



Upgrade and Installation of Passenger Information Screens at Buchanan Bus Station

Committee Operations

Date of meeting 23 August 2019

Date of report 7 August 2019

Report by Assistant Chief Executive

1. Object of report

To update the Committee on the upgrading and installation of Passenger Information Screens at Buchanan Bus Station.

2. Background

SPT's bus stations currently have a variety of general and at-stance information offerings. These include:

- concourse TFT (see Appendix 1);
- information totems populated with paper information;
- at-stance LED (see Appendix 1) with scheduled information;
- at-stance LED with real time information; and
- at-stance information panels populated with paper information.

In addition, at-stance audio totems are available.

The back office support systems also vary to some extent with the principle support system BIDS regarded as life expired. The supplier, Vix, has previously intimated they have no plans to develop the system any further in the future. BIDS is also used to manage and bill for four departures as well as parking, power and cleaning.

A summary of the information provision at each bus station is provided in Table 1.

Table 1

Location	Concourse	Stance	Audio	Real Time	Back Office
BBS	Large screens	Paper information panels	Yes	No	BIDS
Hamilton	Large screen and paper totem	LED	Yes	No	BIDS
East Kilbride	Paper totem	LED	Yes	No	BIDS
Greenock	Paper totem	LED	No	Yes	BIDS (no departure charges)
Partick	Paper totem	LED	Yes	Yes	BIDS (no departure charges)
Govan	Paper totem	TFT	Yes	Yes	BIDS (no departure charges)

3. Outline of proposals

3.1 Bus Information Screen Enhancements

In recent years, upgrades at Partick and Govan Interchanges as well as Hamilton and Greenock bus stations have resulted in the introduction of high specification electronic information facilities. This now means that information provision at BBS, our flagship site, is behind the standards established elsewhere on our own estate.

Currently, the large screens at BBS are life expired and require replacement. At-stance information is paper based and does not meet the standard established at any other SPT bus site or connect to the RTPi system.

3.2 TFT and LED Screens

A review of the screen options for BBS was undertaken with input from the Bus Station, Transport Data, Digital and Bus Infrastructure teams.

Pros and cons exist for both TFT and LED screens and their utilisation at BBS.

In summary, TFT screens provide greater content flexibility and are capable of clearly demonstrating multiple lines of transport information, which is compatible with use at main entrances and on concourses. However, the technology is still maturing and does not currently have as long a life as LED screens (this relates to the screen component only).

LED screens are well established with the public in a public transport environment and have recently been successfully installed at Partick at each stance (including with RTPI).

Although there are limitations to the amount of characters available and to the back office compatibility, these are manageable and LED screens have proved effective at stance level at several SPT sites.

Approximately 60% of services at BBS utilise RTPI and therefore an upgrade to LED screens would markedly improve the information offering to customers, from the current paper information system.

3.3 At-Stance Audio

At-stance audio is currently in place at each stance in BBS, operating from the BIDS back office system. However, the technology and infrastructure are life expired.

Audio provision is vital in providing a viable service to visionally impaired customers. Alternative provision is available by utilising the Vix Horizon back office (already owned by SPT and in place for on-street RTPI).

3.4 Back Office System

As noted, the current system, BIDS, is life expired. Alternative provision is available for the key service of information provision via Vix Horizon which SPT already owns and utilises in support of RTPI. Horizon is capable of interfacing with both TFT and LED screens and also with at-stance audio provision.

The other key function, invoicing for departure charges, would be generated via Novus FX (currently in development) and interfaced to the financial management system.

Other items currently supported by BIDS fall out of the scope of Horizon or BIDS, being Tours, Cleaning and Power. These items will initially require to be managed and interfaced to the financial management system for billing by spreadsheet. A scoping exercise has identified that the volumes are low and manageable via spreadsheet.

3.5 Estimated Cost and Budget

A review of BBS identified a requirement for 16 TFT screens at 9 locations within the bus station capable of working with RTPI to provide the right blend of passenger information by stance, by service, by operator or other as required.

At-stance, the review identified a requirement for 46 LED screens (reflecting the lesser need for multiple rows of information) to bring BBS to the standard established elsewhere.

Table 2 details the capital and revenue costs of the planned upgrade.

