



Designing the Future

Passengers' preferences for new national intercity rolling stock from 2012

Report for Passenger Focus
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Foreword for IEP project

In March 2007 the Department for Transport (DfT) launched the procurement process for the Intercity Express Programme (IEP), one of the most significant investment programmes in rolling stock for over 30 years. When introduced, the new fleet of trains will replace existing High Speed Trains (HSTs) which will have been in service around 40 years. The first generation of electric trains on the East Coast Main Line will also be replaced.

Passenger Focus has long argued that it is vital for passengers to be involved in the design of new trains at the earliest opportunity. Failure to consult at the right level, at the right time, can condemn a generation of passengers to travelling in trains that are not fit for purpose or are less suitable than those they might otherwise have had. This view was endorsed by the National Audit Office (NAO) in its report 'Improving passenger rail services through new trains', which recommended that rolling stock leasing companies and train operators should liaise closely with Passenger Focus. The NAO argued that this would allow better account to be taken of the features and facilities that passengers, including those with disabilities, need in the design of new trains. Passenger Focus holds a unique place within the industry in having no vested interest other than ensuring the best possible deal for passengers – the people who are going to travel on these trains for the next 30 or 40 years.

Given the significance of IEP and that the new trains will serve different markets (long-distance, inter-urban, and commuter) it is of vital importance to ensure that the design fully meets the wide-

ranging needs of passengers. Therefore, Passenger Focus sought active engagement with the process of determining the passenger facilities to be provided on the new trains. As part of this process this research report was commissioned to help inform the Department for Transport in its discussions with those seeking to win the IEP contract.

Passenger Focus is not attempting to design the interiors of the new trains but to provide evidence from passengers on what they consider to be good and bad examples of interior design on current long-distance trains. By seeking to build on current good practice we are trying to prevent past mistakes being repeated. We also hope to encourage innovative designs as new products and materials become available in the next few years. Whilst the IEP trains will need to be ground-breaking in design and offer passengers an enhanced experience, they will also need to be durable.

This report sets out which areas of existing interior design rail passengers favour, the design features they think need improving, and highlights examples of good practice that can be found on existing long-distance trains. It provides a clear message from passengers to the designers.

A handwritten signature in black ink, appearing to read 'Colin Foxall'.

Colin Foxall CBE
Chairman – Passenger Focus



Executive Summary

Passenger perspectives on inter-city trains

The Intercity Express Programme is a government sponsored project to design, build and maintain new trains for use on the East Coast Main Line, Great Western Main Line and West Coast Main Line (south) between 2013 and 2020. The objective is to provide new express trains for these routes with higher passenger capacity, better performance and modern control systems. Currently the plan is to provide trains with 3 different types of internal layout: inter-city, inter-urban and commuter.

This report sets out the results of research sponsored by Passenger Focus to examine the attitudes of passengers to the features inside the standard class of current inter-city trains operating on nearly all British main lines. The research was divided into two parts. Firstly a sample of passengers was invited to complete a detailed questionnaire about the train on which they had travelled. Questionnaires were distributed on eight different types of train, operated by different train operating companies. The aim was to have a minimum sample of 100 passengers on each train type. Secondly we used 18 mystery shoppers, six of whom were disabled. Each mystery shopper was required to travel on five different train types and complete a detailed questionnaire on each. They were also asked to simulate being a passenger for leisure, business or commuting purposes and were asked to take luggage with them. Twelve of the mystery shoppers ("Main panel") came to a workshop to discuss their findings. The six disabled mystery shoppers participated in in-depth interviews with a researcher after their journeys.

The report thus provides the results of both a quantitative sample from all current inter-city trains and more detailed qualitative information from all eighteen mystery shoppers. There were generally few differences in the level of satisfaction between different groups of passengers, be that gender, age

or journey purpose. Where substantial differences emerged, these are noted in the report.

A key principle to emerge from the results is the need for designers to pay close attention to the detail of the features in the passenger accommodation. Once the basic requirement of seating comfort has been established, the finer details of facilities become more significant to passengers. In particular passengers found the space available for luggage to be inadequate; this design feature consistently attracted the lowest scores for satisfaction.

While passengers were significantly more satisfied with particular design features on individual trains, no one type of train received universal endorsement. Hence there is much to be learnt from the detailed results, for those charged with finalising the design of the new trains.

Passenger Focus believes that part of the design process should include the creation of mock-ups of the internal features and, if time permits, using the pre-series trains. This should then be tested by passengers before any final decision is made on the internal layout.

Section 3 of this report sets out the detailed findings from the quantitative phase of this research. In each section these results are followed by a commentary, based on the observations of the mystery shoppers. Section 4 then sets out the comments of the mystery shoppers expressed at the workshop.

The main findings of the passenger surveys are:

- In the vestibules, the space to manoeuvre and the position and visibility of the grab rails was less than satisfactory (table 3.2)
- When moving through the train, the majority of passengers considered the

aisle width satisfactory. However only a minority considered the visibility and style of the hand holds on the backs of seats easy to use and see. (Table 3.3).

- When boarding the train there was a high level of satisfaction with the external features.
- The main panel said that the seat reservation information was difficult to read on both electronic and paper formats (Table 3.4) although in the quantitative surveys the electronic reservation displays scored higher.
- On the comfort of seating, the 1990s diesel trains generally had the best satisfaction ratings (around 65%) while the Pendolino scored lowest. The leg room and foot space often had lower satisfaction ratings than the seats. Generally, males were less satisfied with the seating than females and commuters were less satisfied than business or leisure travellers (Table 3.5).
- Lighting was considered good but armrests were considered too hard by 35%. Tables with four seats were favoured over airline seating in the ratio 6:4. Often the drop-down tables, on the backs of seats, were considered inadequate for laptops. Perhaps surprisingly, there were no differences between travellers with different purposes although the main panel felt that commuters and business travellers needed better seating accessories such as power points and Wi-Fi (Table 3.6).
- The size of the windows and the visibility from them was generally satisfactory and passengers want seats aligned with the windows (Table 3.7).
- Toilets produced much dissatisfaction. We specifically tried to separate design features from the maintenance condition, considered satisfactory by 70%. The Desiro design produced consistently low satisfaction scores but existing design features satisfied less than half of passengers overall. Women were more satisfied than men with toilet facilities and older travellers were more satisfied than younger age groups (table 3.8).
- Of all the aspects in the survey, luggage provision provided consistently the lowest satisfaction scores, be that for stowage facilities, security or accessibility. Men were generally more satisfied than women. Main panel members felt that luggage space was sufficient for commuters and business travel but not for leisure passengers (table 3.9).
- Information audibility and legibility generally scored very well (table 3.10).
- Just over half of respondents were satisfied with the on-train environment and there was little difference between trains. Litter bin provision scored consistently poorly (table 3.11).
- Satisfaction with the layout of the buffet generally scored over 80% with especially high ratings for the Mallard. Women and leisure passengers were

more satisfied with the buffet than men, commuters and business passengers. Features concerning service provision were less satisfactory. Space around the buffet to minimise congestion was considered crucial (table 3.12).

The main panel workshop (Section 4) explored the rationale behind the views expressed in the survey. These mystery shoppers recognised that conflicts exist between passenger preferences and therefore that compromises have to be made. They were forthright in expecting that certain basic passenger needs must be met. They especially emphasised:

- the comfort and legroom on the seating must be at least as good as the best current designs.
- there must be no deterioration in ease of safely moving inside the train.
- adequate luggage space should be provided.

Overall there were high expectations from the mystery shoppers for the new designs.

Aided by this research, Passenger Focus will continue to work with the Department for Transport, the successful bidder and the Train Operating Companies with the aim of achieving the best possible design for all passengers in the new trains.



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1 Introduction

1.1 Background

This report presents findings from a research project commissioned by Passenger Focus in September 2008 and undertaken by MVA Consultancy, to explore passengers' preferences for the design of the next generation of national intercity rolling stock.

Context of the Research

In January 2008 the Government produced a rolling stock plan setting out in detail how rolling stock will be used to deliver increased capacity. The Intercity Express Programme (IEP), the Thameslink and Crossrail programmes all include provision for the introduction of new rolling stock. This rolling stock is expected to provide advancement in technology and design. The focus of this research and report is therefore the rolling stock that will be delivered as part of the Intercity Express Programme.

The first generation of IEP rolling stock will be introduced on the East Coast and Great Western Main Lines, followed in due course by other key long-distance, inter-regional and commuter routes.

The procurement of the IEP rolling stock is led by DfT with industry stakeholder involvement, including relevant TOCs and Network Rail. The winning bidder will be responsible for design, manufacturing, financing, long-term maintenance plus

operational reliability and availability of the rolling stock¹. The DfT have produced an IEP Train Technical Specification to guide manufacturers.

Three different layouts will be provided on Intercity Express Trains: long-distance, inter-regional and commuter. This research focuses on the internal design and facilities of the long-distance intercity version. A key focus of the study was to investigate passenger experiences of making long-distance journeys on 9 different types of rolling stock currently in operation, and specifically, to compare their satisfaction with the different design aspects of the train interiors:

- High Speed Train: 1970s diesel train, recently refurbished – East Coast Main Line (NE EC HST);
- High Speed Train: 1970s diesel train, recently refurbished – Great Western (FGW HST);
- Mallard 225: 1980s electric train since refurbished – East Coast Main Line (EC Mallard);
- Pendolino: recently introduced electric train – West Coast Main Line (Pendolino)
- Voyager: 1990s diesel unit – Cross Country (Voyager Cross Country);
- Meridian: 1990s diesel unit – East Midland Trains, broadly similar to the Voyager (EM Meridian);

¹ Bids to build the Intercity Express were submitted in May 2008. A contract is expected to be awarded in April 2009, with trains entering full service in 2015 (House of Commons Transport Committee, Tenth Report of Session 2007-08, July 2008)

- Pioneer: 1990s diesel units – Hull Trains, broadly similar to the Voyager (Hull Trains Pioneer);
- Eurostar: 1990s high-speed international electric trains; and
- Class 444: long-distance electric units introduced in 2004 – South West Trains (SWT Desiro).

1.2 Study Objectives

The purpose of this study was to understand passengers' views about the internal layout, facilities and design features of current trains and to ascertain which features passengers thought should be incorporated in the new design. Recognising that certain design features including those prescribed by the Technical Standards for Interoperability for People of Reduced Mobility are already incorporated in the DfT's technical specification. This study therefore sought to understand passengers' views on the additional aspects of the interior design that have not already been decided. Therefore, the key objectives were to:

- compare passengers' preferences between the internal designs of 9 types of intercity rolling stock, based on their experiences of making long-distance journeys on each type
- identify passenger priorities and preferences in respect of the new build, enabling these to be considered against design assumptions and specifications being developed by the DfT, and
- provide Passenger Focus, DfT and manufacturers with robust evidence on passenger opinions, priorities and

concerns, thus helping to ensure that passengers' views are recognised in design specifications and proposals.

The research methodology included:

- **main panel of 12 mystery shoppers** who assessed current long-distance rolling stock;
- **mini-panel of six disabled mystery shoppers** who assessed current long-distance rolling stock;
- quantitative **passenger on-train survey** to establish satisfaction levels of the nine selected types of rolling stock;
- **workshop** involving the main panel members to explore in detail acceptable/aspirational standards for each design aspect; and
- **depth interviews** with the mini-panel mystery shoppers.

1.3 Structure of the Report

Details of the study methodology are provided in Chapter 2. Chapter 3 presents the main findings of the study, set out under the following headings:

- vestibule area
- moving through the train
- boarding the train and finding a seat
- comfort of seating
- seating accessories
- toilets

- windows
- luggage
- information provision
- on-train environment
- buffet

Chapter 4 then looks at passenger views on improvements and trade-offs and Chapter 5 presents the conclusions and recommendations.

The Appendix to this report includes:

- Appendix A – Tabulations Report
- Appendix B – Passenger On-Train Survey Questionnaire
- Appendix C – Design criteria for each train type
- Appendix D – Mystery shoppers' journeys
- Appendix E – Main-panel Questionnaire
- Appendix F – Disabled Mini-panel Questionnaire
- Appendix G – Workshop Topic Guide
- Appendix H – Highest and lowest scores for each design area

2 Methodology

2.1 Introduction

In order to meet the objectives of the study a programme of qualitative and quantitative research was undertaken, including:

- an on-train self completion survey;
- a mystery shopping exercise;
- a workshop with representatives from the mystery shopping main-panel; and
- depth interviews with participants of a mini-panel of disabled mystery shoppers.

2.2 On-train self completion survey

To provide an evidence base of passenger opinion of current long-distance rolling stock, a passenger survey was undertaken on eight different train types (permission was not granted for Eurostar) covering 38 long-distance journeys².

Interviewers walked through the carriages and invited passengers in standard-class accommodation to complete questionnaires concerning their experience and opinions on the particular rolling stock they were using for their long-distance journey that day.

² It was hoped that the quantitative survey could also be undertaken on the Eurostar. However, due to operational difficulties (tunnel fire at the time of the proposed fieldwork) Eurostar declined to participate.

A total of 1169 passenger-completed questionnaires was taken forward for analysis. A breakdown of the samples achieved for each train type is shown in the table below.

Train Type	Number of completed surveys
First Great Western - HST	161
NE East Coast - HST	97
East Midlands Trains - Meridian	113
Hull Trains - Pioneer	118
Cross Country - Voyager	146
South West Trains - Desiro	127
NE East Coast - Mallard	237
Virgin - Pendolino	170
TOTAL	1169³

Questionnaire Design

The questionnaire (Appendix B) explored passengers' satisfaction and views on the following design areas:

- boarding the train
- vestibule area

³ The target for each train type was a minimum of 100 completed questionnaires. The Mallards were over sampled (1 shift plus 3 additional trains) compared to HST (1 shift + 1 additional train) due to timetable constraints and the need to include the few Hull Pioneers trains per day into a designated fieldwork shift.

- moving through the train
- comfort of seating
- seat accessories
- windows
- toilets
- luggage
- information provision
- on-train environment
- buffet

Passengers were also asked for details of their journey (such as journey purpose) and to provide some information about themselves, e.g. demographic details including age, gender, height). The body size of the respondent was also noted by the fieldworker handing out the questionnaire – allocated as small, average or large in terms of girth.

The questionnaire was developed in consultation with Passenger Focus and finalised following ‘cognitive testing’ and piloting to ensure that it was clear, unambiguous and straightforward for passengers to complete on-train.

Sampling, Sample Size

The train selection and survey timing was designed to achieve a large sample of passengers with good representation of commuters, business and leisure travellers on all eight types of train. Interviewers completed 11 shifts which included:

- nine shifts between 08:00 – 14:00 on a weekday; and

- two shifts at weekends to focus on leisure travellers (Saturdays 10:00 – 16:00).

On routes where both recently refurbished and older stock were known to operate, interviewers were instructed to issue questionnaires on the refurbished stock only.

Data Processing and Analysis

Coding and Cleaning Data

The questionnaires were largely pre-coded, and data was manually entered onto computers using a specially devised Data Entry program. All data were checked for range, route and logic errors which were corrected wherever possible.

In cases where respondents had answered questions that were not relevant for their particular train type, e.g. because the design feature concerned was not present in this type of train⁴, the responses were deemed ‘not applicable’.

When interpreting the findings, it is important for the reader to be aware of the key design aspects that differ between train types. Appendix C identifies differences in internal designs and facilities on each of the 9 types of rolling stock.

Weighting the Data

Although the proportions of commuters, business and leisure passengers selected for the survey on each train were similar, the mix of respondents using each type of train naturally varied

⁴ For example, some respondents who travelled on the Virgin Pendolino and Voyager Cross-Country answered the question ‘how easy it was to read seat reservation information cards’, when in fact indicator screens rather than cards are used on these train types.

somewhat. To ensure that comparisons of train users' opinions would not be distorted by differences in the passenger mix, the survey data were post-weighted. Data from the National Passenger Survey were used to identify the overall profile of passengers using trains operated by the TOCs concerned. The data in our sample were then weighted according to age, gender and journey purpose so that the analysis would consistently compare the views of the same mix of users towards each type of rolling stock. The adjustments needed were relatively small as the gender, age group and journey purpose splits in the samples matched NPS profiles within ten percentage points in most cases.

Analysis

The main thrust of the on-train passenger survey analysis is to compare the average long-distance passenger's satisfaction with the different design aspects of the 8 types of train – controlling for any differences in users' age, gender and journey purpose mix. In addition, the tabulations report (Appendix A) provides breakdowns showing how the opinions of different types of passenger vary. Breakdowns of opinions with each design aspect are provided for each train type, according to responding passengers' journey purpose (commuter, business and leisure) and personal characteristics (age, gender).

Some points to note when inspecting the results

- comparisons of opinion according to passengers' journey purpose are based on respondents' own judgement of which category applied to their journey;
- the journey purpose categories included commuting, business, leisure and 'other non-business', and for

analysis purposes, 'other non-business' and leisure categories have been combined;

- the tables show the 'base' (number of respondents answering) and the statistical significance of differences in opinions across the different train types; and
- weighted and unweighted overall sample sizes are generally similar. Unless otherwise indicated, the base shown is the weighted base, as this is used to calculate the statistical significance of differences in opinion by train type.

2.3 Mystery Shoppers Main-Panel

The use of professional mystery shoppers was preferred to recruiting rail users from the general public because of the difficulty in securing a commitment from individuals to spend several days making journeys that would not otherwise have been made. Moreover, a further risk could have been potentially higher attrition rates and/or not recruiting a sufficiently diverse range of passengers to yield comprehensive insight. The key advantages of using mystery shoppers included:

- recruiting regular rail users;
- recruit accurately "all shapes and sizes" of rail users;
- commitment (as the people were conducting the journeys as a work task); and
- assured quality of reporting experiences in a consistent fashion.

The aim of the main-panel was to obtain a more detailed comparative assessment of the different rolling stock, from a

carefully selected group of mystery shoppers. Each mystery shopper undertook up to five long-distance journeys using different rolling stock, making detailed comparisons of their experiences on each, and satisfaction with internal design aspects. Panel members were instructed to begin completing the questionnaire only after spending at least 45 minutes on the train, to ensure their assessments accurately reflected the long-distance travel journey experience.

Main–Panel recruitment and sample

The main–panel members undertook up to five journeys generating a total sample of 59 journeys. The panelists were selected to reflect the cross-section of long-distance rail users nationally, both demographically and physically. Profile data of ‘operators of long-distance journeys’ from the Spring 2008 National Passenger Survey was used to recruit panelists against NPS age and gender profiles, and selection covered a broad range of passenger body sizes (using three categories of adult height and a simple grading of girth⁵). All panelists selected were regular users of rail (once a month or more) for long-distance journeys of one hour or more.

Each panel member undertook a cross–section of journey types covering peak and off–peak periods on up to five different types of train. Appendix D displays the journeys undertaken by each mystery shopper. For each journey, panelists were asked to assess the internal designs from a particular perspective (either business, leisure or commuting) and to take the appropriate luggage for that purpose (e.g. laptop and briefcase for a business journey, suitcase for leisure journey).

⁵ These were based on an approximation of body width scale of small/average/large and a height scale of Under 5ft, 5-6 ft and over 6ft

Semi–structured questionnaire design

The questionnaire was based on the Passenger On-Train Survey questionnaire but with the addition of open-ended questions (e.g. ‘explain why’) aimed at identifying factors behind ratings of satisfaction or dissatisfaction with design aspects (see Appendix E). The questionnaire was piloted by both MVA and Passenger Focus staff before finalisation.

Panelists were provided with disposable cameras so that photographs could be taken to provide further evidence, and to verify that assessments were based on journeys actually made on the rolling stock types specified.

2.4 Mystery Shoppers Panel Workshop

Once all the mystery journeys had been undertaken, eleven of the main panel members came together for a two–hour workshop to explore in detail their experiences and identify preferences for the new rolling stock.

The workshop explored key design areas including:

- overall experiences of the different types of rolling stock (e.g. which areas were well/poorly designed);
- views on which rolling stock represented best practice in particular design areas;
- views on the main areas that are important to the quality of the journey experience;
- priority areas for improvement (establishing whether there are differences for business, commuter and business passengers);

- thoughts on possible trade-offs and compromise (e.g. preferences between increased luggage space vs additional seating space); and
- 'key messages', based on experience as long-distance passengers, for designers of the next generation of rolling stock.

Appendix G contains the topic guide used for the workshop.

2.5 Mini-Panel of disabled passengers

A mini-panel was also undertaken to examine the views of six disabled passengers. Passengers from the deaf community were not included in the mini-panel. It was taken as given that features such as on-board announcements and door hustle-alarm volumes will be at a suitable level for the widest range of hearing-impaired passengers to benefit, as specified in relevant disability legislation.

A mini-panel of six members was therefore recruited which comprised⁶:

- two wheelchair rail users;
- two visually-impaired rail users; and
- two mobility-impaired rail users.

Each participant undertook a minimum of four journeys ensuring that each type of rolling stock was assessed by a participant with each disability⁷.

⁶ Both visually-impaired panel participants were registered blind and both mobility-impaired panel members required a stick to assist with walking.

⁷ It was not possible for a mobility-impaired passenger to review Eurostar stock.

The questionnaire used by the disabled passengers' mini-panel was similar to that used by the main-panel, though additional questions were included, specifically tailored towards the disabilities of the participants (see Appendix F).

Depth interviews

After disabled panel members had completed their journeys individual depth interviews were carried out. These interviews were designed to clarify and explore further any issues raised in the questionnaires, and to discuss aspirations and priorities for the new rolling stock. Although the mini-panel undertook the same type of journeys as the main panel it was considered more appropriate for the former to be interviewed about their journey experiences, and thoughts relating to the design of the new rolling stock, rather than participate in the workshop. It was felt that the needs of disabled passengers would be very different (depending on the nature of their disability) from those of others. It was therefore decided that, in order to ensure their views were captured in full and not overshadowed, that the input of disabled passengers should be captured separately.

3 Key Findings

3.1 Introduction

The following sections of this chapter outline the key findings from the passenger on-train survey, the mystery-shopper panels, the workshop and the depth interviews with the mini-panel of disabled passengers. This chapter reports the overall approval rating for each design area and passenger views on which current train types represent best practice. In addition, we highlight future design aspirations and issues raised by disabled passengers.

Interpreting the tables

The following points should be noted when interpreting the tables:

- answers to questions about different aspects of the same 'design area' have been combined into overall 'approval ratings'. Approval ratings are calculated from (a) passengers' responses to questions on their satisfaction with aspects of the design area concerned (based on the proportion of all respondents who scored between 7 and 10 on the satisfaction scale, where 1 equals very dissatisfied and 10 equals very satisfied) and (b) the proportions of respondents who gave positive responses to certain other questions also asked, e.g. who said they found it 'quite easy' or 'very easy' to use the design area referred to, or who rated it as 'good';
- certain other questions in the questionnaire explored passengers' preferences rather than satisfaction (e.g. which type of seating or luggage space passengers would prefer) and these have not therefore been included in the 'approval rating' calculation. Those questions on which the overall approval ratings are based are clearly indicated with a [♦] symbol beside the relevant item in each table. Each item has equal weights in the calculation;
- 'n/a' means that this particular design feature is 'not available' for that train type – see Appendix C for a complete breakdown. Where one particular train type has two or more 'n/a' for a specific design area (e.g. SWT's Mallard luggage provision) no attempt has been made to combine scores for the relatively few 'available' features into an 'overall approval' score. This rule has been extended to three 'n/a' for the design area 'seating accessories' where opinions on thirteen separate features were explored;
- the question numbers identified in the table (e.g. 'Q22') refer to the on-train passenger survey questionnaire (see Appendix B);
- for ease of use, the data are reported without decimal places. 'Rounding' of the data means that results may appear to differ by one per cent to the published results. For example 84.6 is reported as '85' and 83.2 is reported as '83'; the apparent reported difference is 2, however the actual difference is 1.4 and will therefore be published as '1';

- an asterisk means that the differences between approval ratings shown for each train type are statistically significant at the 95% confidence level; and
- in cases where some cells are 'not applicable', the means of column and row averages may not precisely agree. In these cases the table shows the mean of column averages (passengers' ratings of each train type).

3.2 The overall picture

Table 3.1 Overall approval ratings for each design area

Design area	% overall approval rating	Train type with:	
		Highest score	Lowest score
Information provision ⁸	86	n/a	n/a
Boarding the train and taking a seat	76	Pioneer (Hull Trains)	FGW HST
Windows ⁹	74	NE East Coast HST	Pendolino
Buffet	66	Meridian East Midlands/ Pioneer (Hull Trains)	Voyager XC
Moving through the train (including grab and hand rails)	65	Voyager XC	Desiro (SWTs)
Seating accessories	64	Meridian East Midlands	Pendolino
Comfort of seating	58	Meridian East Midlands	Pendolino
On-train environment	52	Meridian East Midlands	Pendolino
Toilets	46	Voyager XC	Pioneer (Hull Trains)/ Desiro (SWT)
Vestibule area	42	Pioneer (Hull Trains)	Pendolino
Luggage provision (including space, security and accessibility)	27	Pioneer (Hull Trains)	Meridian East Midlands / Voyager XC / Pendolino

⁸ This score is based on 'audio announcements' and 'information displays in the carriage' and should be treated with caution as 3 of the 8 train types did not have information displays in the carriage. In addition, as all train types do not incorporate all the relevant design features (i.e. information displays) it is not appropriate to identify a highest and lowest approval score – see table 3.10 for individual scores.

⁹ Note: Only Meridian East Midlands, Voyager and the Pendolino have blinds and curtains. Therefore, the approval rating is based solely on being able to 'see out the window' and the 'overall size of the window'. The Pendolino's blinds/curtains received highest average score – see table 3.7

Please Note: Despite the fact that a particular train type might be highlighted as being the lowest or highest score, the % difference between the next highest or lowest score might be very small. Therefore, please inspect each design area table and note the % difference between each train type.

Table 3.1 shows that respondents’ approval ratings for three design areas – toilets, vestibule area and luggage provision – were below 50%. Passengers across all long-distance train types are most satisfied with information provision (86%) and boarding the train and taking a seat (76%), while they are least satisfied with luggage provision. Significantly only 26% said that they were satisfied with this design area.

The long-distance trains that received the most favourable ratings overall were the Pioneer (Hull Trains) and East Midlands’ Meridian (EM Meridian), while the Pendolino was given the lowest average scores.

3.3 Vestibule area

Table 3.2 Vestibule Area

Vestibule Area	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who thought the following factors were good:										
Room in vestibule area (Q11) ♦	24	17	20	26	28	24	30	26	18	
Floor surfaces (vestibule area) (Q12) ♦	59	62	59	60	63	60	64	58	51	
Floor surfaces (seating area) (Q12) ♦	63	69	63	58	73	70	64	59	50	
Provision of grab rails and handles (Q13) ♦	22	26	22	25	31	19	22	21	16	
Approval rating	42	44	41	42	49	43	45	41	34	
Base	1233	158	108	121	120	167	138	244	179	

Approval ratings for vestibule area

The vestibule area scored relatively low in comparison with other design areas with less than a quarter (24%) of respondents identifying that the 'room in the vestibule' area was good. This level of dissatisfaction was consistent across all train types with the highest score only reaching 30% (Desiro).

The provision of grab and hand rails also scored low, with only 22% overall identifying that the provision was 'good'. However, passengers on average were more satisfied with the floor surfaces in both the vestibule (59%) and the seating area (63%). The Pendolino (34%) on average scored the lowest for these design areas, while the Pioneer (49%) received the highest score.

Differences in opinion by age, gender and journey profile

Satisfaction of vestibule area designs was generally consistent among passengers in different age, gender and journey purpose categories.¹⁰

Reasons for satisfaction and drivers of good practice

A number of main-panel members found the vestibule area to be 'tight' and 'quite cramped', especially if travelling as a leisure passenger when trying to negotiate with luggage in a crowded situation. One main-panel member commented that they were helping people with a pushchair on and found it difficult to lift and manoeuvre within the vestibule when congested. The floor surfaces of the vestibule area, however, were generally considered to provide good grip across all train types. A few of the main-panel members commented that they would have liked a few more hand rails in the vestibule area to assist with boarding and alighting.

Observations by disabled passengers

- Voyager hand rails in the vestibule were considered to be placed logically and were colour contrasted red which made them easy to locate (visually-impaired).
- Pioneer hand rails were considered modern, hand-friendly and easy to hold. In addition, the floor surfaces were considered good.
- Eurostar reportedly had no grab rails and the vestibule area was overcrowded and the respondent felt that the vestibule design didn't help the flow of passengers into the carriage (visually-impaired).
- One mobility impaired passenger found it difficult to move in the vestibule areas on the Pendolino and Voyager because it was overcrowded and luggage was obstructing the area (mobility-impaired).

Key design features and improvements

Overall and taking all passenger views into consideration the key design features and improvements identified by passengers include:

¹⁰ Please note that this section and subsequent sections relating to 'experience by age, gender and journey profile' are drawing on the data from the tabulations report located in Appendix A.

- additional hand rails and handles in the vestibule; and
- sufficient/enhanced room to manoeuvre large items of luggage and pushchairs and improved luggage provision to avoid spill over into the vestibule area.

3.4 Moving through the train

Table 3.3 Moving through the train

Moving through the train	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who said it was quite/very easy to:										
Use internal doors (Q19) ♦	93	99	94	89	87	91	84	98	97	
Use the inter-carriage doors (Q21) ¹¹ ♦	93	100	96	87	82	93	86	97	98	
Walk through the train while it is travelling at speed (Q22) ♦	75	75	69	75	74	79	71	77	74	
Walk back to your seat with purchases while the train is moving (Q28) ♦	67	47	73	50	68	72	n/a	76	75	*
Average	82	80	83	75	78	84	80	87	86	
Base	952	119	88	95	100	130	99	177	145	
% who said it was easy to:										
See the grab rail (Q24) ♦	33	35	32	42	44	36	38	24	23	*
Use the grab rail (Q25) ♦	30	32	25	35	36	37	31	25	24	
Base	1225	161	110	117	120	166	134	239	180	
% who felt the aisle was:										

¹¹ Note: There are no inter-carriage doors on any HSTs or the Mallard. However, it is felt that the respondents' opinions on this question contributed to their overall satisfaction of moving through the train and the scores were included to inform the analysis.

Moving through the train	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
Too narrow (Q23)	34	31	32	26	31	21	38	39	45	*
More than wide enough (Q23)	2	3	3	5	3	1	0	3	0	
Wide enough (Q23) ♦	64	66	65	69	66	78	62	61	55	
Approval rating	65	65	65	64	65	69	62	65	64	
Base	1250	169	108	121	124	168	138	239	183	

Approval ratings for moving through the train

The Voyager received the highest approval score (69%) and Desiro the least (62%) for aspects in relation to moving through the train. More than three quarters (82%) of respondents thought that using internal and inter-carriage doors, where provided, and walking through the train (with and without purchases) was 'quite or very easy'. This view was relatively consistent across all train types except for the question 'walking back to your seat with purchases' where only half of the respondents for HST FGW (47%) and EM Meridian (50%) considered this task easy; on average the highest scores were received by the Pendolino and Mallard.

In contrast, passengers were far less satisfied with the 'visibility' and 'ease of use' of grab rails¹². On average less than a third of respondents considered it easy to 'see' and 'use' the seat-grab rails. Views on ease of using the seat-back grab rails were fairly consistent across all train types, but there was a wider range of scores regarding visibility of the grab rail. The Pendolino received the lowest scores for both use (24%) and visibility (23%), while the Pioneer and Voyager received the highest scores for visibility (44%) and ease of use (37%) respectively.

On average just over a third (34%) of respondents thought that the aisle was too narrow across all types of rolling stock. However, the range did vary with 45% of respondents identifying the Pendolino's aisle 'too narrow' and only 21% sharing this view for the Voyager.

¹² When referring to 'grab rails' in the section 'moving through the train' this is in relation to handholds on the backs of seats.

Differences in opinion by age, gender and journey profile

There was no marked difference in levels of satisfaction for moving through the train between passengers in different age, gender and journey purpose categories.

Reasons for satisfaction and drivers of good practice

Main-panel members identified that the internal and inter-carriage doors were easy to use because they were either automatic or had easily accessible and clearly visible push buttons. In addition, it was felt that the aisle was well lit and the door controls were at a convenient height for both children and adults. The aisle on all trains was generally considered too narrow, especially for passengers carrying large pieces of luggage or to facilitate two people passing. However, the strongest criticism across most trains was the adequacy of the seat-back grab rails to assist when walking through trains travelling at high speed, when swaying, vibration and shaking can create unstable footing. Grab rails that were considered good practice incorporated:

- bright colours (contrasting colour to the seat);
- designed in a size and a shape that are easy to grip;
- located on every seat (rather than every second or third);
- appropriate height which accommodates most passengers;
- made of a hard material (the Eurostar seat handles were softer and more difficult to grab); and
- seat grips located on the top of the seat rather than the side.

Observations by disabled passengers

- Although push-button doors generally did not cause a problem as long as the buttons were sufficiently illuminated (visually impaired) automatic doors were preferred. One mobility impaired passenger noted that the Mallard's automatic doors in particular were 'easy to use and helpful'. However, grab rails on Mallard trains were felt to have insufficient colour contrast. Visually-impaired passengers also reported problems seeing yellow grab rails e.g. on Pioneers.
- The aisle was considered too narrow on the Pendolino – "you have to walk semi-sideways and the narrowness is not helped by unthinking people either placing their bags in the aisle" (visually-impaired).
- The main concern identified by mobility impaired and wheelchair passengers in relation to moving through the train/accessing the wheelchair space was luggage in the aisle, which prevented easy movement.

Key design features and improvements

Overall and taking all passenger views into consideration, the key design features and improvements identified by passengers include:

- accessible and clearly visible push buttons or door handles;
- well lit aisle and corridors;
- good design of grab rail and hand rails; and
- sufficient luggage provision to avoid luggage being placed in aisles.

3.5 Boarding the train and taking a seat

Table 3.4 Boarding the train and taking a seat

Boarding the train and taking a seat	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who said it was quite/very easy to:										
Identify destination from external signage (Q8) ♦	83	85	82	77	90	84	76	88	81	
Get on the train (Q9) ♦	92	96	96	85	88	92	94	93	92	
Find the door handle/controls (Q10a) ♦	67	56	59	68	74	82	79	55	70	*
Using the door handle/controls (Q10b) ♦	70	56	55	73	79	83	88	57	73	*
Read the seat reservation information (screens) (Q15a) ♦	76	n/a	n/a	82	83	77	n/a	n/a	66	
Read the seat reservation information (cards) (Q15b) ♦	60	64	74	n/a	n/a	n/a	27	68	n/a	*
Identify their reserved seat (Q16) ♦	79	73	89	84	86	68	75	85	73	
Identify unreserved seats (Q17) ♦	82	87	83	83	86	82	92	81	70	
Approval rating	76	74	77	79	84	81	76	75	75	
Base	952	127	85	89	94	128	103	188	138	

Approval ratings for boarding the train and taking a seat

Across all train types, rail passengers were generally satisfied with design aspects related to 'boarding the train and taking a seat', with the majority of respondents stating that it was easy to board a train (92%). However, one aspect that received lower scores was 'the ability to read the seat reservation cards (60%)¹³. The East Coast HSTs received the highest score of all the train types where seat reservation information is card-based, while the Desiro received the least. Of those trains with electronic seat reservation displays Hull Trains Pioneers scored the highest approval rating (83%) Although passengers were not asked to make a comparison the satisfaction scores with the electronic displays was higher overall, by (16%). There was a significant difference between the scores for 'using the door handle/controls' with FGW HSTs (56%) and NE East Coast trains (55%) receiving the lowest scores, while Desiro trains received the highest score (88%).

Differences in opinion by age, gender and journey profile

Satisfaction ratings for boarding the train and taking a seat were generally consistent among passengers in different age, gender and journey purpose categories. However, a number of main-panel participants commented that there was insufficient space for leisure passengers to board with a pushchair and take it through the corridor or the aisle.



¹³ Note: Not all train types use seat reservation cards. Please see appendix C which identifies the train types that use reservation cards or electronic reservation screens.

