## Hitachi AT200

## Stakeholder Consultation

## Introduction

Format of today's presentation


- Transforming the passenger experience ...


ScotRail is operated by
abellio ${ }^{\circ}$

## Procurement Programme

- Aug 2013: Abellio commence OJEU process

Oct 2013: TS draft Train Technical Specification Jan 2014: TS final Train Technical Specification Mar 2014: Manufacture and Owner tenderers received Oct 2014: Hitachi and CRL appointed preferred Manufacturer and Owner
Mar 2015: Contracts executed

- Apr 2015: ScotRail franchise commenced


## Procurement Scope

- Hitachi
- $24 \times 4$-car EMU ( 23 m vehicle length. $1^{\text {st }}$ class)
- $46 \times 3$-car EMU ( 23 m vehicle length. No $1^{\text {st }}$ class)
- Saloon mock up
- Driver training simulator
- Training courses, operating manuals, back office systems
- Maintenance services for 10 years


## ScotRail

- Joint Project Manager
- Traincrew (testing \& operation)
- Timetable (testing \& operation)
sabeanstegir delivers electrification and Millerhill depot abellio ${ }^{\approx}$


## Delivery Programme

## Abellio EGIP

Issue 1.2 (02 Mar 2015) Design

## - Design Freeze

Procurement

- Component Deliveries to Factory
- All Components Delivered for 1st Train

Mock-Uo \& Simulator

- Mock-Up Delivery
- Simulator Delivery

Testing
System / Combined Testing

- Factory Acceptance Testing (1st Train)

Type Approval / Testing (Static)
Type Approval / Testing (Dynamic)
Performance Testing
Rescue Test 8 car +8 car

## Production Schedule

Type Approval Train 1
Type Approval Train 2
Type Approval Train 3
Typo Approva! TraIn A
Series Build Train 5
Series Build Train 6
Series Build Train 7
Series Build Train 8
Series Build Train 9
Series Build Train 10
Series Build Train 11 series Bulla I rain 12 Series Build Train 13 Series Build Train 14 Series Build Train 15 Series Build Train 16 Series Build Train 17 Series Build Train 18 Series Build Train 19 Series Build Train 20 Series Build Train 21 Series Build Train 22 Series Build Train 23 Series Build Train 24
$\square$




ScotRail is operated by

## Proposed routes



Bus/Interlink services
Ferry routes
Please note that this is an abbreviated version of our network and not all stations are shown. These stations are detailed in a separate map for legibility.

## Vehicle interior

- Compliant with PRM - TSI
- Two toilets per Unit (3 and 4-car)
- Two wheelchair spaces per Unit
- 2 bicycle spaces per Unit
- Min of 266 seats (4-car)
- Passenger door control
- Power sockets per pair of seats
- Free WiFi
- Seat availability system
- Luggage stacks and overhead racks abellio ${ }^{\approx}$


ScotRail
SCOTLAND's RAILWAY

## Vehicle interior



ScotRail is operated by abellio ${ }^{\circ}$

## Vehicle interior

UAT designed to meet the latest PRM TSI requirements


Glass support bracket RAL 7015 Slate grey Luggage rack frame RAL9006 Silver

## Layout changes during design

- Seat numbers reduced: 286 fixed to 257 fixed:
- more bays
- pitch increased
- alignment with windows improved
- priority seats moved to vestibule area

Wheelchair spaces relocated
Bicycle storage improved
Flexible use area
$1^{\text {st }}$ class relocated and quality improved

Original


1-B25276-150226.tif

Current Proposal


Adobe Acrobat Document

## Vehicle interior (comparison)

|  | 380/1 | 380/0 | 170 | Original 3xx (4-car) | Proposed 3xx <br> (4-car) | Proposed 3xx (3-car) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| First Class Seats | 0 | 0 | 18 | 20 | 20 | 0 |
| Std Class Seats | 266 | 192 | 169 | 266 | 237 | 190 |
| Iotal Fixed Seats | 266 | 192 | 187 | 286 | 257 | 190 |
| Std Class Tip-up Seats | 17 | 17 | 2 | 11 | 16 | 16 |
| Total Seats | 283 | 209 | 189 | 297 | 273 | 206 |
| UAT | 1 | 1 | 1 | 1 | 1 | 1 |
| Std Toilet | 1 | 0 | 1 | 1 | 1 | 1 |
| 3ike spaces | 2 | 2 | 2 | 2 | 2 | 2 |
| Wheelchair Spaces | 2 | 2 | 2 | 2 | 2 | 2 |
| Luggage Stacks/vehicle | 1 | 1 | 2 | 1 | 1 | 1 |
| Airline Pitch | $805-920 \mathrm{~mm}$ | $805-920 \mathrm{~mm}$ | $795-940 \mathrm{~mm}$ | $770-870 \mathrm{~mm}$ | $810-880 \mathrm{~mm}$ | $810-880 \mathrm{~mm}$ |
| Bay Pitch | 1770 mm | 1770 mm | 1880 mm | 1700 mm | 1770 mm | 1770 mm |

## Thank You

- Discussion
- Toilets
- Luggage space
- Priority seat and wheelchair locations
- Bicycle storage
- Flexible use area
- Door controls
- Announcements / displays
- Colour contrast
- Signage
- What have we missed?

