



Transport North East (Tyne and Wear) Sub-Committee

Thursday 28th January 2016 at 2.00 pm

Meeting to be held at Sunderland Civic Centre, Burdon Road, Sunderland, SR2 7SN

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SUPPLEMENTAL AGENDA 2

Page No

4. Monitoring Nexus' Performance: 1 April to 5 December 2015

Addendum Report: Update on actions to improve Metro performance

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To All Members

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North East Combined Authority

Transport North East (Tyne and Wear) Sub-Committee

Date: 28 January 2016

Subject: Update on actions to improve Metro performance

Report of: Chief Executive Officer for Transport
Managing Director (Transport Operations)

Executive Summary

The purpose of this report is to provide the Sub-Committee with an update on the actions being taken to improve the Metro's operational performance.

Recommendations

It is recommended that the Committee receives and considers this report.

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1 Background Information

- 1.1 At the meeting on 24 November 2015, arising from consideration of the Tyne and Wear Metro Performance Update report, the Sub-Committee requested that arrangements be made to provide a regular report updating on progress with the actions being taken to improve operational performance on the Metro.
- 1.2 To facilitate appreciation of the factors involved a seminar for Members of the Sub-Committee took place on Friday 22 January 2016. This seminar allowed Members to explore and challenge the emerging trends and associated remedial actions. This included a comprehensive review of the Metro performance management framework.
- 1.3 Key improvement elements, as at 5 December 2015, were identified by relevant organisations in terms of the top five categories causing Excess Headway Minutes (EHWM) in the year to date as follows:

**Organisation: EHWM
(YTD)**

DBTW: 186,675

Top EHWM Categories: EHWM (YTD)

1. Driver – other: 15,557
2. Power, Power Circuit and Power Control Fault: 11,643
3. Saloon Door and Door Control Fault: 10,695
4. Overhead Line (OHL) Trip caused by Metrocar: 6,281
5. Disorder – Antisocial: 5,491

Nexus Rail: 20,150

1. Signalling – equipment failure: 2,499
2. Track – objects on track: 2,390
3. Power Supplies – OHL fault: 1,565
4. Signalling – track circuits: 1,542
5. Nexus Renewals – equipment failure: 1,503

Network Rail: 12,676

1. Other Train Operating Company: 6,744
2. Points Failure: 2,465
3. OHL Line Fault/Vandalism: 869
4. Suicide Attempt: 489
5. Track Defect: 428

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- 1.4 This analysis excludes the seasonal factor of Low Rail Adhesion (LRA) which is being treated as a separate category in its own right. In this connection there has been a 16% year on year improvement identified in the number of EHWM attributed to LRA (2014/15: 14,995, 2015/16:12,507), brought about in large part by Nexus increasing the number of Rail Head Treatment Train (RHTT) circuits to 2 per day in during the 2015/16 LRA season.
- 1.5 The 3 appendices presented with this report detail the actions being taken by each of the three organisations to address the individual categories identified in the table above.
- 1.6 Members also had the opportunity to contrast the Tyne and Wear Metro's performance characteristics with those of other Metro's throughout the world.

2 Proposals

- 2.1 It is proposed that Nexus will continue to report on Metro performance to the Tyne and Wear Sub Committee at regular intervals. .

3 Next Steps

- 3.1 A further update on Metro performance improvement actions will be prepared for submission to the April meeting of the Sub-Committee.

4 Potential Impact on Objectives

- 4.1 Providing a focus on the key actions being taken to improve Metro performance should help to ensure that service quality and delivery objectives are achieved.

5 Finance and Other Resources

- 5.1 There are no direct financial or resource considerations arising from this report.

6 Legal

- 6.1 There are no direct legal considerations arising from this report.

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7 Other Considerations

7.1 Consultation/Community Engagement

There are no specific consultation/community engagement considerations arising from this report.

7.2 Human Rights

There are no specific human rights considerations arising from this report.

7.3 Equalities and Diversity

There are no specific equalities and diversity considerations arising from this report.

7.4 Risk Management

There are no specific risk management considerations arising from this report as there are no issues requiring escalation at this time.

7.5 Crime and Disorder

There are no specific crime and disorder considerations arising from this report.

7.6 Environment and Sustainability

There are no specific environment and sustainability considerations arising from this report.

8 Background Documents

8.1 None.

9 Links to the Local Transport Plans

9.1 This report has direct links to the delivery of public transport services and facilities covered in the statutory Local Transport Plan for Tyne and Wear.

10 Appendices

10.1 An update on the improvement actions being taken by each of DBTW, Nexus Rail and Network Rail in respect of Metro performance.

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11 Contact Officers

- 11.1 Tobyn Hughes
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12 Sign off

- Transport Lead Executive Officer ✓
- Monitoring Officer ✓
- Chief Finance Officer ✓

13 Glossary

EHWM - Excess Headway Minutes - the method by which delays experienced by passengers are measured. The total EHWM for any period is subject to an attribution process resulting to an agreed allocation across the Operator, Nexus Rail, Network Rail and Other/disputed depending on the identified causation.

