Consultation comments and responses

Document Title: Seat Comfort Assessment Guidance Note.

Document number: GMGN2696

Consultation closing date: 08 November 2022

1. Responders to consultation

No	Name	Company
1	Louise Shaw	Transport Scotland
2	Philip Hunt	DfT
3	David Polhill	Chair of KTR drafting group
4	Syd Scrace	Hitachirail
5	Paul Griggs	Alstom
6	David Gordon	DGDESIGN

2. Summary of comments

Code	Description	Total
-	Consulted	79
CE	Critical errors	0
ED	Editorial errors	20
TY	Typographical errors	5
OB	Observations	5
-	Total comments returned	0

Classification codes for a way forward:

- DC – Document change
- NC – No change

3. Collated consultation comments and responses

No	Page	Clause	Comment	Suggestion	By	Way forward	Page	Clause	Response
1	All		Transport Scotland is strongly supportive of the development of means to ensure that seats on trains can be bought in a manner that ensures passengers can be comfortable, that procurement is competitive and performance measurable. It is therefore supportive of both the KTRs and this standard, in principle. However, it must not be possible to "game" the scoring to ensure that seats that are uncomfortable can compare well with seats which are. The guidance must also take due account of the longevity of trains, and hence the increase in height of the population over that lifetime. Today's average person is not average in the next generation.		1	NC			Noted. There is an expectation for the document to be used by persons applying expert judgement when specifying the target specification, and for the persons undertaking the assessments.
2	0		A very useful document that nicely summarises T1140 and other recent documents on seat comfort.	I'd like to have a chat about the best way to incorporate into KTR, either for v7 or the subsequent issue.	3	NC			Noted. A discussion on this matter has been conducted.
3	0		There is nothing much about installing in vehicles. The use of spacers and ensuring the seat side adjacent to the bodyside has shoulder room. There's also things like low level bodyside grilles and table supports that can affect comfort. We discussed some of this during the EuroSpec seat comfort drafting but didn't included.	Some guidance on positioning and space would be useful. Perhaps we can have a chat about this too.	3	DC			Noted. A discussion on this matter has been conducted. Additional guidance in relevant sections of the document have been added to provide information on positioning and space.
4	0		The EuroSpec Seat comfort document also includes a management questionnaire which can be used to determine the style of seat needed to suit a particular train type or journey type.		3	DC			Clause added to Appendix B.1: "Section 3 in "EuroSpec Seat Comfort Appendices v1.0" includes a series of questionnaires that can be used to decide on parameters relating to journey time, postures, etc."
5			The EuroSpec Seat comfort document also includes a series of user questionnaires which can be used to ask specific questions about seats chosen for comparison.		3	DC			Clause added to Appendix B.1: "Section 3 in "EuroSpec Seat Comfort Appendices v1.0" includes a series of questionnaires that can be used to decide on parameters relating to journey time, postures, etc."
6			As an overall comment score weightings in places now very skewed/unfair so need re-considered.		6	DC			The scores have been revised throughout as part of the review of comments received from consultation. The version of the guidance note to be published will reflect this improvement.
7	8	1.2.2	Repeated word 'the'	Correct to 'Commitment 41 in the'	2	DC			Removed additional "the".
8	8	1.2.4	Word missing: 'set out the following'	Correct to 'set out in the following'	2	DC			Added "in".