Reasons for satisfaction and drivers of good practice

Main-panel members were generally satisfied with the physical design of the train and how it facilitates boarding. However, once on the train and looking for their seats some main-panel members expressed concern at the small size and poor clarity of reservation cards which identifies whether seats are reserved or available. In particular, one main-panel member drew attention to big differences in the quality of printing on cards used by different train operators and how this affected their legibility. The two examples on page 3.9 from standard-class journeys (SWT's journey from London to Southampton and FGW's journey from Southampton to Westbury) demonstrate good and poor practice in relation to print quality.¹⁴

A number of main-panel members commented that the electronic reservation screens were generally too small, not immediately noticeable at times, scrolled too fast and could be difficult to read with direct sunlight. Some main-panel members said that they would like to see their names appear on both the electronic and traditional reservation cards as standard practice. This was identified as useful in quickly identifying a seat (and avoiding tailbacks of boarding passengers) and avoiding confusion and disagreements. However, this view was only expressed by a few of the main-panel members, and the question of whether passenger names should be displayed was not put to those passengers participating in the on-train survey.

Other points of good practice raised by main-panel members in relation to 'boarding the train' included clear and visible carriage identifier signs (including coach letters on exterior windows) and providing sufficient room for luggage to prevent it 'spilling into the aisle or vestibule'.

Observations from disabled passengers

- Visually-impaired passengers considered Pioneer, HST and Desiro 'best for boarding' due to ease of finding the step and using the grab rails.
- The colour contrast of grab rails on Mallards was considered poor (visually impaired).
- Visually-impaired and mobility-impaired panellists reported that door opening warning chimes on Meridian, Desiro, NE East Coast HST and Mallard were difficult to hear.
- Both wheelchair users commented that boarding the train was relatively easy on all train types¹⁵ (wheelchair user).
- Desiro trains were praised for having "lots of room to manoeuvre". However, it was thought that access into the carriage needed enlarging for Pioneer trains (wheelchair user).
- The room in the vestibule area was described as good for Desiro and Meridian trains, because they were wider which gave a 'good turning area for a wheelchair'. Eurostar was described as adequate, as was the Pioneer (wheelchair user).
- The Pendolino, NE East Coast HST, Mallard and Voyager were considered difficult to board by mobility impaired passengers. The main reason was the design of the grab rails. Pendolinos and Voyager grab rails were described as being the wrong angle, shape and height (note:

¹⁴ Please note that it is acknowledged that the journey from Southampton to Westbury is not a long-distance journey and is operated by inter-regional stock. The reservation card for this journey was from a panel member who was making a connecting trip before their return leg on a specified long-distance journey. Therefore the cards are displayed purely as an example of good and poor practice.

¹⁵ A ramp was provided by the relevant train operating company, having been booked via the Assisted Passenger Reservation Service.

for Voyager this is in contrast to visually impaired passengers who thought the grab rails were of a good design because of the colour contrast). It was suggested that grab rails on the backs of seats should either be circular or triangular in design, which were considered easier to grip. NE East Coast HST and Mallard seat back handles were considered too low (mobility-impaired).

- The step onto the NE East Coast HST was considered difficult to see by one mobility-impaired passenger, who suggested that it should be “reflective or have mini cats eyes” to assist visibility.

Key design features and improvements

Overall, and taking all passenger views into consideration, the key design features and improvements identified by passengers include:

- clear, bold and legible printing on reservation cards;
- larger LED screens and indicators to show both reserved and unreserved status;
- LED screens to be designed in order to minimise impact of sunlight;
- clear and visible signage indicating coach/carriage/seating information; and
- sufficient space for luggage to minimise overspill into boarding area.

3.6 Comfort of seating

Table 3.5 Comfort of Seating

Your comfort during this journey	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who were satisfied with the following aspects of the seating comfort:										
Ease of getting into and out of the seat (Q29) ♦	67	65	65	65	72	75	69	70	58	
Comfort of the seat when upright (Q29) ♦	65	63	61	71	68	76	61	64	54	
Comfort of the seat when reclining (Q29) ♦	30	29	23	40	21	32	17	36	33	*
Height of seat (considering comfort and view) (Q29) ♦	74	72	74	78	75	80	69	80	60	

Your comfort during this journey	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
Width of seat (Q29) ♦	63	64	64	68	69	66	53	69	49	
Depth of seat (Q29) ♦	65	60	67	69	71	73	60	69	54	
Comfort of the front edge of the seat (Q29) ♦	69	69	67	70	75	77	69	72	53	
Contour and shape of the seat (Q29) ♦	65	63	62	74	68	68	61	69	57	
Leg room – knee clearance when upright (Q29) ♦	55	56	44	68	63	55	50	58	49	
Leg room – foot space when upright (Q29) ♦	56	67	43	62	61	59	50	58	47	
Comfort of foot area (Q29) ♦	27	29	14	44	25	31	15	27	29	*
Head support (Q29) ♦	52	47	46	62	52	58	46	59	41	
Back support (Q29) ♦	60	61	56	70	65	62	52	63	49	
Hardness/softness of upholstery (Q29) ♦	57	61	52	62	61	57	47	60	56	
Overall feeling of comfort in this seat (Q29) ♦	60	54	51	70	72	66	60	61	49	
Approval rating	58	57	53	65	61	62	52	61	49	
Base	1206	163	104	120	116	165	133	228	177	

Approval ratings for comfort of seating

Just over half (58%) of respondents overall were satisfied with design areas in relation to 'seating comfort'. The views expressed were relatively consistent across all train types, except for 'comfort of seating when reclining'¹⁶ and 'comfort of foot area' where the levels of satisfaction varied. The Meridian received the highest overall approval rating and achieved the greatest number of highest scores for individual design areas. In contrast, the Pendolino received the lowest approval rating.

¹⁶ "Reclining" refers to the position the passenger takes in the seat, without the seat actually changing position.

The two design areas that received the least level of satisfaction overall were comfort of the foot area (27%) and comfort of the seat area when reclining (30%). The design areas that received the highest level of satisfaction were height of the seat (74%) and comfort of the front edge of the seat (69%).

In relation to leg room just over half of the respondents overall were satisfied with the foot space when sitting upright (56%) and with knee clearance when upright (55%). The HST NE East Coast received the lowest level of satisfaction for both these design features.

Differences in opinion by age, gender and journey profile

There were some differences in opinion on comfort of seating between passengers of different gender, age and journey purpose categories.

Males were slightly less satisfied (53%) with the comfort of the seating than females (61%). However, men were far less satisfied with certain aspects of seating comfort, for example:

- depth (males 58%, females 72%);
- width (males 55%, females 69%);
- front edge of the seat (males 62%, females 75%);
- the contour and shape of the seat (males 58%, females 72%); and
- knee clearance when sitting upright (males 49%, females 61%).

Passengers aged 64+ were more satisfied with seating comfort (71%)¹⁷ than younger passengers (16-34 60%, 35-54 55%), especially in relation to seat width (16-34 67%, 35-54 59%, 55-64+ 55%, 64+ 82%) and knee clearance when sitting upright (16-34 56%, 35-54 52%, 55-64+ 49%, 64+ 85%).

Commuters were generally less satisfied with the comfort of the seating area (46%) than business passengers (57%) and leisure passengers (62%). In particular they were less satisfied with the comfort of the seat when sitting upright (commuter 53%, leisure 69%, business 64%), contour and shape of the seat (commuter 51%, leisure 72%, business 63%) and the overall feeling of comfort (commuter 46%, leisure 65%, business 58%). In relation to seating comfort commuters were most satisfied with the Meridian (62%), leisure passengers with the Pioneer (68%) and business passengers with the FGW HST (65%).

¹⁷ Note: Relatively small sample size for this age category (n= 134) – see Appendix A for breakdown of sample size for each age, gender and journey purpose category.

Reasons for satisfaction and drivers of good practice

A number of reasons were provided by main-panel members for their dissatisfaction with seating designs. Many of these related to the overall shape and design of the seat itself. For example, some seats were felt to offer insufficient head support when sitting upright or “just an uncomfortable position for their head”. Although the contour and shape of the seat scored relatively well across most train types, a number of main-panel members commented that the contour/shape of the seat or the reclining angle of the seat on certain trains did not fit their back shape correctly. Furthermore, some seats did not offer sufficient leg or foot room and some seats provided a claustrophobic feeling. The seating plan and design of Pioneer from Hull Trains was considered to offer sufficient leg room, which also facilitated getting in and out of the seating area easily. A couple of main-panel members found the Voyager Cross Country seating area ‘too tight’.

Observations by disabled passengers

- Visually-impaired passengers reported difficulties finding priority seating on all train types (visually-impaired).
- Visually-impaired passengers found seat numbers too small – “there is no point in putting numbers on a little plaque the size of a postage stamp” (visually-impaired).
- The wheelchair space was considered good on the Meridian with the exception of the position of the travelling companion who was not facing the wheelchair user (wheelchair user).
- The Pioneer’s wheelchair space was considered poor because of the lack of room to manoeuvre into a comfortable position. Furthermore, the seating for any companion, backing on to the wheelchair user, was considered inappropriate. Good practice was identified when the travel companion can face the wheelchair user (wheelchair user).
- Provision of a fixed table in the wheelchair space was considered good practice, e.g. Meridian (wheelchair user).
- The mobility-impaired passengers considered the comfort of priority seating adequate. However, at times this was not easily accessible due to crowding.

It is clear that individual passengers have varying preferences, based partly on body size and shape. Taking all passenger views into consideration, the key design features and improvements most often identified by passengers include:

- greater legroom;
- softer upholstery and softer padded seats;
- strong and well-contoured head support; and
- ergonomically designed shape to offer good and comfortable back support.

3.7 Seating accessories

Table 3.6 Seating Accessories

Seating Accessories	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who felt the following aspects of their seat were accessible:										
Coat hooks (Q34) ♦	48	29	n/a	69	54	57	n/a	n/a	40	*
Magazine holder (Q34) ♦	50	n/a	10	63	50	57	n/a	n/a	59	*
Personal power point (Q34) ♦	52	42	64	71	52	69	n/a	44	34	*
At seat lighting (Q34) ♦	35	7	15	46	39	73	n/a	14	59	*
WiFi (Q34) ♦	32	n/a	51	31	23	32	n/a	38	19	*
Average	46	n/a	35	56	44	58	n/a	n/a	42	
Base	1165	157	104	108	114	154	136	224	168	
% who felt the general overhead lighting was:										
Too strong (Q30)	3	9	5	3	1	2	2	2	1	*
Too weak (Q30)	4	2	0	0	1	2	1	0	10	*
Adequate (Q30) ♦	97	89	95	97	98	96	97	98	89	
Base	1253	172	110	119	116	170	139	243	184	
% who felt the at seat lighting was:										
Too strong (Q36)	1	1	0	4	2	1	1	1	0	
Too weak (Q36)	6	0	4	1	6	7	0	2	14	*
Adequate (Q36) ♦	93	99	96	95	92	92	99	97	86	
Base	1126	147	98	106	115	154	126	221	159	
% who preferred the following seats:										
Airline (Q33)	38	44	43	28	36	33	38	36	44	

Passengers' preferences for new national intercity rolling stock from 2012

Seating Accessories	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
Around a table (Q33)	62	56	57	72	64	68	62	64	56	
Base	1210	166	103	112	116	160	132	240	181	
% who felt the drop down table was:										
A suitable size (Q31c) ♦	72	79	64	75	78	73	70	67	68	
Suitable to use a laptop (Q31c) ♦	41	59	42	53	37	39	30	31	32	*
Firm and strong enough (Q31c) ♦	95	92	94	98	100	98	97	89	98	
Base	592	110	54	51	46	76	61	108	86	
% who said the height of the armrest was:										
Too low (Q32c)	5	4	4	4	4	4	6	8	4	
Too high (Q32c)	4	9	1	0	1	9	5	1	4	*
A good height ♦	91	87	95	96	95	87	89	91	92	
Base	1142	165	96	113	112	158	108	221	169	
% who said the width of the armrest was:										
Too narrow (Q32d)	32	27	32	21	20	40	46	33	37	*
Too wide (Q32d)	0	0	0	0	0	0	0	0	0	n/a
A good width ♦	68	73	68	79	80	60	54	67	63	
Base	1143	165	96	113	113	159	108	221	168	
% who felt the armrest was:										
Too soft (Q32e)	1	1	0	0	0	0	0	0	1	
Too hard (Q32e)	39	36	49	12	21	36	47	57	39	*
Comfortable ♦	60	63	51	88	79	64	53	43	60	
Approval rating	64	65	62	74	67	69	n/a	62	61	
Base	1140	166	95	113	112	159	108	219	168	

Approval ratings for seating accessories

The Meridian overall received the highest approval score for seating accessories and the Pendolino the lowest score. Less than half the respondents (46%) on average considered the key seating accessories (coat hooks, magazine holder, personal power point, at-seat lighting and WiFi) to be accessible. There was no clear consensus amongst respondents as the scores varied across train types for each of the design areas.

The majority of respondents thought that 'overhead lighting' and 'at-seat lighting' was adequate across all train types. However, a small proportion of HST FGW passengers (9%) considered the overhead lighting to be too strong, while 10% of Pendolino passengers considered it too weak. In comparison with all other train types a high proportion of Pendolino (14%) passengers considered the 'at-seat' lighting to be too weak.

The majority of respondents (62%) preferred 'around the table' seating to airline style seating, with the strongest preference coming from Meridian passengers (72%). Overall nearly three quarters (72%) of respondents considered the 'drop down table' to be a suitable size. However, less than half (41%) considered it a suitable size for a laptop computer. The scores were relatively consistent between train types with respect to the suitability of the size of the table, however there was a range of scores in relation to the table being suitable for a laptop. For example, 50% or more of the respondents thought that the drop-down table space for HST FGW (59%) and Meridian (53%) was sufficient for a laptop, while less than a third of respondents from the Mallard, Pendolino and Desiro thought this was not the case.

Only a small minority of respondents overall thought the arm rests were either too low (5%) or too high (4%) across all train types. However, in comparing train types the Mallard's armrests were considered too low by a larger proportion of respondents, while in the same context the HST FGW's armrests were considered too high. Overall more than a third of passengers across all train types considered the armrests to be too narrow (32%) or too hard (39%). For both these categories there is a range of scores between the different train types. The Desiro's armrests received the highest negative score, with 46% of respondents considering the armrests to be too narrow, while the Pioneer from Hull Trains received the most positive score (20%). No passengers across all train types considered the armrests too wide. The largest proportion of respondents from the Desiro (57%) considered the armrests to be too hard, while only 12% of Meridian respondents considered them too hard.

Differences in opinion by age, gender and journey profile

Satisfaction scores for 'seating accessories' were generally consistent among passengers in different age, gender and journey purpose categories. However, most main-panel members remarked that business travellers and commuters would like more power points, personal lighting and Wifi facilities.

Reasons for satisfaction and drivers of good practice

The key drivers of satisfaction with seating accessories identified by the main-panel members was for them to be conveniently located and clearly visible. A number of main-panel members remarked that it took numerous attempts to identify and locate the personal power points or coat hooks. The Eurostar's seating accessories were highlighted as good practice by two main-panel members because each accessory was 'close to hand' and easily identifiable and accessible. The one seating accessory that most main-panel members considered essential was the personal

power point, especially for business and leisure passengers. Main-panel members said that they would like to see power points at all seats, along with storage nets on backs of seats.

The main concerns identified with the armrests on the majority of train types was that the plastic design was too hard and uncomfortable and that one arm rest is too narrow for two passengers to share. The Eurostar armrests were highlighted as good design because they were relatively soft and had the flexibility to be raised and lowered.

The overall design of the drop-down table on most trains was generally considered adequate for general travelling (e.g. to place a magazine or a cup of tea). However, the design and size was not considered sufficient for the use of laptops. Main-panel members noted that most tables were not deep enough or wide enough to facilitate efficient working. Moreover, in most, the angle of the seat in front (supporting the drop-down table) was felt to be problematic when attempting to look at a laptop screen. The design of FGW's HST with its adjustable pull out tray alleviated this problem and was considered by all main-panel members as best practice. Interestingly, a number of main-panel members conceded that if user-friendly drop-down tables (with the pull-out extension) were provided consistently on all train types, and complemented with personal power points, there could be less of a demand for 'around the table' seating, which could free up space/capacity for additional seating/luggage space. The at-seat lighting of the Eurostar and Pendolino was considered good practice by main-panel members, largely because it was controllable.

Observations by disabled passengers

- The armrests were considered too low and too narrow on the NE East Coast HST and more suitable on the Voyager (mobility impaired).

Key design features and improvements

Overall and taking all passenger views into consideration the key design features and improvements identified by passengers include:

- accessories to be clearly visible and easily accessible;
- each seat to have own personal power point and magazine net;
- drop-down tables to have adjustable surface area (similar to FGW's HST);
- armrests to be softer and flexible to move both up and down; and
- passenger-controlled at-seat lighting.

3.8 Windows

Table 3.7 Windows

Windows	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who were satisfied with the following aspects of the windows near their seat:										
Seeing out of the window (Q37) ♦	71	73	81	65	75	77	72	72	59	
Overall size of the window (Q37) ♦	77	80	84	73	85	80	76	77	68	
Quality of blinds/curtains (Q37)	46	n/a	n/a	31	n/a	49	n/a	n/a	51	*
Ability to adjust blinds/curtains (Q37)	39	n/a	n/a	21	n/a	40	n/a	n/a	48	*
Approval rating¹⁸	74	77	83	69	80	79	74	75	64	
Base	1226	166	107	109	121	166	136	239	183	

Experiences of existing long-distance rolling stock

Overall, approximately three quarters of the respondents were satisfied with the ability to see out the window (i.e. alignment of the seat with the window). The Pendolino overall received the lowest approval rating (64%) and the NE East Coast HST the highest approval rating (83%). The level of satisfaction, however, was lower in relation to the quality of blinds and curtains. Less than half (46%) of all respondents were satisfied with the quality of the blinds and curtains, and even fewer were satisfied with their ability to be adjusted. Although the Pendolino received the lowest level of satisfaction for being able to 'see out the window' it received the highest scores for quality of blinds and curtains – although not all train types have this design feature. The NE East Coast HST and Pioneer received the highest levels of satisfaction for being able to see out the window (81%, 75%) and overall window size (84%, 85%), respectively.

¹⁸ Note: Only Meridian East Midlands, Voyager and the Pendolino have blinds and curtains therefore the approval rating is based solely on being able to 'see out the window' and the 'overall size of the

Differences in opinion by age, gender and journey profile

On average males, females, commuters, business and leisure passengers had similar views on satisfaction with windows and blinds/curtains. However, opinions differed by age, with older passengers generally being more satisfied with the windows (71%) than younger passengers (16-34 64%, 35-54 56%). Furthermore, passengers aged 64+ were significantly more satisfied (63%) with the ability to adjust the blinds or curtains than younger respondents (16-34 41%, 35-54 37%, 55-64+ 30%).

Approval ratings for windows

The dissatisfaction with windows is largely attributed to the alignment of the seat with the window. A number of main-panel members commented that their view was restricted or they had no view at all as their seat was positioned by the wall – this lack of window space significantly affected their journey experience. Good practice was considered to be a window that is of a generous size, aligned well with the seats and of a suitable height to provide a good panoramic view. In addition, it was considered important to have individually adjustable blinds or curtains to shield glare and strong sunlight.

Criticisms of windows in the Pendolino were mainly based on the window being too narrow with relatively few seated passengers having a window view. The windows of the Pioneer and Mallard were considered to be of good design, except from seats that were not well aligned with them.

Observations by disabled passengers

There were no observations made by disabled passengers in relation to windows, blinds and curtains.

Key design features and improvements

Overall the key design requirements identified by passengers is to avoid poor alignment of seats to bulkheads and interior walls, and to provide large windows, ideally fitted with individually adjustable blinds or curtains.

3.9 Toilets

Table 3.8 Toilets

Toilet	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who felt the maintenance of the toilet was:										
Well maintained (Q48b)	69	82	44	79	81	83	53	63	73	
Poorly maintained (Q48b)	31	18	56	21	19	17	47	37	27	*
Base	315	34	50	24	42	36	15	70	44	
% who said the toilet cubicle was:										
Clean (Q48c)	70	82	58	67	79	81	43	66	71	
Dirty (Q48c)	30	18	42	33	21	19	57	34	29	
Base	316	34	50	24	42	36	14	71	45	
% who were satisfied with the following aspects of the design of the toilet:										
Ease of using the door controls (48e) ♦	55	48	60	65	54	54	67	53	52	
Ease of using the door lock (48e) ♦	57	61	57	78	61	54	50	54	55	
Clear visible instruction of how to lock the door (48e) ♦	54	64	54	53	46	56	36	56	57	
Clear visible direction signs to toilet and once in toilet (48e) ♦	55	66	59	55	44	71	42	53	51	
Space within the toilet area (48e) ♦	46	53	26	58	39	74	36	36	58	
Quality of toilet and washing/drying facilities (48e) ♦	35	42	31	53	21	46	31	36	37	
Quality of baby changing facilities (48e) ♦	35	29	21	44	20	67	12	41	44	*
Provision for disposables (48e) ♦	36	48	25	50	25	39	21	38	44	
Mirror (48e) ♦	48	57	40	33	46	78	46	49	39	
Facility to hold the toilet lid and seat up (48e) ♦	45	44	48	53	35	62	18	49	35	

Passengers' preferences for new national intercity rolling stock from 2012

Toilet	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
Hook for hanging coats/bags (48e) ♦	41	42	28	53	34	61	36	45	38	
Floor surface (48e) ♦	40	47	38	38	36	54	25	35	45	
Location of toilet flush (48e) ♦	46	54	40	45	34	60	77	45	36	
Approval rating¹⁹	46	50	41	52	38	60	38	45	45	
Base	283	32	45	17	38	33	13	64	40	

Approval ratings for toilets

Although cleanliness and maintenance is not directly related to toilet design, respondents were invited to score these aspects to ensure that assessments of the overall design were not influenced by any concerns about condition and cleanliness. In fact nearly three quarters of respondents considered the toilets across all train types to be well maintained (69%) and clean (70%). The Voyager received the highest satisfaction scores, while the Desiro and Pioneer Hull Trains scored the lowest²⁰.

In terms of the design of toilets less than half (46%) of the passengers across all train types were satisfied. The results are relatively consistent across all train types, but there was more variation with views on the 'quality of baby changing facilities' and space within the toilet, across the different types of train.

The design aspects that most respondents (though only just over half) were satisfied with were 'the ease of using the toilet door controls' (55%) and 'ease of using the door lock' (57%). Those that received lowest satisfaction scores across all train types were 'quality of toilet and drying facilities' (35%), 'quality of baby changing facilities' (35%) and the 'provision for disposables' (36%).

Voyager toilet design across all categories scored relatively high in most respects compared with the other train types, while the Desiro received the lowest satisfaction scores for many of the design aspects. Interestingly the highest satisfaction score for the Voyager was 'space within the toilet area' where nearly three quarters (74%) of respondents were satisfied.

¹⁹ Note: Approval rating does not include maintenance and cleanliness of toilet as focus was on design features.

²⁰ Note: it was not known if respondents were referring to the accessible toilet or the standard toilet.

Differences in opinion by age, gender and journey profile

Women reported slightly higher levels of overall satisfaction with the toilet facilities (50%) than men (41%), across all types of train. Passengers aged 64+ were more satisfied with the toilet facilities (65%) than any other age groups (16-34 45%, 35-54 46%, 55-64 39%) and were on average 15-20% more satisfied with all aspects of toilet design than younger passengers. Passengers aged 16-34, 55-64 and 64+ were most satisfied with the Voyager, compared to respondents aged 35-54 who were most satisfied with the Meridian. There were no marked differences according to passenger type by journey purpose.

Reasons for satisfaction and drivers of good practice

The key reason for dissatisfaction with toilets was the design of the cubicle, in particular the limited/cramped space inside. Other reasons for dissatisfaction across most trains identified by the main panel types included:

- poor/insufficient paper waste provision;
- positioning of toilet seat lifting and location of the flush;
- poor drainage causing floors to be wet due to poor design;
- poor signage to toilets;
- no/unclear instructions on use of lock; and
- poorly located handrails causing problems when train is swaying.

The toilets that received the highest satisfaction scores were generally the refurbished 'universal' toilets, because they were considered to be spacious and well lit with modern facilities.

Observations by disabled passengers

- Toilets on NE East Coast HST, Mallard and Eurostar trains were highly rated by visually impaired passengers.
- Visually-impaired passengers reported problems on Eurostar finding the door lock and how to use it on accessible toilets – “the automatic doors are quite difficult for blind passengers if they are unfamiliar with them because they just have to feel around to try and find the button that says lock the door, or flush the toilet”.
- Visually-impaired passengers had difficulty finding toilets on the Voyager, Pioneer and Pendolino, and once found, they reported it was difficult to find the toilet flush. By contrast, Mallard received praise for illuminated flush button and clear signage.
- One wheelchair user commented that accessible toilets were good but too few. The Desiro and Meridian toilets were considered to be the best for wheelchair users.

- One mobility-impaired passenger found the door controls and door lock difficult to use and was slightly dissatisfied with the directions to the toilets across all trains. He commented that there was “too much automation” in the toilets (mobility-impaired).

Key design features and improvements

Overall and taking all passenger views into consideration the key design features and improvements identified by passengers include:

- sufficient space to move around in the toilet;
- a logical layout with good provision of accessories such as coat hooks and hand rails to assist when swaying;
- a full-size mirror and good lighting;
- sufficient room for waste; and
- positioning of the instructions for use of the lock and flush.

3.10 Luggage

Table 3.9 Luggage provision

Luggage provision	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who were satisfied with the following stowage facilities in terms of space provided:										
Overhead racks (Q40) ♦	45	46	54	33	36	42	44	52	44	
Luggage stacks at end of carriage (Q40) ♦	25	29	31	13	33	n/a	n/a	21	n/a	*
Luggage stacks elsewhere in carriage (Q40) ♦	21	n/a	n/a	n/a	n/a	22	n/a	n/a	21	
Luggage space between seat backs (Q40) ♦	17	15	16	18	20	22	n/a	14	16	
Average	27	30	34	21	30	29	n/a	29	27	
Base	889	108	91	68	102	108	90	191	130	
% who were satisfied with the following stowage facilities in terms of accessibility:										
Overhead racks (Q41) ♦	39	38	49	33	43	31	34	41	40	
Luggage stacks at end of carriage (Q41) ♦	33	41	33	19	46	n/a	n/a	27	n/a	*
Luggage stacks elsewhere in carriage (Q41) ♦	23	n/a	n/a	n/a	n/a	24	n/a	n/a	23	
Luggage space between seat backs (Q41) ♦	16	14	15	20	22	13	n/a	15	17	
Average	28	31	32	24	37	17	n/a	28	27	
Base	723	98	87	65	90	98	84	159	114	
% who were satisfied with the following stowage facilities in terms of security:										
Overhead racks (Q42) ♦	51	57	58	49	54	42	40	57	46	
Luggage stacks at end of carriage (Q42) ♦	18	17	21	17	26	n/a	n/a	14	n/a	
Luggage stacks elsewhere in carriage (Q42) ♦	16	n/a	n/a	n/a	n/a	21	n/a	n/a	11	
Luggage space between seat backs (Q42) ♦	19	12	19	29	28	18	n/a	18	17	
Average	26	29	33	32	36	27	n/a	30	25	
Base	875	110	90	72	98	109	89	184	123	

Passengers' preferences for new national intercity rolling stock from 2012

Luggage provision	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who preferred to store their main luggage in the following stowage facilities:										
Overhead racks (Q43)	43	35	53	38	44	27	44	49	49	
Luggage stacks at end of carriage (Q43)	23	23	24	30	20	n/a	n/a	22	n/a	
Luggage stacks elsewhere in carriage (Q43)	11	n/a	n/a	n/a	n/a	11	n/a	n/a	11	
Luggage space between seat backs (Q43)	17	18	14	17	10	25	n/a	18	14	
Average	24	25	30	28	25	21	n/a	30	25	
Approval rating	27	30	33	26	34	26	n/a	29	26	
Base	837	105	86	63	96	105	86	179	117	

Approval ratings for luggage

The design area that received by far the lowest satisfaction scores from respondents, in all respects, was provision for luggage. Overall, only around one in four respondents were satisfied with luggage space (27%), accessibility of luggage facilities (28%) and (perceived) security (26%). The luggage facilities that passengers reported most satisfaction with were NE East Coast's 'overhead racks', Hull Trains Pioneer's 'luggage stacks elsewhere in the carriage' and Voyager's 'luggage space between seat backs' (Note: not all train types have luggage space allocated 'at the ends of the carriage' and 'elsewhere in the carriage'). Overhead racks are the most commonly used stowage location, with nearly half (43%) identifying this as their preferred stowage facility – this was consistent across all train types. Overall NE East Coast and Pioneer Hull Trains received the highest approval rating and Meridian East Midlands, Virgin Cross Country and Virgin Pendolino the lowest.

Differences in opinion by age, gender and journey profile

Females overall were slightly less satisfied with luggage facilities than males. Males (31%) rated stowage facilities more accessible than females (25%), particularly with respect to overhead racks (males 47%, females 32%). Females were also less satisfied (23%) than males (31%) with the amount of space provided by luggage stowage facilities.

There were also differences amongst the different age groups in relation to satisfaction with the accessibility of stowage facilities. Respondents aged 55-64 were much less satisfied (17%) than passengers of all other age groups (16-34 31%, 35-54 30%, 64+ 39%). They were also less satisfied (10%) in comparison with others (16-34 33%, 35-54 39%, 64+ 51%) with the accessibility of luggage stacks at the ends of the carriage. There were no marked differences between the different age groups in relation to luggage security, preferred stowage facility and satisfaction with space. There were however, differences in the overall preferred train type. Passengers aged 16-54 years preferred the Desiro trains, whilst older passengers (55+) preferred the NE East Coast HST.

Interestingly there were no significant differences in satisfaction with luggage facilities from respondents from different journey purposes. However, a number of main-panel members felt that facilities were adequate for business travellers and commuters but not sufficient for leisure travellers who are more likely to carry additional luggage.

Reasons for satisfaction and drivers of good practice

Passengers cited several reasons for being dissatisfied with luggage provision on existing long-distance rolling stock. A principal reason is the lack of space afforded for luggage, especially for leisure passengers who wish to carry a number of large bags. The main concern regarding space is the limited amount of room allocated at the end of each carriage where traditionally larger items are placed. Moreover, when this space is full it leads to a 'spill over' affect in the vestibule and aisle. This is reportedly compounded by the limited space for storage in the overhead racks (i.e. lack of depth) for larger items and the lack of space either below or between seats. For example, the overhead racks of the Pendolino and Voyager were considered far too narrow.

Most passengers also want to have their luggage close to them, mainly for reasons of perceived threat to security. Passengers are often reluctant to stow their luggage at the end of the carriage because it would then be out of sight. Notwithstanding the space and security concerns some passengers also have difficulty physically accessing some storage locations because of the height (e.g. overhead racks) and level of congestion. One main-panel member commented that she had to 'hoist herself up onto a seat to use the overhead rack'. Another important issue is the feeling of competition between passengers for limited space, with some main-panel members commenting for example that large pushchairs were taking up a large area of storage.

Observations by disabled passengers

- A visually-impaired passenger was concerned with the lack of depth of overhead luggage racks as they could not be sure that their luggage was stable at speed.
- Wheelchair users considered luggage space to be unsuitable generally, especially on Desiro. HSTs with their luggage stacks located at the opposite end of the carriage to the wheelchair space were also highlighted as poor. In addition, Pioneer luggage stacks were described as “not accessible from the wheelchair space”. Wheelchair users noted that there were no convenient places to stow luggage except on the floor by the wheelchair, and suggested that luggage stacks and wheelchair spaces should be provided at both ends of the carriage.
- The mobility-impaired panellists expressed concern that the overflow of luggage restricted their safe movement through the carriage – “these blockages make it impossible to move through the train unless you are young and fit” (mobility-impaired).

Key design features and improvements

Passengers perceive a clear need for enhanced and improved luggage space and design. Overall, taking all passenger views into consideration, the key design features and improvements identified by passengers include:

- secure luggage facilities;
- facilities that reduce anxiety over security, including clear/transparent racks so passengers can have constant sight of their luggage during the journey, or that enable them to feel secure in the knowledge that the luggage is safe;
- adequate luggage space, including enough space for large items, especially for leisure passengers;
- options for stowing luggage at floor level, not just overhead;
- Wider and deeper (in terms of vertical height) luggage racks to allow for larger items in end of carriages and overhead racks;
- Easy to reach luggage space that is close to seating;
- Dedicated space for cycle and push chair storage;
- More stacks in centre of carriage for easier access and improved security;
- More storage between and under seat backs; and
- Varied heights of luggage racks.

3.11 Information provision

Table 3.10 Information During the Journey

Information during the journey	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who said announcements were:										
Audible (Q44c) ♦	78	55	87	76	91	80	80	74	85	*
Inaudible (Q44c)	20	37	13	21	8	19	18	26	14	*
Base	1222	160	104	117	124	165	131	233	188	
% who said the information displays in the carriage were:										
Perfectly/ fairly legible (Q44b) ♦	93	n/a	n/a	93	94	93	99	n/a	90	
Approval rating²¹	86	55	87	85	93	87	90	74	88	
Base	516	4	6	93	76	143	70	10	114	

Approval ratings for information provision

Just over three quarters (78%) of respondents thought that the audio announcements were audible. However, the survey results did yield a range of scores with 91% of respondents who travelled on the Pioneer stating that the announcements were audible, while in comparison just over a half (55%) of the respondents from FGW's HST considered the announcements audible. Passengers were more satisfied with the quality of the information displays, with most of the respondents (93%) across all train types (where applicable) stating that they were legible.

²¹ Note: This score is based on 'audio announcements' and 'information displays in the carriage' and should be treated with caution as 3 of the 8 train types did not have information displays in the carriage. In addition, as all train types do not incorporate all the relevant design features (i.e. information displays) it is not appropriate to identify a highest and lowest approval score.

Differences in opinion by age, gender and journey profile

There were no marked differences in the levels of satisfaction for information provision between passengers in the different age, gender and journey purpose categories.

Reasons for satisfaction and drivers of good practice

Generally passengers were satisfied with the existing designs for visual information on trains. The majority of the main-panel members commented that on most occasions the screens could be clearly seen from anywhere in the carriage due to the good size font, the colour contrasting of the screens and the easily to read scrolling speed. The only concerns raised were in relation to the size of the font on the seat reservation screens (as previously discussed) and the difficulty in reading the main information screens when they are hit directly by sunlight. In respect to audio announcements, main-panel members commented that automated announcements were clear and audible, however at times some guard/driver announcements were more difficult to hear due to a low volume, the guard/driver speaking too quickly or the announcement being distorted. An example of good practice highlighted by one main-panel member was the Desiro where audio announcements and matching visual information messages are transmitted at the same time.

Observations by disabled passengers

- The electronic information displays on the Voyager trains were illegible to the visually impaired – “the signs are too small for me to read and yellow makes them impossible for me to see”.
- Audio announcements on the Desiro, Mallard and Eurostar were considered particularly satisfactory, as audibility was good. Visually-impaired passengers did note that some train manager announcements were too quick and difficult to comprehend – this creates real concern for passengers unable to read the visual screens.
- Visually-impaired people can have a particular interest in good information on the location of safety equipment. Very clear signage is important as are audio announcements (those on Mallard were reported as good examples).

Key design features and improvements

Overall key design requirements identified by passengers for audio and visual information include:

- large and clear font (with contrasting colours) on information screens with a sensible scrolling speed; and
- clear automated announcements that cover trains stops, destination information and emergency information.

3.12 On-train environment

Table 3.11 On-train Environment

On-train environment	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who were satisfied with the following aspects of the environment on the train:										
Air conditioning (Q46) ♦	56	54	44	69	55	66	57	58	47	
Temperature (Q46) ♦	57	53	42	72	55	67	56	61	49	*
Ventilation (Q46) ♦	53	55	47	66	57	57	51	52	42	
Odour or smell of train interior (Q46) ♦	55	56	48	63	59	57	64	50	49	
Noise within carriage (train not passengers) (Q46) ♦	59	61	59	50	65	69	58	56	57	
Litter bin provision (Q46) ♦	32	27	38	33	32	35	30	32	33	
Ease of locating safety/emergency equipment (Q46) ♦	51	59	50	59	53	49	52	49	44	
Approval rating	52	52	47	59	54	57	53	51	46	
Base	1232	164	105	118	121	166	136	241	181	

Approval ratings for on-train environment

On average just over half (52%) of all respondents were satisfied with the on-train environment. Noise within the carriage (59%) and temperature (57%) were the two areas that received the highest satisfaction scores, while less than a third (32%) of respondents overall were satisfied with litter bin provision. The satisfaction scores were relatively consistent across all train types.

