



Tyne & Wear Integrated Transport Authority - Metro Sub Committee

Friday 13 January 2012 at 10am, Committee Room, Newcastle Civic Centre

SUPPLEMENTAL AGENDA

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Tyne and Wear Integrated Transport Authority Metro Sub-Committee

DATE: 13TH January 2012
TITLE: ANALYSIS OF PROGRAMME TO DATE
REPORT OF DIRECTOR OF FINANCE AND RESOURCES, NEXUS
Reasons for confidentiality (if confidential)
District Implications

1. Summary / Purpose of Report

- 1.1 To provide assurance regarding the overall financial standing of the ARP after 18 months of delivery and in advance of providing our submission for years 3 to 6 to the DfT.

2. Recommendations

- 2.1 The ITA Metro Sub-Committee is recommended to note the position as outlined in the report.

3. Introduction / Background

- 3.1 An analysis of financial performance to date has formed part of our submission to DfT for years 3 to 6 of the ARP.
- 3.2 This analysis compares the total estimate for schemes that were scheduled to **commence** during the first three years of the ARP programme with what is now likely to be delivered. This analysis by necessity includes some expenditure in years four and five for projects that carry on beyond year three.
- 3.3 This analysis indicates that the initial work bank is now likely to cost slightly in excess of the original estimate. This is illustrated at asset category level in the following table:-

Asset Category	Initial PID Estimate	Current Projection	Variation
	£000	£000	£000
Civils	20,250	30,275	10,025
Permanent Way	28,581	32,250	3,669
Overhead Line	0	344	344
Stations	11,370	19,178	7,808
Communications	9,123	9,922	798
Signalling	15,146	16,130	984
Level Crossings	4,739	420	-4,319
Plant	2,500	3,387	887
Mechanical/Electrical	7,439	6,752	-687
Power	832	1,342	510
Metro Cars	12,181	13,094	913
Depot Equipment	3,329	2,022	-1,306
Capital Maintenance	11,520	9,265	-2,255
Miscellaneous	4,000	4,820	820
Project Management	8,161	2,198	-5,963
Capital Slippage	5,027	0	-5,027
Major Projects	2,500	2,087	-413
Total	146,699¹	153,486	6,787

3.4 What the table shows is that whilst there are some large variations relating to individual asset categories, there are a range of factors that need to be borne in mind when interpreting this:-

- Project management costs for year three still need to be allocated as an overhead on the programme against individual projects as they already have been for years one and two.
- Capital Slippage, which was identified towards the end of the year prior to the implementation of the ARP has been allocated across the most appropriate asset category
- The Station Investment Programme has been significantly affected by works at North Shields station where numerous problems have been encountered which has effectively led to a complete demolition and

¹ Adjusted for Central Station and IP Network projects

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rebuild as opposed to the original plan which was to refurbish the station. The Sub-committee is receiving a more detailed briefing in relation to this project elsewhere on today's agenda.

- Civils works have borne the brunt of the capital slippage referred to above and in addition, asset condition has generally been poorer than anticipated in relation to ducting and cable replacement and particularly earthworks
- The track renewal programme has suffered from higher than anticipated tender prices and additional works arising because asset condition has again been worse than expected e.g. at Howdon viaduct
- The approach to investment in level crossings has changed significantly and rather than investing £4.739m we will be investing £0.420m instead
- Capital maintenance activities have been pared back in order to create some additional headroom and this will be reviewed further as investment continues and less reactive maintenance is required in those geographic areas that have been dealt with
- The $\frac{3}{4}$ life refurbishment project has encountered worse than anticipated corrosion and wiring problems
- The opportunity to value engineer the depot wheel lathe has resulted in a saving of £0.5m against budget.

3.5 Therefore, whilst in overall terms, the pressure on the work bank amounts to some £6.8m or 4.8%, the reasons for these pressures have been recognised moving forward within the second iteration of the PID, covering years 4 to 6. In this regard, it is vital that we manage the ARP such that we eradicate this overspend.