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9	12	G2.1.12	A seat could be made out of a pallet that could score 70 ie suitable for the high-end of Inter-city application. This would clearly not be suitable.	Have another go at the scoring process. It shouldn't be possible to score well on dimensions alone. It must not be possible to score well without doing well in the comfort testing process.	1	DC			A hierarchy of requirements for the procurement of seats could include the use of a deformable material (such as a cushion). The purpose of this guidance note is to provide a consistent approach in quantifying comfort. If the comfort levels for a cushioned seat were to be compared with a seat that is rigid, then the rigid seat will not be able to score points for the compressibility and durability tests and is likely to lose out to the seat made with cushion.
10	12	G2.1.13	Thickness of itself may not be a useful indicator of comfort. A brick has thickness but is not comfortable.	Combine thickness with an additional criterion?	1	DC			This is covered by a compressibility test in Part 5 of GMGN2696. A brick (or other rigid material) is not compressible so they would not be scored in this section. A thicker seat made of cushion can be more comfortable.
11	10	G2.1.4	Figure 1: Expected range of scores for seats from T1140 shows a score range to indicate what each train type should be scoring to be deemed comfortable for its type of service. But these ranges were done for T1140 scoring metric and the GMGN2696 metric is very different. Alstom have scored a few seats and believes: the lower metro/regional will move up; the Intercity / VHS will move down; and the regional and intercity ranges be more compacted and overlapping. But this needs further validation before being put as a guideline, as TOCs will use these ranges to think if their seats are good enough or not.	A range of seats should be scored to see the values what would be deemed the acceptable range for a Regional train; Inter city and VHS, as they will not be at 25 point gaps. This should be done before release so no false impression on new seats is given where a basic metro seat might score 35 and consider itself a regional seat, OR a comfortable VHS seat score only 70 and deemed not comfortable when it is. A small range of seats should be scored under the new metric before setting the boundaries on each perceived range.	5	DC			The score values on Figure 1 have been removed to avoid giving readers pre-conceived notions of comfort scores. Expected scores can be derived from experience or indicatively through seat specifications.
12	11	G2.1.8	The list of components fails to consider that clearance for shins and place to put feet also forms an important part of being able to sit comfortably, without having to have lower legs tucked underneath the knees – passengers need to have room to place the feet.	Add a dimension to permit shin clearance and a space for feet.	1	DC			Clause G3.9.10 states, "It is good practice for seat assemblies to adopt the use of a central support pedestal as it provides equity in terms of foot space and better under-seat storage." Seat assemblies with a central pedestal design can enable passengers to sit with space for their shins and feet. Clause 3.9.9 has been revised to provide further emphasis that equipment in the legroom area will greatly reduce passenger comfort. .

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13	10	G2.1.8 & table 2	Backrest - is it possible to add backrest width instead of Backrest Same remark of Angle of seat - is it possible to change it to Angle of seat cushion	a) Seat height* b) Seat depth* c) Seat width and gap between armrests d) Backrest width e) Armrest height f) Underside of headrest to seat g) Angle of seat cushion h) Angle between seat and back i) Legroom j) Bay seating arrangement k) Clearance under tablet* l) Tablet depth	5	DC			Agreed. Term changed to “backrest width”.
14	12	G 2.1.13, G 2.1.14	‘maximum possible score’, but shows two values	Correct to ‘The maximum possible scores’	2	DC			Changed to “scores”.
15	11	G 2.1.7	If it is not a pass/fail then a score and weighting should be applied otherwise a seat with too high a front edge or too long a depth could still sneak through without any consequence.	If seat height and depth are not scored then it needs to be made clear why this is – is it a pass/fail and if so this should be stated?	6	NC			A pass / fail criteria cannot be set as this would form requirements in this document. The assessment for seat height relates to the PRM NTSN so seats that are outside the specified value will be uncomfortable. For seat depth, the value of 435 mm +/- 10 mm was set out in T1140 and it was straightforward to apply a comfortable / uncomfortable result from this measurement.
16	10	G2.1.8 & table 2	There is no score for height / shape of headrest which could have a large effect on perceived comfort. Is it assumed that because it’s a UK comfort guideline all the seat would be high backed with headrests to meet GMRT2100 ? This may not be the case if used on Metros etc where GMRT2100 is not required.	Discuss if to add seat headrest height / shape / angle into requirements	5	NC			The requirements for the seat’s headrest are covered by requirements relating to passenger containment and interior passive safety.
17	12	G 2.1.14	‘the seat thickness tests’ repeats from G 2.1.13	Correct to ‘the seat compressibility tests’	2	DC			Agreed. Changed to “compressibility”.
18	14	G2.2.1	Chair measurement device: For new development can we have a preliminary assessment of seat comfort without using the chair measurement (is it possible to find a correlation about chair measurement and drawing dimensions) ?. To measure the seat height (when loaded) if we don’t have the CMD or the seat is not yet produced, there needs to be an easy way to estimate this dimension, if you are relying on industry individuals to calculate its own value for prelim design then there wont be a standardised process for fair comparisons.	Discuss if to add values for compression of CMD on various foam densities and thicknesses ? or leave it to industry to make its own way of doing assessment in preliminary stages which will lead to deviations	5	NC			Measurements are undertaken using a CMD but it is reasonable to undertake calculations based on the CAD model of the CMD as its properties including mass and dimensions are known. Properties of the seat such as material density, stiffness, can be known so its interaction with the CMD can be determined using CAD.