While there were few statistically significant differences between train types, it is worth noting that East Midlands Meridian received the highest satisfaction scores for two key passenger comfort considerations – air conditioning (69%) and temperature (72%), while in contrast NE East Coast HST received the lowest satisfaction scores for both these aspects. On average the Meridian received the highest approval rating for the on-train

environment compared to other train types, although scoring the lowest for train noise. In contrast, the Pendolino received the lowest approval rating.

Differences in opinion by age, gender and journey profile

Satisfaction ratings for the on-train environment were generally consistent among passengers in different age, gender and journey purpose categories.

Reasons for satisfaction and drivers of good practice

The main causes of dissatisfaction identified by the main panel with the on-train environment were unsuitable temperatures (either too hot or cold), cramped conditions, rumble and vibration (e.g. diesel trains were considered to vibrate much more than electric trains), inadequate litter bin provision and a feeling that the carriage felt dated and 'jaded'. Passengers who reported an enjoyable journey in respect of their on-train experience often commented that they had a smooth ride, the train smelt fresh and that the carriage felt spacious and open due to a well planned layout with a modern design and colours.

The Desiro coaches were considered by a number of main-panel members as representing good practice because they were 'airy and light with lots of room', while some main-panel passengers considered the Pendolino and Voyager as 'claustrophobic'.

Observations by disabled passengers

- Disabled passengers' views generally matched those of other passengers.
- Wheelchair users commented that the on-train environment ranged from being very cramped/squashed on the Pioneer to very spacious on the Desiro. They were particularly dissatisfied that there were no bins near to the wheelchair space on the Desiro and Pioneer (wheelchair user).

Key design features and improvements

Overall the key design requirements identified by passengers that contribute to a good on-train environment included:

- controllable ventilation and lighting;
- open design providing a spacious view/feeling (including seat backs that are not too high so not to restrict vision);
- pleasant smelling carriages;

- adequate litter bin provision (to minimise litter and odours); and
- modern design with a feel-good 'wow' factor.

3.13 Buffet

Table 3.12 Buffet

Buffet	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino	Statistically significant finding
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin	
% who were satisfied with the following aspects of the buffet:										
Height of counter (Q27) ♦	80	78	80	82	82	84	n/a	88	69	
Edges of the counter (Q27) ♦	80	79	73	82	85	88	n/a	88	65	
Lighting at/around the counter (Q27) ♦	80	84	71	82	85	63	n/a	88	83	
Visibility of items for sale (Q27) ♦	55	39	43	76	69	28	n/a	50	69	*
Non-slippery floors (Q27) ♦	77	81	73	80	79	91	n/a	56	80	
Ease of reading menu/price list (Q27) ♦	44	12	42	50	70	27	n/a	58	41	*
Convenience of queuing space (Q27) ♦	49	53	48	56	38	32	n/a	60	53	
Approval rating	66	61	61	73	73	59	n/a	70	66	
Base	186	58	59	71	71	55	n/a	67	65	

Approval ratings for buffet design

Two thirds of respondents (66%) on average were satisfied with the design of the buffet. The key design areas, 'height of the counter,' 'edges around the counter' and 'lighting around the counter', all received an overall satisfaction score of 80% across all train types (where applicable). However, respondents were less satisfied with aspects such as the ease of reading the menu (44%) and convenience of queuing space (49%). It should be noted that there was a range of satisfaction scores between train types and design aspects. The Meridian and Pioneer 1990 Diesel Units received on average the highest approval scores (73%) and the Voyager the lowest (59%).

Differences in opinion by age, gender and journey profile

Males were less satisfied with the buffet (57%) than females were (71%). Males reported lower satisfaction for the height of the counter (males 69%, females 88%), the edges of the counter (males 68%, females 90%), the visibility of items for sale (males 44%, females 61%) and the convenience of queuing space (males 38%, females 52%).

Leisure passengers were more satisfied with most aspects of the buffet facilities (71%) than commuters (57%) and business passengers (51%). Leisure passengers were more satisfied with the visibility of items for sale (65%) than commuters (35%) and business passengers (34%). They were also more satisfied with the ease of reading the menu (leisure 51%, commuter 35%, and business 26%) and the convenience of the queuing space (leisure 58%, commuter 23%, business 29%). There were also differences in the preferences between trains, according to journey purpose – leisure passengers were most satisfied with the Meridian (88%) whilst commuters and business passengers were most satisfied with the Pioneer buffet facilities (86% and 67% respectively).

Reasons for satisfaction and drivers of good practice

The main reason for dissatisfaction reported by main-panel members was the 'cramped' conditions at the buffet counter due to a lack of space. In addition, some main-panel passengers thought that improved lighting and display of items to be purchased would create a speedier process and relieve congestion in and around the buffet car.

Observations by disabled passengers

- Mallard, Voyager and NE EC HST trains were considered exemplars of good practice.
- Visually-impaired passengers reported problems with Voyager buffets in relation to the height of the counter and poor visibility of items for sale.

Key design features and improvements

Overall the single most important design requirement identified is reducing the congestion in and around the buffet by providing more room.

4 Views on Design Improvements and Trade-offs

4.1 Introduction

This chapter of the report largely draws on the workshop held with the main panel. The workshop provided an opportunity to explore further the rationale behind some of the views expressed in relation to the level of approval ratings for different design areas. Participants were also asked to consider:

- their needs and priorities for design improvements in the next generation of IEP trains; and
- their opinions on possible trade-offs in allocating limited space to different functions and facilities such as seating, luggage and access areas (such as vestibule and corridors).

Since the workshop 'sample' is relatively small, findings are qualitative and only indicative (not necessarily fully representative) of all passengers' opinion.

The workshop explored the quality of design of existing rolling stock on the basis of 'likes' and 'dislikes' and then explored passengers' expectations for new designs. It emerged that most participants shared an expectation - and to some extent trust - that designers will apply the latest state-of-the-art design concepts and manufacturing techniques, in order to:

- make good, or at least improve, the aspects of current design that are considered (from the passengers' perspective) to represent poor practice, and discomfort;
- make more efficient use of the limited available space

- help resolve the dilemma of wanting more space both in the seating areas and in other areas seen as currently cramped, especially space allocated for luggage; and
- achieve a real 'step change' in comfort, ergonomics and aesthetic appearance: creating a lasting 'wow factor'.

4.2 Design improvements

The workshop discussion highlighted the fact that although passengers would like to see improvements to most aspects of current design in the next generation of long-distance rolling stock, it may not be possible to have 'the best of everything' and that compromises may be needed. This, in part, related to the competing demands on use of limited space. At the same time, most participants did not want or expect to see any reduction in the standards of various basic aspects of design (or 'hygiene factors') provided by current rolling stock. For example, there should be:

- no reduction in comfort of seating and legroom (i.e., legroom not less than now, while recognising that modern seating designs may well make more efficient comfortable use of limited space per seat);
- no deterioration in the ease of safely moving through the train (including passage through vestibule and corridor, and implying no reductions in aisle space); and
- adequate luggage space (against a baseline of perceived real problems and inadequacies of current on-train luggage provision).

Priorities for improvement tended to reflect the overall approval ratings obtained from the main survey. Areas rated poorly were usually considered to have high priority for improvement, but with some exceptions. Improvements in information provision had a high priority for improvement even though passengers in the main survey gave this aspect a high approval rating. Although the approval rating for the vestibule area was relatively low in the main survey, this was not identified as a priority area for improvement. This reflects differences in the importance of these two design areas for passengers, in terms of their overall satisfaction with their long-distance journey experience.

The quantitative survey showed that although ratings of approval with most design aspects of current trains were quite similar among commuters, business and leisure users, opinions on comfort of seating and buffet provision, in particular, were more varied. In the workshop, participants were asked to compare their priorities for higher standards in the next generation of IEP trains, when making journeys for each different purpose (each had 'role-played' commuter, business and leisure passengers in the main-panel). This suggested some additional contrasts:

- taking the business passenger's perspective, participants rated an improved on-train environment as a key area for improvement, but from the commuting perspective, this improvement had lower priority. This was partly because business trips are expected to involve longer periods on-board, even though participants were asked to consider long-distance journeys of an hour or more; and
- improvements in 'boarding the train' only had high priority from the leisure passenger perspective, because

of the greater likelihood of travelling with children, large luggage and other people when making leisure journeys.

4.3 Balancing competing demands for additional space

Participants were asked to consider the allocation of limited space in future train designs, assuming that demand for trains and seats remains at least as high as now.

Opinions on how the potential for crowding must be addressed included suggestions for reducing the carriage space dedicated to First Class seating and having more and/or longer carriages.

When considering choices and trade-offs in how to allocate the available space in each standard-class carriage (assuming the same external dimensions as now) participants came up with a number of 'compromise' solutions:

- the option of having seats that recline in standard class was considered a 'nice to have' that could be sacrificed in the interests of maintaining and not reducing current legroom. Similarly;
- although some participants initially said that they would accept a smaller vestibule area in order to have more seats, they ultimately conceded that this was probably an impractical option as the current space is only sufficient to manoeuvre a pushchair and a wheelchair, and probably could not be reduced further.

Asked whether any 'minimum standards' should be set, and if so which, the broad conclusions after some debate were that:

- having more seats, per carriage and per train, would mean reduced standing, reduced risk/worry over not getting a seat, but
- it is important that these advantages are balanced against needs for:
 - good minimum standards of leg room, and;
 - improved luggage facilities, probably requiring more space and more secure space for luggage than in most current trains.

Making better use of existing space through improved design

There are high expectations that improved designs will create a more comfortable on-train journey experience, despite the constraints of available space. Some participants in the workshop felt that important improvements may be achievable through attention to detail. For example, one suggestion was that by ensuring that all drop-down tables are extendable, and that personal power points are accessible at all seats, the demand for 'around table' seating could be reduced, leading to more acceptance of airline-style seating, thereby creating opportunities for increased luggage rack space. However, this would in turn reduce the ability of passengers to stow luggage between seat backs.

Similarly, it was thought that significant comfort improvements may be achievable through good ergonomic design of the seats with close attention to shape, contour and choice of materials, and improved controllability/adaptability. It was also suggested for example that moveable armrests can improve the overall feeling of space and comfort giving passengers some of the benefits of a larger seat with rigid armrests.

Participants also identified the overall 'look' of the carriage interior as important. For example, designs that feel 'claustrophobic' (mentioned in respect of Pendolinos particularly) can create stress and discomfort. Future designs should aim to create a relaxing appearance, and this may improve satisfaction with other aspects of the overall long-distance journey experience.

5 Conclusions and Summary of Findings

5.1 Introduction

This research has used a combination of passenger on-train surveys, a mystery shoppers main-panel, a separate mini-panel of disabled mystery shoppers, a workshop and depth interviews to explore rail passengers' current views and preferences for aspects of internal design in standard class across nine types of current long distance inter-city rolling stock.

5.2 The current experience

We examined eleven areas of rolling stock interior design, and sought views from passengers on the features and facilities of the nine different types of train surveyed.

Overall, eight of the 11 design areas had less than a 70% approval rating by passengers, with three of those areas scoring less than 50%.

Passengers across all long-distance train types were most satisfied with information provision and boarding the train, while they are least satisfied with luggage provision, the vestibule area and toilets.

Although varying proportions of passengers reported some dissatisfaction with all eleven areas, highlighting concerns that are unique to each, problems of existing luggage provision emerged as the paramount issue. Problems with the stowage of luggage have a notable impact on satisfaction with other design

areas of the train. For example, inadequate luggage space, or space that passengers are reluctant to use for security reasons, can lead to excess luggage cluttering the vestibule area, causing restricted movement through the train and impeding safe transition through the carriage, especially for mobility-impaired and visually-impaired passengers.

Across all the design areas considered, the train types that received the most favourable approval ratings were the Pioneer (Hull Trains) and East Midlands' Meridian.

5.3 Current best practice in design

The following section highlights what design aspects passengers like and which of the train types surveyed represent best practice. Appendix H provides a breakdown for each design area and highlights which train type received the highest and lowest approval score.

Vestibule area

Passengers were relatively happy with the **floor surfaces** in the vestibule and seating area. Best practice for floor surfaces in the vestibule area was SWT Desiro.

The **room in the vestibule area** was generally considered poor - the highest approval rating was for the SWT Desiro.

The provision of **grab rails and handles** in the vestibule was also considered poor. The train with the highest approval rating was Pioneer (Hull Trains).

Satisfaction scores for the vestibule area were similar for passengers of different age, gender and journey purpose categories.

The key design consideration for new trains should be:

- sufficient room to manoeuvre large items of luggage and pushchairs and improve luggage provision to avoid spill-over into vestibule area.

Moving through the train (including grab and hand rails)

Passengers gave a high score for the ease of use of **internal and inter-carriage doors** across all train types. HST FGW represented good practice for both door types.

Voyager Cross Country was considered good practice in terms of overall carriage design to facilitate **moving through the train**.

The **handles and at-seat grab rails** to assist moving through the train were generally considered poor. The design of Hull Trains' Pioneer was considered the best design by passengers in terms of visibility and Voyager Cross Country in terms of ease of use.

The **aisle width of the carriage** was generally considered acceptable. The highest approval rating was for the Voyager Cross Country.

The handles and at-seat grab rails that assist walking through the train were identified as a key area for improvement, especially for visually and mobility impaired passengers.

Satisfaction ratings for 'moving through the train' were generally consistent among passengers in different age, gender and journey purpose categories.

New design of grab rails should:

- incorporate bright contrasting colours;
- be designed in a size and a shape that are easy to grip;
- be located on the top of every seat; and
- be made of a material that facilitates grip.

Boarding the train and finding a seat

Passengers generally gave high approval ratings for the physical design of the train and how it facilitates boarding and finding a seat. However, they did express less satisfaction for being able to read seat reservation cards. The satisfaction scores of passengers in different age, gender and journey purpose categories were similar.

Pioneer Hull Trains was considered best practice for the **external signage** identifying the train's destination, while the HSTs of FGW and NE East Coast were best practice for **ease of getting on the train**.

NE East Coast HST received the highest score for both being able to **identify a reserved seat** and being able to read the **seat reservation cards**. Pioneer (Hull Trains) received the highest score for ease of reading the **electronic seat reservation screens**.

The design and quality of the reservation electronic screens and cards were identified as the main areas for improvement. The key design consideration for new trains should be:

- larger LED screens and indicators to show both reserved (including names) and unreserved seating;
- clearer and bolder printing on reservation cards; and
- clear and visible signage indicating coach/carriage/seating information.

Comfort of seating

There were mixed views from passengers in regard to seating comfort.

Sixty per cent of passengers said they were satisfied with the **overall feeling of comfort** of their seat across all train types. Passengers generally prefer 'around the table' seating compared to the 'airline style'.

The design features that received the highest satisfaction scores were **ease of getting in and out of the seat, height of the seat and comfort of the front edge of the seat**. Areas passengers were less satisfied with included **comfort of the seat when in a reclining position** (i.e. individual reclining as opposed to the seat) and **comfort of the foot area**.

The Voyager Cross Country seating design was considered a good example of best practice receiving the highest satisfaction scores for: ease of getting in and out of the seat, comfort of the seat when sitting upright, height of the seat, depth and front edge of seat.

A further example of good practice is East Midland's Meridian which received the highest satisfaction scores for: contour and shape of the seat, leg room (knee clearance when sitting upright); comfort of foot area, head and back support and hardness/softness of upholstery.

Male passengers, on average, were slightly less satisfied with the comfort of seating than females, especially with respect to seat depth, width and knee clearance. Older people (64+) were generally more satisfied with seating comfort than younger passengers and commuters were generally less satisfied with the comfort of the seating area than business and leisure passengers.

The key requirement for seating in the new rolling stock is for it to be **ergonomically designed** and offer good back and head support. In addition, it should be designed in a manner that evokes an open and spacious feeling, rather than claustrophobic.

Seating accessories

Just under two thirds of passengers thought seating accessories were easily accessible. **At-seat lighting** was generally considered least accessible and **personal power points** the most accessible of the key accessories surveyed.

The East Midlands Meridian was considered best practice for coat hooks, magazine holder and personal power points. NE East Coast was considered good practice in terms of WiFi facilities.

Passengers were generally satisfied with the **overhead and at-seat lighting** in most types of train surveyed.

The **drop-down tables** on most types of train were generally felt to be suitable in size, but not suitable for using a laptop. The FGW HST and East Midland's Meridian were considered to be examples of good practice for both size and suitability for a laptop, the key reason being the 'pull-out' design.

The **armrests** were generally considered by passengers to be of a suitable height but approximately a third of passengers thought they were too hard and narrow. Pioneer Hull Trains armrests were considered good practice in terms of width and East Midlands Meridian received the highest score in terms of the armrest not being too hard.

There was no marked difference in the levels of satisfaction for seating accessories between passengers in different age, gender and journey purpose categories.

Seating accessories in the new trains should be more visible and positioned in appropriate locations with complementary signage. The two key requirements for new designs include:

- adjustable drop-down tables suitable for laptops; and
- personal power points allocated to each seat.

Toilets

Fewer than half of the passengers surveyed were satisfied with the design of the toilet facilities. The design features that received the highest satisfaction included **ease of using the door controls and lock**, while the areas of least satisfaction included **quality of washing/drying facilities and provision for disposables**.

The Voyager Cross Country's toilet design received the highest satisfaction scores for: signage directing to the toilet and once in the toilet; space within the toilet; quality of baby changing facilities; mirror provision; facility for holding the toilet lid/seat up; hook for hanging coats and bags; and floor surface.

A further example of good practice was East Midland's Meridian which received the highest satisfaction scores for ease of using

the door lock, quality of washing/drying facilities and provision for disposables.

Women reported slightly higher levels of overall satisfaction with the design of toilet facilities than men, while older people (64+) were more satisfied with the toilet facilities than any other age groups. There were no marked differences according to passenger type by journey purpose categories.

The areas that require attention and improvement in new train designs include:

- the need for improved baby changing facilities and enhanced litter provision;
- a full size mirror and good lighting; and
- provision of coin-operated sanitary facilities.

Windows

Passengers were generally satisfied with the windows on the types of train surveyed. NE East Coast HST and Pioneer were considered best practice in relation to being able to '**see out of the window**' and '**overall window size**' respectively.

Luggage provision (including space, security and accessibility)

The design area that received by far the lowest approval ratings from passengers was provision for luggage.

Overall, just over a quarter of passengers (27%) were satisfied with luggage **space, accessibility of luggage facilities and security**. Overhead racks were the most commonly used

storage location and these received significantly higher satisfaction scores in respect of storage space, accessibility and security compared to all other luggage locations.

The luggage facilities that passengers were **most satisfied** with were NE East Coast's '**overhead racks**', and Voyager's '**luggage space between seat backs**'.

Females overall were slightly less satisfied with luggage facilities than males, especially in relation to accessibility of overhead racks and amount of space provided. Passengers aged 55-64 were much less satisfied than passengers of all other age groups with the accessibility of stowage facilities. Interestingly there were no strong differences in satisfaction with luggage facilities reported by commuters, business and leisure passengers.

There is clear evidence that passengers want new trains to provide greater capacity and improved design for luggage storage. Suggested improvements include:

- transparent design of luggage facilities (to 'keep an eye' on their luggage);
- wider and deeper luggage racks to allow for larger items;
- dedicated space for pushchair storage; and
- varied heights of luggage racks and shelves within some racks, especially those at the end of the carriage.

Information provision

Passengers generally thought that information provision on the train types surveyed, in terms of **announcements and information displays** were of a good quality. Pioneer (Hull Trains) was considered good practice in terms of audibility of

announcements and the SWT Desiro for legibility of information displays in the carriage.

There was not a marked difference in the levels of satisfaction for information provision between the different gender, age and journey purpose categories.

On-train environment

Passengers were generally satisfied with the on-train environment. **Noise within the carriage and temperature received the highest satisfaction scores**, while litter bin provision scored the lowest

East Midlands Meridian was given highest satisfaction score for air conditioning, temperature and ventilation. The Cross Country Voyager scored the highest for the running noise of the train.

Satisfaction ratings for on-train environment were similar between passengers in the different age, gender and journey purpose categories.

The main complaint with existing long-distance trains was the varied temperature and poor air conditioning. Therefore, a consideration for the new designs could be at-seat controllable ventilation and heating.

Buffet

Passengers were generally satisfied with the design of buffet facilities in the train types surveyed. The '**height of the counter,**' '**edges around the counter**' and '**lighting around the counter**' were all considered satisfactory. However, passengers were less satisfied with the ease of reading the

menu and convenience of queuing space. The Meridian and Pioneer 1990 Diesel Units received on average the highest approval ratings for buffet design.

Male passengers were less satisfied with the buffet design than females, on average, while leisure passengers were more satisfied with most aspects of the buffet than commuters and business passengers.

The main causes of concern with using buffet facilities are cramped conditions at the buffet counter and congestion when queuing due to a lack of space. Any new design should consider options to improve the flow of passengers passing through the buffet carriage.

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Appendix A Tabulations Report

1.1 Introduction

The following tables provide breakdowns of the findings from the passenger on-train survey by age, gender and journey purpose.

Interpreting the tables

The following points should be noted when interpreting the tables:

- Where the table indicates ‘% of people who were satisfied’, this reflects respondents who scored between 7 and 10 on the satisfaction scale (where 1 equals very dissatisfied and 10 equals very satisfied);.
- Where ‘n/a’ appears in the table this means that this particular design feature is ‘not available’ for that train type – see Appendix C for a complete breakdown;
- The question numbers identified in the table refer to the on-train survey questionnaire (see Appendix B);
- The values have been rounded for presentation and may not total to 100%;
- The column headed ‘Average’ shows the average of the scores for each train type. Overall averages are presented both for each detailed aspect of internal design (e.g. ‘finding the door handle’) and as an average of all the scores for the design area concerned (e.g. ‘moving through the train’).¹
- Due to the relatively small sample sizes in many of the sub-categories an ‘approval rating’ (used in main sections of this report to compare passenger views on design areas between different train types) has not been calculated within these breakdown tables.
- Comparisons can be made using the averages, but it is important to note the base (sample size). As a general rule, comparisons should always be considered unreliable when the base is less than 30.
- The table below provides the base (sample size) for each train type by age, gender and journey purpose. The weighted base is shown, for consistency with tables in the main sections of report. While samples in each cell are generally large enough to support comparisons of passenger opinion by gender and journey purpose, those for the two highest age categories (55-64 and 65+) are often relatively small: where this applies, these age bands should therefore be considered together.

¹ The means of column and row averages may not precisely agree in cases where some cells are ‘not applicable’. In these cases the table shows the mean of column averages (passengers’ ratings of each train type).

Table: base (sample size) for each train type by age, gender and journey purpose

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
Gender:									
Male	584	79	53	58	57	77	64	110	86
Female	703	94	58	69	68	93	78	139	104
Total*	1287	173	111	127	125	170	142	249	190
Age Group:									
16 - 34 years	372	50	37	37	36	49	41	67	55
35 - 54 years	523	70	46	52	51	69	58	100	77
55 - 64 years	260	35	17	26	25	34	29	56	38
65 + years	134	18	12	13	13	18	15	25	20
Total*	1289	173	112	128	125	170	143	248	190
Journey Purpose:									
Commute	291	39	32	29	28	39	32	49	43
Leisure	716	96	63	71	69	94	79	138	106
Business	282	38	17	28	27	37	31	62	42
Total*	1289	173	112	128	124	170	142	249	191

*Number of valid cases is different due to rounding of the cell counts

Female

Table 1 Boarding the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Identify destination from existing signage (Q8)	82	88	75	71	97	85	73	89	71
Get on the train (Q9)	90	97	96	79	86	86	91	92	90
Find the door handle/controls (Q10a)	65	50	62	64	76	80	77	47	74
Using the door handle/controls (Q10b)	66	46	53	68	81	83	91	48	73
Read the seat reservation information (screens) (Q15a)	78	n/a	n/a	89	84	76	n/a	n/a	67
Read the seat reservation information (cards) (Q15b)	62	67	71	n/a	n/a	n/a	29	71	n/a
Identify their reserved seat (Q16)	83	70	97	85	83	73	100	84	87
Identify unreserved seats (Q17)	82	83	77	80	92	85	92	87	64
Average	76	72	76	77	86	81	79	74	75
% who thought the following factors were good:									
Vestibule area (Q11)	21	10	15	30	24	18	29	21	18
Floor surfaces (vestibule area) (Q12)	60	70	47	66	65	56	58	61	56
Floor surfaces (seating area) (Q12)	63	74	50	64	85	65	58	61	51
Provision of grab rails and handles (Q13)	21	22	18	33	24	18	13	19	22
Average	41	44	33	48	50	39	40	41	37

Table 2 Moving through the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Use internal doors (Q19)	93	100	89	85	92	89	83	98	99
Use the inter-carriage doors (Q21)	92	100	94	84	82	92	85	95	99
Walk through the train while it is travelling at speed (Q22)	72	77	64	74	72	75	70	76	63
Walk back to your seat with purchases while the train is moving (Q28)	60	50	64	36	66	50	n/a	63	76
% who said it was easy to:									
See the grab rail (Q24)	31	29	19	45	45	41	36	19	27
Use the grab rail (Q25)	28	26	12	36	43	39	28	19	27
% who felt the aisle was:									
Too narrow (Q23)	34	28	31	29	22	29	37	44	44
More than wide enough (Q23)	1	1	4	2	3	1	0	1	0
% who were satisfied with the following aspects of the buffet*:									
Height of counter (Q27)	88	86	100	91	83	92	n/a	100	88
Edges of the counter (Q27)	90	93	92	91	89	92	n/a	100	85
Lighting at/around the counter (q27)	82	93	82	91	89	46	n/a	100	82
Visibility of items for sale (Q27)	61	46	46	82	76	46	n/a	71	56
Non-slippery floors (Q27)	83	91	85	91	85	92	n/a	57	76
Ease of reading menu/price list (Q27)	42	8	44	29	72	25	n/a	75	33
Convenience of queuing space (Q27)	52	62	64	58	35	42	n/a	86	56
Average	71	68	73	76	76	62	n/a	84	68

Table 3 Your comfort during this journey

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who were satisfied with the following aspects of the seating comfort*:									
Ease of getting into and out of the seat (Q29)	66	57	62	72	75	71	65	67	63
Comfort of the seat when upright (Q29)	69	61	56	76	81	83	70	68	59
Comfort of the seat when reclining (Q29)	33	38	24	47	17	33	14	40	41
Height of seat (considering comfort and view) (Q29)	75	64	83	89	74	78	68	83	66
Width of seat (Q29)	69	64	71	73	73	75	60	73	62
Depth of seat (Q29)	72	58	71	77	81	82	71	75	65
Comfort of the front edge of the seat (Q29)	75	67	77	76	83	83	79	75	65
Contour and shape of the seat (Q29)	72	66	76	84	76	74	70	73	65
Leg room - knee clearance when upright (Q29)	61	58	50	72	67	63	52	64	61
Leg room - knee clearance when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Leg room - foot space when upright (Q29)	61	66	51	65	69	62	56	61	57
Leg room - foot space when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Comfort of foot area (Q29)	29	36	13	58	25	27	16	28	32
Head support (Q29)	53	44	42	61	59	54	49	63	48
Back support (Q29)	62	61	54	71	72	60	54	66	59
Hardness/softness of upholstery (Q29)	59	57	57	66	69	52	51	59	64
Overall feeling of comfort in this seat (Q29)	64	50	55	78	78	68	68	63	54
Average	61	56	56	71	67	64	56	64	57
% who were satisfied with the following aspects of the windows near their seat*:									
Seeing out of the window (Q37)	72	64	85	69	74	77	71	74	68
Overall size of the window (Q37)	78	73	86	73	86	82	74	80	73
Quality of blinds/curtains (Q37)	46	n/a	n/a	32	n/a	48	n/a	n/a	52
Ability to adjust blinds/curtains (Q37)	37	n/a	n/a	18	n/a	42	n/a	n/a	42
Average	58	69	86	48	80	62	73	77	59
% who felt the following aspects of their seat were accessible*:									
Coat hooks (Q34)	48	17	n/a	71	60	57	n/a	n/a	43
Magazine holder (Q34)	52	n/a	7	74	64	51	n/a	n/a	59
Personal power point (Q34)	50	36	55	78	69	63	n/a	44	29
At seat lighting (Q34)	34	2	7	55	49	70	n/a	9	54
WiFi (Q34)	25	n/a	42	46	38	33	n/a	35	18
Average	42	18	28	65	56	55	n/a	29	41

Table 3 (cont) Your comfort during this journey

% who felt the general overhead lighting was:									
Too strong (Q30)	3	15	2	0	2	0	0	2	1
Too weak (Q30)	1	1	0	0	0	1	0	1	7
% who felt the at seat lighting was:									
Too strong (Q36)	0	0	0	0	0	0	1	1	0
Too weak (Q36)	4	0	6	0	8	7	0	1	14
% who preferred the following seats:									
Airline (Q33)	42	39	43	33	46	42	36	42	49
Around a table (Q33)	58	61	57	67	54	58	64	58	51
% who felt the drop down table was:									
A suitable size (Q31c)	76	79	80	81	83	71	76	73	71
Suitable to use a laptop (Q31c)	45	62	61	59	44	40	32	34	33
Firm and strong enough (Q31c)	94	89	93	97	100	97	100	83	100
% who said the height of the armrest was:									
Too low (Q32c)	6	6	8	8	3	7	4	5	7
Too high (Q32c)	5	14	2	0	2	8	7	2	5
% who said the width of the armrest was:									
Too narrow (Q32d)	32	21	32	19	20	45	44	36	33
Too wide (Q32d)	0	0	0	0	0	0	0	0	0
% who felt the armrest was:									
Too soft	0	1	0	0	0	0	0	0	2
Too hard	38	31	50	14	22	37	46	64	30

Table 4 Your luggage

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following stowage facilities in terms of space provided*:									
Overhead racks (Q40)	38	29	39	46	32	32	33	41	51
Luggage stacks at end of carriage (Q40)	22	18	23	9	39	n/a	n/a	19	n/a
Luggage stacks elsewhere in carriage (Q40)	19	n/a	n/a	n/a	n/a	21	n/a	n/a	17
Luggage space between seatbacks (Q40)	14	11	10	23	13	23	n/a	14	8
Luggage space beneath seats (Q40)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	23	19	24	26	28	25	33	25	25
% who were satisfied with the following stowage facilities in terms of accessibility*:									
Overhead racks (Q41)	32	20	36	43	43	26	21	29	41
Luggage stacks at end of carriage (Q41)	32	20	31	24	52	n/a	n/a	31	n/a
Luggage stacks elsewhere in carriage (Q41)	20	n/a	n/a	n/a	n/a	21	n/a	n/a	20
Luggage space between seatbacks (Q41)	14	7	10	27	26	6	n/a	16	10
Luggage space beneath seats (Q41)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	16	26	31	40	18	21	25	24
% who were satisfied with the following stowage facilities in terms of security*:									
Overhead racks (Q42)	50	48	55	59	52	30	46	57	50
Luggage stacks at end of carriage (Q42)	19	11	17	18	33	n/a	n/a	16	n/a
Luggage stacks elsewhere in carriage (Q42)	11	n/a	n/a	n/a	n/a	5	n/a	n/a	17
Luggage space between seatbacks (Q42)	19	11	7	41	30	20	n/a	19	11
Luggage space beneath seats (Q42)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	23	26	39	38	18	46	31	26
% who preferred to store their main luggage in the following stowage facilities:									
Overhead racks (Q43)	39	33	43	30	55	12	100	36	46
Luggage stacks at end of carriage (Q43)	25	38	24	46	30	n/a	n/a	31	n/a
Luggage stacks elsewhere in carriage (Q43)	7	n/a	n/a	n/a	n/a	35	n/a	n/a	24
Luggage space between seatbacks (Q43)	30	30	32	24	15	53	n/a	33	30
Luggage space beneath seats (Q43)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	34	33	33	33	33	100	33	33

Table 5 Information during this journey

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who said announcements were:									
Audible (Q44c)	77	57	84	80	90	84	75	71	81
Inaudible (Q44c)	21	35	16	15	10	15	22	29	18
% who said the information displays in the carriage were:									
Perfectly/ fairly legible (Q44b)	95	n/a	n/a	91	98	93	100	n/a	93

Table 6 On-train environment

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who were satisfied with the following aspects of the environment on the train*:									
Air conditioning (Q46)	57	50	44	77	54	69	50	56	55
Temperature (Q46)	58	51	41	76	54	68	51	61	59
Ventilation (Q46)	56	54	45	72	65	60	48	54	49
Odour or smell of train interior (Q46)	57	50	48	66	64	59	63	50	60
Noise within carriage (train not passengers) (Q46)	61	59	54	62	68	69	61	53	66
Litter bin provision (Q46)	34	28	38	33	37	40	29	31	40
Ease of locating safety/emergency equipment (Q46)	52	58	42	63	52	56	51	47	49
Average	54	50	45	64	56	60	50	50	54

Table 7 Toilet

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who felt the maintenance of the toilet was:									
Well maintained (Q48b)	73	88	50	100	73	90	83	64	74
Poorly maintained (Q48b)	27	13	50	0	27	10	17	36	26
% who said the toilet cubicle was:									
Clean (Q48c)	74	87	64	56	70	90	50	71	84
Dirty (Q48c)	26	13	36	44	30	10	50	29	16
% who were satisfied with the following aspects of the design of the toilet*:									
Ease of using the door controls (48e)	57	43	65	75	53	52	83	58	63
Ease of using the door lock (48e)	60	58	63	75	64	52	83	55	65
Clear visible instruction of how to lock the door (48e)	57	58	58	0	50	52	50	60	76
Clear visible direction signs to toilet and once in toilet (48e)	62	71	68	50	45	77	75	55	65
Space within the toilet area (48e)	50	70	20	75	35	82	80	40	65
Quality of toilet and washing/drying facilities (48e)	41	46	38	75	20	45	75	38	59
Quality of baby changing facilities (48e)	37	29	24	0	21	64	0	43	78
Provision for disposables (48e)	42	57	35	75	27	44	33	37	80
Mirror (48e)	56	63	54	0	41	79	67	54	63
Facility to hold the toilet lid and seat up (48e)	55	48	54	75	44	75	0	56	63
Hook for hanging coats/bags (48e)	48	48	35	75	42	65	40	46	56
Floor surface (48e)	42	57	40	0	33	60	33	29	63
Location of toilet flush (48e)	47	52	38	0	35	68	80	45	53
Average	50	54	46	44	39	63	54	47	65

Male

Table 8 Boarding the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Identify destination from existing signage (Q8)	85	81	87	85	82	82	79	87	91
Get on the train (Q9)	95	96	96	95	88	99	97	95	94
Find the door handle/controls (Q10a)	70	65	55	73	71	83	83	64	66
Using the door handle/controls (Q10b)	74	69	57	78	79	84	85	67	74
Read the seat reservation information (screens) (Q15a)	73	n/a	n/a	74	81	77	n/a	n/a	64
Read the seat reservation information (cards) (Q15b)	58	60	77	n/a	n/a	n/a	25	65	n/a
Identify their reserved seat (Q16)	78	80	76	85	91	50	50	87	52
Identify unreserved seats (Q17)	83	91	88	89	81	81	92	75	74
Average	77	77	77	83	82	79	73	77	74
% who thought the following factors were good:									
Vestibule area (Q11)	27	25	25	20	31	30	30	32	18
Floor surfaces (vestibule area) (Q12)	58	52	72	52	60	66	73	55	44
Floor surfaces (seating area) (Q12)	62	61	80	51	63	75	71	56	49
Provision of grab rails and handles (Q13)	24	31	27	15	38	19	31	24	10
Average	43	42	51	35	48	48	51	42	30

