

Board meeting 24.10.17

Secretariat memorandum

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Agenda item: 8

LTW562

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Piccadilly line reliability

1 Purpose of report

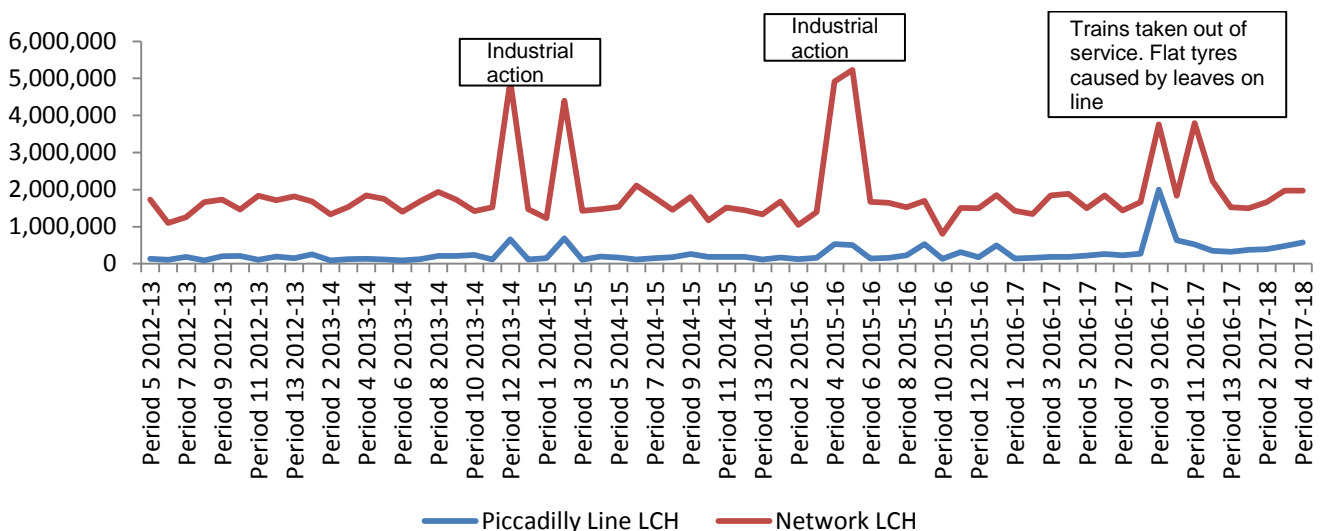
- 1.1. To advise members of the steps taken by London Underground to address seasonal poor service reliability on the Piccadilly line, following concerns raised at previous meetings.

2 Recommendation

- 2.1. Members are recommended to note the report.
- 2.2. London TravelWatch should write to Transport for London expressing our concerns regarding this issue. To urge them in particular to consider providing a permanent Rail Adhesion Train for use on the Piccadilly line and also the fitment of equipment to allow the application from service trains of 'Sandite'.

3 Background

- 3.1. In 2015 and 2016 there was a serious deterioration in the performance of the Piccadilly line as a result of trains being withdrawn from service as a result of damage to their wheelsets arising from adverse braking and acceleration conditions on the track, on the open air sections of line. (The Piccadilly line although a 'tube' line through central London is outside of this area largely above ground). This is shown in the table of Lost Customer Hours below:



- 3.2. The Piccadilly line trains are of a design known as '1973 stock' and were built in the mid-1970's. These therefore have a much older type of braking system than trains in use on other London Underground lines that do not feature more modern anti-slip technology. This means that when trains encounter slippery conditions caused by rain, grease and detritus such as leaves and other organic material, it causes the train brakes to lock wheels to the rail head, causing them to come out of shape. This means that the wheels are no longer round but have a series of flat surfaces. This then requires the wheels to be re-profiled back to a round shape using a wheel lathe.
- 3.3. A simple but effective way of increasing adhesion is the application of sand or other materials (Sandite) that break up grease or add grip, from apparatus fitted to trains. Drivers use this when they experience poor adhesion. Most National Rail and other London Underground trains are fitted with this, but not the Piccadilly line trains.
- 3.4. If trains are unable to brake properly there is a serious risk of trains overshooting station platforms, colliding with other trains or derailing if they pass through a signal at danger.
- 3.5. Similarly when accelerating lack of adhesion on the track means that trains will find it difficult to move, with associated problems of 'wheel slip' and reliability.
- 3.6. As a result of this poor performance in two successive years London Underground commissioned an investigation into the underlying causes of this. This report can be found here <https://tfl.gov.uk/info-for/media/press-releases/2017/september/specialist-trains-lead-the-charge-against-leaf-fall-on-the-piccadilly-line> .

4 The consultants report findings and recommendations

- 4.1. The investigation found that the primary cause of the problems was a failure to clear lineside vegetation to the agreed standard for London Underground. This was largely due to poor relationships between the infrastructure maintenance provider and the line operator, and decisions to reduce such activity due to budgetary constraints.
- 4.2. As a result of the report a number of actions were implemented including:
 - A programme of tree and vegetation removal
 - Creation of two trains to clear the tracks of leaf fall detritus (Rail Adhesion Trains)
 - Provision of 'traction gel' applicators at known locations where adhesion is problematic
 - Provision of signage and improved information for drivers at sites of poor adhesion
 - Modifications to the train braking systems
 - Commissioning a feasibility study of adding 'sanding' gear to the existing rolling stock

5 Discussions and commentary

- 5.1. Passengers using the Piccadilly line in the latter halves of 2015 and 2016 were subjected to considerable disruption as a result of this failure on the part of London Underground. As this is a major route serving Heathrow Airport, central London and large areas of West and North London, the impact of this was very widely felt.
- 5.2. The consultants report and recommendations are welcome, but also raise a number of questions, particularly as to why circumstances changed in 2015, when these trains had for around 40 years operated without these conditions being experienced before.
- 5.3. The change in the vegetation maintenance regime from 2014 onwards is the obvious reason for this. However, it is surprising that unlike other 'open air' sections of London Underground railway (and Network Rail) that there was no Rail Adhesion Train activity on this route, given the volume of passengers using it and its strategic importance to London.
- 5.4. The consultants report also does not mention the sale of one of London Underground's wheel lathes in 2015 to Abellio Greater Anglia to help them deal with a similar problem on their rural diesel multiple units. This effectively impaired London Underground's ability to repair any damage being done to its own fleet and therefore more of their trains were unavailable for use.
- 5.5. The creation of the Rail Adhesion Trains has been made possible by withdrawing of two service trains, and reducing the timetable accordingly. It is the intention to return the Rail Adhesion Trains to passenger use at the end of the autumn season.

6 London TravelWatch priority

- 6.1. The large volume of passengers using and the strategic nature of the Piccadilly line in London make this a priority issue for London TravelWatch.

7 Equalities and inclusion implications

- 7.1. There are no equality and inclusion implications arising from this report.

8 Legal powers

- 8.1. Section 248 of the Greater London Authority Act 1999 places upon London TravelWatch (as the London Transport Users Committee) a duty to consider - and where it appears to the Committee to be desirable, to make recommendations with respect to - any matter affecting the functions of the Greater London Authority or Transport for London which relate to transport (other than of freight).

9 Financial implications

- 9.1. There are no financial implications for London TravelWatch arising from this report