3.6 As asset knowledge improves over time this will have an impact on the prioritisation of the individual schemes that make up the work bank. Value engineering can also impact on the scope and timing of individual projects. This underlines the dynamic nature of the ARP programme. The DfT approval letter recognises this and is why each individual year of the programme is submitted for approval during the prior year [reference the separate PID report on this agenda].

In addition, building on the Nexus Rail Consolidation Action Plan that resulted

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3.7 from a 'lessons learned' review instigated by the Director General following completion of Year 1 activity, and having recently refined stage gate review processes, it is apparent that a greater emphasis on cost estimation, project and programme management and ultimately cost control is manifesting itself in the way that the ARP is being delivered. Similarly, as outlined in paragraph 3.6 above, increased asset knowledge and more accurate (and earlier) forward planning are assisting in determining a clearer vision of future funding requirements. The point about the gathering of better asset knowledge cannot be understated as we move from a programme that was initially largely based upon asset age as a proxy for condition to one that is based more upon intrusive survey work and a much more informed understanding of what the issues actually are.

4. **Next Steps**

5. **Further comments by the:**

- **Clerk** (if any);
- **Treasurer** (if any);
- **Legal Advisor** (if any);
- **Director General** (if any).

6. **Background Papers**

Financial analysis spread sheet:

Year 3 to 6 Programme (Analysis) Final 301111 Updated.xlsx – to be made available upon request.

7 **Contact Officer (s)**

7.1 Linden Watson, Capital Accountant (0191) 2033410
Keith Nisbet, Head of Finance (0191) 2033264

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Tyne and Wear Integrated Transport Authority Metro Sub-Committee

Date: 13 January 2012

TITLE: ASSET RENEWAL PROGRAMME – PROGRAMME INITIATION DOCUMENT

REPORT OF THE DIRECTOR OF RAIL & INFRASTRUCTURE, NEXUS

Reasons for confidentiality (if confidential)

District Implications

1. **Summary / Purpose of Report**

1.1 This report presents the Metro Asset Renewal Plan proposals for the years 2013/14 – 2015/16.

2. **Recommendations**

2.1 The Committee is recommended to note the contents of the Metro Asset Renewal programme.

3. **Introduction / Background**

3.1 In February 2010 the Department for Transport (DfT) agreed a funding package for Metro Re-Invigoration Phase 2. The terms of the funding agreement were stated in a letter dated 2nd February 2010.

3.2 One of the terms required Nexus to provide "...firm plans for the 2013/14 to 2015/16 period...by dates to be agreed with the Department".

3.3 Subsequent discussion identified the due date as being up to 18 months in advance of the relevant 3 year period (i.e submission no earlier than October 2011 in this case).

- 3.4 Nexus is also required to submit a detailed work plan for each financial year no later than 28 February in the preceding year. As a result the forward programme includes not only the 2013/14-2015/16 (Years 4 to 6) period, but also a work plan for 2012/13 (Year 3) based on asset category.
- 3.5 A previous version of the Programme Initiation Document formed part of the original bid to DfT. The PID has therefore been updated to reflect upon physical and organisational progress to date and explain the strategy for asset renewal during the period 2013/14 to 2015/16.
- 3.6 A Business Risk Assessment has been undertaken that identifies the overall effect of works carried out to date. This demonstrates that the Asset Renewal Plan is broadly achieving the aims identified for the first 3 years. A further assessment shows the business risks identified for years 4-6 and the effect that a fully funded Asset Renewal Programme will have on those risks.
- 3.7 Major areas of work proposed for 2013/14 to 2015/16 are:
- Permanent way works to three sections of the route:
 - South Gosforth to Gateshead Stadium
 - Tynemouth to Northumberland Park
 - Northumberland Park to South Gosforth
 - Commence the system wide upgrade of Overhead Line
 - Refurbish stations Gateshead Stadium to South Shields
 - Civils works at specific geographic locations following the permanent way works
 - Replace the Open Transmission Network (OTN) network with an Internet Protocol (IP) based solution
 - Replace the Positive Train Identification (PTI) system
 - Replace the Radio system
 - Complete the $\frac{3}{4}$ life fleet refurbishment programme
- 3.8 A detailed list of works, based upon full funding, forms the basis of the high level programme. This has been arrived at as result of increased asset knowledge and delivery experience gained since the beginning of the Asset