Table 9 Moving through the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Use internal doors (Q19)	94	99	98	93	81	95	85	99	95
Use the inter-carriage doors (Q21)	95	100	96	91	81	95	88	99	99
Walk through the train while it is travelling at speed (Q22)	78	72	74	78	76	84	73	80	87
Walk back to your seat with purchases while the train is moving (Q28)	74	43	78	71	77	85	n/a	78	74
% who said it was easy to:									
See the grab rail (Q24)	35	43	45	39	43	29	41	30	18
Use the grab rail (Q25)	33	38	40	33	29	35	35	34	21
% who felt the aisle was:									
Too narrow (Q23)	33	35	34	25	39	12	38	33	46
More than wide enough (Q23)	3	5	2	9	4	1	0	6	0
% who were satisfied with the following aspects of the buffet*:									
Height of counter (Q27)	69	60	65	71	77	79	n/a	80	53
Edges of the counter (Q27)	68	50	59	67	77	85	n/a	80	55
Lighting at/around the counter (q27)	72	60	65	67	73	75	n/a	78	80
Visibility of items for sale (Q27)	44	17	39	67	58	16	n/a	33	75
Non-slippery floors (Q27)	70	60	65	50	69	89	n/a	56	75
Ease of reading menu/price list (Q27)	41	20	38	67	58	26	n/a	50	45
Convenience of queuing space (Q27)	38	17	33	50	45	30	n/a	38	50
Average	57	41	52	63	65	57	n/a	59	62

Table 10 Your comfort during this journey

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who were satisfied with the following aspects of the seating comfort*:									
Ease of getting into and out of the seat (Q29)	68	75	69	58	68	78	73	73	52
Comfort of the seat when upright (Q29)	59	66	65	63	54	66	50	60	48
Comfort of the seat when reclining (Q29)	26	19	24	32	24	32	20	32	22
Height of seat (considering comfort and view) (Q29)	72	82	62	68	75	82	71	76	54
Width of seat (Q29)	55	63	56	61	65	55	44	64	35
Depth of seat (Q29)	58	64	62	62	59	64	48	62	42
Comfort of the front edge of the seat (Q29)	62	72	55	63	65	70	58	69	43
Contour and shape of the seat (Q29)	58	61	51	63	61	59	49	66	49
Leg room - knee clearance when upright (Q29)	49	53	38	65	57	45	48	51	36
Leg room - knee clearance when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Leg room - foot space when upright (Q29)	51	68	34	60	50	55	45	55	36
Leg room - foot space when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Comfort of foot area (Q29)	24	21	15	30	26	35	12	25	24
Head support (Q29)	51	52	51	64	43	62	44	57	33
Back support (Q29)	57	61	58	66	59	65	48	58	39
Hardness/softness of upholstery (Q29)	56	65	46	58	52	63	44	63	48
Overall feeling of comfort in this seat (Q29)	56	58	47	61	64	64	49	58	44
Average	53	59	49	58	55	60	47	58	40
% who were satisfied with the following aspects of the windows near their seat*:									
Seeing out of the window (Q37)	70	84	75	60	77	77	74	70	48
Overall size of the window (Q37)	77	90	81	71	85	79	81	73	62
Quality of blinds/curtains (Q37)	45	n/a	n/a	32	n/a	49	n/a	n/a	51
Ability to adjust blinds/curtains (Q37)	40	n/a	n/a	24	n/a	37	n/a	n/a	53
Average	58	87	78	47	81	61	78	72	54
% who felt the following aspects of their seat were accessible*:									
Coat hooks (Q34)	49	42	n/a	66	45	57	n/a	n/a	37
Magazine holder (Q34)	47	n/a	14	50	32	65	n/a	n/a	59
Personal power point (Q34)	53	49	74	62	32	76	n/a	44	41
At seat lighting (Q34)	38	12	23	38	27	79	n/a	21	64
WiFi (Q34)	24	n/a	61	20	9	30	n/a	43	18
Average	42	34	43	47	29	61	n/a	36	44

Table 10 (cont) Your comfort during this journey

% who felt the general overhead lighting was:									
Too strong (Q30)	3	1	9	7	0	4	5	3	1
Too weak (Q30)	3	4	0	0	2	4	2	0	13
% who felt the at seat lighting was:									
Too strong (Q36)	2	1	0	8	4	3	0	1	0
Too weak (Q36)	4	0	2	0	4	7	0	3	14
% who preferred the following seats:									
Airline (Q33)	33	50	43	22	25	19	41	29	38
Around a table (Q33)	67	50	57	78	75	81	59	71	62
% who felt the drop down table was:									
A suitable size (Q31c)	66	79	46	65	67	74	63	58	65
Suitable to use a laptop (Q31c)	36	57	29	42	29	36	27	28	31
Firm and strong enough (Q31c)	97	96	96	100	100	98	93	96	97
% who said the height of the armrest was:									
Too low (Q32c)	4	1	0	0	6	1	10	11	1
Too high (Q32c)	2	3	0	0	0	10	2	1	3
% who said the width of the armrest was:									
Too narrow (Q32d)	34	36	33	24	21	33	49	30	43
Too wide (Q32d)	0	0	0	0	0	0	0	1	0
% who felt the armrest was:									
Too soft	0	0	0	0	0	0	0	0	0
Too hard	40	42	49	9	19	36	49	50	51

Table 11 Your luggage

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who were satisfied with the following stowage facilities in terms of space provided*:									
Overhead racks (Q40)	52	63	68	16	44	55	51	66	37
Luggage stacks at end of carriage (Q40)	28	38	37	14	27	n/a	n/a	23	n/a
Luggage stacks elsewhere in carriage (Q40)	25	n/a	n/a	n/a	n/a	24	n/a	n/a	25
Luggage space between seatbacks (Q40)	19	19	24	10	27	20	n/a	15	21
Luggage space beneath seats (Q40)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	31	40	43	13	33	33	51	35	28
% who were satisfied with the following stowage facilities in terms of accessibility*:									
Overhead racks (Q41)	47	55	63	23	41	39	44	57	40
Luggage stacks at end of carriage (Q41)	34	60	36	10	38	n/a	n/a	23	n/a
Luggage stacks elsewhere in carriage (Q41)	24	n/a	n/a	n/a	n/a	24	n/a	n/a	24
Luggage space between seatbacks (Q41)	18	19	19	10	19	19	n/a	14	22
Luggage space beneath seats (Q41)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	31	45	39	14	33	27	44	31	29
% who were satisfied with the following stowage facilities in terms of security*:									
Overhead racks (Q42)	52	65	63	35	55	59	35	58	40
Luggage stacks at end of carriage (Q42)	18	22	24	16	17	n/a	n/a	12	n/a
Luggage stacks elsewhere in carriage (Q42)	19	n/a	n/a	n/a	n/a	24	n/a	n/a	16
Luggage space between seatbacks (Q42)	19	13	30	16	24	16	n/a	16	23
Luggage space beneath seats (Q42)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	27	33	39	22	32	33	35	29	26
% who preferred to store their main luggage in the following stowage facilities:									
Overhead racks (Q43)	75	60	69	76	67	77	100	77	81
Luggage stacks at end of carriage (Q43)	14	23	29	12	23	n/a	n/a	18	n/a
Luggage stacks elsewhere in carriage (Q43)	1	n/a	n/a	n/a	n/a	0	n/a	n/a	8
Luggage space between seatbacks (Q43)	9	18	2	12	10	23	n/a	5	10
Luggage space beneath seats (Q43)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	34	33	33	33	33	100	33	33

Table 12 Information during this journey

	Overall	1990 Diesel Units					Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		HST	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country				
% who said announcements were:									
Audible (Q44c)	78	53	88	72	93	75	83	77	90
Inaudible (Q44c)	19	38	10	24	5	23	13	22	10
% who said the information displays in the carriage were:									
Perfectly/ fairly legible (Q44b)	91	n/a	n/a	92	88	94	97	75	88

Table 13 On-train environment

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who were satisfied with the following aspects of the environment on the train*:									
Air conditioning (Q46)	55	60	42	63	56	61	63	59	37
Temperature (Q46)	57	58	43	69	56	66	63	61	37
Ventilation (Q46)	50	56	48	62	48	53	55	49	33
Odour or smell of train interior (Q46)	53	63	47	59	53	53	64	50	36
Noise within carriage (train not passengers) (Q46)	57	65	63	37	62	67	54	60	49
Litter bin provision (Q46)	30	27	38	34	25	26	32	32	25
Ease of locating safety/emergency equipment (Q46)	51	61	60	54	52	41	50	54	38
Average	50	56	49	54	50	52	54	52	36

Table 14 Toilet

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who felt the maintenance of the toilet was:									
Well maintained (Q48b)	64	70	40	71	100	79	33	61	72
Poorly maintained (Q48b)	36	30	60	29	0	21	67	39	28
% who said the toilet cubicle was:									
Clean (Q48c)	65	70	54	75	100	71	38	61	63
Dirty (Q48c)	35	30	46	25	0	29	63	39	38
% who were satisfied with the following aspects of the design of the toilet*:									
Ease of using the door controls (48e)	53	60	58	62	50	53	57	48	44
Ease of using the door lock (48e)	54	63	54	83	50	53	20	53	46
Clear visible instruction of how to lock the door (48e)	51	67	50	75	36	57	29	52	42
Clear visible direction signs to toilet and once in toilet (48e)	49	50	54	58	40	62	14	52	44
Space within the toilet area (48e)	41	27	33	50	50	62	13	32	52
Quality of toilet and washing/drying facilities (48e)	29	33	24	46	18	43	0	36	24
Quality of baby changing facilities (48e)	34	44	18	50	14	70	0	38	29
Provision for disposables (48e)	29	38	14	43	20	31	17	36	29
Mirror (48e)	37	38	27	43	55	67	33	41	23
Facility to hold the toilet lid and seat up (48e)	35	33	40	50	22	43	33	41	17
Hook for hanging coats/bags (48e)	33	13	19	46	10	50	33	48	26
Floor surface (48e)	38	20	39	46	44	50	17	36	36
Location of toilet flush (48e)	45	50	43	56	36	46	75	46	28
Average	41	41	36	54	34	53	26	43	34

16-34 year olds

Table 15 Boarding the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
				Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country		NE East Coast	
		FGW	NE East Coast				SWT		Virgin
% who said it was quite/very easy to:									
Identify destination from existing signage (Q8)	86	84	75	82	90	94	85	92	84
Get on the train (Q9)	95	96	97	89	79	100	97	97	96
Find the door handle/controls (Q10a)	69	59	51	74	81	84	82	61	65
Using the door handle/controls (Q10b)	70	58	46	72	81	86	85	58	75
Read the seat reservation information (screens) (Q15a)	82	n/a	n/a	97	75	89	n/a	n/a	73
Read the seat reservation information (cards) (Q15b)	56	64	61	n/a	n/a	n/a	26	63	n/a
Identify their reserved seat (Q16)	83	69	100	80	85	81	33	80	95
Identify unreserved seats (Q17)	84	90	65	100	93	86	86	75	76
Average	78	74	71	85	83	89	71	75	81
% who thought the following factors were good:									
Vestibule area (Q11)	29	18	22	46	38	16	26	30	35
Floor surfaces (vestibule area) (Q12)	64	51	54	84	53	71	65	63	72
Floor surfaces (seating area) (Q12)	67	55	62	83	69	78	63	63	69
Provision of grab rails and handles (Q13)	26	23	20	42	33	26	28	18	30
Average	47	37	40	64	48	48	46	44	52

Table 16 Moving through the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Use internal doors (Q19)	91	98	89	86	72	86	92	97	96
Use the inter-carriage doors (Q21)	91	100	95	86	65	92	90	97	96
Walk through the train while it is travelling at speed (Q22)	82	89	78	78	63	94	85	79	83
Walk back to your seat with purchases while the train is moving (Q28)	72	75	43	67	75	80	n/a	75	100
% who said it was easy to:									
See the grab rail (Q24)	34	29	24	73	47	29	46	18	28
Use the grab rail (Q25)	32	31	17	62	33	27	39	18	39
% who felt the aisle was:									
Too narrow (Q23)	33	28	38	29	31	12	43	46	35
More than wide enough (Q23)	2	0	5	9	6	2	0	1	0
% who were satisfied with the following aspects of the buffet*:									
Height of counter (Q27)	82	67	67	100	63	100	n/a	100	100
Edges of the counter (Q27)	69	33	57	100	67	100	n/a	75	67
Lighting at/around the counter (q27)	72	67	50	100	63	80	n/a	75	100
Visibility of items for sale (Q27)	51	33	0	67	63	60	n/a	75	83
Non-slippery floors (Q27)	74	67	57	100	67	100	n/a	75	88
Ease of reading menu/price list (Q27)	50	33	0	67	63	67	n/a	75	67
Convenience of queuing space (Q27)	48	50	14	0	50	80	n/a	67	67
Average	64	50	35	76	62	84	n/a	77	82

Table 17 Your comfort during this journey

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following aspects of the seating comfort*:									
Ease of getting into and out of the seat (Q29)	71	62	75	68	70	78	71	71	73
Comfort of the seat when upright (Q29)	68	58	53	78	61	88	71	63	71
Comfort of the seat when reclining (Q29)	30	30	25	38	16	32	28	27	38
Height of seat (considering comfort and view) (Q29)	78	77	68	81	74	92	70	73	84
Width of seat (Q29)	67	58	60	61	79	73	68	69	69
Depth of seat (Q29)	70	57	56	75	71	89	66	69	73
Comfort of the front edge of the seat (Q29)	72	69	54	74	69	86	74	73	77
Contour and shape of the seat (Q29)	65	63	53	75	64	70	63	66	63
Leg room - knee clearance when upright (Q29)	56	51	41	70	69	66	46	48	59
Leg room - knee clearance when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Leg room - foot space when upright (Q29)	55	51	44	60	66	71	45	52	51
Leg room - foot space when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Comfort of foot area (Q29)	30	29	15	50	29	33	21	25	35
Head support (Q29)	56	51	42	67	47	67	53	64	49
Back support (Q29)	62	60	51	69	64	73	54	66	56
Hardness/softness of upholstery (Q29)	58	55	54	50	59	69	50	56	65
Overall feeling of comfort in this seat (Q29)	66	49	49	69	74	84	67	68	65
Average	60	55	49	66	61	71	56	59	62
% who were satisfied with the following aspects of the windows near their seat*:									
Seeing out of the window (Q37)	76	76	86	66	74	82	76	79	69
Overall size of the window (Q37)	82	86	89	73	79	88	83	76	81
Quality of blinds/curtains (Q37)	55	n/a	n/a	39	n/a	54	n/a	n/a	65
Ability to adjust blinds/curtains (Q37)	41	n/a	n/a	29	n/a	32	n/a	n/a	56
Average	64	81	88	52	77	64	80	78	68
% who felt the following aspects of their seat were accessible*:									
Coat hooks (Q34)	44	33	n/a	61	31	51	n/a	n/a	46
Magazine holder (Q34)	47	n/a	6	64	36	53	n/a	n/a	68
Personal power point (Q34)	51	41	65	71	42	67	n/a	48	32
At seat lighting (Q34)	40	4	19	62	47	73	n/a	15	67
WiFi (Q34)	30	n/a	69	47	10	50	n/a	53	14
Average	42	26	40	61	33	59	n/a	39	45

Table 17 (cont) Your comfort during this journey

% who felt the general overhead lighting was:									
Too strong (Q30)	4	14	8	0	3	2	5	1	2
Too weak (Q30)	2	2	0	0	0	0	2	1	6
% who felt the at seat lighting was:									
Too strong (Q36)	2	0	0	7	6	0	3	0	0
Too weak (Q36)	1	0	3	0	0	2	0	2	2
% who preferred the following seats:									
Airline (Q33)	37	29	41	31	42	42	49	35	33
Around a table (Q33)	63	71	59	69	58	58	51	65	67
% who felt the drop down table was:									
A suitable size (Q31c)	65	67	61	83	64	65	79	50	60
Suitable to use a laptop (Q31c)	36	53	44	35	7	34	42	28	31
Firm and strong enough (Q31c)	93	94	88	94	100	97	96	87	93
% who said the height of the armrest was:									
Too low (Q32c)	5	10	6	0	9	2	7	6	2
Too high (Q32c)	3	4	0	0	0	13	10	0	0
% who said the width of the armrest was:									
Too narrow (Q32d)	34	31	44	12	17	49	48	34	33
Too wide (Q32d)	0	0	0	0	0	0	0	0	0
% who felt the armrest was:									
Too soft	0	0	0	0	0	0	0	0	0
Too hard	42	31	47	24	22	40	55	69	38

Table 18 Your luggage

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following stowage facilities in terms of space provided*:									
Overhead racks (Q40)	42	54	36	24	24	45	48	48	48
Luggage stacks at end of carriage (Q40)	23	25	13	22	33	n/a	n/a	22	n/a
Luggage stacks elsewhere in carriage (Q40)	28	n/a	n/a	n/a	n/a	24	n/a	n/a	31
Luggage space between seatbacks (Q40)	18	14	10	21	28	18	n/a	13	26
Luggage space beneath seats (Q40)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	28	31	20	22	28	29	48	28	35
% who were satisfied with the following stowage facilities in terms of accessibility*:									
Overhead racks (Q41)	36	41	34	17	40	31	46	35	42
Luggage stacks at end of carriage (Q41)	33	38	17	17	47	n/a	n/a	36	n/a
Luggage stacks elsewhere in carriage (Q41)	35	n/a	n/a	n/a	n/a	31	n/a	n/a	39
Luggage space between seatbacks (Q41)	19	18	11	18	24	16	n/a	17	32
Luggage space beneath seats (Q41)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	31	32	21	17	37	26	46	29	38
% who were satisfied with the following stowage facilities in terms of security*:									
Overhead racks (Q42)	55	61	48	41	62	47	61	63	48
Luggage stacks at end of carriage (Q42)	20	13	11	29	36	n/a	n/a	15	
Luggage stacks elsewhere in carriage (Q42)	17	n/a	n/a	n/a	n/a	18	n/a	n/a	17
Luggage space between seatbacks (Q42)	23	21	22	17	32	9	n/a	24	32
Luggage space beneath seats (Q42)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	29	32	27	29	43	25	61	34	32
% who preferred to store their main luggage in the following stowage facilities:									
Overhead racks (Q43)	64	62	57	67	60	53	100	59	73
Luggage stacks at end of carriage (Q43)	17	24	24	0	35	n/a	n/a	26	n/a
Luggage stacks elsewhere in carriage (Q43)	n/a	n/a	n/a	n/a	n/a	21	n/a	n/a	9
Luggage space between seatbacks (Q43)	16	14	19	33	5	26	n/a	15	18
Luggage space beneath seats (Q43)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	32	33	33	33	33	33	100	33	33

Table 19 Information during this journey

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who said announcements were:									
Audible (Q44c)	77	48	76	75	94	85	80	71	85
Inaudible (Q44c)	19	27	21	25	6	15	12	29	13
% who said the information displays in the carriage were:									
Perfectly/ fairly legible (Q44b)	94	n/a	n/a	100	89	98	94	n/a	86

Table 20 On-train environment

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who were satisfied with the following aspects of the environment on the train*:									
Air conditioning (Q46)	52	44	31	76	40	65	45	50	63
Temperature (Q46)	56	48	29	85	49	60	51	59	64
Ventilation (Q46)	48	48	34	63	50	52	38	47	53
Odour or smell of train interior (Q46)	56	53	31	65	66	67	56	50	59
Noise within carriage (train not passengers) (Q46)	60	59	45	52	69	67	67	52	68
Litter bin provision (Q46)	31	18	33	24	47	38	29	12	56
Ease of locating safety/emergency equipment (Q46)	51	44	49	47	60	48	56	42	64
Average	51	45	36	59	54	57	49	45	61

Table 21 Toilet

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who felt the maintenance of the toilet was:									
Well maintained (Q48b)	64	100	38	100	50	80	50	57	67
Poorly maintained (Q48b)	36	0	62	0	50	20	50	43	33
% who said the toilet cubicle was:									
Clean (Q48c)	55	89	58	40	50	80	33	38	63
Dirty (Q48c)	45	11	42	60	50	20	67	52	38
% who were satisfied with the following aspects of the design of the toilet*:									
Ease of using the door controls (48e)	52	50	46	50	50	75	67	37	67
Ease of using the door lock (48e)	56	63	50	100	50	75	33	40	71
Clear visible instruction of how to lock the door (48e)	53	63	58	33	50	75	33	42	71
Clear visible direction signs to toilet and once in toilet (48e)	53	63	57	40	50	75	43	40	69
Space within the toilet area (48e)	41	44	23	100	0	75	29	20	69
Quality of toilet and washing/drying facilities (48e)	36	29	21	100	0	75	29	24	50
Quality of baby changing facilities (48e)	31	33	27	0	0	75	0	33	44
Provision for disposables (48e)	38	38	31	100	0	50	17	25	54
Mirror (48e)	47	56	38	40	50	75	33	43	54
Facility to hold the toilet lid and seat up (48e)	51	43	50	100	50	75	14	50	54
Hook for hanging coats/bags (48e)	39	29	23	100	50	75	29	26	47
Floor surface (48e)	40	50	50	40	0	75	17	25	53
Location of toilet flush (48e)	43	44	42	50	50	50	83	37	29
Average	45	47	40	66	31	71	33	34	56

35-54 year olds

Table 22 Boarding the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Identify destination from existing signage (Q8)	85	78	87	86	88	80	85	89	88
Get on the train (Q9)	94	100	94	92	86	88	93	98	99
Find the door handle/controls (Q10a)	66	57	53	69	74	79	81	53	72
Using the door handle/controls (Q10b)	70	61	56	76	82	82	84	56	74
Read the seat reservation information (screens) (Q15a)	78	n/a	n/a	79	82	81	n/a	n/a	73
Read the seat reservation information (cards) (Q15b)	60	61	74	n/a	n/a	n/a	32	69	n/a
Identify their reserved seat (Q16)	82	68	86	92	89	68	100	90	60
Identify unreserved seats (Q17)	83	80	100	74	85	80	94	83	78
Average	77	72	79	81	84	80	81	77	78
% who thought the following factors were good:									
Vestibule area (Q11)	26	21	29	27	22	21	38	32	18
Floor surfaces (vestibule area) (Q12)	59	64	67	60	73	53	64	63	39
Floor surfaces (seating area) (Q12)	63	74	67	51	78	73	67	63	40
Provision of grab rails and handles (Q13)	22	29	15	20	30	14	26	25	14
Average	43	47	45	39	51	40	49	46	28

Table 23 Moving through the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Use internal doors (Q19)	94	100	93	90	92	91	87	99	96
Use the inter-carriage doors (Q21)	94	100	93	87	90	91	85	99	99
Walk through the train while it is travelling at speed (Q22)	77	75	67	82	84	75	72	81	74
Walk back to your seat with purchases while the train is moving (Q28)	65	67	70	43	65	61	n/a	71	89
% who said it was easy to:									
See the grab rail (Q24)	29	33	33	27	40	22	27	30	20
Use the grab rail (Q25)	28	28	27	25	41	27	25	34	17
% who felt the aisle was:									
Too narrow (Q23)	33	36	33	20	36	21	29	37	47
More than wide enough (Q23)	3	7	2	4	0	1	0	7	0
% who were satisfied with the following aspects of the buffet*:									
Height of counter (Q27)	81	80	70	67	94	89	n/a	86	67
Edges of the counter (Q27)	82	100	64	67	88	89	n/a	86	80
Lighting at/around the counter (Q27)	75	100	60	67	88	65	n/a	86	78
Visibility of items for sale (Q27)	45	50	36	67	75	11	n/a	33	67
Non-slippery floors (Q27)	73	100	64	67	88	89	n/a	29	60
Ease of reading menu/price list (Q27)	39	25	20	67	80	17	n/a	20	40
Convenience of queuing space (Q27)	35	40	36	29	44	21	n/a	17	67
Average	61	71	50	61	79	54	n/a	51	65

Table 24 Your comfort during this journey

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following aspects of the seating comfort*:									
Ease of getting into and out of the seat (Q29)	67	62	59	58	76	73	74	72	58
Comfort of the seat when upright (Q29)	63	58	52	65	71	67	62	74	51
Comfort of the seat when reclining (Q29)	24	17	18	33	15	26	9	36	30
Height of seat (considering comfort and view) (Q29)	73	69	70	84	82	73	69	83	58
Width of seat (Q29)	59	60	59	65	60	61	51	71	41
Depth of seat (Q29)	63	59	62	67	69	69	63	71	47
Comfort of the front edge of the seat (Q29)	67	62	69	71	84	68	64	79	47
Contour and shape of the seat (Q29)	62	57	57	75	71	59	59	72	49
Leg room - knee clearance when upright (Q29)	52	47	45	68	58	40	55	61	45
Leg room - knee clearance when reclining (Q29)	54	68	35	60	53	46	57	62	41
Leg room - foot space when upright (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Leg room - foot space when reclining (Q29)	24	23	14	30	18	32	14	27	27
Table 23 Comfort of foot area (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Head support (Q29)	50	43	48	63	49	49	49	60	40
Back support (Q29)	57	51	49	71	63	52	59	66	46
Hardness/softness of upholstery (Q29)	58	56	51	65	64	46	59	67	52
Overall feeling of comfort in this seat (Q29)	57	50	43	67	75	53	60	64	45
Average	55	52	49	63	60	54	53	64	45
% who were satisfied with the following aspects of the windows near their seat*:									
Seeing out of the window (Q37)	70	68	74	76	73	75	75	67	57
Overall size of the window (Q37)	76	66	74	88	88	77	82	78	67
Quality of blinds/curtains (Q37)	42	n/a	n/a	23	n/a	46	n/a	n/a	49
Ability to adjust blinds/curtains (Q37)	37	n/a	n/a	13	n/a	42	n/a	n/a	46
Average	56	67	74	50	80	60	79	73	55
% who felt the following aspects of their seat were accessible*:									
Coat hooks (Q34)	47	28	n/a	69	61	49	n/a	n/a	40
Magazine holder (Q34)	46	n/a	9	52	55	65	n/a	n/a	41
Personal power point (Q34)	54	48	67	72	53	70	n/a	47	35
At seat lighting (Q34)	31	11	11	28	29	68	n/a	16	48
WiFi (Q34)	21	n/a	50	8	19	15	n/a	40	17
Average	40	29	34	46	43	53	n/a	34	36

Table 24 (cont) Your comfort during this journey

% who felt the general overhead lighting was:									
Too strong (Q30)	4	10	7	4	0	3	2	3	1
Too weak (Q30)	2	3	0	0	0	3	0	0	9
% who felt the at seat lighting was:									
Too strong (Q36)	1	2	0	0	0	3	0	2	0
Too weak (Q36)	5	0	7	0	2	14	0	3	15
% who preferred the following seats:									
Airline (Q33)	40	54	47	24	37	36	46	33	42
Around a table (Q33)	60	46	53	76	63	64	54	67	58
% who felt the drop down table was:									
A suitable size (Q31c)	70	78	60	75	73	68	71	66	68
Suitable to use a laptop (Q31c)	37	62	35	59	33	20	29	26	24
Firm and strong enough (Q31c)	96	98	95	100	100	96	96	88	100
% who said the height of the armrest was:									
Too low (Q32c)	7	3	5	10	2	10	4	11	9
Too high (Q32c)	3	10	2	0	0	3	0	1	4
% who said the width of the armrest was:									
Too narrow (Q32d)	30	22	27	29	13	42	38	28	40
Too wide (Q32d)	0	0	0	0	0	0	0	1	0
% who felt the armrest was:									
Too soft	1	1	0	0	0	0	0	0	3
Too hard	36	37	43	6	9	42	49	46	43

Table 25 Your luggage

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following stowage facilities in terms of space provided*:									
Overhead racks (Q40)	49	50	56	32	52	34	48	59	45
Luggage stacks at end of carriage (Q40)	31	44	34	20	29	n/a	n/a	26	n/a
Luggage stacks elsewhere in carriage (Q40)	19	n/a	n/a	n/a	n/a	25	n/a	n/a	10
Luggage space between seatbacks (Q40)	19	24	13	15	17	23	n/a	15	17
Luggage space beneath seats (Q40)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	30	39	34	22	33	27	48	33	24
% who were satisfied with the following stowage facilities in terms of accessibility*:									
Overhead racks (Q41)	45	41	53	41	53	24	41	53	42
Luggage stacks at end of carriage (Q41)	39	61	24	13	54	n/a	n/a	31	n/a
Luggage stacks elsewhere in carriage (Q41)	18	n/a	n/a	n/a	n/a	12	n/a	n/a	23
Luggage space between seatbacks (Q41)	16	22	5	9	24	10	n/a	19	15
Luggage space beneath seats (Q41)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	30	41	27	21	44	15	41	34	27
% who were satisfied with the following stowage facilities in terms of security*:									
Overhead racks (Q42)	53	60	58	57	58	33	53	57	45
Luggage stacks at end of carriage (Q42)	18	30	5	5	26	n/a	n/a	14	n/a
Luggage stacks elsewhere in carriage (Q42)	10	n/a	n/a	n/a	n/a	8	n/a	n/a	12
Luggage space between seatbacks (Q42)	20	18	6	25	30	27	n/a	18	18
Luggage space beneath seats (Q42)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	36	23	29	38	23	53	30	25
% who preferred to store their main luggage in the following stowage facilities:									
Overhead racks (Q43)	68	52	77	63	74	55	100	64	69
Luggage stacks at end of carriage (Q43)	12	23	13	26	13	n/a	n/a	15	n/a
Luggage stacks elsewhere in carriage (Q43)	3	n/a	n/a	n/a	n/a	5	n/a	n/a	17
Luggage space between seatbacks (Q43)	17	26	10	11	13	40	n/a	20	14
Luggage space beneath seats (Q43)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	33	33	33	33	33	100	33	33

Table 26 Information during this journey

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who said announcements were:									
Audible (Q44c)	80	66	93	78	100	74	85	69	86
Inaudible (Q44c)	18	29	7	14	0	23	15	30	14
% who said the information displays in the carriage were:									
Perfectly/ fairly legible (Q44b)	97	n/a	n/a	95	100	95	100	n/a	96

Table 27 On-train environment

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who were satisfied with the following aspects of the environment on the train*:									
Air conditioning (Q46)	57	54	51	71	65	58	61	65	36
Temperature (Q46)	57	46	49	69	60	72	59	65	38
Ventilation (Q46)	52	53	43	70	59	46	60	61	30
Odour or smell of train interior (Q46)	50	54	50	59	52	41	68	53	30
Noise within carriage (train not passengers) (Q46)	57	55	64	52	63	68	53	60	43
Litter bin provision (Q46)	34	33	33	41	24	30	30	46	29
Ease of locating safety/emergency equipment (Q46)	56	73	47	60	53	52	59	56	47
Average	52	52	48	60	54	53	56	58	36

Table 28 Toilet

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who felt the maintenance of the toilet was:									
Well maintained (Q48b)	67	77	44	57	94	82	0	63	64
Poorly maintained (Q48b)	33	23	56	43	6	18	100	38	36
% who said the toilet cubicle was:									
Clean (Q48c)	65	77	44	57	79	82	0	71	46
Dirty (Q48c)	35	23	56	43	21	18	100	29	54
% who were satisfied with the following aspects of the design of the toilet*:									
Ease of using the door controls (48e)	54	36	60	100	72	24	0	63	50
Ease of using the door lock (48e)	54	36	59	100	68	22	0	67	50
Clear visible instruction of how to lock the door (48e)	50	36	44	100	56	24	0	69	47
Clear visible direction signs to toilet and once in toilet (48e)	59	42	53	83	74	59	0	68	46
Space within the toilet area (48e)	45	33	18	33	56	63	0	46	69
Quality of toilet and washing/drying facilities (48e)	34	25	18	67	33	24	0	48	43
Quality of baby changing facilities (48e)	44	50	14	57	36	71	0	55	27
Provision for disposables (48e)	35	20	24	50	42	25	0	48	38
Mirror (48e)	52	42	35	80	61	73	0	58	31
Facility to hold the toilet lid and seat up (48e)	45	40	41	57	44	50	50	48	38
Hook for hanging coats/bags (48e)	41	36	19	57	31	56	0	56	31
Floor surface (48e)	41	30	29	57	63	20	0	58	31
Location of toilet flush (48e)	46	36	35	57	56	47	0	58	33
Average	46	36	35	69	53	43	4	57	41

55-64+ year olds

Table 29 Boarding the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Identify destination from existing signage (Q8)	78	97	79	68	96	85	45	79	75
Get on the train (Q9)	89	91	100	88	100	91	86	86	81
Find the door handle/controls (Q10a)	65	65	56	46	72	94	71	52	67
Using the door handle/controls (Q10b)	69	51	38	58	78	91	100	56	69
Read the seat reservation information (screens) (Q15a)	69	n/a	n/a	76	91	69	n/a	n/a	54
Read the seat reservation information (cards) (Q15b)	59	63	88	n/a	n/a	n/a	17	66	n/a
Identify their reserved seat (Q16)	81	79	88	100	85	63	0	85	73
Identify unreserved seats (Q17)	83	100	0	100	67	88	100	78	52
Average	74	78	64	77	84	83	60	72	67
% who thought the following factors were good:									
Vestibule area (Q11)	13	16	6	8	16	27	25	11	0
Floor surfaces (vestibule area) (Q12)	53	76	50	36	46	53	56	51	53
Floor surfaces (seating area) (Q12)	59	83	59	39	70	53	64	54	54
Provision of grab rails and handles (Q13)	16	26	13	4	20	17	7	20	9
Average	35	50	32	22	38	38	38	34	29

Table 30 Moving through the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Use internal doors (Q19)	95	100	100	96	91	97	64	98	100
Use the inter-carriage doors (Q21)	94	100	100	95	73	97	85	98	100
Walk through the train while it is travelling at speed (Q22)	66	68	38	84	63	69	56	73	65
Walk back to your seat with purchases while the train is moving (Q28)	53	50	50	0	78	80	n/a	67	36
% who said it was easy to:									
See the grab rail (Q24)	33	40	25	20	38	56	46	22	24
Use the grab rail (Q25)	29	40	18	20	29	61	25	19	24
% who felt the aisle was:									
Too narrow (Q23)	42	26	33	48	16	35	61	39	68
More than wide enough (Q23)	1	0	0	4	8	0	0	0	0
% who were satisfied with the following aspects of the buffet*:									
Height of counter (Q27)	70	100	100	75	56	60	n/a	67	60
Edges of the counter (Q27)	77	100	100	75	80	60	n/a	100	50
Lighting at/around the counter (q27)	85	100	100	75	80	40	n/a	100	100
Visibility of items for sale (Q27)	58	50	0	75	56	40	n/a	67	73
Non-slippery floors (Q27)	89	100	100	75	71	80	n/a	100	100
Ease of reading menu/price list (Q27)	34	0	100	0	56	0	n/a	100	40
Convenience of queuing space (Q27)	41	50	50	75	0	40	n/a	100	36
Average	65	71	79	64	57	46	n/a	91	66

