification condition – DC traction substations (M14)	Consistent	-
Electrification condition – AC traction contact systems (M15)	Consistent	-
Electrification condition – DC traction contact systems (M16)	Consistent	-
Power incidents causing train delays of more than 300 minutes	Consistent	-
Station Stewardship Measure (M17)	Minor Discrepancy	Table 3.46 - Typographical error. Category F score for completed NSIP stations should be 2.52 (2.51 reported in the Annual Return)
Light Maintenance Depot Stewardship Measure (M19)	Consistent	-
Section 4 – Activity volumes		
Rail renewed (M20)	Consistent	-
Sleepers renewed (M21)	Consistent	-
Ballast renewed (M22)	Consistent	-
Switches and crossings renewed (M25)	Consistent	-
Signalling renewed (M24)	Consistent	-
Level crossing renewals	Consistent	-
Telecom renewals	Consistent	-

Report Sections	Data Consistent with Annual Return 2012?	Observations/Comments
Civils activity volumes	Consistent	-
Bridge renewals and remediation (M23)	Discrepancy	Table 4.20 - Typographical error. Scotland was included in the England and Wales total for 'Strengthen' category under Bridge Renewals and remediation and then added again to derive the Network total.
Culverts renewals and remediation (M26)	Discrepancy	Table 4.22 - values for 'Preventative' and 'Replace' are interchanged
Retaining walls remediation (M27)	Discrepancy	Table 4.23 - values for 'Preventative' and 'Replace' are interchanged
Earthwork remediation (M28)	Consistent	-
Tunnel remediation (M29)	Consistent	-
Electrification and plant renewal activity volumes	Consistent	-
Drainage renewals	Minor Discrepancy	Table 4.31 - Error in totalling. Volume of catchpits cleaned out for E&W should be 72,838 (vs 72,837 reported in the Annual Return)
Operational property volumes	Consistent	-
Section 5 – Safety and Sustainable development		
Passenger safety	Consistent	-
Workforce safety (fatalities and weighted injuries rate)	Consistent	-
System safety	Consistent	-
Public safety	Consistent	-
Health surveillance and screening	Discrepancy	See Section 3.4 of this report
Sustainable development	Consistent	
Section 6 – Enhancement Programme		
Summary of progress in the year	Consistent	-
Change control	Consistent	-
England and Wales	Consistent	-
Scotland	Consistent	-

3.1 Summary of Discrepancies

A brief description for the sections in the Annual Return where we identified discrepancies with the data provided to us or any other issues identified during the review process, are reported as follows.

3.1.1 Bridge Condition (M8)

We have been unable to verify Table 3.24 of the Annual Return, which provides the number of bridges assessed for the year and the condition band to which those bridges have been allocated. This is because the base data used to produce the

Annual Return for this measure was not saved at the time, and has been updated since, as it is a live database.

This highlights the importance of storing the original data used to produce the Annual Return, in order to provide greater assurance.

NR has explained that the figures published in the Annual Return are incorrect and has provided us with the corrected information, as summarised in the Table below.

On further request, we were also supplied with the underlying data used to produce the below table. Our checks of the underlying data showed a few erroneous exam dates recorded in NR's database. Although, the results in the table below are not noticeably affected by these minor discrepancies in the data, we recommend that NR should carry out sense checks on the data extracted from their databases to identify any such anomalies before producing figures for the Annual Return. We also suggest that appropriate checks should be built into the databases to minimise the possibility of entering erroneous data.

Table 3.24: Bridge Condition Index Results

Bridge Condition Grade	Equivalent SCMI Value	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
1	80 - 100	728	605	516	453	383	293	294
2	60 -79	3,033	2,537	2,168	2,243	1,794	1,649	1,635
3	40 - 59	1,250	888	781	832	667	722	713
4	20 - 39	107	94	70	90	84	89	104
5	1 - 19	4	5	1	4	4	3	7
Total No Examined		**5,122**	**4,119**	**3,536**	**3,622**	**2,932**	**2,756**	**2,753**
Average Condition Grade		**2.14**	**2.07**	**2.08**	**2.09**	**2.09**	**2.09**	**2.10**

3.1.2 Electrification condition – AC traction feeder stations and track sectioning points (M13)

Average condition grade (2.66) for England and Wales was not reported in Table 3.39 of the Annual Return 2012.

3.1.3 Station Stewardship Measure (M17)

Based on the underlying data that we received, our checks have indicated that, Category F score for completed NSIP stations in Table 3.46 should be 2.52 (as opposed to 2.51 reported in the Annual Return). Network Rail has explained that this was a typographical error.

3.1.4 Bridge renewals and remediation (M23)

We found an error in *Table 4.20: Bridge renewals and remediation 2011/12: number by task category*, whereby, the value for Scotland was included in the England and Wales total for 'Strengthen' category and then added again to derive the Network total.

