

# Increasing resilience ahead of DLR trains end of life

Tom Page, January 2024

## **Summary**

The DLR operates two fleets of trains – the B92 trains (average entry into service 1993), the B07 fleet (entered service ~2009). We will soon use the B23 trains (the first was due in service at the end of March 2024, now estimated around three months later). **We propose to shorten trains on one route to build contingency by keeping our oldest fleet going until new trains are ready. We've picked the lowest impact way of doing this.** This is an expansion to train-shortening we began Dec 2023.

The B92 fleet are life expired and their replacement by the B23 fleet is a critical part of the business case for the new trains. We are approaching a point with the B92 fleet where many vehicles reach a kilometrage cap beyond which the trains cannot run. Shortening trains on one route saves km now, reducing the chance we need to enact sudden service reductions in 2024 should there be further delays to the programme.

## ***The issue – the cap in kilometrage***

The safety case for the train depends on them being maintained in accordance with the mandated maintenance regime. On the B92s many trains are coming up to their next major heavy maintenance overhaul (known as either H or I exams). We have already undertaken condition-based assessments to stretch out the period between exams, but this will soon be met.

## ***The context***

- When the DLR contract was extended for four years to run to 2025 (the extension was agreed in late 2019) the programme for the delivery of the new trains was at an earlier stage. We instructed KAD to remove the H&I exams beyond 2022 on the basis that this was unnecessary work and we would have new trains to replace the B92s by this point. We have subsequently re-inserted these H&I exams this year to try and keep as many B92s going as possible.
- Doing the exams take up depot space which
  - Is in shorter supply because the trains are life expired, fail more and need more casualty maintenance
  - Is needed to do equivalent, but earlier in lifecycle, exams on the B07 fleet (which we'll keep running for ~15 more years)
  - Is needed to assemble and service the new trains until the new depot is available
- This means we don't have the depot space to do more exams on B92 trains in 2023/24 (and doing so would get in the way of accepting B23s which is our path out of this issue)
- The post Covid timetables we implemented in Sept 2022 and May 2023 have brought substantial additional revenue (at P6 DLR was 26% of the total upside in TfL fare revenue, but accounts for about 3% of all TfL PT journeys), but it also pushes the trains harder.
- In December, because of delays to the first train in service date, we began shortening trains on the Woolwich Arsenal to Stratford Int route, at that point on Mondays and Fridays only as demand is lower.

## ***The deadline***

Many B92 vehicles are currently on restricted mileage to eke out extra calendar time before they are unable to operate. We have seven vehicles that will run out of kilometrage by the end of May, and five more that will be out by the end of August. The first new train is currently estimated to be in service by around the

end of June / start of July 2024, with some uncertainty. If there were further delays and we had built up no contingency then we could be in a position of needing to implement sudden reductions in service.

## ***The proposal***

We want to find enough kilometrage reduction to be able to manage a six-month delay from the *previous* end of March 2024 date, i.e. three months from the *current* project estimate. Working with PTSP we have looked for ways to do this that minimise customer disbenefit, minimise equality impacts, protect revenue, are operationally easier (and therefore don't compound the problems above) and can be easily reversed. The favoured option is to **change trains on the Woolwich-Stratford International branch from three cars to two cars for all days**. The change implemented in December did this on Mondays and Fridays – this would now also occur on Tuesdays, Wednesday & Thursdays. This avoids frequency reduction and is deliverable.

We've picked this because:

- This is the least bad option assessed by PTSP; disbenefits and thus lost revenue are lowest
- It's simple to implement and doesn't require new timetables
- We can revert it quickly if needed

We have already engaged with our Comms team to prepare reactive lines. Given we do see crowding on the trains midweek on this route we propose to also do proactive comms at affected stations to explain why we're doing this and to note the benefits of the new trains (to show that this disbenefit will be short-lived, without specifically committing to times for the new trains).