



This paper will be considered in public

1 Summary

- 1.1 This paper sets out the proposal for a programme of station stabilisation works at London Underground (LU) stations on the Sub-Surface Railway and the Bakerloo, Central and Victoria lines. The request is for the first three year tranche of works that is a constituent part of a planned seven year programme of station asset stabilisation works. This authority shall expire on 31 December 2016. Additionally, the Board is asked to grant Project Authority for the programme.
- 1.2 At its meeting on 26 February 2013, the Projects and Planning Panel noted the proposals in this paper and supported the recommendations.
- 1.3 At its meeting on 13 March 2013, the Finance and Policy Committee noted the proposals in this paper and supported the recommendations to the Board.

2 Recommendations

2.1 The Board is asked to:

- (a) note the paper;
- (b) grant total budgeted Project Authority of £163.6m at outturn; and
- (c) note that the authority to be requested includes £43.8m relating to 10 stations that already have full or partial individual project authorities. The submission concerns additional budgeted Project Authority of £119.8m to develop an encompassing programme of stations and include the remaining stations which do not have full project authority alongside these individual projects. The authority requested is budgeted within the recently approved Business Plan.

3 Background

- 3.1 During the PPP, Metronet delivered a number of modernisation and refurbishment projects to a population of stations under its stewardship. However works at 74 stations were not delivered prior to the administration of Metronet. The complete list of stations that are to be addressed is shown in Appendix 1.

- 3.2 Understandably, a sizeable proportion of known asset defects occur at these 74 stations. Generally the assets are in poor condition and in a state of decline and there is a growing need to address these issues.
- 3.3 A strategy has been developed to ensure that these concerns are addressed in the most cost effective manner over a seven year period.
- 3.4 A targeted condition definition has been established to ensure that all station assets are returned to and maintained at a level that is being described as 'fair'. A more detailed set of scoping characteristics consistent with 'fair' can be seen in Appendix 2.
- 3.5 The definition of 'fair' is to carry out works to ensure that concerns are removed for a minimum of ten years. This will ensure:
- (a) safety of passengers and staff is maintained;
 - (b) operability of the railway is maintained;
 - (c) asset compliance with statutory legislation is maintained; and
 - (d) the risk of additional operating costs as a result of line or station closures or period of degraded operation is minimised.
- 3.6 This portfolio of stations has been prioritised, based on asset condition, and their criticality to the core LU operation. Stations have also been packaged into groups, either geographically or by trade, to obtain synergies and best value for money in delivering the programme of work.
- 3.7 Separate, full or partial authority, totalling £43.8m has already been approved for 10 stations. It is intended to subsume these stations into this authority request to enable maximum flexibility though the ability to deliver as a programme of works.
- 3.8 The Stations Stabilisation Programme is a key component in LU's plan to improve reliability. This supports the objectives of the Mayor's Transport Strategy, specifically: improving public transport reliability; reducing operating costs; bringing and maintaining all assets to a state of good repair and improving public transport customer satisfaction.

4 Proposal

- 4.1 A new delivery and procurement model is being deployed which is a radical way of driving up quality of the delivered work.
- 4.2 It is estimated that 12 per cent efficiency can be delivered over the full seven year programme of work based on continuation of the approach beyond this three year tranche.
- 4.3 An eight per cent (£9.6m) efficiency saving is included in this initial three year authority based on adopting the procurement model and is further predicated on:

- (a) procuring a Delivery Partner to provide delivery management personnel, including critical construction management resources; and
 - (b) devolved authority (to site managers, supervisors and engineers) to enable efficiency of response, resource deployment and cross programme procurement savings.
- 4.4 The refreshed and improved delivery and procurement model – ‘Stake’ will be utilised to deliver this programme of works. The strategy is based on an improved way of delivering works using a Construction Management approach.
- 4.5 The approach is to provide packages by trade, across groups of stations, to enable predictable and continuous work streams and drive resultant reductions in unit rate. The key principle of this strategy is that ‘the workforce leads, everything else enables it’. This strategy follows the principle, that a capable, engaged and incentivised workforce will provide the best basis for delivering efficiently.
- 4.6 Efficiency is delivered in three ways:
- (a) maximising productivity at the workforce;
 - (b) reducing defects; and
 - (c) delayering the supply chain.
- 4.7 Productivity of the craftsmen at the workforce is maximised by:
- (a) creating continuity by organising work into predictable and continuous work streams by trade avoiding ‘stop go’ inefficiencies;
 - (b) engaging a workforce from trade contractors, where subject to their performance, contracts are renewed, thus creating a continuing programme; and
 - (c) incentivising them and utilising their knowledge, skills and experience to build a stable production team that delivers a quality output first time.
- 4.8 Delayering the supply chain is delivered by:
- (a) shortening the vertical supply chain by engaging trade contractors at tier 3 and 4 (SME level) avoiding the costs of duplicated management;
 - (b) implementing a ‘One Team’ approach to organise all resources into a single team; and
 - (c) implementing new and shared materials and logistics arrangements.
- 4.9 Early contractor involvement is also at the heart of this approach, supporting design development, logistics and category management.