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19	16	G2.3.6	It would be useful to add reference some sort of body mapping questionnaire such as the NMQ (Nordic Musculoskeletal questionnaire) – because for example, on CL720 we had that issue with the kick tin, where the seat was reasonable, but the position of the kick tin meant that the user had less foot space and then potentially more perceived discomfort in one of their legs. Body mappings helps highlight specific areas. Details / examples of the body maps can be given	G 2.3.6 Additional information on other factors that can affect passenger seat comfort are set out in Appendix D. The appendix includes information on: a) Seat pressure mapping b) Body mapping c) Seat hardness and measurement d) Seat contour. Enter body mapping in appendix D	5	DC			Noted. Can be added.
20	17	G 3.1.2	Repeated word 'the'	Correct to 'A target value of the'	2	DC			Corrected. Additional "the" removed.
21	21	G 3.3.1.2	'edge of the armrests are aligned'	Correct to 'edge of the armrests is aligned', or 'edges of the armrests are aligned'	2	DC			Corrected to, "…edges of the armrests are aligned".
22	17	G3.1.3	'The dimension measures the vertical distance from the footrest surface to the lower surface of the thigh immediately behind the knee, bent at right angles" is it possible to change the footrest to the top of floor, as we have excluded footrests from the seat standard ?	The dimension measures the vertical distance from the top of the floor to the lower surface of the thigh immediately behind the knee, bent at right angles.	5	DC			Changed "footrest" to, "vehicle floor surface".
23	18	G.3.2.1	Repeat of Seat depth picture fig 6	Delete Fig 6	4	NC			This is a deliberate repeat of the image as it is intended to be useful to the reader in undertaking the measurement for seat depth.
24	19	G.3.2.7	Repeat of Seat depth picture fig 5	Keep	4	NC			Noted.
25	21	G 3.3	The sensible way to measure seat width is to use dimension D1 and as shown on page 22 for all seats (with or without armrests) as this better represents the useable seat width when seated – not simply the gap between arms when entering the seat.	On the diagram on the right of page 21, dimension C2 could be 500mm and dimension C1 459mm and the seat would score 2 points, whilst C1 and C2 on diagram on left could be 440mm and this would also score 2 points, but has 60mm less useable hip space! All this serves to do is penalise seats with armrests. Measuring based on armrest width takes no account for the fact that an armrest could be shaped to be wider in the front than rear as shown below. Score weightings also too extreme – a jump from 2 points (440 – 459) to 9 points (460 – 503)?	6	DC			The scores have been revised to: <440 440 – 459 460 – 503 504 – 524 >525 0 2 6 5 4. The jump from 2 to 9 has thus been reduced.
26	21	G.3.3.1.1	Fig 7 shows two seats	Just show one pair	4	DC			Correct. The purpose of this figure is to inform the reader of the measuring C1 depending on the design of armrests. New clause added to explain the difference between the images on the left, and right of Figure 7.
27	21	G 3.3.1.8	Spelling 'calliper'	Amend to 'caliper' (consistent with G 3.4.8 and G 4.2.5)	2	DC			Spelling corrected to "caliper".