Renewal Programme in March 2010. It has been arrived at in consultation with Nexus Rail Engineers, Project Managers, PMO and Finance staff whilst following the strategy outlined within the PID. There are however inherent issues associated with the list of works that span up to a period four years hence as follows:-

- Whilst best estimates have been provided there are still uncertainties as to the exact cost of some major projects such as PTI and Radio.
- The extent of the work to deliver the plain line renewal between Howdon and Tynemouth may exceed the time available i.e. the 23 day blockade in August and September 2012. An option exists to split this work into two phases, completing it in 2013 or alternatively, utilise existing track access time for some of the work.
- Costs for the $\frac{3}{4}$ Life refurbishment of the train fleet are currently under discussion following the discovery of worse than expected corrosion of the fleet.

3.9

The programme for 2012/13 to 2015/16 was submitted to DfT in mid-December 2011. From discussions with DfT, it is hoped that the Year 3 programme (2012/13) will be agreed by the end of January 2012 and an informal approval to Years 4 to 6 (2013/14 to 2015/16) by the end of February 2012 (with formal approval by June 2012 following detailed analysis by DfT). This will assist with detailed forward planning of the programme.

4. Financial Implication

4.1 The proposed programme is summarised below:

Asset Category	Year 3 2012/13 £000	Year 4 2013/14 £000	Year 5 2014/15 £000	Year 6 2015/16 £000	Total £000
Civils	5,351	3,701	5,907	7,230	22,189
Permanent Way	12,243	9,533	9,950	11,750	43,476
Overhead Line	260	0	2,000	2,000	4,260
Stations	4,159	1,990	2,960	4,215	13,324
Communications	3,885	2,450	960	500	7,795
Signalling	4,906	3,200	1,815	2,775	12,696
Level Crossings	120	31	50	0	201
Plant	0	1,200	1,800	0	3,000
Mechanical and Electrical	2,060	1,736	2,245	3,510	9,551
Power	20	200	900	0	1,120
Metro Cars	4,653	4,557	4,889	3,594	17,693
Depot Equipment	5	0	50	100	155
Capital	2,607	1,759	1,410	1,312	7,088
Maintenance	3,540	3,250	3,250	2,250	12,290
Miscellaneous	2,198	2,198	2,198	2,198	8,792
Project Management					
Total	46,007	35,805	40,384	41,434	163,630

4.2 The proposed funding is as follows:

Funding	Year 3 2012/13 £000	Year 4 2013/14 £000	Year 5 2014/15 £000	Year 6 2015/16 £000	Total £000
DfT Grant	35,000	31,000	31,000	31,000	128,000
Proposed Grant Virement between Years	0	0	0	0	0
10% Nexus Contribution	3,889	3,444	3,444	3,444	14,222
Over- programming	7,118	1,361	5,939	6,990	21,408
Total	46,007	35,805	40,383	41,434	163,630

Over-programming	18.3%	4%	17.3%	20.3%	15%
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4.3 Over-programming levels vary over the four year period as the level of uncertainty over projects increases. However, over the four year period the overall over-programming represents approximately 15%, which is considered a reasonable level to ensure DfT spending targets are achieved.

5. **Further comments by the:**

- Clerk (if any);
- Treasurer (if any);
- Legal Advisor (if any);
- Director General (if any).

6. **Background Papers**

6.1 Programme Initiation Document V5 dated 15 December 2011 which is available on request.

7. **Contact Officer (s)**

7.1 Ken Mackay, Director of Rail & Infrastructure 0191 203 3241

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