Programmes and Investment Committee

Date: **11 December 2025**

Item: **Piccadilly Line Upgrade Programme – Stage 1**

This paper will be considered in public

1 Summary

1.1 This paper provides an update to the Committee on delivery progress of Stage 1 of the London Underground (LU) Piccadilly Line Upgrade Programme (the Programme). Stage 1 of the Programme comprises the introduction of 94 new trains to replace the existing 1973 rolling stock fleet and associated infrastructure and depot works (Stage 2 of the Programme which involves upgrading the signalling system is not currently authorised or funded).

1.2 The Committee has received regular updates on the Programme since it was authorised in May 2018. More recently, at the July and October 2025 meetings, the Committee was updated on cost and schedule pressures that Stage 1 of the Programme is facing, as well as the progress of testing since the first train was delivered to London.

1.3 The purpose of this paper is to provide a further update on progress with testing and reviews on the estimated final cost (EFC) and to inform the Committee of a proposed change of approach in relation to depots on the Programme.

1.4 A paper is included on Part 2 of the agenda which contains supplementary information that is exempt from publication by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the financial or business affairs of TfL. Any discussion of that exempt information must take place after the press and public have been excluded from the meeting.

2 Recommendation

2.1 **The Committee is asked to note the paper and the exempt supplementary information on Part 2 of the agenda and endorse a change of approach for the depots element of the Piccadilly Line Upgrade Programme in relation to the works at Northfields depot as described in this paper.**

3 Background

3.1 As reported to the Committee in July 2025 the Programme team is currently working towards the first new train entering passenger service in the second half of 2026. We continue to work through the uncertainty and risks across the key enablers that support the introduction of this first train. Review points have been identified over the coming months to help to further refine this window.

3.2 In October 2025, the Committee was informed that our rigorous programme of integration testing which tests how the new train interacts with the railway infrastructure and systems and is vital to ensure the train is safe and reliable, had commenced. The first test runs of the new train took place on the LU network in late July with this initial testing focusing on the physical interfaces between the train and the LU infrastructure.

3.3 Introducing an innovative new train into operation on some of the oldest infrastructure on the Tube (that is shared with other trains at some locations) is a complex undertaking requiring significant time and investment that will ultimately bring transformational benefits to millions of customers.

4 Delivery Progress Since October 2025

4.1 Works continue across the Piccadilly line to install the infrastructure and systems needed to enable the next stages of testing and introduction of the new train. Significant work is being undertaken across several asset areas including modifications to signalling, power and communication systems, new platform infrastructure, gauging and infringement clearances and works to the depot maintenance and stabling facilities.

4.2 Since the end of September 2025, testing has progressed to also include system integration testing, which is testing the railway trackside systems that communicate and interact with the onboard train systems. Testing has been taking place during weekend closures and in Engineering Hours overnight during the week, planned around ongoing installation activities. At the end of October, a further train arrived in London, providing a total of four new trains to support this testing programme.

4.3 The system integration testing programme involves fully testing the complex interfaces between the new train and the railway systems and infrastructure, with appropriate time allowed to address any identified hardware and/or software issues and, where necessary, re-test. This testing is vital to ensure we are ready to introduce the train safely and reliably into passenger service. The testing and trials are planned to progress to the assessment of reliability and performance and to facilitate operational familiarisation and training next year ahead of the first train entering passenger service.

5 Schedule and Cost Review

5.1 In May 2018, the Committee approved Programme and Project Authority of £3,294m for Stage 1 of the Programme. In July 2021, the Committee approved a £300m reduction in Programme and Project Authority to £2,994m. There was no change to scope as part of the Programme and Project Authority reduction. The reduction was made to reflect that the EFC, which is dynamic, had reduced and remained stable as described in the paper in July 2021.

5.2 As reported to the Committee in October 2025 the Programme team has in recent months been undertaking a review of the EFC of the Programme and the wider schedule, informed by progress to-date, the window for the first train entering passenger service, and the broader challenges ahead.

5.3 As part of this review, we have reconsidered our strategy in relation to the depots sub-programme and have identified an alternative approach for Northfields depot (outlined in section 6 below).

5.4 Despite this, there are still cost pressures on the Programme which are expected to result in the EFC exceeding the current Programme and Project Authority of £2,994m. This is reflected in the proposed Business Plan assumptions currently in preparation. An increase in Programme and Project Authority will be sought at the meeting of the Committee on 5 March 2026, once the EFC and schedule review has been finalised.

6 Depots Strategy

6.1 We have recently reviewed our strategy in relation to the depot sub-programme. In particular, we have reconsidered the need for both Cockfosters and Northfields train maintenance depots to be fully upgraded concurrently, as well as the practicality of delivering a rebuild of both depots to the same timescales in a live operational environment without impacting services. When the project was originally authorised, the intention to fully upgrade both depots concurrently was valid, particularly because at that time it was expected that Stage 2 of the Programme (delivery of new signalling and additional trains) would be funded soon after, as referenced in the May 2018 paper to the Committee. However, the timescale for funding for Stage 2 remains uncertain.

6.2 In consequence of the review, it is now proposed to adopt an alternative approach for Northfields depot undertaking necessary modifications to the depot to maintain the new fleet for a period of up to 15 years. This approach would defer significant spend from the short to medium term and would make completion of the Programme more affordable and practical, particularly in the next TfL Business Plan period to 2030. The intention to fully upgrade Cockfosters depot remains unchanged. The value of the combined investment at both depots will still be substantial. The proposed approach at Northfields depot provides an opportunity to review future stabling and maintenance requirements. In the meantime, our assumption will continue to be that the full upgrade of Northfields depot needs to be delivered in the future.

6.3 Detailed work is being undertaken to define the requirements and exact scope of the modification works at Northfields depot under this revised strategy.

7 Assurance

7.1 TfL Project Assurance and the Independent Investment Programme Advisory Group are providing assurance on an ongoing basis through a programme of continuous assessment. A review of the Programme has been completed covering key challenges including schedule and EFC and a detailed briefing has been provided by the Programme team in support of this review. Further targeted assurance will be completed ahead of the submission to the Committee in March 2026.

List of appendices to this report:

A paper containing exempt supplementary information is included on Part 2 of the agenda

List of Background Papers:

Piccadilly Line Upgrade Stage 1 Progress Update paper, Programmes and Investment Committee 8 October 2025

Piccadilly Line Upgrade Stage 1 Progress Update paper, Programmes and Investment Committee 2 July 2025

Independent Investment Programme Advisory Group Report

TfL Project Assurance Report

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