3.1.5 Culverts renewals and remediation (M26)

Our checks of the underlying data show that there is an error in *Table 4.22: Culvert renewals and remediation 2011/12 by task category*, whereby the values for 'Preventative' and 'Replace' are interchanged.

3.1.6 Retaining walls remediation (M27)

Our checks of the underlying data show that there is an error in *Table 4.23: Retaining walls renewals and Remediation 2011/12 by task category*, whereby the values for 'Preventative' and 'Replace' are interchanged.

3.1.7 Health Surveillance and Screening

Noise at Work

As per the source data, the total employees screened figure in Table 5.8 of the Annual Return should be 2,870. The reported figure is 2,871, resulting in a difference of one employee.

Hand Arm Vibration Syndrome

We were unable to reconcile the HAVs base data with the reported figures. It would appear that the late stage HAVs was over reported. There was some uncertainty whether the base data supplied to us was the correct version that was used for the Annual Return.

In Table 5.9 of the Annual Return, the numbers of employees unfit for work were reported as 13, as opposed to 5 in the underlying data, resulting in a discrepancy of 8 employees.

Employer's Liability

The network wide figure of 471 reported in Table 5.10 in the draft Annual Return should be 474, as per the underlying data.

NR has explained that the status of employer liability claims published in the Annual Return reflect a snapshot of information at the time it was taken in May 2012. The source data files supplied to Arup were downloaded from NR's claims system in July 2012, resulting in a small discrepancy in the totals, as the data may have been updated since the Annual Return was submitted in relation to their status in 2011/12.

3.2 Comparison with ORR's Specification of the 2012 Annual Return

The Specification for the 2012 Annual Return issued by ORR to Network Rail includes measures unchanged from the 2011 specification as well as a number of completely new measures for 2012 Annual Return. The specification for the 2012 Annual Return is included in Annexe A of Appendix A in this report.

We undertook a review of the 2012 Annual Return against the ORR's specification. The following was observed:

3.2.1 Section 3 - Asset Management

The summary table, Table 3.2 includes the actual data and the Delivery Plan 2011 targets. However, it does not include the variance and disaggregation at England and Wales, and Scotland, as requested in the ORR's specification for 2012 Annual Return.

3.2.2 Section 4 – Activity Volumes

Signalling Renewed (M24) – Number of SEUs reaching GRIP stage 4 and number of LXEUs commissioned have not been reported.

3.2.3 Section 5 – Safety and Environment

Safety Culture - We note that there was very little commentary on the adoption of RM3 (Rail Management Maturity Model).

3.3 Document Control using CCMS2

A meeting was held on 23rd July with NR's Data Champion responsible for collating the information for the Annual Return. The purpose of this meeting was to review the progress made on last year's recommendation to investigate opportunities for further automation of the process for compiling the Annual Return in order to minimise human error. Our findings are summarised below.

Last year, data was emailed by individual data champions and was individually copied and pasted in the Annual Return by the central team. The data was stored in a number of different locations such as shared drives, at desks or on users' local file-systems.

Network Rail has advised that following our recommendation in the previous year's review, to automate the process, they used the newly implemented CCMS2 system, a corporate nationwide repository which gives users browser-based access to documents with version control, audit trail and collaboration functions.

The purpose was to accelerate the process, have a transparent version control and a single up-to-date version of all documents and data at a point in time.

Although the system was capable of keeping track of the different versions modified by different users (history tracking), Network Rail has advised us that, when a document was edited by several users at the same time, CCMS2 created multiple versions of the same document and hence lost the single document version.

Network Rail therefore had to revert to using their original method of emails to collate the data and text for the Annual return, though with an improved system of filing. They are currently considering improvements for next year.

4 Enhancement Programme

The Enhancement projects undertaken by Network Rail are regularly reviewed by the ORR. We have therefore limited our review to the process for gathering the information for the Annual Return, to a sample of projects.

The Data Champion responsible for this section of the Annual Return sent emails to each project sponsor, starting in January 2012, for reporting milestones planned vs actual and project progress. Sponsors were also asked to specifically check the commitments made for their project(s) in the 2011 Delivery Plan and to report progress against them. The process included producing a few drafts of their text and then the final version. This process is thorough, and the Data Champion considers that it worked well.

As part of this review, we checked a sample of correspondence between the data champion and the sponsors and found them to be consistent with that reported in the Annual Return.

5 Confidence Grading

The table below compares the Confidence Grades awarded by Arup during 2011/12 with those quoted in the 2012 Annual Return.

Not all of the grades awarded by Arup have been reported in the Annual Return.

The ones that are reported, have been reported correctly. However, there are some grades reported that have not been awarded by Arup. Network Rail has advised that these were awarded by the previous Independent Reporter in their final Annual Return review.