Table 31 Your comfort during this journey

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following aspects of the seating comfort*:									
Ease of getting into and out of the seat (Q29)	59	80	33	56	56	77	61	52	44
Comfort of the seat when upright (Q29)	58	80	60	58	70	80	50	45	37
Comfort of the seat when reclining (Q29)	31	42	25	38	26	44	11	36	14
Height of seat (considering comfort and view) (Q29)	66	78	79	58	56	79	70	74	37
Width of seat (Q29)	55	74	63	63	68	71	21	53	33
Depth of seat (Q29)	62	70	75	54	72	71	42	66	51
Comfort of the front edge of the seat (Q29)	64	76	77	44	55	82	83	57	43
Contour and shape of the seat (Q29)	64	67	85	54	63	82	54	59	58
Leg room - knee clearance when upright (Q29)	49	57	31	56	52	58	36	51	38
Leg room - knee clearance when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Leg room - foot space when upright (Q29)	53	76	50	52	63	59	36	48	46
Leg room - foot space when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Comfort of foot area (Q29)	25	32	8	50	25	28	0	27	19
Head support (Q29)	50	63	21	52	50	67	40	55	32
Back support (Q29)	52	71	54	50	61	67	35	49	36
Hardness/softness of upholstery (Q29)	52	71	54	50	61	67	35	49	36
Overall feeling of comfort in this seat (Q29)	54	69	73	56	50	69	44	48	34
Average	53	67	52	53	55	67	41	51	37
% who were satisfied with the following aspects of the windows near their seat*:									
Seeing out of the window (Q37)	66	80	71	35	88	78	56	74	44
Overall size of the window (Q37)	69	94	86	36	92	74	56	75	44
Quality of blinds/curtains (Q37)	37	n/a	n/a	28	n/a	44	n/a	n/a	35
Ability to adjust blinds/curtains (Q37)	30	n/a	n/a	11	n/a	41	n/a	n/a	30
Average	51	87	79	27	90	59	56	75	38
% who felt the following aspects of their seat were accessible*:									
Coat hooks (Q34)	53	21	n/a	72	68	74	n/a	n/a	37
Magazine holder (Q34)	59	n/a	6	72	58	50	n/a	n/a	82
Personal power point (Q34)	55	36	69	78	68	81	n/a	46	35
At seat lighting (Q34)	40	3	7	55	46	88	n/a	14	67
WiFi (Q34)	22	n/a	23	44	42	32	n/a	24	26
Average	46	20	26	64	56	65	n/a	28	49

Table 31 (cont) Your comfort during this journey

% who felt the general overhead lighting was:									
Too strong (Q30)	1	0	0	8	0	0	0	2	0
Too weak (Q30)	2	0	0	0	5	0	0	0	8
% who felt the at seat lighting was:									
Too strong (Q36)	1	0	0	9	0	0	0	0	0
Too weak (Q36)	6	0	0	0	22	3	0	2	21
% who preferred the following seats:									
Airline (Q33)	35	44	35	39	32	12	21	36	57
Around a table (Q33)	65	56	65	61	68	88	79	64	43
% who felt the drop down table was:									
A suitable size (Q31c)	80	89	100	55	100	100	40	89	70
Suitable to use a laptop (Q31c)	52	61	100	75	83	60	0	41	38
Firm and strong enough (Q31c)	95	82	100	100	100	100	100	96	100
% who said the height of the armrest was:									
Too low (Q32c)	3	0	0	0	5	0	19	5	0
Too high (Q32c)	4	9	0	0	5	6	0	0	9
% who said the width of the armrest was:									
Too narrow (Q32d)	36	21	15	30	50	27	82	37	39
Too wide (Q32d)	0	0	0	0	0	0	0	0	0
% who felt the armrest was:									
Too soft	0	0	0	0	0	0	0	0	0
Too hard	38	36	77	9	44	22	38	60	28

Table 32 Your luggage

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following stowage facilities in terms of space provided*:									
Overhead racks (Q40)	36	33	53	20	20	31	38	50	33
Luggage stacks at end of carriage (Q40)	15	16	30	0	32	n/a	n/a	12	n/a
Luggage stacks elsewhere in carriage (Q40)	21	n/a	n/a	n/a	n/a	32	n/a	n/a	12
Luggage space between seatbacks (Q40)	8	0	8	7	0	12	n/a	13	12
Luggage space beneath seats (Q40)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	20	16	30	9	17	25	38	25	19
% who were satisfied with the following stowage facilities in terms of accessibility*:									
Overhead racks (Q41)	31	32	40	39	29	26	13	34	37
Luggage stacks at end of carriage (Q41)	10	4	33	14	0	n/a	n/a	9	n/a
Luggage stacks elsewhere in carriage (Q41)	19	n/a	n/a	n/a	n/a	30	n/a	n/a	11
Luggage space between seatbacks (Q41)	8	0	7	6	11	11	n/a	8	11
Luggage space beneath seats (Q41)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	17	12	27	20	13	22	13	17	20
% who were satisfied with the following stowage facilities in terms of security*:									
Overhead racks (Q42)	39	52	60	37	24	37	4	49	41
Luggage stacks at end of carriage (Q42)	10	4	33	14	0	n/a	n/a	9	n/a
Luggage stacks elsewhere in carriage (Q42)	20	n/a	n/a	n/a	n/a	32	n/a	n/a	12
Luggage space between seatbacks (Q42)	12	0	13	22	12	11	n/a	16	11
Luggage space beneath seats (Q42)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	20	19	35	24	12	27	4	25	21
% who preferred to store their main luggage in the following stowage facilities:									
Overhead racks (Q43)	46	35	47	29	36	18	100	53	64
Luggage stacks at end of carriage (Q43)	24	29	33	71	50	n/a	n/a	18	n/a
Luggage stacks elsewhere in carriage (Q43)	3	n/a	n/a	n/a	n/a	18	n/a	n/a	5
Luggage space between seatbacks (Q43)	28	35	20	0	14	65	n/a	29	32
Luggage space beneath seats (Q43)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	33	33	33	33	33	100	33	33

Table 33 Information during this journey

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who said announcements were:									
Audible (Q44c)	77	53	80	80	72	80	80	87	82
Inaudible (Q44c)	22	47	20	16	24	20	20	13	18
% who said the information displays in the carriage were:									
Perfectly/ fairly legible (Q44b)	88	n/a	n/a	90	92	80	100	67	83

Table 34 On-train environment

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who were satisfied with the following aspects of the environment on the train*:									
Air conditioning (Q46)	56	68	40	59	42	76	59	61	33
Temperature (Q46)	57	71	40	58	44	69	57	66	33
Ventilation (Q46)	53	71	50	63	54	70	46	44	36
Odour or smell of train interior (Q46)	55	64	36	56	58	59	69	46	53
Noise within carriage (train not passengers) (Q46)	58	75	50	56	57	71	54	51	51
Litter bin provision (Q46)	28	30	40	30	28	39	18	30	15
Ease of locating safety/emergency equipment (Q46)	44	58	33	67	44	44	39	46	18
Average	50	62	41	55	47	61	49	49	34

Table 35 Toilet

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who felt the maintenance of the toilet was:									
Well maintained (Q48b)	74	63	75	60	73	82	0	78	77
Poorly maintained (Q48b)	26	38	25	40	27	18	0	22	23
% who said the toilet cubicle was:									
Clean (Q48c)	77	63	67	60	73	82	0	76	100
Dirty (Q48c)	23	38	33	40	27	18	0	24	0
% who were satisfied with the following aspects of the design of the toilet*:									
Ease of using the door controls (48e)	51	70	63	40	40	82	0	47	29
Ease of using the door lock (48e)	54	67	63	40	60	82	0	47	29
Clear visible instruction of how to lock the door (48e)	51	70	56	40	40	82	0	40	36
Clear visible direction signs to toilet and once in toilet (48e)	49	100	75	0	25	82	0	40	31
Space within the toilet area (48e)	39	78	25	0	31	82	0	24	31
Quality of toilet and washing/drying facilities (48e)	25	56	25	0	13	60	0	24	0
Quality of baby changing facilities (48e)	24	50	0	0	0	56	0	25	0
Provision for disposables (48e)	29	100	14	0	19	56	0	27	0
Mirror (48e)	39	100	43	0	27	78	0	33	0
Facility to hold the toilet lid and seat up (48e)	34	44	33	0	33	64	0	40	0
Hook for hanging coats/bags (48e)	34	44	33	0	29	45	0	50	0
Floor surface (48e)	36	56	25	0	27	80	0	20	36
Location of toilet flush (48e)	40	67	25	0	19	82	0	40	36
Average	39	69	37	9	28	72	0	35	17

64+ year olds

Table 36 Boarding the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Identify destination from existing signage (Q8)	77	83	100	36	82	71	79	91	65
Get on the train (Q9)	83	88	100	40	92	89	100	77	75
Find the door handle/controls (Q10a)	66	23	100	100	62	61	73	52	79
Using the door handle/controls (Q10b)	72	38	100	100	64	65	85	62	83
Read the seat reservation information (screens) (Q15a)	55	n/a	n/a	57	92	44	n/a	n/a	35
Read the seat reservation information (cards) (Q15b)	76	75	100	n/a	n/a	n/a	33	87	n/a
Identify their reserved seat (Q16)	72	78	89	0	89	56		88	45
Identify unreserved seats (Q17)	69	89	100	0	67	67	83	100	44
Average	71	68	98	48	78	65	65	80	61
% who thought the following factors were good:									
Vestibule area (Q11)	19	0	0	0	55	44	21	27	0
Floor surfaces (vestibule area) (Q12)	56	50	58	40	77	76	77	46	32
Floor surfaces (seating area) (Q12)	52	62	33	40	75	76	58	46	19
Provision of grab rails and handles (Q13)	25	21	67	36	50	28	7	21	0
Average	38	33	40	29	64	56	41	35	13

Table 37 Moving through the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Use internal doors (Q19)	95	100	100	69	100	100	83	100	100
Use the inter-carriage doors (Q21)	93	100	100	69	100	100	80	91	100
Walk through the train while it is travelling at speed (Q22)	66	53	100	31	92	73	58	67	65
Walk back to your seat with purchases while the train is moving (Q28)	80	0	100	100	63	100	n/a	100	90
% who said it was easy to:									
See the grab rail (Q24)	45	57	58	54	64	65	50	17	19
Use the grab rail (Q25)	36	36	58	23	42	65	50	26	0
% who felt the aisle was:									
Too narrow (Q23)	19	29	0	0	38	17	15	27	18
More than wide enough (Q23)	0	0	0	0	0	0	0	0	0
% who were satisfied with the following aspects of the buffet*:									
Height of counter (Q27)	79	60	91	100	100	67	n/a	100	55
Edges of the counter (Q27)	81	60	91	100	100	100	n/a	100	55
Lighting at/around the counter (Q27)	80	60	91	100	100	75	n/a	100	60
Visibility of items for sale (Q27)	66	0	91	100	83	67	n/a	0	60
Non-slippery floors (Q27)	76	60	91	100	83	100	n/a	0	60
Ease of reading menu/price list (Q27)	52	0	89	0	67	100	n/a	0	27
Convenience of queuing space (Q27)	68	60	80	100	67	33	n/a	100	55
Average	72	43	89	86	86	77	n/a	57	53

Table 38 (cont) Your comfort during this journey

% who felt the general overhead lighting was:									
Too strong (Q30)	0	0	0	0	0	0	0	0	0
Too weak (Q30)	5	6	0	0	0	6	0	0	24
% who felt the at seat lighting was:									
Too strong (Q36)	0	0	0	0	0	0	0	0	0
Too weak (Q36)	9	0	0	0	10	11	0	0	35
% who preferred the following seats:									
Airline (Q33)	38	44	43	0	31	35	0	54	58
Around a table (Q33)	62	56	57	100	69	65	100	46	42
% who felt the drop down table was:									
A suitable size (Q31c)	83	100	80	100	100	73	100	56	88
Suitable to use a laptop (Q31c)	64	100	50		67	67	50	60	64
Firm and strong enough (Q31c)	95	100	100	100	100	100		78	100
% who said the height of the armrest was:									
Too low (Q32c)	1	0	0	0	0	0	0	5	0
Too high (Q32c)	12	20	0	0	0	29	20	10	5
% who said the width of the armrest was:									
Too narrow (Q32d)	31	47	20	0	17	29	20	45	37
Too wide (Q32d)	0	0	0	0	0	0	0	0	0
% who felt the armrest was:									
Too soft	0	0	0	0	0	0	0	0	0
Too hard	41	47	40	0	17	38	30	67	50

Table 38 (cont) Your comfort during this journey

% who felt the general overhead lighting was:									
Too strong (Q30)	0	0	0	0	0	0	0	0	0
Too weak (Q30)	5	6	0	0	0	6	0	0	24
% who felt the at seat lighting was:									
Too strong (Q36)	0	0	0	0	0	0	0	0	0
Too weak (Q36)	9	0	0	0	10	11	0	0	35
% who preferred the following seats:									
Airline (Q33)	38	44	43	0	31	35	0	54	58
Around a table (Q33)	62	56	57	100	69	65	100	46	42
% who felt the drop down table was:									
A suitable size (Q31c)	83	100	80	100	100	73	100	56	88
Suitable to use a laptop (Q31c)	64	100	50		67	67	50	60	64
Firm and strong enough (Q31c)	95	100	100	100	100	100		78	100
% who said the height of the armrest was:									
Too low (Q32c)	1	0	0	0	0	0	0	5	0
Too high (Q32c)	12	20	0	0	0	29	20	10	5
% who said the width of the armrest was:									
Too narrow (Q32d)	31	47	20	0	17	29	20	45	37
Too wide (Q32d)	0	0	0	0	0	0	0	0	0
% who felt the armrest was:									
Too soft	0	0	0	0	0	0	0	0	0
Too hard	41	47	40	0	17	38	30	67	50

Table 39 Your luggage

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following stowage facilities in terms of space provided*:									
Overhead racks (Q40)	51	30	73	73	30	69	25	43	47
Luggage stacks at end of carriage (Q40)	31	0	75	0	50	n/a	n/a	25	n/a
Luggage stacks elsewhere in carriage (Q40)	25	n/a	n/a	n/a	n/a	33	n/a	n/a	19
Luggage space between seatbacks (Q40)	24	0	55	57	33	36	n/a	13	0
Luggage space beneath seats (Q40)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	33	10	68	43	38	46	25	27	22
% who were satisfied with the following stowage facilities in terms of accessibility*:									
Overhead racks (Q41)	44	40	92	36	29	60	0	29	35
Luggage stacks at end of carriage (Q41)	51	20	91	73	57	n/a	n/a	25	n/a
Luggage stacks elsewhere in carriage (Q41)	28	n/a	n/a	n/a	n/a	36	n/a	n/a	20
Luggage space between seatbacks (Q41)	32	0	73	73	40	23	n/a	13	9
Luggage space beneath seats (Q41)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	39	20	85	61	42	40	0	22	21
% who were satisfied with the following stowage facilities in terms of security*:									
Overhead racks (Q42)	60	64	73	73	57	67	33	53	50
Luggage stacks at end of carriage (Q42)	34	0	75	36	43	n/a	n/a	24	n/a
Luggage stacks elsewhere in carriage (Q42)	20	n/a	n/a	n/a	n/a	36	n/a	n/a	0
Luggage space between seatbacks (Q42)	26	0	64	73	50	21	n/a	0	0
Luggage space beneath seats (Q42)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	35	21	71	61	50	41	33	26	17
% who preferred to store their main luggage in the following stowage facilities:									
Overhead racks (Q43)	24	17	36	0	25	50	0	22	14
Luggage stacks at end of carriage (Q43)	43	67	45	50	25	n/a	n/a	67	n/a
Luggage stacks elsewhere in carriage (Q43)	13	n/a	n/a	n/a	n/a	40	n/a	n/a	71
Luggage space between seatbacks (Q43)	20	17	18	50	50	10	n/a	11	14
Luggage space beneath seats (Q43)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	33	33	33	33	33	0	33	33

Table 40 Information during this journey

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said announcements were:									
Audible (Q44c)	69	19	100	56	91	89	54	73	75
Inaudible (Q44c)	31	81	0	44	9	11	46	27	25
% who said the information displays in the carriage were:									
Perfectly/ fairly legible (Q44b)	87	100	n/a	69	86	85	100	n/a	100

Table 41 On-train environment

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following aspects of the environment on the train*:									
Air conditioning (Q46)	66	60	50	73	80	82	73	44	78
Temperature (Q46)	66	63	60	77	73	75	62	48	80
Ventilation (Q46)	74	67	100	77	80	88	62	44	100
Odour or smell of train interior (Q46)	70	56	100	79	64	76	62	44	94
Noise within carriage (train not passengers) (Q46)	70	67	100	31	82	73	62	63	100
Litter bin provision (Q46)	37	19	78	29	38	43	67	32	26
Ease of locating safety/emergency equipment (Q46)	50	50	90	77	44	53	25	48	33
Average	62	54	83	63	66	70	59	46	73

Table 42 Toilet

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who felt the maintenance of the toilet was:									
Well maintained (Q48b)	70	100	20	100	80	100	100	43	100
Poorly maintained (Q48b)	30	0	80	0	20	0	0	57	0
% who said the toilet cubicle was:									
Clean (Q48c)	91	100	73	100	100	67	100	100	100
Dirty (Q48c)	9	0	27	0	0	33	0	0	0
% who were satisfied with the following aspects of the design of the toilet*:									
Ease of using the door controls (48e)	72	40	70	0	50	100	100	75	75
Ease of using the door lock (48e)	79	100	70	0	50	100	100	75	75
Clear visible instruction of how to lock the door (48e)	75	100	73	0	50	100	60	75	75
Clear visible direction signs to toilet and once in toilet (48e)	69	60	73	100	25	67	67	75	75
Space within the toilet area (48e)	67	60	50	100	33	100	75	71	75
Quality of toilet and washing/drying facilities (48e)	57	60	60	0	0	100	67	43	100
Quality of baby changing facilities (48e)	47	0	50	0	100	100	0	0	100
Provision for disposables (48e)	54	60	33	0	33	50	50	60	100
Mirror (48e)	63	0	50	0	67	100	100	100	100
Facility to hold the toilet lid and seat up (48e)	66	60	73	0	50	100	0	67	75
Hook for hanging coats/bags (48e)	73	60	50	0	50	100	100	100	75
Floor surface (48e)	58	60	73	0	0	100	50	14	75
Location of toilet flush (48e)	67	60	73	100	25	67	100	50	75
Average	65	55	61	23	41	91	67	62	83

Commuter

Table 43 Boarding the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Identify destination from existing signage (Q8)	82	69	75	89	89	79	83	86	85
Get on the train (Q9)	94	100	100	100	64	87	94	100	100
Find the door handle/controls (Q10a)	72	64	56	73	82	100	84	59	67
Using the door handle/controls (Q10b)	74	66	47	85	90	100	84	59	71
Read the seat reservation information (screens) (Q15a)	90	n/a	n/a	90	100	100	n/a	n/a	75
Read the seat reservation information (cards) (Q15b)	51	54	67	n/a	n/a	n/a	13	64	n/a
Identify their reserved seat (Q16)	84	27	100	100	100	100	0	78	100
Identify unreserved seats (Q17)	80	75	79	84	100	100	86	59	68
Average	78	65	75	89	89	95	63	72	81
% who thought the following factors were good:									
Vestibule area (Q11)	22	28	25	41	10	0	27	30	18
Floor surfaces (vestibule area) (Q12)	57	51	69	68	46	66	58	61	42
Floor surfaces (seating area) (Q12)	64	61	69	68	67	100	58	60	38
Provision of grab rails and handles (Q13)	19	27	19	34	10	8	26	14	16
Average	41	42	45	53	33	43	42	41	29

Table 44 Moving through the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Use internal doors (Q19)	90	100	91	88	72	92	75	100	93
Use the inter-carriage doors (Q21)	91	100	100	80	57	100	77	100	100
Walk through the train while it is travelling at speed (Q22)	75	76	63	92	48	87	66	96	65
Walk back to your seat with purchases while the train is moving (Q28)	62	0	75	67	0	62	n/a	100	100
% who said it was easy to:									
See the grab rail (Q24)	30	24	26	62	29	26	34	12	40
Use the grab rail (Q25)	23	15	19	62	18	18	17	18	28
% who felt the aisle was:									
Too narrow (Q23)	38	45	59	17	46	0	50	48	40
More than wide enough (Q23)	3	8	0	14	0	0	0	4	0
% who were satisfied with the following aspects of the buffet*:									
Height of counter (Q27)	84	0	75	67	100	100	n/a	100	100
Edges of the counter (Q27)	78	0	75	67	100	100	n/a	100	33
Lighting at/around the counter (q27)	70	0	75	67	100	62	n/a	100	100
Visibility of items for sale (Q27)	35	0	50	67	100	0	n/a	0	67
Non-slippery floors (Q27)	77	0	75	50	100	100	n/a	0	100
Ease of reading menu/price list (Q27)	35	0	50	67	100	0	n/a	0	67
Convenience of queuing space (Q27)	23	0	50	50	0	0	n/a	0	67
Average	57	0	64	62	86	52	n/a	43	76

Table 45 Your comfort during this journey

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following aspects of the seating comfort*:									
Ease of getting into and out of the seat (Q29)	62	54	71	57	57	79	58	62	60
Comfort of the seat when upright (Q29)	53	41	50	59	56	79	33	63	41
Comfort of the seat when reclining (Q29)	17	0	14	35	0	29	7	24	18
Height of seat (considering comfort and view) (Q29)	66	54	64	70	55	87	59	82	52
Width of seat (Q29)	51	41	66	59	65	54	31	68	29
Depth of seat (Q29)	55	23	59	66	56	76	47	71	41
Comfort of the front edge of the seat (Q29)	58	41	52	70	79	72	53	70	33
Contour and shape of the seat (Q29)	51	41	46	73	54	54	39	76	29
Leg room - knee clearance when upright (Q29)	27	33	25	46	23	16	10	33	27
Leg room - knee clearance when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Leg room - foot space when upright (Q29)	41	54	23	70	33	54	20	49	18
Leg room - foot space when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Comfort of foot area (Q29)	16	0	16	46	0	39	0	20	8
Head support (Q29)	43	9	48	75	36	49	25	63	31
Back support (Q29)	54	26	65	79	56	57	40	71	41
Hardness/softness of upholstery (Q29)	49	41	39	57	46	58	27	62	51
Overall feeling of comfort in this seat (Q29)	49	23	35	68	67	66	30	64	40
Average	46	32	45	62	46	58	32	59	35
% who were satisfied with the following aspects of the windows near their seat*:									
Seeing out of the window (Q37)	69	64	81	59	78	77	66	75	51
Overall size of the window (Q37)	74	69	87	54	100	80	74	71	56
Quality of blinds/curtains (Q37)	51	n/a	n/a	46	n/a	58	n/a	n/a	49
Ability to adjust blinds/curtains (Q37)	37	n/a	n/a	18	n/a	38	n/a	n/a	47
Average	58	67	84	44	89	63	70	73	51
% who felt the following aspects of their seat were accessible*:									
Coat hooks (Q34)	49	44	n/a	62	55	38	n/a	n/a	54
Magazine holder (Q34)	49	n/a	13	73	54	53	n/a	n/a	56
Personal power point (Q34)	52	54	64	81	54	68	n/a	24	37
At seat lighting (Q34)	39	8	25	59	54	79	n/a	4	58
WiFi (Q34)	27	n/a	64	27	28	33	n/a	46	15
Average	43	35	42	60	49	54	n/a	25	44

Table 45 (cont) Your comfort during this journey

% who felt the general overhead lighting was:									
Too strong (Q30)	7	26	13	8	0	0	6	4	0
Too weak (Q30)	1	0	0	0	0	0	0	0	8
% who felt the at seat lighting was:									
Too strong (Q36)	1	0	0	9	0	0	0	0	0
Too weak (Q36)	7	0	10	0	17	16	0	4	9
% who preferred the following seats:									
Airline (Q33)	52	62	62	52	46	48	52	43	51
Around a table (Q33)	48	38	38	48	54	52	48	57	49
% who felt the drop down table was:									
A suitable size (Q31c)	67	86	44	74	73	67	68	65	43
Suitable to use a laptop (Q31c)	31	71	28	53	38	14	26	8	7
Firm and strong enough (Q31c)	97	100	100	100	100	100	90	88	100
% who said the height of the armrest was:									
Too low (Q32c)	7	10	0	0	0	13	12	8	5
Too high (Q32c)	4	15	0	0	0	8	0	0	5
% who said the width of the armrest was:									
Too narrow (Q32d)	37	31	39	27	13	63	50	27	43
Too wide (Q32d)	0	0	0	0	0	0	0	0	0
% who felt the armrest was:									
Too soft	0	0	0	0	0	0	0	0	0
Too hard	42	46	39	27	0	28	69	55	51

Table 46 Your luggage

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following stowage facilities in terms of space provided*:									
Overhead racks (Q40)	41	55	58	14	39	20	43	33	57
Luggage stacks at end of carriage (Q40)	24	31	32	17	28	n/a	n/a	13	n/a
Luggage stacks elsewhere in carriage (Q40)	15	n/a	n/a	n/a	n/a	0	n/a	n/a	32
Luggage space between seatbacks (Q40)	14	21	24	0	10	21	n/a	0	23
Luggage space beneath seats (Q40)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	24	36	38	10	26	14	43	15	37
% who were satisfied with the following stowage facilities in terms of accessibility*:									
Overhead racks (Q41)	35	45	50	29	38	0	38	29	45
Luggage stacks at end of carriage (Q41)	38	59	24	14	46	n/a	n/a	32	n/a
Luggage stacks elsewhere in carriage (Q41)	16	n/a	n/a	n/a	n/a	0	n/a	n/a	35
Luggage space between seatbacks (Q41)	10	21	16	0	10	0	n/a	0	25
Luggage space beneath seats (Q41)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	42	30	14	31	0	38	20	35
% who were satisfied with the following stowage facilities in terms of security*:									
Overhead racks (Q42)	43	62	54	54	36	21	25	44	45
Luggage stacks at end of carriage (Q42)	19	31	24	31	12	n/a	n/a	6	n/a
Luggage stacks elsewhere in carriage (Q42)	0	n/a	n/a	n/a	n/a	0	n/a	n/a	0
Luggage space between seatbacks (Q42)	19	10	32	29	10	21	n/a	14	25
Luggage space beneath seats (Q42)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	20	34	37	38	19	14	25	21	23
% who preferred to store their main luggage in the following stowage facilities:									
Overhead racks (Q43)	73	80	68	100	69	36	100	69	100
Luggage stacks at end of carriage (Q43)	14	20	32	0	31	n/a	0	10	n/a
Luggage stacks elsewhere in carriage (Q43)	0	n/a	n/a	n/a	n/a	0	n/a	n/a	0
Luggage space between seatbacks (Q43)	13	0	0	0	0	64	0	21	0
Luggage space beneath seats (Q43)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	33	33	33	33	33	33	33	33

Table 47 Information during this journey

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said announcements were:									
Audible (Q44c)	78	78	83	79	82	79	70	58	95
Inaudible (Q44c)	20	16	17	13	18	21	22	42	5
% who said the information displays in the carriage were:									
Perfectly/ fairly legible (Q44b)	96	n/a	100	81	100	100	90	n/a	100

Table 48 On-train environment

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following aspects of the environment on the train*:									
Air conditioning (Q46)	50	53	19	62	46	72	55	56	38
Temperature (Q46)	53	50	19	54	46	79	52	65	47
Ventilation (Q46)	43	50	26	52	38	46	38	59	29
Odour or smell of train interior (Q46)	46	50	32	54	28	58	52	48	43
Noise within carriage (train not passengers) (Q46)	54	50	60	40	36	92	47	46	53
Litter bin provision (Q46)	32	31	26	32	0	45	41	35	38
Ease of locating safety/emergency equipment(Q46)	54	74	38	37	36	59	60	58	55
Average	47	51	31	47	33	64	49	52	43

Table 49 Toilet

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who felt the maintenance of the toilet was:									
Well maintained (Q48b)	61	0	0	50	100	100	0	87	50
Poorly maintained (Q48b)	39	0	100	50	0	0	100	13	50
% who said the toilet cubicle was:									
Clean (Q48c)	57	0	33	50	70	100	0	67	50
Dirty (Q48c)	43	0	67	50	30	0	100	33	50
% who were satisfied with the following aspects of the design of the toilet*:									
Ease of using the door controls (48e)	44	0	50	75	27	0	0	58	50
Ease of using the door lock (48e)	53	0	50	100	50	0	0	58	50
Clear visible instruction of how to lock the door (48e)	48	0	50	100	27	0	0	58	50
Clear visible direction signs to toilet and once in toilet (48e)	58	0	50	75	50	100	0	58	50
Space within the toilet area (48e)	43	0	33	50	27	100	0	42	50
Quality of toilet and washing/drying facilities (48e)	28	0	33	50	0	0	0	42	50
Quality of baby changing facilities (48e)	25	0	0	33	0	0	0	42	100
Provision for disposables (48e)	23	0	0	50	0	0	0	42	100
Mirror (48e)	44	0	0	67	27	100	0	58	50
Facility to hold the toilet lid and seat up (48e)	41	0	33	50	0	100	0	56	50
Hook for hanging coats/bags (48e)	36	0	0	50	0	100	0	58	50
Floor surface (48e)	37	0	33	50	27	0	0	58	50
Location of toilet flush (48e)	44	0	33	50	27	100	50	58	0
Average	40	0	28	62	20	46	4	53	54

Leisure

Table 50 Boarding the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Identify destination from existing signage (Q8)	83	91	85	70	90	84	71	88	78
Get on the train (Q9)	90	94	95	78	92	91	95	89	89
Find the door handle/controls (Q10a)	64	51	58	65	71	74	76	51	73
Using the door handle/controls (Q10b)	68	52	54	69	76	76	90	54	76
Read the seat reservation information (screens) (Q15a)	71	n/a	n/a	82	80	70	n/a	n/a	60
Read the seat reservation information (cards) (Q15b)	67	68	79	n/a	n/a	n/a	37	75	n/a
Identify their reserved seat (Q16)	80	80	87	85	84	63	75	88	67
Identify unreserved seats (Q17)	84	93	86	84	87	78	93	91	69
Average	76	76	78	76	83	77	77	77	73
% who thought the following factors were good:									
Vestibule area (Q11)	23	11	16	21	34	29	32	21	20
Floor surfaces (vestibule area) (Q12)	60	65	56	53	69	56	69	60	56
Floor surfaces (seating area) (Q12)	63	70	60	50	79	61	70	62	55
Provision of grab rails and handles (Q13)	23	25	25	21	38	22	17	22	15
Average	42	43	39	36	55	42	47	41	37

Table 51 Moving through the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Use internal doors (Q19)	95	99	97	90	91	92	85	99	99
Use the inter-carriage doors (Q21)	94	100	95	89	88	91	89	95	99
Walk through the train while it is travelling at speed (Q22)	75	77	70	69	81	76	73	71	79
Walk back to your seat with purchases while the train is moving (Q28)	69	47	67	50	73	92	n/a	73	74
% who said it was easy to:									
See the grab rail (Q24)	35	43	34	36	54	43	41	27	16
Use the grab rail (Q25)	33	38	24	23	43	49	34	27	23
% who felt the aisle was:									
Too narrow (Q23)	33	27	22	31	28	28	32	38	49
More than wide enough (Q23)	2	2	5	0	4	1	0	2	0
% who were satisfied with the following aspects of the buffet*:									
Height of counter (Q27)	80	87	89	100	76	77	n/a	89	63
Edges of the counter (Q27)	81	81	79	100	82	85	n/a	100	64
Lighting at/around the counter (q27)	82	87	76	100	81	69	n/a	100	78
Visibility of items for sale (Q27)	65	44	44	100	73	62	n/a	67	70
Non-slippery floors (Q27)	82	83	79	100	76	100	n/a	78	78
Ease of reading menu/price list (Q27)	51	13	50	40	76	50	n/a	100	43
Convenience of queuing space (Q27)	58	60	53	78	46	57	n/a	100	52
Average	71	65	67	88	73	71	n/a	91	64

Table 52 Your comfort during this journey

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following aspects of the seating comfort*:									
Ease of getting into and out of the seat (Q29)	69	65	61	69	79	74	73	73	57
Comfort of the seat when upright (Q29)	69	70	65	75	71	79	72	65	57
Comfort of the seat when reclining (Q29)	36	48	25	43	27	37	20	41	42
Height of seat (considering comfort and view) (Q29)	76	75	75	82	81	83	72	80	62
Width of seat (Q29)	67	70	62	71	74	68	64	71	56
Depth of seat (Q29)	69	67	69	70	78	71	66	70	59
Comfort of the front edge of the seat (Q29)	73	76	73	69	78	82	77	74	61
Contour and shape of the seat (Q29)	72	69	73	79	75	75	72	69	67
Leg room - knee clearance when upright (Q29)	64	62	45	76	74	64	61	66	60
Leg room - knee clearance when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Leg room - foot space when upright (Q29)	63	71	50	63	69	63	63	64	59
Leg room - foot space when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Comfort of foot area (Q29)	33	46	10	51	35	28	18	31	42
Head support (Q29)	54	59	41	58	58	61	54	58	44
Back support (Q29)	62	71	53	67	72	67	58	61	50
Hardness/softness of upholstery (Q29)	60	64	55	65	69	55	56	60	60
Overall feeling of comfort in this seat (Q29)	65	58	57	73	77	68	76	63	55
Average	62	65	54	67	68	65	60	63	55
% who were satisfied with the following aspects of the windows near their seat*:									
Seeing out of the window (Q37)	71	76	83	61	76	76	74	71	60
Overall size of the window (Q37)	78	83	84	74	80	82	76	75	72
Quality of blinds/curtains (Q37)	45	n/a	n/a	29	n/a	43	n/a	n/a	55
Ability to adjust blinds/curtains (Q37)	40	n/a	n/a	25	n/a	40	n/a	n/a	48
Average	59	79	84	47	78	60	75	73	59
% who felt the following aspects of their seat were accessible*:									
Coat hooks (Q34)	47	19	n/a	74	53	65	n/a	n/a	36
Magazine holder (Q34)	51	n/a	8	63	48	61	n/a	n/a	62
Personal power point (Q34)	53	42	63	73	52	69	n/a	49	35
At seat lighting (Q34)	34	6	10	44	32	73	n/a	16	59
WiFi (Q34)	24	n/a	41	40	21	34	n/a	33	21
Average	42	22	31	59	41	60	n/a	33	43

Table 52 (cont) Your comfort during this journey

% who felt the general overhead lighting was:									
Too strong (Q30)	2	4	2	3	0	1	1	2	1
Too weak (Q30)	2	1	0	0	0	1	1	1	10
% who felt the at seat lighting was:									
Too strong (Q36)	1	1	0	4	3	0	1	1	0
Too weak (Q36)	3	0	2	0	3	2	0	0	18
% who preferred the following seats:									
Airline (Q33)	33	37	31	18	32	26	29	38	47
Around a table (Q33)	67	63	69	82	68	74	71	62	53
% who felt the drop down table was:									
A suitable size (Q31c)	76	78	76	83	75	79	77	75	73
Suitable to use a laptop (Q31c)	49	57	54	61	38	53	44	45	40
Firm and strong enough (Q31c)	94	90	92	100	100	98	100	87	98
% who said the height of the armrest was:									
Too low (Q32c)	5	1	8	8	6	1	5	7	5
Too high (Q32c)	4	9	0	0	0	8	7	3	3
% who said the width of the armrest was:									
Too narrow (Q32d)	32	26	31	16	22	34	49	38	34
Too wide (Q32d)	0	0	0	0	0	0	0	0	0
% who felt the armrest was:									
Too soft	0	0	0	0	0	0	0	0	2
Too hard	38	34	55	5	27	40	33	65	33

Table 53 Your luggage

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following stowage facilities in terms of space provided*:									
Overhead racks (Q40)	46	44	54	43	32	44	43	56	43
Luggage stacks at end of carriage (Q40)	26	27	31	5	39	n/a	n/a	22	n/a
Luggage stacks elsewhere in carriage (Q40)	23	n/a	n/a	n/a	n/a	28	n/a	n/a	18
Luggage space between seatbacks (Q40)	17	12	11	17	26	18	n/a	19	13
Luggage space beneath seats (Q40)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	28	28	32	22	32	30	43	32	25
% who were satisfied with the following stowage facilities in terms of accessibility*:									
Overhead racks (Q41)	40	36	50	40	44	37	35	39	38
Luggage stacks at end of carriage (Q41)	32	32	38	23	52	n/a	n/a	23	n/a
Luggage stacks elsewhere in carriage (Q41)	24	n/a	n/a	n/a	n/a	28	n/a	n/a	21
Luggage space between seatbacks (Q41)	18	10	16	24	31	12	n/a	19	16
Luggage space beneath seats (Q41)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	29	26	35	29	42	26	35	27	25
% who were satisfied with the following stowage facilities in terms of security*:									
Overhead racks (Q42)	53	59	61	53	63	45	44	58	43
Luggage stacks at end of carriage (Q42)	21	13	22	17	36	n/a	n/a	17	n/a
Luggage stacks elsewhere in carriage (Q42)	19	n/a	n/a	n/a	n/a	28	n/a	n/a	12
Luggage space between seatbacks (Q42)	19	11	11	32	40	13	n/a	18	15
Luggage space beneath seats (Q42)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	28	28	31	34	46	29	44	31	23
% who preferred to store their main luggage in the following stowage facilities:									
Overhead racks (Q43)	47	34	49	32	54	34	100	46	55
Luggage stacks at end of carriage (Q43)	24	34	28	49	29	n/a	n/a	31	n/a
Luggage stacks elsewhere in carriage (Q43)	6	n/a	n/a	n/a	n/a	29	n/a	n/a	21
Luggage space between seatbacks (Q43)	24	32	23	19	17	37	n/a	23	25
Luggage space beneath seats (Q43)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	33	33	33	33	33	100	33	33