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28	22 & 24	G3.3.2.1 & G3.3.2.2	Are the dimension lines going to the outside dimension of the seat frame or the seat cushions?. As may be a few mm different depending on seats used as some seats have external structure larger than cushion surfaces.	Discuss and put a short sentence to clarify	5				Clause G 3.3.2.1.5 reads, "The measurement is undertaken from the centreline of the central spacer on side of the seat, to the edge of the seat pad." This informs the reader to measure to the edge of the seat pad.
29	25	G.3.4.1	Fig 11 Shows 3 identical pictures with back measurement	Just show one pair	4	DC			Figure 11 will remain unchanged as it shows three forms of backrest width measurements: 1. For seats with armrests 2. For seats without armrests or spacers 3. For seats with spacers. Clause added to explain the differences between the drawings in Figure 11.
30	25	G 3.4.3	Suggest a review of the scores for the backrest widths. Not many train seats in standard class will meet the 500 mm width.	Review the values (telephone discussion had with Barry Tan on this topic).	5	NC			The values for the backrest widths are unchanged in this initial version of the guidance note. We understand that not many train seats can have a width of 500 mm and this is likely to be limited by the actual body width of trains, and the number of seats each vehicle is required to be equipped with.
31	26	G.3.4.8	Fig 12 Shows the measurement but ought to have a reference to table 8?	Show dimension with table 8 ref.	4	NC			This figure shows the method for measuring the backrest. G 3.4.3 informs the reader that the measurement for the backrest in Figure 11 ties in with Table 8 for the scores.
32	28	G3.5.9	The armrest sleeve material could have an impact on comfort, is it something that could be included on scoring ? A painted aluminium casting verses a fabric cushioned pad will be very different in terms of comfort – both thermal (col tracking) and tactile	Discuss and review if score should be introduced Metal = 0, hard PU, fabric with no cushioning and wooden, pads = 1 and cushioned fabric pads = 2	5	NC			Can be considered for inclusion in a future revision.
33	33	G 3.8	The score weighting is too skewed towards adjustability. Given that a seat, for example with 97-degree angle could be very comfortable, scoring it 2 and one that has adjustability of 95 – 120 scores 12 points just doesn't tally. A seat with 120 degrees could be less comfortable than the same seat cushions at 97-degrees unless the seat base cushion angles to hold the posture more stable and prevent sheer on the thighs.		6	DC			The previous version of the scores were: G 3.8.5 The scores are shown in Table 12. Dimension (°) | <95° | 95° - 99° | 100° - 105° | 95° - 105° (adjustable) | 95° - 120° (adjustable) Score | Uncomfortable | 2 | 4 | 7 | 12 This scoring system has been split into two: 1. Scores for seat angles 2. Scores if seats are adjustable. Dimension (°) | <95° | 95° - 99° | 100° - 105° | 105° - 110° | >110° Score | Uncomfortable | 2 | 4 | 2 | Uncomfortable **Table 12:** Scores for the angle between the seat and back Dimension (°) | No adjustment | Up to 6° Single position | 6° - 15° Multiple positions | 16° - 25° Multiple positions | >25° Multiple positions Score | 0 | 2 | 4 | 6 | 8 **Table 13:** Scores for the adjustability of the angle between the seat and back