Report Sections	***Confidence Grade reported in Annual Return 2012***	***Confidence Grade awarded by Arup***
Section 1 – Operational performance and stakeholder relationships		
Public Performance Measure (PPM)	-	A1
Delay minutes	-	-
Delays to passenger train services	-	A1
Delays to freight train services	-	A3
Delay category	-	-
Infrastructure incidents causing delay	-	-
Cancellations & Significant Lateness (CaSL)	-	A2
Customer satisfaction	-	A1
Passenger satisfaction	-	-
Section 2 – Network capability and network availability		
Linespeed capability (C1)	-	B2
Gauge capability (C2)	-	B2
Route availability value (C3)	-	B2
Electrified track capability (C4)	-	B2
Network change	-	-
Discrepancies between actual and published capability	-	-
Ongoing short-term network change proposals	-	-

Platform lengths	-	-
Network availability	B2	B2
Section 3 – Asset management		
Excellence in asset management	-	-
Broken rails (M1)	A1 (Halcrow)	-
Rail defects (M2)	A2 (Arup)	A2
Track Geometry – Good Track Geometry (M3)	B2 (Arup)	B2
Track geometry quality – Poor Track Geometry (M3)	A1 (Halcrow)	-
Track geometry faults (M5)	A1 (Halcrow)	-
Track buckles	-	-
Track failures	-	-
Condition of asset temporary speed restriction sites (M4)	B2 (Halcrow)	-
Earthwork failures (M6)	A2 (Halcrow)	-
Earthwork condition (M33)	-	-
Tunnel condition	-	-
Bridge condition (M8)	C3 (Halcrow)	-
Signalling failures (M9)	-	-
Signalling asset condition (M10)	B2 (Halcrow)	-
Points failures	-	-
Train detection failures	-	-
Telecoms condition	-	-
Telecoms failures	-	-
Alternating current traction power incidents causing train delays (M11)	B2 (Halcrow)	-
Direct current traction power incidents causing train delays (M12)	-	-
Electrification condition – AC traction feeder stations and track sectioning points (M13)	-	-
Electrification condition – DC traction substations (M14)	-	-
Electrification condition – AC traction contact systems (M15)	-	-
Electrification condition – DC traction contact systems (M16)	-	-
Power incidents causing train delays of more than 300 minutes	-	-
Station Stewardship Measure (M17)	B2	B2
Light Maintenance Depot Stewardship Measure (M19)	C2	C2
Section 4 – Activity volumes		
Track Renewals	-	B1
Signalling Renewals	-	B1
Telecom Renewals	-	C1
Civils Activity Volumes	-	B1
Electrification and plant renewal activity volumes	-	C1
Section 5 – Safety and Sustainable development		
Passenger Safety	-	B3
Infrastructure wrongside Failures	-	A1
Category A SPADs	-	A1
Level Crossing Misuse	-	A3
Irregular Working	-	B3
Criminal Damage	-	B3
Fatalities and Weighted Injuries	-	B2
Accident Frequency	-	B2
Red Zone Green Zone	-	C4
Section 6 – Enhancement Programme		
	none	none

6 Comments from proof reading of the final version of Annual Return 2012

In accordance with recommendation 2011.AR.1, to proof read the final version of the 2012 Annual Return, the text was reviewed by Arup (the auditor was not involved in the wider Independent Reporter work, or involved in the review of the figures published in the Annual Return). The corrections required from this review were marked up in the final draft report supplied by Network Rail and emailed back to Network Rail for consideration.

This was considered to be a very useful exercise which will be repeated next year, as there were useful comments as well as amendments provided.

7 Conclusions

The audit was undertaken to assess the accuracy of data and commentary presented in Network Rail's Annual Return 2012. Our conclusions are summarised below:

- A significant improvement in the process and accuracy of the data presented, as compared to last year;
- Not all of the confidence grades awarded by Arup were reported;
- Network Rail used a document management system called CCMS2 for compiling the Annual Return. However, due to technical problems with the version control in CCMS2, they are currently investigating opportunities for improvements to the process; and
- Proof reading the final draft seems to have been successful in improving the quality of the text and report format. Therefore, we suggest a repeat of the proof reading arrangements made for the Annual Return 2012.

8 Recommendations

No.	*Recommendations*	*Location in Text*	*Data Champion Responsible*	*Due Date*
2012.AR.1	To develop and implement an appropriate process to deliver the required level of version control in order to minimise errors.	3.3	Senior Strategic Planner (NR)	April 2013
2012.AR.2	Data Champions to record the date their data was extracted to prepare the Annual Return and also save a copy of the source dataset from systems such as TRUST, RDMS and so on. This will enable NR to maintain consistency and accuracy of reporting throughout and will be of a greater assistance in the audit process.	3.1.1	Senior Strategic Planner (NR)	June 2013
2012.AR.3	The process would be improved further if the data input and the interim calculations for reporting could be automated as much as possible, as there are still instances of manual calculation of results and manually entering figures into tables for the Annual Return.	3.1.3 3.1.4 3.1.5 3.1.7	Senior Strategic Planner (NR)	June 2013
2012.AR.4	A consistent method of rounding, as appropriate, should be applied to the data to produce the final figures for publication. Where possible, data champions should include source data, interim calculations and the final tables supplied to the Annual Return all within a single spreadsheet for the purposes of audit trail.	3	Senior Strategic Planner (NR)	June 2013
2012.AR.5	Data Champions should carry out sense checks on the data extracted from NR's databases to search for any errors in the data (e.g. incorrect dates), before the Annual Return is produced.	3.1.1	Senior Strategic Planner (NR)	June 2013
2012.AR.6	Quote all the Confidence Grades awarded by Arup and Halcrow, whichever is the most recent (possibly in an Annex of the Annual Return).	5	Senior Strategic Planner (NR)	June 2013