LRA – Low Rail Adhesion - is an international problem that affects train companies right across the world. When leaves fall on to the line, particularly in damp or wet weather, the rolling action of passing wheels compresses them, causing a greasy ‘mulch’ to cover the top of the rail. This mulch is to rails what ice is to roads. It reduces the adhesion, or ‘co-efficient of friction’ to use the technical term, between the steel train wheels and the rails. Acceleration must be reduced to prevent the wheel from slipping, and braking distances extended. The leaf mulch can also affect the operation of signalling track circuits. These combined effects can result in delays against the timetabled service.

RHTT – Rail Head Treatment Train - These trains are deployed across the country, tasked with both cleaning the railhead of greasy leaf mulch with high-pressure water jets and the laying of “Sandite”, a composite material of sand and aluminium in the form of an adhesive paste, applied to the rail to aid traction.

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EHWM Category	Improvement Action
1. Driver – other	<ul style="list-style-type: none"> • Review of this category has revealed a high number of low value incidents which are broadly unexplained/don't fit into current reporting arrangements. • New practices are being trialled to identify and correctly code real time trains incurring minor delays.
2. Power, Power Circuit and Power Control Fault	<ul style="list-style-type: none"> • New post now approved to bring greater focus on reliability matters. • Alternations made to the preventative maintenance arrangements on power equipment. • On-going work on coaching drivers on fault finding and driving techniques.
3. Saloon Door and Door Control Fault	<ul style="list-style-type: none"> • On-going door overhaul programme now 87% complete. • On-going work on coaching drivers on fault finding techniques.
4. Overhead Line Trip caused by Metrocar	<ul style="list-style-type: none"> • Much of the growth in this category is the change in a safety related procedure which will not be amended until alterations to the Nexus Infrastructure are made. These are due to be made in 2017.
5. Disorder - Antisocial	<ul style="list-style-type: none"> • Nexus/DBTW/Northumbria Police senior meeting to be held aimed at discussing antisocial behaviour. • DBTW additional roving customer facing staff introduced to address ticketless travel and create a presence within the network.

EHWM Category	Improvement Action
<p>1. Signalling – equipment failure</p>	<ul style="list-style-type: none"> • Benton area National Power Grid power dip technical review undertaken with the resulting modification/alteration to Nexus circuit now complete. • System wide replacement of signalling cables to a new improved standard.
<p>2. Track – objects on track</p>	<ul style="list-style-type: none"> • Nexus/DBTW/Northumbria Police senior meeting to be held aimed at establishing proportionate MOs for trespass and other similar incidents. • Nexus’ lineside vegetation inspection specification to be reviewed.
<p>3. Power Supplies – overhead line fault</p>	<ul style="list-style-type: none"> • A new “high voltage camera” now introduced for “in-service” OHL faults. • Systemwide OHL renewals commencing in June 2016. • A new method of testing OHL feeder cables being introduced. • A specialist consultants’ review of AC&DC protection devices has commenced.
<p>4. Signalling – track circuits</p>	<ul style="list-style-type: none"> • The frequency of track circuit testing doubled – now actioned. • Exploring the possibility of introducing specialist testing equipment (for bonds and insulated block joints).
<p>5. Nexus Renewals – equipment failure</p>	<ul style="list-style-type: none"> • The project control manual is to be updated to have a specific mandated action to consider ‘indirect performance risks’.

EHWM Category	Improvement Action
1. Other Train Operating Company	<ul style="list-style-type: none"> • Analysis performed for freight delays on the route. • Train planning teams working to reduce freight /operator conflicts. • Operations teams monitoring for delay patterns. • Review of train running timings along Nexus route and revision of train plan accordingly.
2. Points Failure	<ul style="list-style-type: none"> • Critical asset works being performed. • Remote condition monitoring (RCM) installation on all Critical Assets on Nexus Route. • Reliability improved by installation of new tubular stretcher bars technology.
3. Overhead Line Fault/Vandalism	<ul style="list-style-type: none"> • Additional OHL Equipment inspections planned. • Defective mains power feed cable replaced and testing of all feeder cables planned. • Weekly conference with British Transport Police to address Vandalism, frequent patrols with Mobile Operations teams. • Graffiti removal programme. • Programme to prevent metal theft.
4. Suicide Attempt	<ul style="list-style-type: none"> • Fencing upgrade programme. • Trespass location monitoring, patrols by British Transport Police and Mobile Operations Teams. • Joint proactive Network Rail / British Transport Police visits to local schools in high risk areas.
5. Track Defect	<ul style="list-style-type: none"> • Enhanced track alignment works on Insulated Block Joints. • Assessment and refurbishment of all key assets. • Multidisciplinary planning and improvement works. • Rectification plans for highest priority assets. • Upgrade of train detection systems, remote condition monitoring and data logging diagnostics.

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