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34		G3.9.1	The minimum dimensions and possibly subsequent dimensions are not compatible with the criterion in G3.1.6 which suggests tall users can stretch legs up to 30 degrees to sit comfortably. Therefore the score should be negative, not zero.	Change the criterion to ensure consistency across the different quantities specified.	1	NC			The scoring system in this document does not include negative scores. In the development of this guidance note, a value of zero for legroom less than 695 mm was set.
35	35 & 37	G3.9.1 & G3.10.1	Put 620mm dimension on drawing so its clear height to measure knee room at	Mod drawing	5	DC			Image updated to include the 620 mm height above the floor to measure the legroom.
36	35	G3.9.3	Note should be added to explain whilst having larger legroom is an improvement to comfort, it may make equipment mounted on the seat back (tables, cup holders, power sockets, etc) less usable and decrease overall comfort of seat and features	Add G3.9.11 to explain how best practice may be a compromise on legroom verses usability of seat back features. Can reference G3.12.9 as mentioned here	5	DC			The following clause has been added, “Seats with excessive legroom (i.e. where the seat are spaced too far apart) can reduce the usability of seat back features such as the tablet and may be in conflict with requirements relating to interior passive safety for passengers.”
37		G3.9.6	The clothing allowances seem to be consistent with summer clothing only, not winter clothing.	Increase the allowances	1	DC			Clause 3.9.6 has been modified to include guidance that the 30 mm clearance will be reduced when passengers wear additional clothing due to inclement weather or during colder seasons.
38	36	G 3.9.10	‘good practice ... to adopt the use of a central support pedestal’ but Figs 7, 9, 11, 12 each show a different position.	Amend Figures to reflect the ‘good practice’	2	DC			Images have been updated to show the seat assemblies with central pedestals.
39		G3.10	95th centile males tend to have very large feet as well as long legs. The minimum dimensions and possibly the subsequent dimensions will create an interference fit between a tall male and any other person sat opposite them. This is not acceptable considering it reduces the capacity of a bay from 4 to 2, and requires acceptance of such an interface by both parties.	Revisit the required dimensions.	1	DC			Two new clauses added: Where tables are included in bay seating arrangements, it is good practice to consider the vertical clearance between the vehicle floor to the underside of the table to enable passengers with long shins to fit comfortably. It is also good practice to consider the position and dimension (e.g. width) of the table's vertical support column to not force passengers' legs into uncomfortable positions.
40	37	G 3.10.1	K looks like a dimension above head height not at 620mm as described in Fig 22	Show K at 620mm height	5	DC			Actually, the clause doesn’t say whether the 620 mm is from floor or seat squab height. This could also be indicated in the diagram. Clause modified to read, “…620 mm measured above the train floor”. Image also updated.
41	37	G.3.10.3	Repeated word ‘the’	Correct to ‘It is good practice for the’	2	DC			Removed extra “the”.
42	38	3.11	The term tablet is from T1140, in KTR we have changed tablet to table to differentiate from tablets as mobile devices	Explain ‘tablet’ or change to ‘table’.	3	DC			Added an additional note in G 2.1.8 to explain what a tablet is. "Seat-back table" has been added to the note.
43		G3.11.4	The dimension does not achieve 40mm clearance for the 95th centile male shin-length.	G.11.3 should be 660mm	1	DC			The 40 mm clearance has been changed to 30 mm clearance.