Appendix A

Mandate

Mandate for Independent Report Part A – Annual Return 2012 Review

Audit Title:	Annual Return 2012 Review
Mandate Ref:	AO031
Document version:	Draft A
Date:	28May 2011
Draft prepared by:	Chris Fieldsend
Remit prepared by:	
Network Rail reviewer:	Angelique Tjen

Authorisation to proceed

ORR	Chris Fieldsend	
Network Rail	Angelique Tjen	

1 Purpose

This mandate sets out the scope of work for the Part A Independent Reporter (Arup) to review Network Rail's 2012 Annual Return. The Annual Return outlines Network Rail's performance against the final determination and delivery plan, and it is therefore essential that ORR has assurance that the data is accurate and reliable. This independent assessment gives ORR the confidence to determine the progress Network Rail is making towards its regulatory targets.

2 Background

The Annual Return is the formal statement from Network Rail on its performance against its regulated outputs at the end of each year (31st March). It is provided by Network Rail as part of the information reporting requirement (licence condition 10). Under the terms of the licence, Network Rail provides outputs that can be measured against the regulatory targets that are defined for the control period, and agreed with in advance by ORR in a formal specification.

3 Scope

The review should consider the process used by Network Rail to compile the 2012 Annual Return, including reference to previous processes. The review should include a summary of confidence gradings for all Annual Return measures (where reviewed by the Part A Reporter in 2011-2012). Recommendations should be made that support the continuous improvement of processes and the accuracy / reliability of measures. Annex A presents the specification for the 2012 Annual Return.

Following the 2010-2011 Annual Return review, it was agreed that the Independent Reporter would provide a final review of the 2012 Annual Return. This review must be completed by colleagues not involved in the wider Independent Reporter work, or this mandate. The Reporter must explicitly state how they will mitigate any conflict of interests that arises from this requirement.

4 Methodology

The Reporter should meet with Network Rail to understand the processes used in the production of the Annual Return. This should include interviewing both those coordinating and contributing towards the development of the Annual Return. The Reporter should also review all Annual Return documentation and systems, and comment upon their quality and fitness for purpose.

The Reporter should review all quantitative outputs within the Annual Return, and comment upon their consistency against the source data. This will involve liaising with data champions to identify and collate the data, along with a comparison of the source data and reported figures.

5 Deliverables

The Reporter should provide a publishable report, including findings, conclusions and recommendations. The report should be prepared in draft form and sent electronically to Network Rail and ORR, at the same time. The Reporter should facilitate feedback (via a tripartite feedback session if appropriate) and provide a revised report with track changes. This should be followed by a final report for publication on ORR's website.

6 Timescales and budget

A fully costed proposal for this work is required by 26 June 2012. Work is expected to commence early July 2011, following approval by NR and ORR. A draft report is required by 3 August 2012 and a final report is required by 31 August 2012.

7 Independent Reporter remit proposal

The Independent Reporter shall prepare a fully costed proposal for review and approval by NR and ORR on the basis of this mandate. The approved remit will form part of the mandate and shall be attached to this document.

The proposal will detail methodology, tasks, programme, deliverables, resources and costs.

Annex A – Specification for 2012 Annual Return

- **Introduction**

The 2012 Annual Return specification is presented as follows:

1. Measures unchanged from the 2011 specification - shaded table and text.
2. Measures from the 2011 specification that have been elaborated for clarification, and to remove any ambiguities – italics text.
3. Completely new measures for 2012 specification – no shading

We expect a definition for each measure and commentary on each measure.

- **General**

We expect Network Rail to provide an executive summary that includes commentary on the key regulatory issues during the year.