- 4.10 Recognising that this strategy requires behavioural change on the part of LU to succeed, LU has engaged a specialist with experience of similar change programmes on major oil and gas and infrastructure projects.
- 4.11 This strategy will be implemented progressively, transitioning from the current construction management arrangements.
- 4.12 The programme will not seek any closures to carry out the implementation phase of this programme. The feasibility and concept design at each station will be based on keeping the stations operational through the construction works with minimal disruption to customers.
- 4.13 As a drive to deliver maximum efficiency, in terms of both programme and cost, where possible, works will be carried out during extended engineering hours, and/or in traffic hours. During the scoping phase investigations will be carried out to see if other projects are proposing line closures or planned service suspensions through the stations that will benefit this programme.

5 Governance Arrangements

- 5.1 The scope of the programme will be set and bounded in accordance with the methodology described in paragraph 3.4 and 3.5. Nevertheless, the nature of the programme lends itself to maximising synergy through the ability to include works from other separately funded programmes (e.g. new ticketing requirements) and also provide commercial opportunity, such as, retail development.
- 5.2 The programme will be managed in a structured way with full governance in place. In addition to the usual stage gate controls, a Stations Programme Board (SPB) attended by the Sponsor Director (LU's Director of Strategy and Service Development) will be put in place.
- 5.3 The primary focus of the programme board will be to ensure that the programme is being delivered in accordance with its forecast spend profile, trajectory of embedded efficiency and in line with the forecast condition and concern improvements in accordance with those detailed in the Stations Asset Management Plan (see Appendix 3).
- 5.4 The SPB will also review and control scope and programme variation.
- 5.5 While this authority request is initially for a period of three years the opportunity for the sponsor to take a flexible view over the wider seven year scope will ensure that the programme will deliver to the planned costs, time and benefits.
- 5.6 The move to a programme approach also provides the ability for the works to be scaled to suit any future emerging business requirements i.e. acceleration, de-scoping, slowing or stopping the works at the end of the relevant phase.

- 5.7 A feature of this programme arrangement is that a TfL Gate P will be scheduled on an annual basis to provide full visibility of progress and to act as a control point if required. This review will also act as a trigger point by which to request an additional rolling annual Project Authority beyond the initial three years. This will enable continued efficiency realisation to be delivered from the 'Stake' model described above.

6 Views of the Projects and Planning Panel

- 6.1 At its meeting on 26 February 2013, the Projects and Planning Panel noted the proposals in this paper and supported the recommendations. Members were informed that all issues raised by the Programme Management Office and Independent Investment Programme Advisory Group on the programme had been addressed.

7 Views of the Finance and Policy Committee

- 7.1 At its meeting on 13 March 2013, the Finance and Policy Committee noted the proposals and supported the recommendations to the Board.
- 7.2 The Committee recognised that the aim of the programme was to return and maintain all station assets to a level described as 'fair' but requested that the aspiration should be to reach the level described as 'good', wherever possible, within budget. The Committee was informed that work on each of the 74 stations would include a deep clean and that LU would look at all opportunities to bring assets up to as high a standard as possible, within budget.

List of appendices to this report:

- Appendix 1: Complete list of 74 stations
Appendix 2: Scope of programme
Appendix 3: Forecast Condition and Risk reduction Measures

List of Background Papers:

None

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Complete List of 74 Stations

Stations included in this 3 year authority*	Stations to be included in this programme authority with existing full or partial approvals	Stations in future years	Stations being delivered alongside other schemes and therefore not included in this programme
Chiswick Park	Greenford	Upton Park	Bank/ Monument
High Street Kensington	Lambeth North	West Harrow	Cannon Street
Euston Square	West Kensington	Leytonstone	Edgware Road (Bakerloo)
Sloane Square	Edgware Road (Cir)	Upney	Farringdon
Parsons Green	Redbridge	West Brompton	
Latimer Road	Seven Sisters	Pimlico	
Stepney Green	Barkingside	Ickenham	
Temple	Goldhawk Road	Royal Oak	
Vauxhall	Croxley		
Liverpool Street	Moor Park		
Kilburn Park	Westbourne Park		
Hillingdon	East Putney		
East Ham	North Acton		
Rayners Lane	Grange Hill		
Rickmansworth	Buckhurst Hill		
Piccadilly	Chorleywood		
Gants Hill	West Acton		
Barons Court	Chesham		
Newbury Park	Mansion House		
Highbury & Islington	Blackhorse Road		
Hornchurch	Warwick Avenue		
Moorgate	Tottenham Hale		
Charing Cross	Ealing Broadway		
Hanger Lane	Fulham Broadway		
Chalfont and Latimer	Turnham Green		
Amersham	Barbican		

* These stations will be in various phases of delivery during the first 3 years of the programme (i.e. From scoping through to completion)

