

Date: 6 December 2023

Item: iBus2 Contract Award

This paper will be considered in public

1 Summary

- 1.1 iBus is the automatic vehicle location system for the London bus network and London Trams and is critical to the safe and efficient operation of these services. This paper seeks Procurement Authority to enter into agreements relating to the iBus2 services, including the On-bus Services and the Back Office Services.
- 1.2 A paper is included on Part 2 of the agenda which contains exempt supplementary information. The information is exempt from publication by virtue of paragraphs 3 and 5 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business affairs of TfL and that is legally privileged. Any discussion of that exempt information must take place after the press and public have been excluded from this meeting.

2 Recommendations

- 2.1 **The Committee is asked to note the paper and the exempt supplementary information on Part 2 of the agenda and, subject to approval of the revised TfL Business Plan to be considered by the Board on 13 December 2023:**
- (a) **approve Procurement Authority in the amount set out in the exempt supplementary paper on Part 2 of the agenda for entry into the iBus2 contracts described in this paper; and**
 - (b) **note that matters for which Procurement Authority is sought above extend beyond the current TfL Business Plan and Budget (a revised version of which is to be considered by the Board on 13 December 2023) and provision will, therefore, need to be made in future Business Plans and Budgets.**

3 Background

- 3.1 Bus Operations currently manages its requirements to support its business activities of managing and monitoring bus services across around 8,850 vehicles, 700 routes and 19,000 stops through a single contract. The system allows us to provide real-time customer information, respond effectively to incidents, make appropriate payments to operating companies based on tracked performance

measures and helps ensure the safety of both our customers and operational colleagues on the Bus network.

- 3.2 The existing contract for the iBus services has been in place since 2005 and will expire on 2 May 2027. Transition and rollout of the iBus2 services will take approximately three years to complete.
- 3.3 This decision is critical to secure the timely replacement of the aging iBus system currently installed on TfL's bus fleet. While the iBus system currently remains operational, TfL must commence the iBus2 project to ensure that a viable replacement solution is ready for deployment before the current system becomes obsolete and impacts upon the quality of passenger services.
- 3.4 iBus2 ensures legal compliance through the continued provision of on-bus audio-visual passenger information, which has recently become a requirement under the Public Service Vehicle (Accessible Information) Regulations 2023.
- 3.5 The existing iBus system uses 2G internet, which is likely to be retired from 2028. The flexibility of the iBus2 solution will allow us to meet existing demand; using 4G (and 5G where available) and the robust product roadmap will ensure that future technologies can be harnessed.
- 3.6 TfL has undertaken a procurement using the Competitive Dialogue procedure under the Public Contracts Regulations 2015 in relation to the iBus2 On-bus Services and Back Office Services contracts described below which are intended to replace the current iBus services. The iBus2 On-bus Services and Back Office Services are business-critical contracts. The proposal is for contracts to be awarded for the supply, installation, maintenance and disposal of each of the following:
 - (a) **On-bus Services:** installation of the on-bus solution on around 8,850 buses and trams across London in order to provide: location information for use in Real Time Passenger Information (RTPI) and performance management of bus operators; geospatial information to service controllers and drivers to track and manage services including diversions; on-board visual and audio next stop announcements; and safety systems such as a driver alerts for low height structure warnings and radio communications for code red calls; and
 - (b) **Back Office Services:** implementation of the back office system to enable TfL, the Network Management Control Centre and bus operators to:
 - (i) track and manage live services including diversions;
 - (ii) provide RTPI to customer channels as well as to around 3,000 signs; consolidate bus operating information provided by other TfL systems and send this to vehicles; and
 - (iii) provide performance management information to TfL and bus operators for use in calculating bus operator payments.
- 3.7 The objectives of the procurement included:
 - (a) deliver the services which allow TfL to comply with legal obligations;

- (b) support the Mayor's Vision Zero goal for a safe transport network;
- (c) support the Mayor's Transport Strategy to improve the customer experience and increase mode share; and
- (d) reduce TfL's operating costs.