- **Safety and health**

Network Rail should provide commentaries that provide insight and depth on their overall health and safety performance. The commentaries should cover how far it is controlling risks by the following:

- the adoption and use of RM3 (rail management maturity model)
- the major programme to review and develop a safety culture

Specified target/output	*Measure*	*Disaggregation*
Safety improvement	Commentary on measures taken to improve safety. Include commentary on measures taken to improve the Safety Management System as a whole and provide an overview of system safety performance with any improvements made.	Network-wide: Scotland; England & Wales.
Workforce safety	Risk expressed as fatalities and weighted injuries (FWI) normalised per million employee hours.	
Passenger safety	Risk expressed as fatalities and weighted injuries (FWI) normalised per billion passenger kilometres	Network-wide
Noise	% of at risk employees that have been screened for Noise Induced Hearing Loss (NIHL)	1.% with acceptable hearing ability (HSE Category 1) 2.% with mild impairment (HSE Category 2) 3.% with poor hearing (HSE Category 3) 4. Rapid Hearing Loss (HSE Category 4)

HAVS	No of at risk employees screened for HAVS	1. % fit to work 2. % diagnosed with early stages of HAVS 3. % diagnosed with late stages of HAVS (late stage 2 SN/V and above)
Exposure to lead	No of people who have been picked up for lead health surveillance screening post accidental exposure to lead	1. All 2. No of employees who require ongoing monitoring as a result of exposure or those employees exposed to lead above the action level of 30 ug/m(3) TWA for more than 30 days each year
Exposure to asbestos	No of employees who have been picked up through BUPA for post exposure asbestos medical.	Post exposure medical of own employees picked up through BUPA referral
MSD	No of referrals to OH providers due to musculoskeletal condition	1 Upper limb (to include neck, shoulder and arms) 2. Lower Limb (to include ankles, knees, hips and feet 3. Back (to include lumbago/ sciatica/ scoliosis of spine) 4. Other
Stress related absence	No of referrals to OH providers due to stress related absence	1. Occupational 2. Occupational element 3. Non occupational
Employers Liability	1. Provide data to 31st March covering the number of claims open, closed, total. 2. Network Rail to provide data to 31st March covering the number of claims closed [includes those not pursued, those rejected] in the last year.	Network-wide

Train performance

ORR expects commentaries on delays at route level (including new Wales route) where applicable, and PPM by operator.

Specified target/output	Measure	Disaggregation
Passenger train punctuality	Public Performance Measure (PPM) - % of trains arriving on time, i.e. within five/ten minute time-bands and having called at all advertised stations	Network-wide; Scotland; England & Wales; by sector
Delays to all passenger train operators attributable to Network Rail	Delay minutes	Network-wide; Scotland; England & Wales;

Delays to freight services attributable to Network Rail	Delay minutes per 100 train kilometres	By Major Freight operators; Minor operators to be grouped into Minor Freight.
Cancellations and significant lateness	Number and percentage of passenger trains (franchised and open access operators) arriving at final destination 30 or more minutes later than the time shown in the public timetable. Partial and full cancellations to be regarded as 'significantly late'	England & Wales; by sector; Scotland

Environmental performance

Specified target/output	*Measure*	*Disaggregation*
Carbon dioxide emissions	CO_2 emissions relating to Network Rail's managed stations offices and depots*	Network-wide
Water recovered	Volume of ground or spring water recovered (and sold on or used) from tunnels as a % of total (deployable) water removed from tunnels*	Network-wide
Non-track waste (Operational recycling)	Stations, office and depot waste mass recycled or re-used expressed as a percentage*	Network-wide
Waste (Infrastructure recycling)	Renewals and enhancement activity waste mass recycled or re-used expressed as a percentage*	Network-wide
SSSIs (Land management)	The number of Network Rail SSSIs classified as favourable or recovering status expressed as a percentage*.	Network-wide
Environmental incidents – leading to serious damage	The number of environmental incidents leading to serious damage*	Network-wide
Environmental sustainability index	The environmental sustainability index* (where available)	Network-wide

* report against delivery plan target

Network Capability

ORR require commentary similar to that in the final 2011 Annual Return.

With reference to the 'discrepancies between actual and published measure', Network Rail must ensure that the published information accurately reflects what is available to operators.

Network Rail must confirm the accuracy of published information in its commentary and provide enough detail that explains all differences as opposed to some differences. Where rounding is applied, it should be sensible, rounding up or down to the nearest ten as appropriate, for example, 24km should be rounded down to 20km (and not 25) but 26 can be rounded up to 30km.

With reference to platform length measure, the commentary must explain any changes to platform length.

Regarding network change, the data must start from the current year (2011-12).

Network Rail to supply commentary which explain significant changes in the year.

Specified target/output	*Measure*	*Disaggregation*
Linespeed	Length of running track (km) by speed band; changes to the network	Network-wide; England & Wales; Scotland

Gauge	Length of route (km) capable of accepting different freight vehicle, by six gauge bands	
Route availability	Length of track (km) capable of accepting loaded vehicle types, by RA value	
Electrified track capability	Length of electrified track (km) by type	
Discrepancies between actual and published capability	Number of outstanding discrepancies, by type and proposed resolution	Network-wide; England & Wales; Scotland
Ongoing short-term network change proposals	Number of ongoing proposals by type of discrepancy, and time remaining before review	Network-wide; England & Wales; Scotland
Platform lengths	The total length (metres) for all platforms, as reported at 31 March	England & Wales; Scotland
Permanent network changes	1) Total annual Network Changes (network) 2) Total cancelled (network) 3) Total 'Non-Material Effects' (network)	Network-wide

Network availability

Specified target/output	*Measure*	*Disaggregation*
Disruption to passengers as a result of planned engineering possessions	Possession disruption index (passenger) - economic value of the excess journey time passengers experience, normalised by total train-km	Network-wide
Disruption to freight as a result of planned engineering possessions	Possession disruption index (freight) - 'unavailability' of track for freight use, weighted by the level of freight traffic operated over each section of track	Network-wide

Asset condition and serviceability

We require reports to be provided in a consistent way to the delivery plan, where all delivery plan measures are reported against. We require a summary table, with actual against target.