Scope of Programme

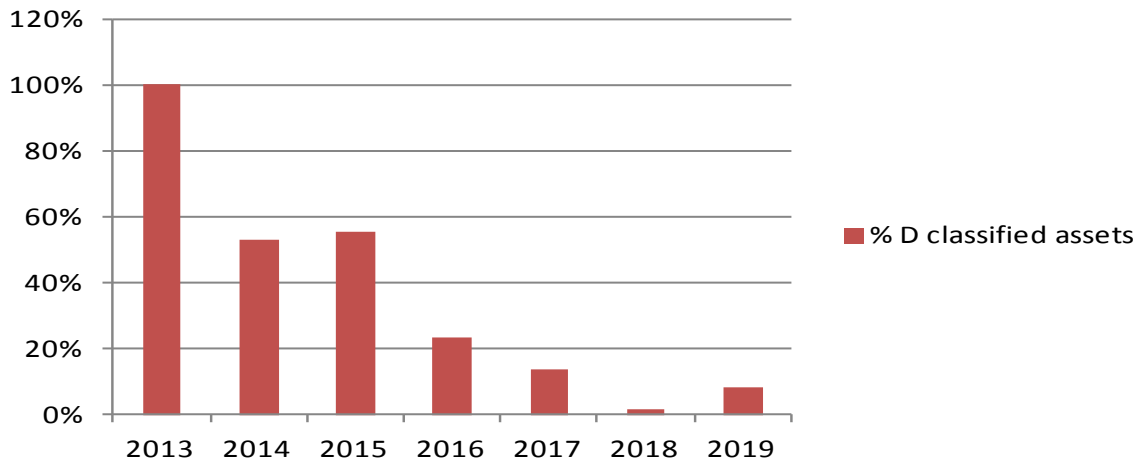
The scope will be derived from the surveys and the workbanks for each station; the following is a list of the items likely to be included, following experience at Baker Street and Chancery Lane stations:

- Replacement of obsolete lighting, switchgear and wiring
- Provision of additional lighting and emergency lighting
- Rewiring and segregation of Off Line Battery Inverter circuits, (secondary power)
- Addressing Distribution Network Operator phase imbalances
- Comfort Cooling Units upgrade
- Replacement of air handling units
- Installation of Fireman's Microphone and Fire Repeater Panels
- Installation of dry falling mains
- Patch repairing, renewal and deep cleaning of finishes to floors, ceilings, walls, columns and canopies
- Disability Discrimination Act improvements including provision of corduroy tactiles and highlighting stairs and columns
- Complete replacement of floor tiling to platforms
- Replacement of polycarbonate platform canopy glazing
- Replacement of suspended ceilings
- Application of a waterproofing membrane to flat roofs
- Repairs to existing and installation of new handrails and access gantries to flat roofs
- Replacement of station clocks
- Structural repairs to cracks
- Application of waterproof render, grout injection and improvements to water management systems to address water ingress issues
- Aesthetic repairs to water damaged finishes
- Jetting and repairs to station drainage
- Removal of asbestos to facilitate safe execution of other items of work

Forecast Condition and Risk reduction Measures

Premises Assets Forecast Condition Improvement

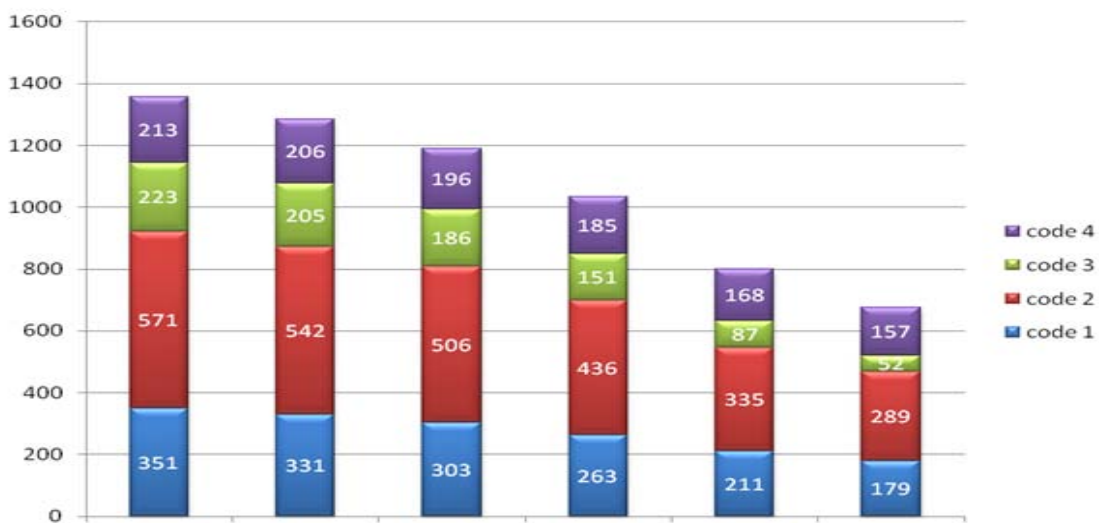
% D classified assets



D classified assets are considered as life expired and therefore run the risk of rapid failure and hence requiring additional maintenance effort and performance concern

Systems Assets Forecast Improvement

Stations systems assets are described as being Fire management systems, Communication systems, Mechanical and electrical assets



Code 1 - Legislative risk, Code 2 - Safety risk, Code 3 - Additional maintenance, Code 4 Performance risk