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44		G3.11	This section should be extended to cover tables in bays as well as tablets.		1	NC			Noted. This dimension focuses on the concept of foldable tablets from the seat in front of the passenger.
45	41	G 3.12.14 Fig 25	Missing text “No contact in this…”	Add missing text.	3	DC			3.12.15 is also missing a “figure” next to the “25”. The word “Figure” has been added
46		G 3.10	Missing criterion – bay tables create problems for accessing a seat if done insenitifitvly, by not allowing knee room to pass and by being too low.	Add a section.	1	NC			This document does not set out information for tables installed in a bay-seating arrangement.
47		G 3.6	This section doesn’t allow for the type of head cushion fitted to IETs, which some people find annoying.	Any mobile head “pads” eg in the style of IET trains needs to be considered in this section, not just the seat back.	1	DC			Clause added: For seats fitted with detachable pillows for head support, it is good practice to consider that the pillows do not excessively displace the passenger's head too far forward as it can cause discomfort.
48		G3.3.1.6	Good!	Keep thinking effectively.	1	NC			Noted.
49	41	Fig 25	The highlighted test “No contact in this ..” has been truncated?	Add “area” or” GD zone”	4	DC			The caption has been updated to read, “No contact in this zone”. The image was from the TecRec 2014 and has been reproduced without changes.
50	42	G4.1 & G4.2	Both Pad and Backrest score a maximum of 5 BUT is the Pad thickness more important for comfort than backrest	Should Pad score be on higher scale?	5	DC			The scores for the seat pad and back pad have been revised to give the seat pad a higher value as shown below: Seat pad Thickness (mm): <30 30 – 49 50 – 60 >60 Previous Score: 0 3 4 5 New Score: 0 4 5 6 Back pad Thickness (mm): <25 25 - 30 31 - 35 >35 Previous Score: 0 3 4 5 New Score: 0 2 3 4
51	42	G 4.1.3	Spelling ‘fulfill’	Amend to ‘fulfil’ (generally British English spelling)	2	DC			Spelling corrected to “fulfil”.
52	42	G.4.1.3	Fulfill should be fulfil	Amend	3	DC			Spelling corrected to “fulfil”.
53	42	G.4.1.7	Underside of seat pan is confusing. The cushion touches the top side	Review wording	3	DC			Clause updated to: “Bottoming out means that the seat foam has reached its compression limit when sat on by a passenger”
54	42	G.4.1.10	Missing articles	measure the height of the seat pad from top side of the rigid seat base to the top side of the fabric cover.	3	DC			Agreed. Articles added.
55	42	G.4.1.11	Off should be from	70 mm from seat centreline	3	DC			Agreed. Text amended.
56	43	G.4.2.5	Missing article	Measure the back pad thickness of the pad at the centre point using a horizontal rule and caliper depth measuring blade.	3	DC			Agreed. Article added.
57	43	G.4.2.6	Repeated word ‘the’	Correct to ‘The back pad thickness is the’	2	DC			Agreed. Duplicate “the” removed.
58	43	G.4.2.7	Meaning of + 40 mm comfort unclear	Please explain	3	DC			Clause amended to read, "The measurement height of 280 mm refers to the sum of the seated passenger's elbow height of 240 mm and an allowance of 40 mm for comfort."