We require detailed reporting for any delivery plan measure not reported in detail last year.

We require an update on excellence in asset management (which is part of the Network Rail success in CP4 measures).

Network Rail must provide historical data from the start of CP3 where available and if not available, then from the start of CP4. The data must be disaggregated at Network-wide, England and Wales, Scotland.

Specified target/output	*Measure*	*Disaggregation*
Broken Rails	Number of broken rails per 100 km	Network-wide: Scotland; England & Wales
Rails defects	Immediate action rail defects per 100 km (primary and secondary)	Network-wide; Scotland; England & Wales
	Length of continuous rail defects	
Track Geometry	Good track geometry, based on index measure of track quality (%)	Network-wide; Scotland; England & Wales
	Poor track geometry based on index measure of track quality (%)	

	Geometry faults per 100 track km	Additional disaggregation by primary and secondary
	Immediate/intervention action geometry faults per 100 track km (if available. Please include a table showing 'under development' if not available)	
Track buckles per 100km	As defined in the delivery plan	Network-wide; Scotland; England & Wales
Condition of Asset TSRs	*Number of TSRs by type (planned, unplanned) and by cause (track; rolling contact fatigue, structures; earthworks, safety)*	Network-wide; Scotland; England & Wales. *Additional disaggregation by primary and secondary*
Bridge condition	Number of bridges examined and assessed condition grade	Network-wide; Scotland; England & Wales
Tunnels condition	Tunnel condition examined and assessed condition (TCMI)	Network-wide; Scotland; England & Wales
Earthwork failure	Number of embankment or cutting sites which have become unstable; assessed risk (hazard rating assessment)	Network-wide; Scotland; England & Wales
	Slope stability index	
	Rock hazard index	
Signalling failures	Number of signalling failures causing delay of more than 10 minutes per incident	Network-wide; Scotland; England & Wales
Signalling asset condition	Number of assets assessed and assessed condition grade	Network-wide; Scotland; England & Wales
	Level crossing condition index	
AC traction power incidents	Number of OLE failures resulting in train delays of more than 500 minutes	Network-wide; Scotland; England & Wales
DC traction power incidents	Number of conductor rail failures resulting in train delays of more than 500 minutes	Network-wide; Scotland; England & Wales
AC electrification condition	Assessed condition grade of AC traction feeder stations and track sectioning points	Network-wide; Scotland; England & Wales
DC electrification condition	Assessed condition grade of DC traction substations	Network-wide; Scotland; England & Wales
AC contact system condition	Assessed condition grade of AC contact systems	Network-wide; Scotland; England & Wales
DC contact system condition	Assessed condition grade of DC contact systems	Network-wide; Scotland; England & Wales
Signalling (for at least interlocking)	Remaining life	Network-wide; Scotland; England & Wales
Electrification	Condition grades	Network-wide; Scotland; England & Wales
Reliability forecasts	Track failures	Network-wide; Scotland; England & Wales
Power incidents	Power incidents causing train delays of more than 300 minutes (as defined in the delivery plan)	Network-wide; Scotland; England & Wales
Telecoms condition	Telecoms condition (as defined in the delivery plan)	Network-wide; Scotland; England & Wales
Telecom failures causing train delays of more than 10 minutes	Telecom failures causing train delays of more than 10 minutes (as defined in delivery plan)	Network-wide; Scotland; England & Wales
Points failures	Points failures (as defined in the delivery plan)	Network-wide; Scotland; England & Wales
Track circuit failures	Track circuit failures (as defined in the delivery plan)	Network-wide; Scotland; England & Wales