Table 2

Preferred Option	Total capital	Total Revenue - 15 years	TOTAL 15-year cost
16 TFT displays for concourse and entrances/ 46 LED displays for stances	£399,425	£161,399	£560,824

The capital cost will be split over financial years 2019/20 and 2020/21 in line with the planned implementation and the annual maintenance cost of c.£10,800 can be

accommodated within existing budgets. In addition, the installation of at-stance LED screens is estimated to incur c.£1,800 in total electricity costs per annum.

Currently, there is a Category 1 budget for 'Buchanan Bus Station Improvements' of £1.255m in 2019/20 and indicative budget of £270k in 2020/21. The current upgrade programme at BBS encompassing Phase 1 Refurbishment, Distribution Board and Electrical Upgrade and Lighting Upgrade is estimated to outturn c. £1m in 2019/20 and therefore the current budget will be sufficient in this financial year based on the planned phased implementation programme. The current year budget of £1.255m includes provision of £205k for screen upgrades.

3.6 Procurement

3.6.1 Passenger Displays

A framework contract with an approved contract value of up to £1,911,965 is in place until November 2021 with Ferrograph Ltd. The cumulative committed spend to March 2019 was £462,000 and therefore no variation is required to accommodate this proposal.

3.6.2 System Communications & Maintenance

A five-year contract with an approved contract value of up to £1,099,105 is in place until June 2021 with Vix Technology Ltd. The cumulative committed spend to March 2019 was £864,000. However, work continues to extend RTPI within the SPT area which if achieved, alongside the BBS works, will further draw on this contract value and may then require variation (note also the existing contract has an option to extend by a further five years from 2021).

3.7 Signage Review for Visually Impaired

The information screens have been specified based on work recently undertaken with Glasgow Access Panel at Partick Interchange and take account of guidelines on font size, type and colour. Prior to installation, a further site specific review of BBS via RNIB is scheduled for the end of August 2019 which will directly inform decisions on height and angle of the screen installation.

3.8 Implementation

The implementation programme is planned around the existing programme of work at BBS. The operational priority is to upgrade the information at the concourse to reinstate the main transport information offering to a high standard. Thereafter, stance upgrades will be implemented on a phased basis, recognising operational constraints and other upgrade work at BBS.

Alongside the implementation of the BBS displays, plans will be further developed for the upgrade of similar legacy displays at East Kilbride, Hamilton & Greenock Bus Stations. Further updates to the Partnership will be provided in due course.

4. Conclusions

Passenger information provision at BBS does not meet the standards established elsewhere on SPT's bus estate. Existing contracts and budgets are in place to provide for a significant upgrade in information provision quality to our customers, including linking to RTPI.

5. Recommendations

The Committee is asked to note the planned upgrade and installation of passenger information provision at Buchanan Bus Station.

6. Consequences

<i>Policy consequences</i>	<i>Consistent with SPT's Regional Transport Strategy and on-street transport information enhancement programme (RTPI).</i>
<i>Legal consequences</i>	<i>None</i>
<i>Financial consequences</i>	<i>Capital and revenue costs of the installation programme can be accommodated within existing budgets.</i>
<i>Personnel consequences</i>	<i>None</i>
<i>Equalities consequences</i>	<i>Better transport data supports STP's drive to deliver equality outcomes</i>
<i>Risk consequences</i>	<i>None</i>

Name Valerie Davidson

Name Gordon Maclellan

Title Assistant Chief Executive

Title Chief Executive

For further information, please contact Neil Wylie, Director of Finance on 0141 333 3380.

APPENDIX 1

TFT Display



Wrexham WREXHAM		Departures		10:57
Service	Destination	Stand	Time	
4A	Wrexham	4	11:00	
T3	Barmouth	5	11:00	
33	Llay	3	11:03	
1	Chester	7	11:07	
2	Oswestry	1	11:07	
TL1	Borras	3	11:10	
21A	Summer Hill	4	11:11	
12A	Mount Sion	8	11:11	
3	Wrexham	4	11:15	
35	Wrexham	3	11:19	

LED Display



F 38	Eastwood Toll	14:09
F 3	Govan Bus Stn	4min
F 57	Silverburn	14:11
M 3	Post Office	5min