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59	45	G.5.1.2	tests should be test	… two test loads	3	DC			Agreed. “tests” is now “test”.
60	45	G 5.1.4 Fig 28	Some parts of figure too small to read	Adjust styling and size	3	NC			Figure 29 is a direct reproduction from a table in T1140 so it cannot be altered within this document.
61	45	G 5.1.5	Fig 29 ‘Value’ column has ‘mm’ units in first row only	Amend heading to ‘Value, mm’ or add ‘mm’ to each row	2	NC			Figure 29 is a direct reproduction from a table in T1140 so it cannot be altered within this document.
62	45	G 5.1.5 Fig 29	‘It shows that there are diminishing values for the scores as the seat pad thickness increases.’ But the scores in the table suggest the opposite, i.e. <30 score 0, >60 score 3.5	Check and clarify intended meaning	2	DC			The intent of this is for the seat to compression when sat on by a lighter person (i.e. providing more compression) while simultaneously providing enough support for heavier persons (i.e. not compressing too much when sat upon).
63	45	G 5.1.5 Fig 29	Text too small to read	Adjust sizing	3	NC			Figure 29 is a direct reproduction from a table in T1140 so it cannot be altered within this document.
64	46	G5.2.5	What is score for Compression % over 53 % ?? Would a super soft spring / foam reaching 55% on 500N load be a fail or max score or something else?	In table 19 add one or two columns for values over 52%. Would suggest 53-58 = 5 and then >58% = 0 so suppliers don’t just use super soft foam and score max here and ignore 1100N loads	5	DC			The intention here is for the seat pad to meet the requirements in both categories. The requirements ensure that no seat pad is too hard or too soft. A new clause, G 5.1.4 has been added and it reads, “*It is good practice is to achieve a balance between the outcomes of the two sets set out in G 5.1.2 as opposed to using one user group to maximise the test results at the expense of the other. For example, designing a seat pad with very high stiffness to maximise the score for the 1100 N test while scoring zero for the 500 N test is not in the spirit of this document.*”
65	46	G5.3.5	What is score for Compression % under 51 % ?? Would a super hard spring / foam reaching 45% on 1100N load be a fail or max score or something else?	In table 20 add one or two columns for values under 51%. Would suggest 45-50 = 5 and then >45% = 0 so suppliers don’t just use super hard foam and score max here and ignore 500N loads	5	DC			The intention here is for the seat pad to meet the requirements in both categories. The requirements ensure that no seat pad is too hard or too soft. A new clause, G 5.1.4 has been added and it reads, “*It is good practice is to achieve a balance between the outcomes of the two sets set out in G 5.1.2 as opposed to using one user group to maximise the test results at the expense of the other. For example, designing a seat pad with very high stiffness to maximise the score for the 1100 N test while scoring zero for the 500 N test is not in the spirit of this document.*”
66	47	Appendices	What is the intention for the Appendices ? Are they going to be used, are they recommended or just for info?	Before Appendix A add a short description as to purpose of these appendices as supplementary info to help seat design but not necessarily increase comfort	5	DC			Clause G 2.1.7 has been modified to include, “for information” at the end of the clause to inform the reader that the appendices in this guidance note are for information.
67	50	G B.1.5 Qu 3	Repeated word ‘and’	Correct to ‘seat and back’	2	DC			Agreed. Duplicate “and” removed.
68	50	G B.1.11 Fig 31	Some parts of figure too small to read	Adjust styling and size	3	Nc			The images were from T1140 and have been reproduced without alteration.
69	50	G B.1.11	Images for seat survey would not be appropriate to use for the comfort assessment as none are mounted in airline config as per on train, so missing all functionality of rear equipment plus legroom etc	For mock ups would always recommend showing in a config same as on train to get real context of comfort and get most accurate survey results	5	DC			The following sentence has been added, “It is beneficial for the surveys to be undertaken on a mock up of the actual seat configuration on a train to enable passengers to test features such as the legroom, and tablet.”.
70	51	G B.1.12 Fig 32	Some parts of figure too small to read	Adjust styling and size	3	NC			The images have been reproduced from T1140. Additional information can be requested from RSSB.
71	51	G B.1.14	‘the survey the user are about to’	Correct to ‘the survey the user is about to’, or ‘the survey the users are about to’	2	DC			Corrected to, “The aim of the survey the user is about to participate in”.

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72	51	G.B.1.14	Improve wording of bullets	a) The aim of the survey the user is about to participate in; b) A statement stating the user's role in the questionnaire; c) […] d) A statement explaining that participation is voluntary and users can withdraw at any time; e) A statement that data collected will be anonymous, containing no personal details, other than age and gender and will comply with requirements of GDPR.	3	DC			Changes as per the suggestion have been applied.
73	56	D.1	The EuroSpec Seat Comfort document also includes pressure mapping and comfort points	Include reference to this too.	3	DC			Clause added to D.1.
74	56	GD.1.3	EUKL SK 271 ISSUE A. Is this reference easy to locate? I could not find it on any website? Additionally, its not in the reference section.	Ensure that any reference is easy to obtain or show where it can be found	4	DC			A copy of this document was provided by a member of the drafting group. Information on locating this document directly from RSSB's website has been included.
75	59, 60	Figs 37, 38, 39	Font size within image too small	Re-create graphs with larger caption font	2	NC			The graphs have been reproduced without modification so we understand that it is difficult to read. Without the source data, we are unable to reproduce the graphs to enhance legibility. Information on this can be requested from RSSB to assist.
76	60	G D.3.1	Missing articles or words … better support passengers … space in uni-directional	Passenger's what? Perhaps 'in the uni-directional'	3	DC			Changed to: 1. "for seated passengers" 2. "in the uni-directional".
77	63	PRM NTSN	Missing space before (PRM NTSN)		3	DC			Space added
78	64		EuroSpec Seat Comfort document not mentioned in bibliography.	Please add EuroSpec Seat Comfort document to list.	3	DC			Reference added.
79	64		Should EUKL SK 271 be included in this section?	Add to list	3	DC			Reference added.