Table 54 Information during this journey

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said announcements were:									
Audible (Q44c)	76	42	86	71	93	79	84	76	81
Inaudible (Q44c)	22	47	12	26	7	20	16	23	19
% who said the information displays in the carriage were:									
Perfectly/ fairly legible (Q44b)	92	n/a	n/a	92	93	91	n/a	89	87

Table 55 On-train environment

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following aspects of the environment on the train*:									
Air conditioning (Q46)	58	58	55	74	54	68	57	54	47
Temperature (Q46)	59	59	50	81	58	65	58	57	47
Ventilation (Q46)	56	61	56	72	63	63	56	46	46
Odour or smell of train interior (Q46)	59	57	54	67	68	61	71	49	55
Noise within carriage (train not passengers) (Q46)	62	65	56	53	77	66	66	58	60
Litter bin provision (Q46)	33	29	46	33	43	33	26	29	35
Ease of locating safety/emergency equipment (Q46)	53	58	59	73	63	48	55	44	41
Average	54	55	54	65	61	58	56	48	47

Table 56 Toilet

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who felt the maintenance of the toilet was:									
Well maintained (Q48b)	72	88	58	100	72	90	64	51	78
Poorly maintained (Q48b)	28	12	42	0	28	10	36	49	22
% who said the toilet cubicle was:									
Clean (Q48c)	72	84	68	77	76	81	50	65	74
Dirty (Q48c)	28	16	32	23	24	19	50	35	26
% who were satisfied with the following aspects of the design of the toilet*:									
Ease of using the door controls (48e)	59	44	68	71	65	70	80	53	53
Ease of using the door lock (48e)	60	63	65	71	65	70	67	51	53
Clear visible instruction of how to lock the door (48e)	59	64	61	29	58	70	50	58	58
Clear visible direction signs to toilet and once in toilet (48e)	57	68	66	55	40	70	50	55	53
Space within the toilet area (48e)	49	62	25	60	42	70	56	40	59
Quality of toilet and washing/drying facilities (48e)	39	46	31	71	27	60	33	37	37
Quality of baby changing facilities (48e)	38	29	27	100	38	63	0	39	41
Provision for disposables (48e)	40	54	28	71	40	50	22	38	39
Mirror (48e)	49	55	48	20	57	73	56	49	39
Facility to hold the toilet lid and seat up (48e)	49	44	53	71	58	68	13	49	39
Hook for hanging coats/bags (48e)	46	46	37	71	57	56	38	42	40
Floor surface (48e)	45	56	44	29	45	78	33	26	48
Location of toilet flush (48e)	48	52	45	44	40	62	78	41	44
Average	49	52	46	59	49	66	44	44	46

Business

Table 57 Boarding the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Identify destination from existing signage (Q8)	85	81	82	81	89	88	77	90	87
Get on the train (Q9)	96	100	94	92	100	97	93	97	90
Find the door handle/controls (Q10a)	68	62	65	71	74	81	80	57	65
Using the door handle/controls (Q10b)	71	57	71	73	78	86	86	59	70
Read the seat reservation information (screens) (Q15a)	72	n/a	n/a	74	69	69	n/a	n/a	74
Read the seat reservation information (cards) (Q15b)	52	63	65	n/a	n/a	n/a	21	58	n/a
Identify their reserved seat (Q16)	79	100	83	78	75	63	100	85	57
Identify unreserved seats (Q17)	82	86	90	79	73	75	100	82	71
Average	76	78	79	78	80	80	80	75	74
% who thought the following factors were good:									
Vestibule area (Q11)	27	20	25	21	33	37	29	34	13
Floor surfaces (vestibule area) (Q12)	59	64	56	70	62	65	60	53	48
Floor surfaces (seating area) (Q12)	60	71	67	67	67	64	57	52	47
Provision of grab rails and handles (Q13)	25	25	24	22	33	22	31	26	18
Average	43	45	43	45	49	47	44	41	31

Table 58 Moving through the train

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who said it was quite/very easy to:									
Use internal doors (Q19)	93	100	88	85	89	88	92	95	97
Use the inter-carriage doors (Q21)	94	100	82	88	92	91	92	98	97
Walk through the train while it is travelling at speed (Q22)	74	69	81	70	88	78	70	75	70
Walk back to your seat with purchases while the train is moving (Q28)	62	50	100	0	78	50	n/a	60	57
% who said it was easy to:									
See the grab rail (Q24)	30	27	38	36	38	27	36	28	21
Use the grab rail (Q25)	31	33	38	31	36	30	39	28	22
% who felt the aisle was:									
Too narrow (Q23)	30	26	19	26	21	24	38	34	44
More than wide enough (Q23)	3	0	0	7	4	3	0	6	0
% who were satisfied with the following aspects of the buffet*:									
Height of counter (Q27)	70	50	40	50	89	67	n/a	80	83
Edges of the counter (Q27)	71	75	40	50	89	67	n/a	67	83
Lighting at/around the counter (Q27)	69	75	40	50	89	60	n/a	60	83
Visibility of items for sale (Q27)	34	0	25	0	44	17	n/a	40	67
Non-slippery floors (Q27)	60	67	40	50	88	50	n/a	50	57
Ease of reading menu/price list (Q27)	26	0	0	0	45	40	n/a	25	17
Convenience of queuing space (Q27)	29	0	25	0	25	50	n/a	0	57
Average	51	38	30	29	67	50	n/a	46	64

Table 59 Your comfort during this journey

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who were satisfied with the following aspects of the seating comfort*:									
Ease of getting into and out of the seat (Q29)	68	73	75	70	67	68	70	68	58
Comfort of the seat when upright (Q29)	64	66	65	68	69	62	61	65	60
Comfort of the seat when reclining (Q29)	26	20	31	36	25	21	15	34	22
Height of seat (considering comfort and view) (Q29)	75	81	83	80	79	69	69	77	67
Width of seat (Q29)	64	73	71	65	64	69	54	66	49
Depth of seat (Q29)	66	78	67	68	63	76	62	62	55
Comfort of the front edge of the seat (Q29)	69	81	72	73	62	70	67	70	54
Contour and shape of the seat (Q29)	63	71	65	65	63	65	57	64	58
Leg room - knee clearance when upright (Q29)	53	61	59	56	60	56	54	49	41
Leg room - knee clearance when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Leg room - foot space when upright (Q29)	54	70	56	54	62	56	48	51	41
Leg room - foot space when reclining (Q29)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Comfort of foot area (Q29)	24	24	27	28	25	26	20	26	18
Head support (Q29)	56	59	60	65	52	60	46	61	44
Back support (Q29)	58	70	53	69	50	57	50	57	54
Hardness/softness of upholstery (Q29)	59	74	63	62	56	59	50	59	48
Overall feeling of comfort in this seat (Q29)	58	74	59	69	62	61	47	55	44
Average	57	65	60	62	57	58	51	58	47
% who were satisfied with the following aspects of the windows near their seat*:									
Seeing out of the window (Q37)	74	75	75	76	70	82	72	74	65
Overall size of the window (Q37)	81	86	72	88	80	78	83	87	70
Quality of blinds/curtains (Q37)	42	n/a	n/a	21	n/a	54	n/a	n/a	46
Ability to adjust blinds/curtains (Q37)	38	n/a	n/a	15	n/a	44	n/a	n/a	46
Average	59	81	74	50	75	64	78	81	57
% who felt the following aspects of their seat were accessible*:									
Coat hooks (Q34)	49	36	n/a	63	56	58	n/a	n/a	37
Magazine holder (Q34)	47	n/a	13	50	48	55	n/a	n/a	54
Personal power point (Q34)	47	29	71	56	48	69	n/a	47	27
At seat lighting (Q34)	36	6	12	36	41	69	n/a	21	62
WiFi (Q34)	24	n/a	62	17	23	24	n/a	44	21
Average	41	24	39	44	43	55	n/a	37	40

Table 59 (cont) Your comfort during this journey

% who felt the general overhead lighting was:									
Too strong (Q30)	3	3	6	0	4	5	0	2	3
Too weak (Q30)	4	6	0	0	4	5	3	0	10
% who felt the at seat lighting was:									
Too strong (Q36)	1	0	0	0	0	6	0	2	0
Too weak (Q36)	4	0	0	4	0	11	0	4	11
% who preferred the following seats:									
Airline (Q33)	35	42	63	27	38	32	45	28	31
Around a table (Q33)	65	58	38	73	63	68	55	72	69
% who felt the drop down table was:									
A suitable size (Q31c)	65	74	69	43	80	54	63	56	72
Suitable to use a laptop (Q31c)	33	50	42	29	38	36	13	23	29
Firm and strong enough (Q31c)	94	88	92	86	100	92	100	93	100
% who said the height of the armrest was:									
Too low (Q32c)	4	6	0	0	4	3	4	9	0
Too high (Q32c)	4	3	6	0	4	12	4	0	5
% who said the width of the armrest was:									
Too narrow (Q32d)	30	25	24	28	25	27	36	29	39
Too wide (Q32d)	0	0	0	0	0	0	0	2	0
% who felt the armrest was:									
Too soft	0	3	0	0	0	0	0	0	0
Too hard	37	29	47	12	25	38	54	42	42

Table 60 Your luggage

	Overall	HST		1990 Diesel U units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who were satisfied with the following stowage facilities in terms of space provided*:									
Overhead racks (Q40)	45	32	45	24	50	59	47	58	35
Luggage stacks at end of carriage (Q40)	24	32	25	24	22	n/a	n/a	22	n/a
Luggage stacks elsewhere in carriage (Q40)	25	n/a	n/a	n/a	n/a	29	n/a	n/a	23
Luggage space between seatbacks (Q40)	17	17	27	25	13	29	n/a	10	17
Luggage space beneath seats (Q40)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	28	27	32	24	28	39	47	30	25
% who were satisfied with the following stowage facilities in terms of accessibility*:									
Overhead racks (Q41)	42	26	40	18	47	50	25	57	44
Luggage stacks at end of carriage (Q41)	27	35	31	13	17	n/a	n/a	32	n/a
Luggage stacks elsewhere in carriage (Q41)	29	n/a	n/a	n/a	n/a	39	n/a	n/a	23
Luggage space between seatbacks (Q41)	15	11	10	13	12	33	n/a	12	17
Luggage space beneath seats (Q41)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	28	24	27	15	25	41	25	34	28
% who were satisfied with the following stowage facilities in terms of security*:									
Overhead racks (Q42)	52	39	50	33	56	65	38	68	48
Luggage stacks at end of carriage (Q42)	10	0	9	12	12	n/a	n/a	15	n/a
Luggage stacks elsewhere in carriage (Q42)	17	n/a	n/a	n/a	n/a	18	n/a	n/a	17
Luggage space between seatbacks (Q42)	19	11	18	24	18	28	n/a	20	18
Luggage space beneath seats (Q42)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	17	26	23	29	37	38	34	28
% who preferred to store their main luggage in the following stowage facilities:									
Overhead racks (Q43)	69	53	100	50	64	71	100	67	73
Luggage stacks at end of carriage (Q43)	12	27	0	17	14	n/a	n/a	22	n/a
Luggage stacks elsewhere in carriage (Q43)	3	n/a	n/a	n/a	n/a	7	n/a	n/a	14
Luggage space between seatbacks (Q43)	15	20	0	33	21	21	n/a	11	14
Luggage space beneath seats (Q43)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average	25	33	33	33	33	33	100	33	33

Table 61 Information during this journey

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who said announcements were:									
Audible (Q44c)	82	60	89	89	96	84	80	81	85
Inaudible (Q44c)	16	37	11	7	0	14	17	19	13
% who said the information displays in the carriage were:									
Perfectly/ fairly legible (Q44b)	93	n/a	n/a	100	94	89	100	n/a	88

Table 62 On-train environment

	Overall	HST		1990 Diesel Units			Desiro SWT	Mallard NE East Coast	Pendolino Virgin
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country			
% who were satisfied with the following aspects of the environment on the train*:									
Air conditioning (Q46)	60	49	53	70	65	58	57	66	56
Temperature (Q46)	58	46	44	65	62	64	54	66	55
Ventilation (Q46)	55	47	59	65	65	54	57	56	45
Odour or smell of train interior (Q46)	54	58	56	56	68	43	59	55	45
Noise within carriage (train not passengers) (Q46)	56	66	61	52	61	53	47	59	50
Litter bin provision (Q46)	28	20	38	34	36	26	21	32	23
Ease of locating safety/emergency equipment (Q46)	45	46	44	48	46	42	34	53	41
Average	51	47	51	56	58	48	47	55	45

Table 63 Toilet

	Overall	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
		FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
% who felt the maintenance of the toilet was:									
Well maintained (Q48b)	70	67	75	50	86	70	100	69	60
Poorly maintained (Q48b)	30	33	25	50	14	30	0	31	40
% who said the toilet cubicle was:									
Clean (Q48c)	69	67	50	75	86	70	50	71	60
Dirty (Q48c)	31	33	50	25	14	30	50	29	40
% who were satisfied with the following aspects of the design of the toilet*:									
Ease of using the door controls (48e)	49	50	40	67	67	45	100	44	40
Ease of using the door lock (48e)	53	57	25	67	60	45	0	56	60
Clear visible instruction of how to lock the door (48e)	48	63	40	50	40	45	0	47	50
Clear visible direction signs to toilet and once in toilet (48e)	49	63	50	50	60	60	0	41	33
Space within the toilet area (48e)	36	38	17	50	40	70	0	19	40
Quality of toilet and washing/drying facilities (48e)	33	29	20	50	33	45	0	28	40
Quality of baby changing facilities (48e)	44	60	0	0	0	83	0	40	50
Provision for disposables (48e)	35	20	40	0	33	44	100	33	50
Mirror (48e)	45	63	60	0	33	63	100	38	17
Facility to hold the toilet lid and seat up (48e)	36	38	60	25	20	30	100	44	0
Hook for hanging coats/bags (48e)	32	25	20	0	0	45	100	44	20
Floor surface (48e)	34	22	60	33	29	44	0	35	20
Location of toilet flush (48e)	40	56	60	33	43	30	100	41	0
Average	41	45	38	33	35	50	46	39	32

Appendix B – On-train Self Completion Questionnaire

INTERVIEWER TO CODE: 1 / 2 / 3

PLEASE DO NOT ALTER

Seat type: airline forward facing / airline rear facing / table seat forward facing / table seat rear facing

Seat type: window / aisle

Other passengers seated: Alongside - yes / no In directly facing seat - yes / no



Passenger Preferences

Government is committed to designing and building a new generation of intercity long distance trains. Passenger Focus, the official, independent consumer organisation representing the interests of rail passengers nationally, wants to understand passengers' views on the design of existing trains, to ensure that passengers' preferences are reflected in the new train design. Please complete this questionnaire, indicating your opinions on the interior design of the train you are travelling on now. The interviewer will collect the completed questionnaire from you, and your answers will be treated in strict confidence. Thank you for your help with this important survey.

Your Journey Details

- Q1 At what station did you join this train? _____
- Q2 At what station will you leave this train? _____
- Q3 Which of the following options best describes the purpose of your journey? (Please tick one only)
- | | |
|--------------------------------------|---|
| <input type="checkbox"/> 1 Commuting | <input type="checkbox"/> 3 Business |
| <input type="checkbox"/> 2 Leisure | <input type="checkbox"/> 4 Other non-business |
- Q4a Are you travelling with anyone else?
- | | | | |
|--------------------------------|-----------|-------------------------------|-----------|
| <input type="checkbox"/> 1 Yes | Go to Q4b | <input type="checkbox"/> 2 No | Go to Q5a |
|--------------------------------|-----------|-------------------------------|-----------|
- Q4b If yes, how many people are travelling with you? (Please write in number of adults and number of children)
- | | |
|--------------------------------|-------------------------------|
| Adults (16 years old and over) | Children (under 16 years old) |
| <input type="checkbox"/> | <input type="checkbox"/> |
- Q5a Did you reserve a seat on this train?
- | | | | |
|--------------------------------|-----------|-------------------------------|----------|
| <input type="checkbox"/> 1 Yes | Go to Q5b | <input type="checkbox"/> 2 No | Go to Q6 |
|--------------------------------|-----------|-------------------------------|----------|
- Q5b If yes, are you...?
- | | |
|---|--|
| <input type="checkbox"/> 1 Sitting in the seat you reserved | <input type="checkbox"/> 2 Sitting in another seat, if so why..... |
|---|--|
- Q6 How crowded was this carriage when you boarded the train?
- | | |
|--|---|
| <input type="checkbox"/> 1 More than half the seats were empty | <input type="checkbox"/> 2 More than half the seats were full |
| <input type="checkbox"/> 3 All the seats were full and some passengers were standing | |

Boarding this train

- Q7a Disabled people can pre-book assistance from station staff in boarding their train.
- Do you consider yourself disabled?
- | | | | |
|--------------------------------|-----------|-------------------------------|----------|
| <input type="checkbox"/> 1 Yes | Go to Q7b | <input type="checkbox"/> 2 No | Go to Q8 |
|--------------------------------|-----------|-------------------------------|----------|
- Q7b If yes, did you book for assistance?
- | | | | |
|--------------------------------|-----------|-------------------------------|----------|
| <input type="checkbox"/> 1 Yes | Go to Q7c | <input type="checkbox"/> 2 No | Go to Q8 |
|--------------------------------|-----------|-------------------------------|----------|
- Q7c Was this assistance provided?
- | | |
|--------------------------------|-------------------------------|
| <input type="checkbox"/> 1 Yes | <input type="checkbox"/> 2 No |
|--------------------------------|-------------------------------|
- Q8 How easy or difficult was it to identify the train's destination and stopping points on external signage (ends and side panels or coach labels)?
- | | | | | |
|---|--|---------------------------------------|--------------------------------------|--|
| <input type="checkbox"/> 1 Very difficult | <input type="checkbox"/> 2 Quite difficult | <input type="checkbox"/> 3 Quite easy | <input type="checkbox"/> 4 Very easy | <input type="checkbox"/> 5 Impossible/ no indication |
|---|--|---------------------------------------|--------------------------------------|--|
- Q9a How easy or difficult was it getting on this train?
- | | | | |
|---|--|---------------------------------------|--------------------------------------|
| <input type="checkbox"/> 1 Very difficult | <input type="checkbox"/> 2 Quite difficult | <input type="checkbox"/> 3 Quite easy | <input type="checkbox"/> 4 Very easy |
|---|--|---------------------------------------|--------------------------------------|
- Q9b If quite or very difficult, was this because of...? (Please tick all that apply)
- | | |
|--|---|
| <input type="checkbox"/> 1 Step height | <input type="checkbox"/> 3 Entrance width |
| <input type="checkbox"/> 2 Crowding | <input type="checkbox"/> 4 Gap between platform and train |
| <input type="checkbox"/> Other (Please write in) | |
-
- Q10a How easy or difficult was it finding the door handle/ controls?
- | | | | | |
|---|--|---------------------------------------|--------------------------------------|--|
| <input type="checkbox"/> 1 Very difficult | <input type="checkbox"/> 2 Quite difficult | <input type="checkbox"/> 3 Quite easy | <input type="checkbox"/> 4 Very easy | <input type="checkbox"/> 5 N/A - door was open |
|---|--|---------------------------------------|--------------------------------------|--|
- Q10b How easy or difficult was it using the door handle/ controls?
- | | | | | |
|---|--|---------------------------------------|--------------------------------------|--------------------------------|
| <input type="checkbox"/> 1 Very difficult | <input type="checkbox"/> 2 Quite difficult | <input type="checkbox"/> 3 Quite easy | <input type="checkbox"/> 4 Very easy | <input type="checkbox"/> 5 N/A |
|---|--|---------------------------------------|--------------------------------------|--------------------------------|
- Q11 Is the room in the vestibule area (space between the external doors and the seating area)...?
- | | | |
|---------------------------------|-------------------------------------|---------------------------------|
| <input type="checkbox"/> 1 Poor | <input type="checkbox"/> 2 Adequate | <input type="checkbox"/> 3 Good |
|---------------------------------|-------------------------------------|---------------------------------|
- Q12 Are the floor surfaces inside this carriage free of slip and trip hazards...?
- | | | | |
|------------------------|--------------------------|--------------------------|--------------------------|
| | Poor | Adequate | Good |
| In the vestibule area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the seating area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
- Q13 Is the provision of grab rails and handles...?
- | | | |
|---------------------------------|-------------------------------------|---------------------------------|
| <input type="checkbox"/> 1 Poor | <input type="checkbox"/> 2 Adequate | <input type="checkbox"/> 3 Good |
|---------------------------------|-------------------------------------|---------------------------------|
- Q14a Please answer Q14a-c if you consider yourself disabled and entitled to Priority Seating. (If you do not, please skip to Q15a)
- How easy or difficult is it to identify the Priority Seating on this train?
- | | | | |
|---|--|---------------------------------------|--------------------------------------|
| <input type="checkbox"/> 1 Very difficult | <input type="checkbox"/> 2 Quite difficult | <input type="checkbox"/> 3 Quite easy | <input type="checkbox"/> 4 Very easy |
|---|--|---------------------------------------|--------------------------------------|
- Q14b Are you using Priority Seating?
- | | | | |
|--------------------------------|------------|-------------------------------|------------|
| <input type="checkbox"/> 1 Yes | Go to Q15a | <input type="checkbox"/> 2 No | Go to Q14c |
|--------------------------------|------------|-------------------------------|------------|
- Q14c If no, is this because it was not available, or for other reasons?
- | | |
|---|--|
| <input type="checkbox"/> 1 It was not available | <input type="checkbox"/> Other reason(s) (Please write in) |
|---|--|
-
- 2 Occupied by another passenger
- Q15a How easy or difficult was it reading the seat reservation information shown on small screens above each seat?
- | | | | | | |
|---|--|---------------------------------------|--------------------------------------|---|--|
| <input type="checkbox"/> 1 Very difficult | <input type="checkbox"/> 2 Quite difficult | <input type="checkbox"/> 3 Quite easy | <input type="checkbox"/> 4 Very easy | <input type="checkbox"/> 5 No small screens above the seats | <input type="checkbox"/> 6 Small screens are not working |
|---|--|---------------------------------------|--------------------------------------|---|--|
- Q15b How easy or difficult was it reading the seat reservation information shown on seat reservation cards?
- | | | | | |
|---|--|---------------------------------------|--------------------------------------|--|
| <input type="checkbox"/> 1 Very difficult | <input type="checkbox"/> 2 Quite difficult | <input type="checkbox"/> 3 Quite easy | <input type="checkbox"/> 4 Very easy | <input type="checkbox"/> 5 There are no seat reservation cards |
|---|--|---------------------------------------|--------------------------------------|--|

- Q16** Please answer this question only if you reserved a seat on this train. (If you did not reserve a seat, please skip to Q17)
- How easy or difficult was it identifying your reserved seat?
1 Impossible 2 Very difficult 3 Quite difficult 4 Quite easy 5 Very easy
- Q17** Please answer this question only if you did not reserve a seat on this train. (If you did, please skip to Q18)
- How easy or difficult was it identifying which empty seats were available for you to use, and not reserved?
1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 Impossible/ No seats were empty

Moving through the train

- Q18** Which type of door in this carriage separates the seating area from the space by the external doors?
1 Open automatically when you approach 2 Automatic push button
- Q19** How easy or difficult is it using these interior doors?
1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy
- Q20** Which type of door, if any, separates one coach from the next?
1 Open automatically when you approach 2 Automatic with push button
3 None
- Q21** How easy or difficult is it using the inter-carriage doors?
1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy
- Q22** How easy or difficult is it to walk through this train while it is travelling at speed?
1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy
- Q23** Do you find the aisle...?
1 Too narrow 2 Wide enough 3 More than wide enough
- Q24** How easy or difficult is it to see the grab rails and handles?
1 Difficult 2 Neither difficult nor easy 3 Easy
- Q25** How easy or difficult is it to use the grab rails and handles?
1 Difficult 2 Neither difficult nor easy 3 Easy
- Q26** Have you visited the buffet counter on this train today?
1 Yes Go to Q27 2 No Go to Q29
- Q27** If yes, please indicate on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied) how satisfied or dissatisfied you are with the following facilities at and near the buffet counter:
- | | Very dissatisfied | | | | | Very satisfied | | | | | N/A | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
| Height of counter | <input type="checkbox"/> |
| Edges of the counter | <input type="checkbox"/> |
| Lighting at/ around the counter | <input type="checkbox"/> |
| Visibility of items for sale | <input type="checkbox"/> |
| Non-slippery floors | <input type="checkbox"/> |
| Ease of reading menu/ price list | <input type="checkbox"/> |
| Convenience of queuing space (eg rail to hold onto) | <input type="checkbox"/> |
- Q28** How easy or difficult was it to walk through the train back to your seat with your purchases while the train was moving?
 Very difficult..... 1 Quite difficult... 2 Quite easy..... 3 Very easy..... 4 N/A - didn't buy anything... 5

Your comfort during this journey

Comfort of seating

- Q29** Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of seating comfort:
- | | Very dissatisfied | | | | | Very satisfied | | | | | N/A | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
| Ease of getting into and out of the seat | <input type="checkbox"/> |
| Comfort of the seat when upright | <input type="checkbox"/> |
| Comfort of the seat when reclining | <input type="checkbox"/> |
| Height of seat (considering comfort and view) | <input type="checkbox"/> |
| Width of seat | <input type="checkbox"/> |
| Depth of seat (length) | <input type="checkbox"/> |
| Comfort of front edge of the seat (rounded/ non-rounded) | <input type="checkbox"/> |
| Contour and shape of seat | <input type="checkbox"/> |
| Leg room - knee clearance (when upright) | <input type="checkbox"/> |
| Leg room - knee clearance (when reclining) | <input type="checkbox"/> |
| Leg room - foot space (when upright) | <input type="checkbox"/> |
| Leg room - foot space (when reclining) | <input type="checkbox"/> |
| Comfort of footrest | <input type="checkbox"/> |
| Head support | <input type="checkbox"/> |
| Back support | <input type="checkbox"/> |
| Hardness/ softness of upholstery | <input type="checkbox"/> |
| Overall feeling of comfort in this seat | <input type="checkbox"/> |
- Q30** Is the general overhead lighting...?
1 Too weak 2 Adequate 3 Too strong
- Q30a** Are you sitting at
1 Airline-style seat Go to Q31a 2 Table-seat Go to Q32a
- Q31a** If you are sitting in an airline style seat, is there a drop down table on the back of the seat in front of you?
1 Yes Go to Q31b 2 No Go to Q32a
- Q31b** If yes, have you used the drop down table?
1 Yes Go to Q31c 2 No Go to Q32a
- Q31c** Is the drop down table...?
 Yes No
 Of a suitable size?
 Suitable to use a laptop?
 Firm and strong enough?
- Q32a** Are there arm rests on the seat you are using?
1 Yes Go to Q32b 2 No Go to Q33
- Q32b** If yes, are the arm rests...?
1 Fixed in place 2 Moveable (up and down)
- Q32c** Is the height of the armrests...?
1 Too low 2 A good height 3 Too high
- Q32d** Is the width of the armrests...?
1 Too narrow 2 A good width 3 Too wide
- Q32e** Are the armrests...?
1 Too soft 2 Comfortable 3 Too hard
- Q33** Which of these options do you prefer?
1 Airline-style seats 2 Seats around a table

Other at-seat facilities

Q34 How accessible were each of the following facilities at your seat?

	Very accessible	Quite accessible	Quite inaccessible	Very inaccessible	There was none
Coat hooks	<input type="checkbox"/>				
Magazine net	<input type="checkbox"/>				
Personal power point	<input type="checkbox"/>				
At seat lighting	<input type="checkbox"/>				
WiFi	<input type="checkbox"/>				

Q35 Did you have to switch on the at seat lighting?
 Yes..... 1 No..... 2 N/A..... 3

Q36 Is the at seat lighting...?
 Too weak..... 1 Adequate..... 2 Too strong..... 3 N/A..... 4

Windows

Q37 Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the windows near your seat:

	Very dissatisfied					Very satisfied					
	1	2	3	4	5	6	7	8	9	10	N/A
Seeing out of the window; field of view including how well seat lines up with window	<input type="checkbox"/>										
Overall size of window	<input type="checkbox"/>										
Quality of blinds/ curtains	<input type="checkbox"/>										
Ability to adjust blinds/ curtains	<input type="checkbox"/>										

Your luggage

Q38 We want to understand passengers' needs for luggage stowing facilities.
Do you have any luggage with you?
1 Yes Go to Q39 2 No Go to Q44a

Q39 If yes, how many of each of the following types of luggage do you have with you? (Please tick one box per luggage type)

	0	1	2	3	More than 3
Brief case	<input type="checkbox"/>				
Small suitcase (not bigger than airline cabin baggage)	<input type="checkbox"/>				
Larger suitcase	<input type="checkbox"/>				
Rucksack	<input type="checkbox"/>				
Other (please write in, eg folding bike)	<input type="checkbox"/>				

Q40 Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following 'stowage' facilities on this train in terms of the SPACE PROVIDED:

	Very dissatisfied					Very satisfied					
	1	2	3	4	5	6	7	8	9	10	Not used
Overhead racks	<input type="checkbox"/>										
Luggage stacks at end of carriage	<input type="checkbox"/>										
Luggage stacks in centre of carriage	<input type="checkbox"/>										
Luggage space between seat backs	<input type="checkbox"/>										
Luggage space beneath seats	<input type="checkbox"/>										

Q41 Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following 'stowage' facilities on this train in terms of the ACCESSIBILITY (how easy to get your luggage in and out):

	Very dissatisfied							Very satisfied			
	1	2	3	4	5	6	7	8	9	10	Not used
Overhead racks	<input type="checkbox"/>										
Luggage stacks at end of carriage	<input type="checkbox"/>										
Luggage stacks in centre of carriage	<input type="checkbox"/>										
Luggage space between seat backs	<input type="checkbox"/>										
Luggage space beneath seats	<input type="checkbox"/>										

Q42 Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following 'stowage' facilities on this train in terms of the SECURITY (e.g. how safe is your luggage):

	Very dissatisfied							Very satisfied			
	1	2	3	4	5	6	7	8	9	10	Not used
Overhead racks	<input type="checkbox"/>										
Luggage stacks at end of carriage	<input type="checkbox"/>										
Luggage stacks in centre of carriage	<input type="checkbox"/>										
Luggage space between seat backs	<input type="checkbox"/>										
Luggage space beneath seats	<input type="checkbox"/>										

Q43 Which of the following 'stowage' facilities is your preferred place to stow your main luggage item in? (Please tick one only)

Overhead racks..... 1 Luggage space between seat backs..... 4
 Luggage stacks at end of carriage..... 2 Luggage space beneath seats..... 5
 Luggage stacks in centre of carriage..... 3

Information during the journey

Q44a Are the electronic information displays, in the carriage you are in, working?
1 Yes Go to Q44b 2 No Go to Q44c
3 No screens Go to Q44c

Q44b How legible is the information on the screens from your seat?
1 Perfectly legible 2 Fairly legible 3 Not very legible 4 Illegible/ Completely obscured

Q44c How audible were the announcements?
1 Very audible 2 Quite audible 3 Quite inaudible 4 Very inaudible 5 N/A

On-train environment

Q45 Thinking about the interior layout of the carriage, on a scale of 1 to 10 how spacious does it feel? (Where 1=very spacious and 10=very cramped/ squashed)

	Very spacious					Very cramped/ squashed				
	1	2	3	4	5	6	7	8	9	10
	<input type="checkbox"/>									

Q46 Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the environment of this train:

	Very dissatisfied					Very satisfied				
	1	2	3	4	5	6	7	8	9	10
Air conditioning	<input type="checkbox"/>									
Temperature	<input type="checkbox"/>									
Ventilation	<input type="checkbox"/>									
Odour or smell (of train interior)	<input type="checkbox"/>									
Train noise within carriage (in terms of the actual train and not the other passengers)	<input type="checkbox"/>									
Litter bin provision	<input type="checkbox"/>									

Ease of locating safety/ emergency equipment

Toilet

Q47a Please answer Q47a and Q47b if you use a wheelchair. (If you do not, please skip to Q48a)

Is a wheelchair accessible toilet provided in this train/ carriage?
1 Yes, in this carriage Go to Q47b 2 Yes, in this train Go to Q47b
3 No, there is no wheelchair accessible toilet on this train 4 Don't know Go to Q48a

Q47b If yes, how satisfied or dissatisfied are you with the accessibility of the wheelchair accessible toilet?
1 Very dissatisfied 2 Quite dissatisfied 3 Quite satisfied 4 Very satisfied

Q48a Have you used the toilet on this train today?
1 Yes Go to Q48b 2 No Go to Q49

Q48b How well or poorly maintained was the toilet?
1 Very well maintained 2 Quite well maintained 3 Quite poorly maintained 4 Very poorly maintained

Q48c How clean was the toilet cubicle?
1 Very clean 2 Quite clean 3 Quite dirty 4 Very dirty

Q48d Did the design of the toilet contribute to its uncleanness?
1 Yes 2 No 3 Don't know

Q48e Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the design of the toilet on this train:

	Very dissatisfied					Very satisfied				
	1	2	3	4	5	6	7	8	9	10
Ease of using the door controls	<input type="checkbox"/>									
Ease of using the door lock	<input type="checkbox"/>									
Clear visible instruction on how to lock the door	<input type="checkbox"/>									
Clear visible direction signs to toilet and once in the toilet	<input type="checkbox"/>									
Space within the toilet area	<input type="checkbox"/>									
Quality of toilet and washing/ drying facilities	<input type="checkbox"/>									
Quality of baby changing facilities	<input type="checkbox"/>									
Provision for disposable (used paper towels, apply disposal)	<input type="checkbox"/>									
Mirror	<input type="checkbox"/>									
Facility to hold the toilet lid and seat up	<input type="checkbox"/>									
Hook for hanging coats/ bags	<input type="checkbox"/>									
Floor surface (i.e. slippery)	<input type="checkbox"/>									
Location of toilet flush	<input type="checkbox"/>									

About You

Q49 On average, how often do you travel by train?
1 5 or more times a week 5 At least twice a year
2 At least once a week 6 At least once a year
3 At least once a month 7 Less than once a year
4 At least 4 times a year 8 This is the first time I have travelled by train

Q50 Are you...?
1 Male 2 Female

Q51 Are you...?
1 16 - 25 years old 6 60 - 64 years old
2 26 - 34 years old 7 65 - 69 years old
3 35 - 44 year old 8 70 - 80 years old
4 45 - 54 years old 9 81 years old and over
5 55 - 59 years old

Q52 Are you...?
1 under 5 ft (1.52m) tall 2 5 ft - 6 ft (1.52m - 1.83m) tall
3 more than 6 ft (1.83m) tall

Q53 Are you...?
1 Employed full time (30 hrs+) 2 Employed part-time (less than 30 hrs)
3 Self-employed 4 Retired
5 House person 6 Student
7 Not working

Q54 In which of the following groups does your total household income (before tax and other deductions) fall into?
1 Under £6,500 5 £6,501 - £11,499
2 £11,500 - £17,499 6 £17,500 - £34,999
3 £35,000 - £49,999 7 £50,000 - £74,999
4 £75,000 - £99,999 8 £100,000 or more

Q55 If you consider yourself to have a disability, please say what your disability is?

Q56 Please write in below any other comments you may have on the design of the train that you are travelling on.

Thank you for completing this survey. Your views are very important to us.

The interviewer will collect the completed questionnaire from you before you leave the train. Should you leave the train before it is collected, please leave it on the seat or table.