Delivery plan measures – Condition and reliability forecasts

Specified target/output	*Measure*	*Disaggregation*
Condition and reliability forecasts:	Reporting of condition and reliability forecasts which are consistent with delivery plan 2011. We require a summary table with actual against target and the variance for the measures listed :	Network-wide, England and Wales, Scotland for plan, actual and variance
Track		
Good track geometry	Plan (DPu11), Actual, Variance	
Poor track geometry	Plan (DPu11), Actual, Variance	
Intervention/immediate action geometry faults per 100km	Plan (DPu11), Actual, Variance	
Rail breaks and immediate action defects per 100km	Plan (DPu11), Actual, Variance	
Civils		
Assets subject to additional inspections (no.)	Plan (DPu11), Actual, Variance	
Operational property		
Station stewardship measure	Plan (DPu11), Actual, Variance	
LMD stewardship measure	Plan (DPu11), Actual, Variance	
Signalling		
Signalling condition	Plan (DPu11), Actual, Variance	
Electrification	Plan (DPu11), Actual, Variance	
AC traction feeder station track sectioning point condition	Plan (DPu11), Actual, Variance	
DC traction substation condition	Plan (DPu11), Actual, Variance	
AC traction contact system condition	Plan (DPu11), Actual, Variance	
DC traction contact system condition	Plan (DPu11), Actual, Variance	
Telecoms	Plan (DPu11), Actual, Variance	
Telecoms condition		
Reliability forecasts	Plan (DPu11), Actual, Variance	
Signalling failures causing train delays of more than 10 minutes	Plan (DPu11), Actual, Variance	
Points failures	Plan (DPu11), Actual, Variance	
Track circuit failures	Plan (DPu11), Actual, Variance	
Track failures	Plan (DPu11), Actual, Variance	
Power incidents causing train delays of more than 300 minutes	Plan (DPu11), Actual, Variance	
Telecom failures causing train delays of more than 10 minutes	Plan (DPu11), Actual, Variance	

Activity levels

We require reports to be provided in a consistent way to the delivery plan, where all delivery plan measures are reported against. We require a summary table, with actual against target.

We require an update on excellence in asset management (which is part of the Network Rail success in CP4 measures).

We require detailed reporting for any delivery plan measure not reported in detail last year.

Network Rail must provide historical data from the start of CP3 where available and if not available, then from the start of CP4. The data must be disaggregated at Network-wide, England and Wales, Scotland.

With reference to 'civils' measure, we expect 'other' to be clearly defined or specified.

Specified target/output	*Measure*	*Disaggregation*
Volume renewals	Volume achieved and % of activity compared with plan	Network-wide; Scotland; England & Wales
Rail renewals	Length of track (km) where re-railing has been carried out	Network-wide; Scotland; England & Wales
Sleeper renewals	Length of track (km) where re-sleepering has been carried out, by type	Network-wide; Scotland; England & Wales
Ballast renewals	Length of track (km) where re-ballasting has been carried out, by type	Network-wide; Scotland; England & Wales
Bridge renewals and remediation	Number and area of bridge decks subject to renewal or remediation	Network-wide; Scotland; England & Wales
Signalling renewals	*1) Number of SEUs commissioned* *2) Number of SEUS reaching GRIP stage 4* *3) Number of LXEUs commissioned* 4) *Number of minor works standard items completed (signals, points, location cases, track circuits, cable and route work)*	Network-wide; Scotland; England & Wales
Level crossing renewals	Number of LXEUs renewed	Network-wide; Scotland; England & Wales
Telecom renewals	A report on renewal of telecom equipment, to include concentrators, PETS, DOO CCTV systems	Network-wide; Scotland; England & Wales
S&C renewals	Number of S & C units renewed, including partial renewal	Network-wide; Scotland; England & Wales
Culvert renewals and remediation	Number of culverts renewed or where major components replaced	Network-wide; Scotland; England & Wales
Drainage renewals	Expenditure on drainage scheme renewals and volume	Network-wide; Scotland; England & Wales
Retaining wall renewals	Number and area of retaining walls subject to renewal	Network-wide; Scotland; England & Wales
Earthworks remediation	Number of earthwork schemes subject to remediation	Network-wide; Scotland; England & Wales
Tunnel renewals	Number of remediation schemes on tunnels	Network-wide; Scotland; England & Wales
Drainage	1) Volume of drainage renewals undertaken 2) Volume of drainage pipes cleaned out 3) Volume of catchpits cleaned out	Network-wide; Scotland; England & Wales