4 Benefits

- 4.1 iBus2 will ensure the continuation of benefits provided under the current iBus contract, such as improved reliability and reduced journey times, which are both key aspects of the Mayor's Transport Strategy and Bus Action Plan. These benefits can be attributed to the remote service control function allowing effective performance management from 42 service control centres across London and performance incentive payments for bus operators calculated using iBus data. Bus journey times at junctions will also improve upon the launch of iBus2, enabled by the Surface Intelligent Transport System Real-Time Optimiser project, allowing bus priority at all 5,000 signalised junctions across London.
- 4.2 Other customer benefits include the continued provision of audio-visual next stop information on-bus and real-time next bus information online and at stops through Countdown displays. The reliability and accuracy of both functions will improve under iBus2, notably information provided in times of disruption, which has been highlighted as a key driver for increased bus patronage in recent research.
- 4.3 iBus2 will improve safety for drivers, colleagues, passengers and other road users, helping to facilitate Vision Zero. Diversions will be shown on the driver's screen, making it easier for drivers to navigate diversions. Furthermore, diversion announcements for passengers will be automated, allowing drivers to focus on their principal role keeping passengers safe. Improvements to location accuracy will reduce the number of false low height structure alarms which should improve responsiveness to the alarms. iBus2 will take a pro-active approach to fatigue management, highlighting potential driver's hours breaches to service controllers in advance of the situation. The new system will maintain the provision of communications between drivers, service controllers, and the Network Management Control Centre, which keeps the network running smoothly and enables a quicker incident response.

5 Procurement Summary

Packaging Strategy

- 5.1 Following extensive analysis, it was determined that a different approach to the iBus contract structure was required to support the iBus2 product strategy of adopting a more modular approach and open architecture. The scope of the iBus contract was therefore split into multiple lots: Lot 1 – On-bus Services; and Lot 2 – Back Office Services.
- 5.2 Due to the size and scale of Lot 1 – On-bus Services, this was divided further into Lot 1A and Lot 1B.
- 5.3 The packaging strategy for iBus2 is set out in Table 1:

Services	Lot	Scope	Awarded Suppliers
On-bus Services	Lot 1A	Supply, installation, and maintenance of 50 per cent bus fleet and Trams	One Supplier
	Lot 1B	Supply, installation and maintenance of 50 per cent bus fleet	One Supplier
Back Office Services	Lot 2	Supply, installation and maintenance of the Back Office Solution	One Supplier

Table 1: iBus2 Packaging Strategy

- 5.4 Bidders were permitted to submit a combined bid across some or all of Lots 1A, 1B and 2 based on their satisfaction of procedural requirements set out in the applicable procurement documents. Therefore, it was possible for a single bidder to be awarded all Lots. If a single bidder won both Lot 1A and Lot 1B then a single contract would be awarded for Lot 1, but a separate contract would be awarded for Lot 2.
- 5.5 The iBus2 contract term for Lots 1A, 1B and 2 is for an initial term of 10 years from its operational commencement date, with options for TfL to extend for up to an additional 10 years. Therefore, the maximum possible term is for 20 years from the operational commencement date. This is to ensure that the return on investment of the initial installation can be maximised.

Evaluation and Supplier Selection

- 5.6 Bidders were required to submit initial tender submissions in November 2021. Bidders' initial tender submissions were discussed with them during dialogue held between June and October 2022 and bidders were requested to submit final tenders in April 2023. The outcome of the evaluation and recommendations is included in the exempt paper on Part 2 of the agenda.

Mobilisation and Contract Readiness

- 5.7 The iBus2 contracts for all Lots are due to commence in February 2024. Transition will take approximately 24 months to ensure that the iBus2 services have been appropriately implemented and tested to minimise any potential disruption to bus operations. Rollout is anticipated to take approximately 12 months to complete from the conclusion of transition.

6 Financial Implications

- 6.1 Financial Authority for iBus2 is included in the draft Business Plan until financial year 2026/27, due to be considered by the Board in December 2023.
- 6.2 Programme and Project Authority was approved by the Committee at its meeting in July 2023, as part of the Technology Programme 2023/24 and 2024/25.

7 Assurance

- 7.1 Second line assurance review of Business Case for iBus2 has been undertaken by an Investment Appraisal Finance Partner from the Investment Appraisal team.
- 7.2 An Integrated Assurance Review was undertaken by TfL Project Assurance and the Independent Investment Programme Advisory Group after the contract award recommendation was made, in September and October 2023, with no critical recommendations made.

List of appendices to this report:

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

List of Background Papers:

Independent Investment Programme Advisory Group (IIPAG) Report and Management Response

TfL Project Assurance Report and Management Response

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