Appendix C – Design Criteria

Design Feature	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
	FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
DOORS								
External door push-button control	-	-	●	●	●	●	●	●
Internal vestibule/saloon door push button	-	-	●	●	●	●	●	●
INFORMATION								
Electronic seating reservation system	-	-	●	●	●	-	-	●
Paper ticket seating reservation system	●	●	-	-	-	●	●	-
Electronic scrolling information system	-	-	●	●	●	●	-	●
SEATING								
Reclining seat	-	-	-	-	-	-	-	-
Footrest	-	-	-	-	-	-	-	-
Head support	●	●	●	●	●	●	●	●
Armrests	●	●	●	●	●	●	●	●
Windows (directly beside seats)	x	x	x	x	x	x	x	x
3x2 seating	-	-	-	-	-	-	-	-
2x2 seating	●	●	●	●	●	●	●	●
Around a table seats	●	●	●	●	●	●	●	●
SEATING ACCESSORIES								
Drop-down table	●	●	●	●	●	●	●	●
Blind / curtains	-	-	●	-	●	-	-	●
Coat hooks	●	-	●	x	●	-	-	●
Magazine holder	●	-	●	●	●	-	-	●
Personal power point	x	x	x	x	x	x	x	x
At seat lighting	●	●	●	●	●	-	●	●
WiFi	-	●	●	●	●	-	●	●
LUGGAGE								
Overhead racks	●	●	●	●	●	●	●	●
Luggage stacks at end of carriage	●	●	●	●	-	-	●	-
Luggage stacks elsewhere in carriage	-	-	-	-	●	-	-	●
Luggage space between seat backs	x	x	x	x	x	-	x	x
Luggage space beneath seats [3]	-	-	-	-	-	-	-	-
OTHER								

Design Feature	HST		1990 Diesel Units			Desiro	Mallard	Pendolino
	FGW	NE East Coast	Meridian East Midlands	Pioneer Hull Trains	Voyager Cross Country	SWT	NE East Coast	Virgin
Buffet counter	•	•	•	•	x [1]	[2]	•	•
Air conditioning	•	•	•	•	•	•	•	•
Baby-changing facilities in toilet	•	•	•	•	•	•	•	•

Notes

• feature present.

X applies to some seats within each coach.

Power points: in standard class, usually only one point between two seats; at blocks of four seats, it may be as little as one per bay of four. The floor plan of the Pendolino suggests that not all standard class seats have plug access.

Luggage spaces between seat backs: few such seats now exist, so the opportunity to use this space is severely limited. On the Meridians, the seat design is such that only the smallest bags would fit.

[1] some sets have a static buffet ("shop") area; others have had this removed and replaced by a trolley.

[2] catering provision by trolley only - not on all services.

Catering trolleys and static buffets may not be available for the entire journey of the train.

[3] there is so little space beneath seats that it is impossible to stow anything but the slimmest of overnight bags, etc.

- feature absent on this type of train.

Appendix D – Mystery Shopper Journeys

Mystery Shopper	HST EC	HST GW	MALLARD EC	PENDOLINO WC	MERIDIAN EMT	PIONEER HULL	VOYAGER XC	CLASS 444 SWT	EUROST AR
Panel Member 1			●	●		●	●		●
Panel Member 2				●	●		●	●	●
Panel Member 3		●		●	●		●		●
Panel Member 4		●	●		●		●		●
Panel Member 5	●	●			●			●	●
Panel Member 6	●	●		●			●	●	
Panel Member 7	●	●		●			●	●	
Panel Member 8	●		●		●	●	●		
Panel Member 9	●		●		●	●	●		
Panel Member 10		●		●			●	●	
Panel Member 11	●	●		●			●	●	
Panel Member 12	●		●	●		●			●

Appendix E – Mystery Shoppers Questionnaire

Passenger Assessment: Intercity Train Designs

Section 1: Journey Details

Complete for each train journey:
Panellist's Full Name: _____

Train ID (1-5): _____

Date (dd/mm/yyyy): _____

Is the weather...? (Please tick all that apply)

- | | | | |
|---------------------------------------|---|--|--|
| Cold <input type="checkbox"/> 1 | Snowing <input type="checkbox"/> 4 | Raining <input type="checkbox"/> 7 | Clear..... <input type="checkbox"/> 10 |
| Warm <input type="checkbox"/> 2 | Sleeting <input type="checkbox"/> 5 | Foggy/ misty <input type="checkbox"/> 8 | Sunny..... <input type="checkbox"/> 11 |
| Hot <input type="checkbox"/> 3 | Hailing..... <input type="checkbox"/> 6 | Cloudy <input type="checkbox"/> 9 | Windy..... <input type="checkbox"/> 12 |

TOC:

- | | | | |
|---|---|---|--|
| East Coast Main <input type="checkbox"/> 1 | West Coast Main <input type="checkbox"/> 3 | Hull Trains <input type="checkbox"/> 5 | South West <input type="checkbox"/> 7 |
| Line | Line (Virgin) | Trains (SWT)..... | |
| Great Western... <input type="checkbox"/> 2 | East Midlands <input type="checkbox"/> 4 | Cross Country..... <input type="checkbox"/> 6 | Eurostar..... <input type="checkbox"/> 8 |

Train type (please tick one only):

- | | | | |
|--|---|--|--|
| Desiro..... <input type="checkbox"/> 1 | Mallard <input type="checkbox"/> 3 | Pendolino <input type="checkbox"/> 5 | Voyager..... <input type="checkbox"/> 7 |
| HST <input type="checkbox"/> 2 | Meridian <input type="checkbox"/> 4 | Pioneer <input type="checkbox"/> 6 | Eurostar..... <input type="checkbox"/> 8 |

Journey start time (00:00 24hr clock): _____

Train station you joined this train: _____

Train loading at start of journey:

- | | | | |
|---|---|--|--|
| More than half the <input type="checkbox"/> 1 | More than half the <input type="checkbox"/> 2 | People standing <input type="checkbox"/> 3 | Severe crowding . <input type="checkbox"/> 4 |
| seats were empty | seats were filled .. | in some carriages | |

Journey end time (00:00 24 hr clock): _____

Train station you left this train: _____

Train loading at end of journey:

- | | | | |
|---|---|--|--|
| More than half the <input type="checkbox"/> 1 | More than half the <input type="checkbox"/> 2 | People standing <input type="checkbox"/> 3 | Severe crowding . <input type="checkbox"/> 4 |
| seats were empty. | seats were filled .. | in some carriages | |

Corresponding photos from camera:

Camera (A or B) _____

Picture range (eg exposures 1-8) _____

I declare that this fieldwork has been carried out strictly in accordance with MVA's specification and has been conducted within the MRS Code of Conduct.

Signed: _____

Date: _____

COMPLETING THIS QUESTIONNAIRE

For this journey please complete the questionnaire from the perspective of a rail passenger travelling on this train today FOR THE SELECTED JOURNEY PURPOSE (check instructions).

You must follow the instructions in your Briefing Manual precisely, including:

- Confirm the train is of the type specified before boarding;
- Take photos like the 'examples' provided:
 - Front of train approaching station;
 - Side of front power car/ leading unit when train stopped;
 - Looking into vestibule through opened external door;
 - Train interior 'long shot' from vestibule;
 - Other standard interior shots as indicated in the questionnaire; and,
 - Other shots at your judgement, to capture features affecting your scores (we may want to use these in the Workshop).
- Select any Standard carriage but NOT any specially designated (eg. 'Quiet' or 'Family') Carriages;
- Board the train;
- Stow your luggage as instructed;
- If possible, you should select a seat that is the same as the 'majority seat type' available on this type of train (eg on trains with mostly airline seats and some round-table seats, you should select an airline seat);
- Do **NOT** occupy priority seats;
- Follow the instructions in each section of the questionnaire;
- Note that you must only answer Section 8 (concerning comfort of the selected seating area) after you have spent at least 45 minutes on this train, and that Sections 4 and 5 must only be completed after you have made mystery walks along the train and to visit the toilets.

Please identify the type of seat you have selected by circling the relevant options from the lists below (please note you need to circle one option from each line):

- airline forward facing / airline rear facing / table seat forward facing / table seat rear facing
- window / aisle
- other passengers seated:

- alongside - yes / no
- in directly facing seat (if any) - yes / no

What is your assumed journey purpose for this journey (please check your instructions for this shift/ journey)

- | | | |
|---|---|---|
| Commuter <input type="checkbox"/> 1 | Business <input type="checkbox"/> 2 | Leisure..... <input type="checkbox"/> 3 |
|---|---|---|

Section 2: Boarding this train

COMPLETE THIS SECTION AS SOON AS YOU HAVE BOARDED THE TRAIN AND SELECTED YOUR SEAT - BUT IF NECESSARY, RETURN TO VESTIBULE TO CHECK YOUR ANSWERS.

Q4 How easy or difficult was it to identify the train's destination and stopping points on external signage (ends and side panels or coach labels)?

1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 Impossible/ no indication

Q5a How easy or difficult was it getting on this train?

1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy

Q5b If quite or very difficult, was this because of...? (Please tick all that apply)

1 Step height 3 Entrance width
 2 Crowding 4 Gap between platform and train
 Other (Please write in)
.....
.....

Q6a How easy or difficult was it finding the door handle/ controls?

1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 N/A - door was open

Q6b If quite or very difficult, please explain why.

.....
.....
.....
.....

Q7a How easy or difficult was it using the door handle/ controls?

1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 N/A

Q7b If quite or very difficult, please explain why.

.....
.....
.....
.....

Q8a Is the room in the vestibule area...?

1 Poor 2 Adequate 3 Good

Q8b Please explain why.

.....
.....
.....
.....

Q9a Are the floor surfaces inside this carriage free of slip and trip hazards...?

	Poor	Adequate	Good
In the Vestibule?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the seating area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q9b Please explain why.

.....
.....
.....
.....

Q10a Is the provision of grab rails and handles...?

1 Poor 2 Adequate 3 Good

Q10b Please explain why.

.....
.....
.....
.....

Q11a How easy or difficult was it reading the seat reservation information shown on small screens above each seat?

1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 No small screens above the seats 7 Small screens are not working

Q11b If quite or very difficult, please explain why.

.....
.....
.....
.....

Q12a How easy or difficult was it reading the seat reservation information shown on seat reservation cards?

1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 There are no seat reservation cards

Q12b If quite or very difficult, please explain why.

.....
.....
.....
.....

Q13 (ASSUME that you have reserved a seat on this train) How easy or difficult was it identifying your reserved seat?

1 Impossible 2 Very difficult 3 Quite difficult 4 Quite easy 5 Very easy

Q14 (Now ASSUME that you did not reserve a seat on this train) How easy or difficult was it identifying which empty seats were available for you to use, and not reserved?

1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 Impossible/ No seats were empty

Q15 Please explain further your allocation of scores regarding seat reservation.

Q16 Please provide any additional comments you may have on 'Section 2: Boarding this train'?

Q17 Reviewing all your answers to Section 2, how could the design of and facilities aboard this train be improved to better meet your requirements?

Q18 If you were undertaking your journey as a commuter/ business/ leisure passenger instead of your assumed journey purpose, is there anything that you have suggested that might be different? (For any answers please indicate which journey purpose you are writing about)

Section 3: Your luggage

WE HAVE ASKED YOU TO BRING WITH YOU LUGGAGE THAT IS APPROPRIATE FOR YOUR JOURNEY PURPOSE INCLUDING A JACKET OR OVERCOAT TO BE TAKEN OFF AND HUNG OR STOWED.

PLEASE COMPLETE THE FOLLOWING SECTION AFTER TRIALLING STOWAGE OF YOUR LUGGAGE IN EACH OF THE LOCATIONS/ FACILITIES LISTED BELOW (IF PROVIDED):

- OVERHEAD RACK
- LUGGAGE STACKS AT END OF CARRIAGE
- LUGGAGE STACKS IN CENTRE OF CARRIAGE
- LUGGAGE SPACE BETWEEN SEAT BACKS
- LUGGAGE SPACE BENEATH SEATS

Q19a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following 'stowage' facilities on this train in terms of the **SPACE PROVIDED:**

	Very dissatisfied					Very satisfied					N/A	
	1	2	3	4	5	6	7	8	9	10		
Overhead racks	<input type="checkbox"/>											
Luggage stacks at end of carriage	<input type="checkbox"/>											
Luggage stacks in centre of carriage	<input type="checkbox"/>											
Luggage space between seat backs	<input type="checkbox"/>											
Luggage space beneath seats	<input type="checkbox"/>											

Q19b For any stowage facilities that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q20a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following 'stowage' facilities on this train in terms of the **ACCESSIBILITY:**

	Very dissatisfied					Very satisfied					N/A	
	1	2	3	4	5	6	7	8	9	10		
Overhead racks	<input type="checkbox"/>											
Luggage stacks at end of carriage	<input type="checkbox"/>											
Luggage stacks in centre of carriage	<input type="checkbox"/>											
Luggage space between seat backs	<input type="checkbox"/>											
Luggage space beneath seats	<input type="checkbox"/>											

Q20b For any stowage facilities that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q21a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following 'stowage' facilities on this train in terms of the **SECURITY:**

	Very dissatisfied					Very satisfied					N/A	
	1	2	3	4	5	6	7	8	9	10		
Overhead racks	<input type="checkbox"/>											
Luggage stacks at end of carriage	<input type="checkbox"/>											
Luggage stacks in centre of carriage	<input type="checkbox"/>											
Luggage space between seat backs	<input type="checkbox"/>											
Luggage space beneath seats	<input type="checkbox"/>											

Q21b For any stowage facilities that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q22a Remembering the purpose of your journey, and taking into account your answers to the previous questions in this section (Section 3: Your luggage), which of the following 'stowage' facilities would you choose to stow your main luggage item in? (Please tick one only)

- Overhead racks 1
- Luggage space between seat backs 4
- Luggage stacks at end of carriage 2
- Luggage space beneath seats 5
- Luggage stacks in centre of carriage 3

Q22b Please explain why.

Q23 Reviewing all your answers to Section 3, how could the design of luggage facilities on this train be improved to better meet your requirements?

Q24 If you were undertaking your journey as a commuter/ business/ leisure passenger instead of your assumed journey purpose, is there anything that you have suggested that might be different? (For any answers please indicate which journey purpose you are writing about)

Section 4: Moving through the train

AFTER FIRST 15 MINUTES, AND WHEN TRAIN IS TRAVELLING AT SPEED, WALK FROM YOUR SEAT THROUGH AT LEAST ONE ADJACENT STANDARD-CLASS SEATING CARRIAGE AND BACK AGAIN, THEN ANSWER SECTION B. NOTE: YOUR WALK SHOULD INCLUDE A TRIP TO THE BUFFET COUNTER.

Q25 Which type of door in this carriage separates the seating area from the space by the external doors?

1 *Open automatically when you approach* 2 *Automatic with push button*

Q26a How easy or difficult is it using these interior doors?

1 *Very difficult* 2 *Quite difficult* 3 *Quite easy* 4 *Very easy*

Q26b Please explain the reason why you have given this answer.

Q27a Which type of door, if any, separates one coach from the next?

1 *Open automatically when you approach* 3 *Automatic with push button* Go to Q27b

2 *None* Go to Q28a

Q27b How easy or difficult is it using these inter-carriage doors?

1 *Very difficult* 2 *Quite difficult* 3 *Quite easy* 4 *Very easy*

Q27c Please explain why.

Q28a How easy or difficult is it to walk through this train while it is travelling at speed?

1 *Very difficult* 2 *Quite difficult* 3 *Quite easy* 4 *Very easy*

Q28b Please explain why.

Q29a Do you find the aisle...?

1 *Too narrow* 2 *Wide enough* 3 *More than wide enough*

Q29b Please explain why.

Q30a How easy or difficult is it to see the grab rails and handles?

1 *Difficult* 2 *Neither difficult nor easy* 3 *Easy*

Q30b Please explain why.

Q30c How easy or difficult is it to use the grab rails and handles?

1 *Difficult* 2 *Neither difficult nor easy* 3 *Easy*

Q30d Please explain why.

Q31 Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following facilities at and near the buffet counter:

	Very dissatisfied					Very satisfied					N/A
	1	2	3	4	5	6	7	8	9	10	
Height of counter	<input type="checkbox"/>										
Edges of the counter	<input type="checkbox"/>										
Lighting at/ around the counter	<input type="checkbox"/>										
Visibility of items for sale	<input type="checkbox"/>										
Non-slippery floors	<input type="checkbox"/>										
Ease of reading menu/ price list	<input type="checkbox"/>										
Convenience of queuing space (eg rail to hold onto)	<input type="checkbox"/>										

Q32 Imagine you had bought something from the buffet counter, how easy or difficult would it be to walk through the train back to your seat with your purchases and while the train was travelling at speed?

1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy

Q33 Please provide any additional comments you may have on 'Section 4: Moving through the train'?

Q34 Reviewing all your answers to Section 4, how could the design of and facilities aboard this train be improved to better meet your requirements?

Q35 If you were undertaking your journey as a commuter/ business/ leisure passenger instead of your assumed journey purpose, is there anything that you have suggested that might be different? (For any answers please indicate which journey purpose you are writing about)

Section 5: Toilet

PLEASE COMPLETE THIS SECTION OF THE QUESTIONNAIRE AFTER YOUR 'MYSTERY' VISIT TO THE TOILET NEAREST TO YOUR SEAT

Q36 How well or poorly maintained was the toilet?

Very well maintained 1 Quite well maintained 2 Quite poorly maintained 3 Very poorly maintained 4

Q37 How clean was the toilet cubicle?

Very clean 1 Quite clean 2 Quite dirty 3 Very dirty 4

Q38a Did the design of the toilet contribute to its uncleanness?

Yes 1 No 2 Don't know 3

Q38b Please explain why.

Q39a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the design of the toilet:

	Very dissatisfied					Very satisfied				
	1	2	3	4	5	6	7	8	9	10
i). Ease of using the door controls	<input type="checkbox"/>									
ii). Ease of using the door lock	<input type="checkbox"/>									
iii). Clear visible instruction on how to lock the door	<input type="checkbox"/>									
iv). Clear visible direction signs to toilet and once in the toilet	<input type="checkbox"/>									
v). Space within the toilet area	<input type="checkbox"/>									
vi). Quality of toilet and washing/drying facilities	<input type="checkbox"/>									
vii). Quality of baby changing facilities	<input type="checkbox"/>									
viii). Provision for disposal (used paper towels, nappy disposal)	<input type="checkbox"/>									
ix). Mirror	<input type="checkbox"/>									
x). Facility to hold the toilet lid and seat up	<input type="checkbox"/>									
xi). Hook for hanging coats/ bags	<input type="checkbox"/>									
xii). Floor surface (i.e. slippery)	<input type="checkbox"/>									
xiii). Location of toilet flush	<input type="checkbox"/>									

Q39b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q39c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

Q40 Reviewing all your answers to Section 5, how could the design of and facilities aboard this train be improved to better meet your requirements?

Q41 Please provide any additional comments you may have about 'Section 5: Toilet'.

Q42 If you were undertaking your journey as a commuter/ business/ leisure passenger instead of your assumed journey purpose, is there anything that you have suggested that might be different? (For any answers please indicate which journey purpose you are writing about)

Section 6: Information during the journey

PLEASE RETURN TO YOUR SELECTED 'FIRST CHOICE' SEAT FOR THE REMAINDER OF THIS QUESTIONNAIRE

Q43a Are the electronic information displays, in the carriage you are in, working?

1 Yes Go to Q43b 3 No Go to Q44a

2 No screens Go to Q44a

Q43b How legible is the information on the screens from your seat?

1 Perfectly legible 2 Fairly legible 3 Not very legible 4 Illegible/ completely obscured

Q43c Please explain why.

Q44a How audible were the announcements?

1 Very audible 2 Quite audible 3 Quite inaudible 4 Very inaudible 5 N/A

Q44b Please explain why.

Q45 Reviewing all your answers to Section 6, how could the design of and facilities aboard this train be improved to better meet your requirements?

Q46 Please provide any additional comments you may have about 'Section 6: Information during the journey'.

Q47 If you were undertaking your journey as a commuter/ business/ leisure passenger instead of your assumed journey purpose, is there anything that you have suggested that might be different? (For any answers please indicate which journey purpose you are writing about)

Section 7: Design and comfort of selected seating area

COMPLETE THIS SECTION ONLY AFTER SPENDING AT LEAST 45 MINS ON THE TRAIN, MOSTLY SEATED (EXCEPT FOR YOUR MYSTERY WALKS ALONG TRAIN AND TO TOILET).

- PLEASE CONFIRM DETAILS OF SEATING TYPE BY CIRCLING THE RELEVANT OPTIONS BELOW (Please note you need to circle one option from each line):

- airline forward facing / airline rear facing / table seat forward facing / table seat rear facing

- window / aisle

- other passengers seated:

- alongside - yes / no

- in directly facing seat (if any) - yes / no

Comfort of seating - Selected 'First Choice' Seat

Q48a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of seating comfort, in your selected seat:

	Very dissatisfied					Very satisfied					N/A	
	1	2	3	4	5	6	7	8	9	10		
Ease of getting into and out of the seat	<input type="checkbox"/>											
Comfort of the seat when upright	<input type="checkbox"/>											
Comfort of the seat when reclining	<input type="checkbox"/>											
Height of seat (considering comfort and view)	<input type="checkbox"/>											
Width of seat	<input type="checkbox"/>											
Depth of seat (length)	<input type="checkbox"/>											
Comfort of front edge of the seat (rounded/ non-rounded)	<input type="checkbox"/>											
Contour and shape of seat	<input type="checkbox"/>											
Leg room - knee clearance (when upright)	<input type="checkbox"/>											
Leg room - knee clearance (when reclining)	<input type="checkbox"/>											
Legroom - foot space (when upright)	<input type="checkbox"/>											
Leg room - foot space (when reclining)	<input type="checkbox"/>											
Comfort of footrest	<input type="checkbox"/>											
Head support	<input type="checkbox"/>											
Back support	<input type="checkbox"/>											
Hardness/ softness of upholstery	<input type="checkbox"/>											
Overall feeling of comfort in this seat	<input type="checkbox"/>											

Q48b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q48c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

Q48d Suppose your journey on this train took longer than two hours, would any of your answers/ scores for seating comfort change significantly?

1 Yes Go to Q48e 2 No Go to Q49

Q48e If yes, please state which of your answers/ scores would change and explain why for each?

Q49 Remembering the purpose of your journey, is the general overhead lighting...?

1 Too weak 2 Adequate 3 Too strong

Q50a If you are sitting in an airline seat, is there a drop down table on the back of the seat in front of you?

1 Yes Go to Q50b 2 No Go to Q51a

Q50b If yes, have you used the drop down table?

1 Yes Go to Q50c 2 No Go to Q51a

Q50c Is this drop down table...?

	Yes	No
Of a suitable size?	<input type="checkbox"/>	<input type="checkbox"/>
Suitable to use a lap top?	<input type="checkbox"/>	<input type="checkbox"/>
Firm and strong enough?	<input type="checkbox"/>	<input type="checkbox"/>

Q50d Please explain why.

Q51a Are there arm rests on the seat you are using?
 1 Yes Go to Q51b 2 No Go to Q52

Q51b If yes, are the arm rests...?
 1 Fixed in place 2 Moveable (up and down)

Q51c Is the height of the armrests...?
 1 Too low 2 A good height 3 Too high

Q51d Is the width of the armrests...?
 1 Too narrow 2 A good width 3 Too wide

Q51e Are the armrests...?
 1 Too soft 2 Comfortable 3 Too hard

Q51f Please explain why.

Other seat facilities near your selected 'First Choice' Seat

Q52 How accessible were each of the following facilities at your seat?

	Very accessible	Quite accessible	Quite inaccessible	Very inaccessible	There was none
Coat hooks	<input type="checkbox"/>				
Magazine net	<input type="checkbox"/>				
Personal power points	<input type="checkbox"/>				
At seat lighting	<input type="checkbox"/>				
WiFi	<input type="checkbox"/>				

Q53 Remembering the purpose of your journey, is the at seat lighting ...?
 1 Too weak 2 Adequate 3 Too strong

Q54 Remembering the purpose of your journey, did you have to switch on the at seat lighting ...?
 1 Yes 2 No

Windows near your selected 'First Choice' Seat

Q55a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the windows near your seat:

	Very dissatisfied										Very satisfied
	1	2	3	4	5	6	7	8	9	10	N/A
Seeing out of the window; field of view including how well seat lines up with window	<input type="checkbox"/>										
Overall size of window	<input type="checkbox"/>										
Quality of blinds/ curtains	<input type="checkbox"/>										
Ability to adjust blinds/ curtains	<input type="checkbox"/>										

Q55b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q55c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

Q56 Reviewing all your answers to Section 7, how could the design of seating and seating area facilities in your 'selected seating area' be improved to better meet your requirements?

Q57 If you were undertaking your journey as a commuter/ business/ leisure passenger instead of your assumed journey purpose, is there anything that you have suggested that might be different? (For any answers please indicate which journey purpose you are writing about)

Section 8: Design and comfort of 'Alternative' seating area

NOW MOVE TO A SEAT WITH A DIFFERENT SEATING CONFIGURATION (IF ANY IS AVAILABLE IN THIS OR ANOTHER CARRIAGE) AND SIT THERE FOR AT LEAST 5 MINS BEFORE ANSWERING THIS SECTION.

Please indicate below, by circling the relevant options, the details of your alternative seating area (please note you need to circle one option from each line):

- airline forward facing / airline rear facing / table seat forward facing / table seat rear facing
- window / aisle
- other passengers seated:
 - alongside - yes / no
 - in directly facing seat (if any) - yes / no

Comfort of seating - Alternative seat

Q58a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of seating comfort, in the 'alternative seat configuration area':

	Very dissatisfied					Very satisfied					N/A	
	1	2	3	4	5	6	7	8	9	10		
Ease of getting into and out of the seat	<input type="checkbox"/>											
Comfort of the seat when upright	<input type="checkbox"/>											
Comfort of the seat when reclining	<input type="checkbox"/>											
Height of seat (considering comfort and view)	<input type="checkbox"/>											
Width of seat	<input type="checkbox"/>											
Depth of seat	<input type="checkbox"/>											
Comfort of front edge of seat (rounded/non rounded)	<input type="checkbox"/>											
Contour and shape of seat	<input type="checkbox"/>											
Leg room - knee clearance (when upright)	<input type="checkbox"/>											
Leg room - knee clearance (when reclining)	<input type="checkbox"/>											
Legroom - foot space (when upright)	<input type="checkbox"/>											
Leg room - foot space (when reclining)	<input type="checkbox"/>											
Comfort of footrest	<input type="checkbox"/>											
Head support	<input type="checkbox"/>											
Back support	<input type="checkbox"/>											
Hardness/ softness of upholstery	<input type="checkbox"/>											
Overall feeling of comfort in this seat	<input type="checkbox"/>											

Q58b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q58c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

Q59a Are there arm rests on the seat you are using?

- 1 Yes Go to Q60 2 No Go to Q59b

Q59b If yes, are the arm rests...?

- 1 Fixed in place 2 Moveable (up and down)

Q59c Is the height of the armrests...?

- 1 Too low 2 A good height 3 Too high

Q59d Is the width of the armrests...?

- 1 Too narrow 2 A good width 3 Too wide

Q59e Are the armrests...?

- 1 Too soft 2 Comfortable 3 Too hard

Q59f Please explain why.

Other seat facilities near your 'Alternative' Seat

Q60 How accessible were these facilities at your seat?

	Very accessible	Quite accessible	Quite inaccessible	Very inaccessible	There was none
Coat hooks	<input type="checkbox"/>				
Magazine net	<input type="checkbox"/>				
Personal power points	<input type="checkbox"/>				
At seat lighting	<input type="checkbox"/>				
WiFi	<input type="checkbox"/>				

Q61 Remembering the purpose of your journey, is the at seat lighting ...?

- Too weak..... 1 Adequate..... 2 Too strong 3

Q62 Remembering the purpose of your journey, did you have to switch on the at seat lighting ...?

- Yes 1 No 2

Windows near your 'Alternative' Seat

Q63a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the windows near your 'alternative' seat:

	Very dissatisfied					Very satisfied					N/A	
	1	2	3	4	5	6	7	8	9	10		
Seeing out of the window; field of view including how well seat lines up with window	<input type="checkbox"/>											
Overall size of window	<input type="checkbox"/>											
Quality of blinds/ curtains	<input type="checkbox"/>											
Ability to adjust blinds/ curtains	<input type="checkbox"/>											

Q63b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q63c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

- Q64** Reviewing all your answers to Section 8, how could the design of seating and seating area facilities in your 'alternative seating area' be improved to better meet your requirements?
- _____
- _____
- _____
- _____
- Q65** If you were undertaking your journey as a commuter/ business/ leisure passenger instead of your assumed journey purpose, is there anything that you have suggested that might be different? (For any answers please indicate which journey purpose you are writing about)
- _____
- _____
- _____
- _____

- Q67c** For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.
- _____
- _____
- _____

- Q68** Reviewing all your answers to Section 9, how could the design of and facilities aboard this train be improved to better meet your requirements?
- _____
- _____
- _____

- Q69** If you were undertaking your journey as a commuter/ business/ leisure passenger instead of your assumed journey purpose, is there anything that you have suggested that might be different? (For any answers please indicate which journey purpose you are writing about)
- _____
- _____
- _____

Section 9: On-train environment

PLEASE COMPLETE THIS SECTION OF THE QUESTIONNAIRE TOWARDS THE END OF YOUR JOURNEY BEFORE COMPLETING, PLEASE RETURN TO YOUR ORIGINAL SEAT

- Q66** Thinking about the interior layout of the carriage, on a scale of 1 to 10 how spacious does it feel? (Where 1=very spacious and 10=very cramped/squashed)

Very spacious										Very cramped/ squashed									
1	2	3	4	5	6	7	8	9	10										
<input type="checkbox"/>																			

- Q67a** Remembering your journey purpose, please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the environment of this train:

	Very dissatisfied										Very satisfied									
	1	2	3	4	5	6	7	8	9	10										
Air conditioning	<input type="checkbox"/>																			
Temperature	<input type="checkbox"/>																			
Ventilation	<input type="checkbox"/>																			
Odour or smell	<input type="checkbox"/>																			
Train noise within carriage	<input type="checkbox"/>																			
Litter bin provision	<input type="checkbox"/>																			
Ease of locating safety/ emergency equipment	<input type="checkbox"/>																			

- Q67b** For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.
- _____
- _____
- _____

Appendix F – Disabled Panel Questionnaire

Passenger Assessment: Intercity Train Designs

Section 1: Journey Details

Complete for each train journey:

Panelist's Full Name: _____

Train ID (1-5): _____

Date (dd/mm/yyyy): _____

Is the weather...? (Please tick all that apply)

- | | | | |
|---------------------------------------|---|--|--|
| Cold <input type="checkbox"/> 1 | Snowing..... <input type="checkbox"/> 4 | Raining <input type="checkbox"/> 7 | Clear..... <input type="checkbox"/> 10 |
| Warm <input type="checkbox"/> 2 | Sleeting <input type="checkbox"/> 5 | Foggy/ misty <input type="checkbox"/> 8 | Sunny..... <input type="checkbox"/> 11 |
| Hot..... <input type="checkbox"/> 3 | Hailing <input type="checkbox"/> 6 | Cloudy <input type="checkbox"/> 9 | Windy..... <input type="checkbox"/> 12 |

Route/TOC:

- | | | | |
|---|---|---|--|
| East Coast Main <input type="checkbox"/> 1 | West Coast Main <input type="checkbox"/> 3 | Hull Trains <input type="checkbox"/> 5 | South West <input type="checkbox"/> 7 |
| Line..... | Line (Virgin) | Trains (SWT)..... | |
| Great Western <input type="checkbox"/> 2 | East Midlands..... <input type="checkbox"/> 4 | Cross Country..... <input type="checkbox"/> 6 | Eurostar..... <input type="checkbox"/> 8 |

Train type (please tick one only):

- | | | | |
|--|--|--|--|
| Desiro..... <input type="checkbox"/> 1 | Mallard <input type="checkbox"/> 3 | Pendolino <input type="checkbox"/> 5 | Voyager..... <input type="checkbox"/> 7 |
| HST <input type="checkbox"/> 2 | Meridian..... <input type="checkbox"/> 4 | Pioneer <input type="checkbox"/> 6 | Eurostar..... <input type="checkbox"/> 8 |

Journey start time (00:00 24hr clock): _____

Train station you joined this train: _____

Train loading at start of journey:

- | | | | |
|--|---|---|--|
| More than half the <input type="checkbox"/> 1
seats were empty. | More than half the <input type="checkbox"/> 2
seats were filled .. | People standing <input type="checkbox"/> 3
in some carriages | Severe crowding . <input type="checkbox"/> 4 |
|--|---|---|--|

Journey end time (00:00 24 hr clock): _____

Train station you left this train: _____

Train loading at end of journey:

- | | | | |
|--|---|---|--|
| More than half the <input type="checkbox"/> 1
seats were empty. | More than half the <input type="checkbox"/> 2
seats were filled .. | People standing <input type="checkbox"/> 3
in some carriages | Severe crowding . <input type="checkbox"/> 4 |
|--|---|---|--|

Corresponding photos from camera:

Camera (A or B) _____

Picture range (eg exposures 1-8) _____

COMPLETING THIS QUESTIONNAIRE

You must follow the instructions in your Briefing Manual precisely, including:

- Confirm the train is of the type specified before boarding;
- Take photos like the 'examples' provided, if possible:
 - Front of train approaching station;
 - Side of front power car/ leading unit when train stopped;
 - Looking into vestibule through opened external door;
 - Train interior 'long shot' from vestibule;
 - Other standard interior shots as indicated in the questionnaire; and,
 - Other shots at your judgement, to capture features affecting your scores.

[PLEASE NOTE: COMPANION OF THOSE WITH VISUAL IMPAIRMENT TO TAKE THE PHOTOS, PLEASE]

- Select any Standard carriage but NOT any specially designated (eg. 'Quiet' or 'Family') Carriages;
- Board the train;
- Select the priority seating / wheelchair space;
- Follow the instructions in each section of the questionnaire;
- Note that you must only answer Section 8 (concerning comfort of the selected seating area, if applicable) after you have spent at least 45 minutes on this train, and that Sections 4 and 5 must only be completed if you undertake the mystery walks / trips along the train and to visit the toilets (as stated in the instructions these are subject to your own discretion / comfort).

Q1 Please identify the type of seat you have selected by circling the relevant options from the lists below (please note you need to circle one option from each line):

- priority seating / airline forward facing / airline rear facing / table seat forward facing / table seat rear facing / wheelchair space

- window / aisle

- other passengers seated:

- alongside - yes / no

- in directly facing seat (if any) - yes / no

Section 2: Boarding this train

COMPLETE THIS SECTION AS SOON AS YOU HAVE BOARDED THE TRAIN AND SELECTED YOUR SEAT / WHEELCHAIR SPACE - BUT IF NECESSARY, RETURN TO VESTIBULE TO CHECK YOUR ANSWERS.

Q4 How easy or difficult was it to identify the train's destination and stopping points on external signage (ends and side panels or coach labels)?

- 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 Impossible/ no indication

Q5a How easy or difficult was it getting on this train?

- 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy

Q5b If quite or very difficult, was this because of...? (Please tick all that apply)

- | | |
|--|---|
| <input type="checkbox"/> 1 Step height | <input type="checkbox"/> 3 Entrance width |
| <input type="checkbox"/> 2 Crowding | <input type="checkbox"/> 4 Gap between platform and train |
| <input type="checkbox"/> Other (Please write in) | |

Q6a How easy or difficult was it identifying the small step when boarding the train [Please consider contrasting colours

- | | | | | |
|---|--|---------------------------------------|--------------------------------------|--|
| <input type="checkbox"/> 1 Very difficult | <input type="checkbox"/> 2 Quite difficult | <input type="checkbox"/> 3 Quite easy | <input type="checkbox"/> 4 Very easy | <input type="checkbox"/> 5 N/A - door was open |
|---|--|---------------------------------------|--------------------------------------|--|

Q6b If quite or very difficult, please explain why.

Q6c Is the surface of the step (in terms of grip)...?
 1 Poor 2 Adequate 3 Good

Q6d Please explain why.