Delivery plan measures – Volume renewals

Activity levels		
Specified target/output	*Measure*	*Disaggregation*
Volume renewals	Reporting of measures Condition and reliability forecasts which are consistent with delivery plan 2011. We would like a summary table with actual against target and the variance for the measures listed:	Network-wide, England and Wales, Scotland for plan, actual and variance
Track		
Rail (km)	Plan (DPu11), Actual, Variance	
Sleeper (km)	Plan (DPu11), Actual, Variance	
Ballast (km)	Plan (DPu11), Actual, Variance	
Composite / Plain line km	Plan (DPu11), Actual, Variance	
S&C (equivalent units)	Plan (DPu11), Actual, Variance	
Signalling		
Conventional SEU	Plan (DPu11), Actual, Variance	
ERTMS SEU	Plan (DPu11), Actual, Variance	
Crossrail accelerated (SEU)	Plan (DPu11), Actual, Variance	
Total SEUs	Plan (DPu11), Actual, Variance	
Level crossings (no.)	Plan (DPu11), Actual, Variance	
Telecoms		
Station information and surveillance systems		
CIS (monitors)	Plan (DPu11), Actual, Variance	
Public address (speakers)	Plan (DPu11), Actual, Variance	
CCTV (cameras)	Plan (DPu11), Actual, Variance	
Clocks (no.)	Plan (DPu11), Actual, Variance	
CIS (monitors)	Plan (DPu11), Actual, Variance	
Public address (speakers)	Plan (DPu11), Actual, Variance	
CCTV (cameras)	Plan (DPu11), Actual, Variance	
Operational telecoms		
Large concentrators (no.)	Plan (DPu11), Actual, Variance	
Small concentrators (no.)	Plan (DPu11), Actual, Variance	
DOO CCTV (systems)	Plan (DPu11), Actual, Variance	
PETS (no.)	Plan (DPu11), Actual, Variance	
Voice recorders (no.)	Plan (DPu11), Actual, Variance	
Electrification	Plan (DPu11), Actual, Variance	
Overhead Line	Plan (DPu11), Actual, Variance	
Campaign changes (wire runs)	Plan (DPu11), Actual, Variance	
Re-wiring (wire runs)	Plan (DPu11), Actual, Variance	
Structure painting (no.)	Plan (DPu11), Actual, Variance	
Conductor rail (km)	Plan (DPu11), Actual, Variance	
AC distribution		
HV switchgear (no.)	Plan (DPu11), Actual, Variance	
GSP transformer (no.)	Plan (DPu11), Actual, Variance	
GSP cable (km)	Plan (DPu11), Actual, Variance	
Booster transformers (no.)	Plan (DPu11), Actual, Variance	
DC distribution	Plan (DPu11), Actual, Variance	
HV switchgear (no.)	Plan (DPu11), Actual, Variance	
HV cabling (km)	Plan (DPu11), Actual, Variance	
LV switchgear (no.)	Plan (DPu11), Actual, Variance	
LV cabling (km)	Plan (DPu11), Actual, Variance	
Transformer rectifiers (no.)	Plan (DPu11), Actual, Variance	
Civils		

Overbridges (sq ms)	Plan (DPu11), Actual, Variance	
Underbridges (sq ms)	Plan (DPu11), Actual, Variance	
Bridgeguard 3 (sq ms)	Plan (DPu11), Actual, Variance	
Footbridges (sq ms)	Plan (DPu11), Actual, Variance	
Tunnels (sq ms)	Plan (DPu11), Actual, Variance	
Culverts (sq ms)	Plan (DPu11), Actual, Variance	
Retaining walls (sq ms)	Plan (DPu11), Actual, Variance	
Earthworks (sq ms)	Plan (DPu11), Actual, Variance	
Coastal/estuary defence (ms)	Plan (DPu11), Actual, Variance	
Other (including major structures) (sq ms)	Plan (DPu11), Actual, Variance	

Operational property

Specified target/output	*Measure*	*Disaggregation*
Station condition	Station stewardship measure - Assessed average condition grade of stations where trains make timetabled stops Also update on SSM required on the plan developed with Arup. The update should reflect: 1) An update on the systematic bias and that this is not affected by implementing the Arup recommendations [this also provides an update on 2nd para under reporting confidence in 2011 Annual Return - page 72]. 2) That implementation of a specific Arup recommendation relating to tactiles and copers will be deferred to the start of CP5 as this would cause a significant variation to the numbers reported against the targets.	Average station condition score for: (a) Each category of station (A-F) across GB network; (b) All stations (A-F) in Scotland; and (c) Each category of station (A-F), and disaggregation by: (i) excluding stations benefiting from NSIP funding; and (ii) only those stations benefiting from NSIP funding.
Light maintenance depot condition	Light maintenance depot stewardship measure - Assessed average condition grade of LMDs	Network-wide

Specified target/output	*Measure*	*Disaggregation*
Operational property volumes	Operational property expenditure as a proxy for renewal volumes (see appendix 21 of 2011 delivery plan).	By repeatable work items (RWI)

Enhancement schemes

We expect all enhancement schemes to be presented in a standard or consistent format, and to be comparable to enhancement scheme information published in other Network Rail outputs.

Network Rail should ensure the 2012 Annual Return aligns with the latest quarterly update of the Enhancements Delivery Plan.

An example of a template to follow is the final 2010 Annual Return.

Specified target/output	*Measure*	*Disaggregation*
Project / Fund / Programme	Progress against milestones and expenditure	As per table delivery plan

Passenger and Customer satisfaction

The customer satisfaction section is unchanged from the 2011 Annual Return. Network Rail should ensure that their commentary summarises the results from the survey of passenger operators and freight operators.

Also, for passenger satisfaction, as defined by Passenger Focus's National Passenger Survey (NPS), ORR would like commentary to focus on those measures where Network Rail directly manage or influence/impact passengers' satisfaction, for example, punctuality and Network Rail managed stations.