Q7a.1 How easy or difficult is it using the grab rails placed inside the door in assisting you to get on the train?
 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 N/A

Q7a.2 How easy or difficult is it using the grab rails placed inside the door in assisting you to get off the train?
PLEASE REMEMBER TO COMPLETE THIS QUESTION AFTER YOU HAVE LEFT THE TRAIN
 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 N/A

Q7b If quite or very difficult, please explain why. In addition, please explain how they could be more suitable.

Q8a How easy or difficult was it finding the door handle/ controls? [Please consider contrasting colours and tactile characters]
 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 N/A - door was open

Q8b If quite or very difficult, please explain why.

Q9a How easy or difficult was it using the door handle/ controls? (if question not relevant as assistance provided please indicate in Q7b)
 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 N/A

Q9b If quite or very difficult, please explain why.

Q10a How easy or difficult was it hearing the 'opening side' chime sound of the doors?
 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 N/A - door was open 5 Not available on this train

Q10b How easy or difficult was it hearing the 'opening warning' chime sounds of the doors?
 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 N/A - door was open

Q10c If quite or very difficult, please explain why.

Q11a Is the room in the vestibule area...?
 1 Poor 2 Adequate 3 Good

Q11b Please explain why.

Q12a Are the floor surfaces inside this carriage free of slip and trip hazards...?

	<i>Poor</i>	<i>Adequate</i>	<i>Good</i>
In the Vestibule?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the seating area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q12b Please explain why.

Q13a Is the provision of grab rails and handles in terms of size and shape...?
 1 Poor 2 Adequate 3 Good

Q13b Please explain why.

Q14a How easy or difficult was it reading the seat reservation information shown on small screens above each seat?
 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy 5 No small screens above the seats 7 Small screens are not working

Q14b If quite or very difficult, please explain why.

Q15a How easy or difficult was it reading the seat reservation information shown on seat reservation cards?

- 1 *Very difficult*
 2 *Quite difficult*
 3 *Quite easy*
 4 *Very easy*
 5 *There are no seat reservation cards*

Q15b If quite or very difficult, please explain why.

Q16 (**ASSUME** that you have reserved a seat on this train) How easy or difficult was it identifying your reserved seat?

- 1 *Impossible*
 2 *Very difficult*
 3 *Quite difficult*
 4 *Quite easy*
 5 *Very easy*

Q17 (Now **ASSUME** that you did **not** reserve a seat on this train) How easy or difficult was it identifying which empty seats were available for you to use, and not reserved?

- 1 *Very difficult*
 2 *Quite difficult*
 3 *Quite easy*
 4 *Very easy*
 5 *Impossible/ No seats were empty*

Q18 Please explain further your allocation of scores regarding seat reservation.

Q19 Please provide any additional comments you may have on 'Section 2: Boarding this train'?

Q20 Reviewing all your answers to Section 2, how could the design of and facilities aboard this train be improved to better meet your requirements? [PLEASE NOTE: when answering this question, please consider all journey types e.g. business, commuter and leisure]

Section 3: Your luggage

PLEASE INDICATE THE SUITABILITY OF EACH DIFFERENT STOWAGE LOCATION FOR THE LUGGAGE YOU HAVE TAKEN ON YOUR JOURNEY TODAY. IF IT WAS NOT POSSIBLE TO BRING LUGGAGE, PLEASE ANSWER THE QUESTIONS ASSUMING YOU HAVE BROUGHT LUGGAGE WITH YOU (Please answer these questions in view of your impairment).

- OVERHEAD RACK
- LUGGAGE STACKS AT END OF CARRIAGE
- LUGGAGE STACKS IN CENTRE OF CARRIAGE
- LUGGAGE SPACE BETWEEN SEAT BACKS
- LUGGAGE SPACE BENEATH SEATS

Q21 Please indicate what type of luggage you have brought with you:

Q22 When travelling on the train and sitting in the priority seating or positioned in the wheelchair space, where do you currently store your luggage?

Q23a Please indicate, on a scale of 1 to 10 (where 1=very unsuitable and 10=very suitable), how suitable each stowage facility on this train is in relation to **ACCESSIBILITY** (how easy to get your luggage in and out) for your luggage:

	Very unsuitable										Very suitable	N/A	
	1	2	3	4	5	6	7	8	9	10			
Overhead racks	<input type="checkbox"/>												
Luggage stacks at end of carriage	<input type="checkbox"/>												
Luggage stacks in centre of carriage	<input type="checkbox"/>												
Luggage space between seat backs	<input type="checkbox"/>												
Luggage space beneath seats	<input type="checkbox"/>												

Q23b For any stowage facilities that you have expressed very unsuitable (1, 2, or 3), please explain why.

Q24a Please indicate, on a scale of 1 to 10 (where 1=very unsuitable and 10=very suitable), how suitable or unsuitable you are with the following 'stowage' facilities on this train in terms of the **SECURITY**(e.g. how safe is your luggage) for your luggage:

	Very unsuitable										Very suitable	N/A	
	1	2	3	4	5	6	7	8	9	10			
Overhead racks	<input type="checkbox"/>												
Luggage stacks at end of carriage	<input type="checkbox"/>												
Luggage stacks in centre of carriage	<input type="checkbox"/>												
Luggage space between seat backs	<input type="checkbox"/>												
Luggage space beneath seats	<input type="checkbox"/>												

Q24b For any stowage facilities that you have expressed very unsuitable (1, 2, or 3), please explain why.

Q25a Taking into account your answers to the previous questions in this section (Section 3: Your luggage), which of the following 'stowage' facilities is most appropriate for you to stow your main luggage item in? (Please tick one only)

Overhead racks 1 Luggage space between seat backs 4
 Luggage stacks at end of carriage 2 Luggage space beneath seats 5
 Luggage stacks in centre of carriage 3

Q25b Please explain why.

Q26 Reviewing all your answers to Section 3, how could the design of luggage facilities on this train be improved to better meet your requirements? [PLEASE NOTE: when answering this question, please consider all journey types e.g. business, commuter and leisure]

Section 4: Moving through the train [WHEELCHAIR USERS SKIP TO SECTION 5]

AFTER FIRST 15 MINUTES, AND WHEN TRAIN IS TRAVELLING AT SPEED, IF YOU ARE COMFORTABLE DOING SO, PLEASE UNDERTAKE A VISIT FROM YOUR SEAT THROUGH AT LEAST ONE ADJACENT STANDARD-CLASS SEATING CARRIAGE AND BACK AGAIN, THEN ANSWER SECTION B. NOTE: YOUR TRIP SHOULD INCLUDE A TRIP TO THE BUFFET COUNTER IF POSSIBLE.

Q27 Have you taken a trip through the train?
 1 Yes (Go to Q28) 2 No (Go to SECTION 5)

Q28 Which type of door in this carriage separates the seating area from the space by the external doors?
 1 Open automatically when you approach 2 Automatic with push button

Q29a How easy or difficult is it using these interior doors?
 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy

Q29b Please explain the reason why you have given this answer.

Q30a Which type of door, if any, separates one coach from the next?
 1 Open automatically when you approach Go to Q30b 3 Automatic with push button Go to Q30b
 2 None Go to Q31a

Q30b How easy or difficult is it using these inter-carriage doors?
 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy

Q30c Please explain why.

Q31a How easy or difficult is it to walk / move through this train while it is travelling at speed?
 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy

Q31b Please explain why.

Q32 Are there any handrails provided to make walking between carriages easier? IF NO, would these help and where should they be positioned. IF YES, are they positioned in the correct location and do they provide the required assistance?

Q33a Do you find the aisle...?
 1 Too narrow 2 Wide enough 3 More than wide enough

Q33b Please explain why.

Q34a How easy or difficult is it to see the grab rails and handles? [Please consider contrasting colours]
 1 Difficult 2 Neither difficult nor easy 3 Easy

Q34b Please explain why.

Q34c How easy or difficult is it to use the grab rails and handles? [Please consider size and shape]
 1 Difficult 2 Neither difficult nor easy 3 Easy

Q34d Please explain why.

Q35 Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following facilities at and near the buffet counter:

	Very dissatisfied					Very satisfied					N/A
	1	2	3	4	5	6	7	8	9	10	
Height of counter	<input type="checkbox"/>										
Edges of the counter	<input type="checkbox"/>										
Lighting at/ around the counter	<input type="checkbox"/>										
Visibility of items for sale	<input type="checkbox"/>										
Non-slippery floors	<input type="checkbox"/>										
Ease of reading menu/ price list	<input type="checkbox"/>										
Convenience of queuing space (eg rail to hold onto)	<input type="checkbox"/>										

Q36 Imagine you had bought something from the buffet counter, how easy or difficult would it be to walk / move through the train back to your seat with your purchases and while the train was travelling at speed?
 1 Very difficult 2 Quite difficult 3 Quite easy 4 Very easy

Q37 Please provide any additional comments you may have on 'Section 4: Moving through the train'?

Q38 Reviewing all your answers to Section 4, how could the design of and facilities aboard this train be improved to better meet your requirements? [PLEASE NOTE: when answering this question, please consider all journey types e.g. business, commuter and leisure]

Section 5: Toilet

PLEASE COMPLETE THIS SECTION OF THE QUESTIONNAIRE AFTER YOUR 'MYSTERY' VISIT TO THE NEAREST ACCESSIBLE TOILET

Q39 Is the toilet wheelchair accessible?
 Yes 1 No 2 Don't know 3

Q40 How well or poorly maintained was the toilet?
 Very well maintained 1 Quite well maintained 2 Quite poorly maintained 3 Very poorly maintained 4

Q41 How clean was the toilet cubicle?
 Very clean 1 Quite clean 2 Quite dirty 3 Very dirty 4

Q42a Did the design of the toilet contribute to its uncleanness?
 Yes 1 No 2 Don't know 3

Q42b Please explain why.

Q43a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the design of the toilet: [PLEASE ONLY COMPLETE THOSE QUESTIONS THAT YOU ARE ABLE TO]

	Very dissatisfied					Very satisfied				
	1	2	3	4	5	6	7	8	9	10
Ease of using the door controls	<input type="checkbox"/>									
Ease of using the door lock	<input type="checkbox"/>									
Clear visible instruction on how to lock the door	<input type="checkbox"/>									
Clear visible direction signs to toilet and once in the toilet	<input type="checkbox"/>									
Space within the toilet area	<input type="checkbox"/>									
Quality of toilet and washing/drying facilities	<input type="checkbox"/>									
Quality of baby changing facilities	<input type="checkbox"/>									
Colour contrasting of facilities	<input type="checkbox"/>									
Height of facilities	<input type="checkbox"/>									
Provision for disposal (used paper towels, nappy disposal)	<input type="checkbox"/>									
Mirror	<input type="checkbox"/>									
Facility to hold the toilet lid and seat up	<input type="checkbox"/>									
Hook for hanging coats/ bags	<input type="checkbox"/>									
Floor surface (e.g. slippery)	<input type="checkbox"/>									
Location of toilet flush	<input type="checkbox"/>									
Sufficient room to move about	<input type="checkbox"/>									
Sufficient room for wheelchair (turning circle) [WHEELCHAIR USERS ONLY]	<input type="checkbox"/>									

Q43b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q43c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

Q44 Reviewing all your answers to Section 5, how could the design of and facilities aboard this train be improved to better meet your requirements?

Q45 Please provide any additional comments you may have about 'Section 5: Toilet'.

Section 6: Information during the journey

PLEASE RETURN TO YOUR SEAT FOR THE REMAINDER OF THIS QUESTIONNAIRE

Q46a Are the electronic information displays, in the carriage you are in, working?

- 1 Yes Go to Q46b
 2 No screens Go to Q47a
 3 No Go to Q47a

Q46b How legible is the information on the screens from your seat?

- 1 Perfectly legible
 2 Fairly legible
 3 Not very legible
 4 Illegible/ completely obscured

Q46c Please explain why.

Q47a How audible were the announcements?

- 1 Very audible
 2 Quite audible
 3 Quite inaudible
 4 Very inaudible
 5 N/A

Q47b Please explain why.

Q48 Reviewing all your answers to Section 6, how could the design of and facilities aboard this train be improved to better meet your requirements? [PLEASE NOTE: when answering this question, please consider all journey types e.g. business, commuter and leisure]

Q49 Please provide any additional comments you may have about 'Section 6: Information during the journey'.

Section 7: Design and comfort of selected seating area

COMPLETE THIS SECTION ONLY AFTER SPENDING AT LEAST 45 MINS ON THE TRAIN, MOSTLY SEATED (EXCEPT FOR YOUR MYSTERY TRIPS / TRIPS ALONG TRAIN AND TO TOILET).

IF WHEELCHAIR USER PLEASE GO TO SECTION 8

- PLEASE CONFIRM DETAILS OF SEATING TYPE BY CIRCLING THE RELEVANT OPTIONS BELOW (Please note you need to circle one option from each line):
- PRIORITY SEATING – If you are unable to sit in the 'priority seating' please complete the sections below from the seat you have chosen. However, where possible please comment on the suitability of the seat you are in and where appropriate make comparisons to your previous experiences with 'priority seating'.

- priority seating / airline forward facing / airline rear facing / table seat forward facing / table seat rear facing

- window / aisle

- other passengers seated:

- alongside - yes / no
- in directly facing seat (if any) - yes / no

Comfort of seating - selected seat

Q50a How easy or difficult was it to identify the priority seating (e.g. the quality of signage)?

- 1 Very difficult
 2 Quite difficult
 3 Quite easy
 4 Very easy
 5 Impossible/ no indication

Q50b Please explain why.

Q51a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of seating comfort, in your selected seat:

	Very dissatisfied					Very satisfied					N/A
	1	2	3	4	5	6	7	8	9	10	
Ease of getting into and out of the seat	<input type="checkbox"/>										
Comfort of the seat when upright	<input type="checkbox"/>										
Comfort of the seat when reclining	<input type="checkbox"/>										
Height of seat (considering comfort and view)	<input type="checkbox"/>										
Width of seat	<input type="checkbox"/>										
Depth of seat (length)	<input type="checkbox"/>										
Comfort of front edge of the seat (rounded/ non-rounded)	<input type="checkbox"/>										
Contour and shape of seat	<input type="checkbox"/>										
Leg room - knee clearance (when upright)	<input type="checkbox"/>										
Leg room - knee clearance (when reclining)	<input type="checkbox"/>										
Legroom - foot space (when upright)	<input type="checkbox"/>										
Leg room - foot space (when reclining)	<input type="checkbox"/>										
Comfort of footrest	<input type="checkbox"/>										
Head support	<input type="checkbox"/>										
Back support	<input type="checkbox"/>										
Hardness/ softness of upholstery	<input type="checkbox"/>										
Overall feeling of comfort in this seat	<input type="checkbox"/>										
Sufficient room for guide dog	<input type="checkbox"/>										

Q51b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q51c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

Q51d Suppose your journey on this train took longer than two hours, would any of your answers/ scores for seating comfort change significantly?

- 1 Yes Go to Q51e 2 No Go to Q52

Q51e If yes, please state which of your answers / scores would change and explain why for each?

Q52 Is the general overhead lighting...?

- 1 Too weak 2 Adequate 3 Too strong

Q53a If you are sitting in an airline seat, is there a drop down table on the back of the seat in front of you?

- 1 Yes Go to Q48b 2 No Go to Q49a

Q53b If yes, have you used the drop down table?

- 1 Yes Go to Q48c 2 No Go to Q49a

Q53c Is this drop down table...?

- | | | |
|----------------------------|--------------------------|--------------------------|
| | Yes | No |
| Of a suitable size? | <input type="checkbox"/> | <input type="checkbox"/> |
| Suitable to use a lap top? | <input type="checkbox"/> | <input type="checkbox"/> |
| Firm and strong enough? | <input type="checkbox"/> | <input type="checkbox"/> |

Q53d Please explain why.

Q54a Are there arm rests on the seat you are using?

- 1 Yes Go to Q54b 2 No Go to Q55

Q54b If yes, are the arm rests...?

- 1 Fixed in place 2 Moveable (up and down)

Q54c Is the height of the armrests...?

- 1 Too low 2 A good height 3 Too high

Q54d Is the width of the armrests...?

- 1 Too narrow 2 A good width 3 Too wide

Q54e Are the armrests...?

- 1 Too soft 2 Comfortable 3 Too hard

Q54f Please explain why.

Other seat facilities near your seat

Q55 How accessible were each of the following facilities at your seat?

	Very accessible	Quite accessible	Quite inaccessible	Very inaccessible	There was none
Coat hook	<input type="checkbox"/>				
Magazine net	<input type="checkbox"/>				
Personal power points	<input type="checkbox"/>				
At seat lighting	<input type="checkbox"/>				
WiFi	<input type="checkbox"/>				

Q56 Is the at seat lighting ...?

- 1 Too weak 2 Adequate 3 Too strong

Q57 Did you have to switch on the at seat lighting ...?
 1 Yes 2 No

Windows near your selected seat

Q58a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the windows near your seat:

	Very dissatisfied					Very satisfied					N/A
	1	2	3	4	5	6	7	8	9	10	
Seeing out of the window; field of view including how well seat lines up with window	<input type="checkbox"/>										
Overall size of window	<input type="checkbox"/>										
Quality of blinds/ curtains	<input type="checkbox"/>										
Ability to adjust blinds/ curtains	<input type="checkbox"/>										

Q58b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q58c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

Q59 Reviewing all your answers to Section 7, how could the design of seating and seating area facilities in your 'selected seating area' be improved to better meet your requirements?

Section 8: Wheelchair space [ONLY COMPLETE IF WHEELCHAIR USER Others go on to Section 9]

Q60 Did you reserve a wheelchair space?
 1 Yes 2 No

Q61a Was the wheelchair space available?
 1 Yes 2 No

Q61b If no, please explain why and where you were positioned?

Q62a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the wheelchair space:

	Very dissatisfied										Very satisfied	N/A
	1	2	3	4	5	6	7	8	9	10		
Ease of getting into and out of the space	<input type="checkbox"/>											
Amount of room dedicated to wheelchair space	<input type="checkbox"/>											
Room for movement in wheelchair space	<input type="checkbox"/>											
Signage indicating wheelchair space	<input type="checkbox"/>											
Adequacy of restraint system	<input type="checkbox"/>											
Height and location of assistance alarm	<input type="checkbox"/>											
Overall feeling of comfort in this space	<input type="checkbox"/>											
Position (i.e. closeness) of seat for travelling companion	<input type="checkbox"/>											

Q62b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q62c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

Q63a Is the general overhead lighting...?
 1 Too weak 2 Adequate 3 Too strong

Q63b Please explain why.

Other seat facilities near your seat

Q64 How accessible were each of the following facilities in the wheelchair space?

	Very accessible	Quite accessible	Quite inaccessible	Very inaccessible	There was none
Coat hooks	<input type="checkbox"/>				
Magazine net	<input type="checkbox"/>				
Personal power points	<input type="checkbox"/>				
At seat lighting	<input type="checkbox"/>				
WiFi	<input type="checkbox"/>				

Q65 Is the seat lighting in the wheelchair space ...?
 1 Too weak 2 Adequate 3 Too strong

Q66 Did you have to switch on the at seat lighting ...?

1 Yes

2 No

Windows near your wheelchair space

Q67a Please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the windows near your space:

	Very dissatisfied					Very satisfied					N/A
	1	2	3	4	5	6	7	8	9	10	
Seeing out of the window; field of view including how well seat lines up with window	<input type="checkbox"/>										
Overall size of window	<input type="checkbox"/>										
Quality of blinds/ curtains	<input type="checkbox"/>										
Ability to adjust blinds/ curtains	<input type="checkbox"/>										

Q67b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q67c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

Q68 Reviewing all your answers to Section 8, how could the design of seating and seating area facilities in your 'selected seating area' be improved to better meet your requirements?

Q69 How easy would it be for you to transfer into a seat? (please consider the design and layout of the carriage when answering this question).

Section 9: On-train environment [All to answer]

PLEASE COMPLETE THIS SECTION OF THE QUESTIONNAIRE TOWARDS THE END OF YOUR JOURNEY

Q70 Thinking about the interior layout of the carriage, on a scale of 1 to 10 how spacious does it feel? (Where 1=very spacious and 10=very cramped/squashed)

Very spacious									Very cramped/ squashed
1	2	3	4	5	6	7	8	9	10

Q71a Reflecting on your journey purpose, please indicate, on a scale of 1 to 10 (where 1=very dissatisfied and 10=very satisfied), how satisfied or dissatisfied you are with the following aspects of the environment of this train:

	Very dissatisfied								Very satisfied	
	1	2	3	4	5	6	7	8	9	10
Air conditioning	<input type="checkbox"/>									
Temperature	<input type="checkbox"/>									
Ventilation	<input type="checkbox"/>									
Odour or smell	<input type="checkbox"/>									
Train noise within carriage	<input type="checkbox"/>									
Litter bin provision	<input type="checkbox"/>									
Ease of locating safety/ emergency equipment	<input type="checkbox"/>									

Q71b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q71c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

Q72 Reviewing all your answers to Section 9, how could the design of and facilities aboard this train be improved to better meet your requirements?

Q73 Considering your disability and your journey on this train, how could the design of and facilities aboard this train be improved to better meet your requirements?

Section 10: Booking through Assisted Passengers Reservation Service (APRS)

COMPLETE THIS SECTION ONCE YOU HAVE COMPLETED YOUR JOURNEY

Q74 How did you book assistance through APRS for this journey?

Q75 How easy or difficult was it to book the assistance?

1 *Very difficult* 2 *Quite difficult* 3 *Quite easy* 4 *Very easy* 5 *Impossible/ no indication*

Q76a How satisfied were you with the level of service you received? (Where 1=very dissatisfied and 10=very satisfied)

Very dissatisfied										Very satisfied	
1	2	3	4	5	6	7	8	9	10		
<input type="checkbox"/>											

Q76b For any aspects that you have expressed dissatisfaction with (1, 2, or 3), please explain why.

Q76c For any aspects that you have expressed satisfaction with (8, 9, or 10), please explain why.

PLEASE REMEMBER TO COMPLETE Q7a.2 AFTER YOU HAVE LEFT THE TRAIN

Appendix G – Workshop Topic Guide

Topic Guide Note

Project Title:	Passenger Focus – IEP Rolling Stock Design
MVA Project Number:	C3752500
Subject:	Workshop Topic Guide
Note Number:	Version: 1
Author(s):	Adrian Housley and Martin Dix
Date:	30 October 2008

1 Introduction [3 mins]

- Introduce self, MVA and Passenger Focus (client)
 - **MVA Consultancy:** are an independent market research company with extensive expertise within the transport industry.
 - **Passenger Focus** is the independent national rail consumer watchdog.
- Explain “rules” and introduction to group (phones off, no right or wrong answers, video recording, PF/DfT observers present etc).
- Explain **objective** of the workshop:
 - To examine in detail your views on the design of existing long distance trains and identify the key requirements for the next generation of intercity long distance trains.

2 Group introductions and initial views of long distance rolling stock – *purpose is for the group to get to know each other and to warm into discussion* [5 mins]

- Ask each group member to introduce themselves giving:
 - Ask everyone to write down: - [*questions to be shown on PowerPoint screen*]
 - the one design area for their journeys that delighted them, and what type of train this applied to; and
 - the one design area that should have priority for improvement in the future trains

[ask each participant to read out and explain why]

3 Existing Rolling Stock Design – *purpose is to understand detailed views on current rolling stock*
[25 mins]

- Explain to the group that we will now be splitting them into two groups in order to focus the discussion on certain specific design areas. Each group will discuss the following key design areas and will report back to the other group their conclusions for an open discussion.

Group 1: - design and comfort of seating
 - toilets

Group 2: - seating accessories (including windows) / on-train environment
 - luggage

[see INFORMATION CARDS A, B, C & D for instructions and prompts for each design areas]

- Taking the first design area (e.g. design and comfort of seating), from your experience:
 - which areas (e.g. of the design and comfort of seating) are generally well designed for long distance passengers, on most or all of the trains you have used, and which did you think are poorly designed? Why, in what ways? [see information cards A-D for prompts on each design area]
 - which train type represents best practice in at least some areas of design?. Why, and in what ways?

[participants to use photos and post-it notes (name of train) to blue-tack onto pre-prepared flip chart]

- write down the 5 areas (e.g. of the design and comfort of seating) that are most important to the quality of your journey experience. Why are these particularly important?
- comparing long distance journeys you might make as a business, leisure or commuter passenger, are the same five areas important in each case, or different areas? Which, why? [questions to be shown on PowerPoint screen or Showcard]

[Each group to then repeat for their second design area]

[Moderator(s) to ensure that the key points and conclusions are captured on a flip chart and prior to the discussion a group member volunteers to provide feedback]

[During the discussion the moderator(s) may use preliminary quantitative findings as prompts and where appropriate, time permitting, will also prompt and probe discussion on other areas of train design (agreed with PF as having lower research priority). For example:

- information provision, boarding and moving through the train, buffet design, vestibule area.

4 Feedback [20 mins]

- Once the group has reconvened ask each mini-group representatives to provide a short presentation of their conclusions. After each presentation, ask the other group whether:
 - they are in agreement or whether their views differ [why?]

COMFORT BREAK [5 mins]

5 Preferred Rolling Stock Design – *purpose is to identify priority areas for improvement to achieve a 'step change' in the quality of passengers' long distance rail journey experience* [20 mins]

- Explain that 'we have just looked at your experiences of current types of long distance train, and we now want to look to the future and the next generation of long distance trains.
- Divide group into three mini-groups (business, leisure and commuters).
- Each group will be given a list of design areas and will be asked to prioritise these, thinking from their allocated journey perspective i.e. business, leisure, commuter.

Each group's conclusions will be recorded on an A3 chart [SHOWCARD A] showing a scale from 1 to 10 (where 1 = low priority for improvement and 10 = high priority for improvement).

- The mini-group will be asked to allocate an overall score for each design area and then mark their scores with a different colour pen on a 'master' sheet. At the time of indicating each group's scores on the 'master' sheet, a group representative will be asked to:
 - explain why they have allocated their scores
 - identify any specific design aspects that are not considered a high priority for improvement, but sit outside their overall score for the design area
 - [questions to be shown on PowerPoint screen]
- Once each group has identified on the master sheet the priority areas for improvement we will select the 'common' priority areas that received the highest score and ask the participants:
 - which particular aspects from within this design area (i.e. leg room with 'seating comfort') require the most improvement and why? (Note: prompts from SHOWCARDS A-D to be used)
 - [Note: if the common priority areas are not consistent with those design areas that PF has identified as important (design and comfort of seating, toilets, luggage, seating accessories, on-train environment), we will also explore these further]

6 Trade-offs – *purpose is to explore passenger views on the trade-offs and potential needs for compromise when moving from ideal designs for each area of a train towards designs for trains as a whole* [20 mins]

- We will explain that we have just looked at the priorities for improvements in different areas, taking each in isolation. But it might not be possible to have 'the best of everything' in the new trains. For instance there is only limited space in the train that has to be allocated between seating areas, on the one hand, and vestibules, corridors, luggage areas, buffet and toilet areas etc.
- We will provide a chart [SHOWCARD B] which will have a range of trade-off scenarios focussing first on allocations of limited space.

- We will ask participants to compare their experience on existing long distance rolling stock with what they would like to find in a new generation of trains, asking:
 - which of these design areas (as shown on SHOWCARD B) deserves more space? and
 - where is it acceptable to have less space?.
 - [It will be emphasised that anywhere they indicate they would like more space (e.g. vestibule area) must mean less space in another area]
- We will then look at preferences for seating design in the area that is allocated to seating would they like more seats (per carriage, or per unit area) than in current trains, or fewer?
 - We will start by asking: what are the implications of having more or fewer seats per carriage than now? (then prompt if not spontaneously identified)
 - more seats (per carriage or per unit area) would mean less space per seat and less legroom. This could mean (but say what you think) passengers would be less comfortable sitting for long distances - BUT there would be less risk of not finding a seat, and more passengers would be able to sit on the same train;
 - fewer seats would mean more space per seat, but more risk of not getting a seat and fewer passengers can sit on the same train
 - which would you prefer? Why?
- We will then ask: what other trade-offs or compromises can they think of that the designers will need to consider, and what are their personal views on these?
 - (then prompt if not spontaneously identified)
 - more tables vs. fewer seats
 - more space for luggage between seats vs. fewer seats
 - more seat pitch (allowing seats to recline) vs. less legroom
 - etc (moderator to pick up choices and trade-offs that have come up previously in discussion)

7 Conclusions – *purpose is to summarise conclusions in the form of 'key messages for designers' on passengers' needs and priorities for long distance train design [20 mins]*

- We will ask participants to role-play the people (DfT officials) responsible for the design specification for the next generation of intercity long distance trains. Re-convening the first breakout groups, participants will be asked to consider their 'priority improvement areas', taking on board conclusions from the 'Trade-offs' discussion; and
 - Identify up to ten 'key messages for designers' expressing passenger needs, and priorities - what passengers want designers of the future long distance trains to deliver.
 - These might be in the form of 'minimum standards' for the design areas considered previously (taken from the list of thirteen). But feel free to get your own message across.

[a member of each group will provide feedback on this list]

8 Close

- Thanks participants for their time and ask if anyone would object to the video recording being used by Passenger Focus in presentation material.

Appendix H – Highest and Lowest Approval Score for Each Design Feature

Design area	Train type with:	
	Highest approval score	Lowest approval score
Vestibule Area		
Room in vestibule area	Desiro (SWTs)	FGW HST
Floor surfaces (vestibule area)	Desiro (SWTs)	Pendolino
Floor surfaces (seating area)	Pioneer (Hull Trains)	Pendolino
Provision of grab rails and handles	Pioneer (Hull Trains)	Pendolino
Moving through the train		
Use internal doors	FGW HST	Desiro (SWTs)
Use the inter-carriage doors	FGW HST	Pioneer (Hull Trains)
Walk through the train while it is travelling at speed	Voyager XC	NE East Coast HST
Walk back to seat with purchases while the train is moving	NE East Coast Mallard	FGW HST
See the grab rail	Pioneer (Hull Trains)	Pendolino
Use the grab rail	Voyager XC	Pendolino
Aisle too narrow	Voyager XC	Pendolino
Boarding a train and taking a seat		
Identify destination from external signage	Pioneer (Hull Trains)	Desiro (SWTs)
Get on the train	FGW/NE EC HST	Meridian East Midlands
Find the door handle/controls	Voyager XC	NE East Coast Mallard
Using the door handle/controls	Desiro (SWTs)	NE East Coast HST
Read the seat reservation information (screens)	Pioneer (Hull Trains)	Pendolino
Read the seat reservation information (cards)	NE EC HST	Desiro (SWTs)
Identify their reserved seat	NE EC HST	Voyager XC
Identify unreserved seats	Desiro (SWTs)	Pendolino
Comfort of seating		
Ease of getting into and out of the seat	Voyager XC	Pendolino
Comfort of the seat when upright	Voyager XC	Pendolino
Comfort of the seat when reclining	Meridian East Midlands	Desiro (SWTs)
Height of seat (considering comfort and view)	Voyager XC / NE East Coast Mallard	Pendolino
Width of seat	Pioneer (Hull Trains) / NE East Coast Mallard	Pendolino
Depth of seat	Voyager XC	Pendolino
Comfort of the front edge of the seat	Voyager XC	Pendolino
Contour and shape of the seat	Meridian East Midlands	Pendolino
Leg room – knee clearance when upright	Meridian East Midlands	NE East Coast HST

Design area	Train type with:	
	Highest approval score	Lowest approval score
Leg room – foot space when upright	FGW HST	NE East Coast HST
Comfort of foot area	Meridian East Midlands	NE East Coast HST
Head support	Meridian East Midlands	Pendolino
Back support	Meridian East Midlands	Pendolino
Hardness/softness of upholstery	Meridian East Midlands	Desiro (SWTs)
Overall feeling of comfort in this seat	Pioneer (Hull Trains)	Pendolino
Seating accessories		
Coat hooks	Meridian East Midlands	FGW HST
Magazine holder	Meridian East Midlands	NE East Coast HST
Personal power point	Meridian East Midlands	Pendolino
At seat lighting	Voyager XC	FGW HST
WiFi	NE EC HST	Pendolino
Drop-down table suitable size	FGW HST	NE EC HST
Drop-down table suitable to use a laptop	FGW HST	Desiro (SWTs)
Drop-down table firm and strong enough	Pioneer (Hull Trains)	NE East Coast Mallard
Arm rest hardness	Meridian East Midlands	NE East Coast Mallard
Arm rest width	Pioneer (Hull Trains)	Desiro (SWTs)
Windows		
Seeing out of the window	NE EC HST	Pendolino
Overall size of the window	Pioneer (Hull Trains)	Pendolino
Quality of blinds/curtains	Pendolino	Meridian East Midlands
Ability to adjust blinds/curtains	Pendolino	Meridian East Midlands
Toilets		
Ease of using the door controls	Desiro (SWTs)	FGW HST
Ease of using the door lock	Meridian East Midlands	Desiro (SWTs)
Clear visible instruction of how to lock the door	FGW HST	Desiro (SWTs)
Clear visible direction signs to toilet and once in toilet	Voyager XC	Desiro (SWTs)
Space within the toilet area	Voyager XC	NE EC HST
Quality of toilet and washing/drying facilities	Meridian East Midlands	Pioneer (Hull Trains)
Quality of baby changing facilities	Voyager XC	Desiro (SWTs)
Provision for disposables	Meridian East Midlands	Desiro (SWTs)
Mirror	Voyager XC	Meridian East Midlands
Facility to hold the toilet lid and seat up	Voyager XC	Desiro (SWTs)

Design area	Train type with:	
	Highest approval score	Lowest approval score
Hook for hanging coats/bags	Voyager XC	NE EC HST
Floor surface	Voyager XC	Desiro (SWTs)
Location of toilet flush	Desiro (SWTs)	Pioneer (Hull Trains)
Luggage provision		
Space provided:		
Overhead racks	NE East Coast HST	Meridian East Midlands
Luggage stacks at end of carriage	Pioneer (Hull Trains)	Meridian East Midlands
Luggage stacks elsewhere in carriage	Voyager XC	Pendolino
Luggage space between seat backs	Voyager XC	NE East Coast Mallard
Accessibility:		
Overhead racks	NE East Coast HST	Voyager XC
Luggage stacks at end of carriage	Pioneer (Hull Trains)	Meridian East Midlands
Luggage stacks elsewhere in carriage	Voyager XC	Pendolino
Luggage space between seat backs	Pioneer (Hull Trains)	Voyager XC
Security:		
Overhead racks	NE EC HST	Desiro (SWTs)
Luggage stacks at end of carriage	Pioneer (Hull Trains)	NE East Coast Mallard
Information provision		
Audible announcements	Pioneer (Hull Trains)	FGW HST
Legible information displays	n/a	n/a
On-train environment		
Air conditioning	Meridian East Midlands	NE EC HST
Temperature	Meridian East Midlands	NE EC HST
Ventilation	Meridian East Midlands	Pendolino
Odour or smell of train interior	Desiro (SWTs)	NE EC HST
Noise within carriage (train not passengers)	Voyager XC	Meridian East Midlands
Litter bin provision	NE EC HST	FGW HST
Ease of locating safety/emergency equipment	FGW HST/ Meridian East Midlands	Pendolino
Buffet		
Height of counter	NE East Coast Mallard	Pendolino
Edges of the counter	Voyager XC / NE East Coast Mallard	Pendolino
Lighting at/around the counter	NE East Coast Mallard	Voyager XC
Visibility of items for sale	Meridian East Midlands	Voyager XC

Design area	Train type with:	
	Highest approval score	Lowest approval score
Non-slippery floors	Voyager XC	Pendolino/ Meridian East Midlands
Ease of reading menu/price list	Pioneer (Hull Trains)	FGW HST
Convenience of queuing space	NE East Coast Mallard	Voyager XC

Key	
First Great Western – High Speed Train	FGW HST
National Express East Coast – High Speed Train	NE EC HST
East Midlands Trains - Meridian	Meridian East Midlands
Hull Trains - Pioneer	Pioneer (Hull Trains)
Virgin Cross Country - Voyager	Voyager XC
South West Trains - Desiro	Desiro (SWTs)
National Express East Coast - Mallard	NE East Coast Mallard
Virgin Trains - Pendolino	Pendolino

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