

Managing Level Crossings: Guide for designers, operators and users - Consultation Comments from: Dave Harris - Signalling Solutions

Page	Section	*Type of comment	Comments (explanation why change is required)	Proposed revised text
8	Industry standards	ed	The current Railway Group Standard reference should not be to GI/RT7012.	
11	Applying the guidance Paragraph 3	ed	The reference to paragraph 7 should be to paragraph 6.	
11	Applying the guidance Paragraph 6	ed	“Road and rail” should be deleted. Level crossing users are those crossing the railway as defined in Appendix D on page 89.	
	Appendices A, B, C, D	ge	Different appendices A, B, C and D appear in chapters 2 and 3. Suggest appendices in chapter 3 are changed to E, F, G and H.	
17	Table 1 Section 4	ed	Only “traffic moment and actual daily road vehicle user” should be italicised in the first sentence of the text of conditions for suitability.	As comment.
17	Table 1 Section 4	ed	In the penultimate line of the text of conditions for suitability, “it is” should read “is it”.	As comment.
17	Table 1 Section 4	ed	Add “the” before “signals” in the second line of the second sentence of the text of conditions for suitability.	As comment.

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17	Table 1 Section 5A	ed	The text of the conditions for suitability in Section 5A should be the same as for Section 5. As written, the conditions for suitability are not specified.	As Section 5.
17	Table 1 Section 6	ed	In the first line of the text of conditions for suitability, "train" should read "trains" and in the last sentence on page 17, "carriage" should read "carriageway".	As comment.
17	Table 1 Section 6	ed	In the eighth line of the text of conditions for suitability, the paragraph reference should be 75, not 76.	As comment.
18	Table 1 Section 7	ed	In the first line of the text of conditions for suitability, "crossings" should read "crossing".	As comment.
18	Table 1 Section 8	te	The second sentence of the text of conditions for suitability should be the same as in Sections 6 and 7.	There should not be more than two running lines.
18	Table 1 Sections 7 and 10	ed	Suggest first line of text of conditions for suitability should read "The speed of trains" to be consistent with the text in Sections 6, 8, 9, and 11.	As comment.

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18	Table 1 Section 10	te	The last sentence of the text of conditions for suitability should be two sentences as shown in proposed revised text.	Where no additional protection is provided, the time required by likely users to traverse the <i>crossing length</i> to be at least 5 seconds less than the <i>warning time</i> available. Where miniature stop lights are provided, the warning period should be greater than the time required by likely users to traverse the crossing length by not less than 5 seconds.
19	Paragraph 22	ed	Add “The positioning of” at the beginning of the first sentence.	As comment.
19	Paragraph 24	ed	The Section referenced in the last line should be 19, not 18.	
20	Paragraph 26	te	MSL are not normally provided with an alternative power supply. See note at the end of Section 18 on page 63.	
20	Paragraph 29	ed	In the second line, “control point” should be italicised.	
21	Paragraph 33	ed	In paragraph 33 (a), the railway staff are “competent”, but in paragraphs 42/44 they are “assigned”. Why was paragraph 33 changed?	
21	Paragraph 35	ed	Add “not” before “across” in the last line.	As comment.

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22	Paragraphs 38 and 39	ed	Suggest “danger” is changed to “Stop” to be consistent with the text in Table 1, Section 4 on page 17.	As comment.
22	Paragraph 38	te	Delete all text after “set at danger”. Approach locking is not always provided and the signals must always be set at stop to open the gates.	
22	Paragraph 42	ed	Delete “towards approaching road traffic” in the second line.	As comment.
23	Paragraph 43	ed	Delete “at” in the second line.	As comment.
24	Paragraph 46 (c)	ed	“Right-hand side” and “left-hand side” should be italicised.	As comment.
24	Paragraph 46 (c)	ed	In the sixth line, delete “barrier timings may need to be lengthened accordingly” and replace with proposed revised text.	It may be necessary to delay the lowering of the <i>right-hand side</i> barriers.
24	Paragraph 46 (f)	ed	This is not part of the sequence of events to close the crossing to road traffic and should be deleted or added to paragraph 52.	
24	Paragraph 47 (b)	ed	Add “least” after “at” in the second line.	As comment.

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24	Paragraph 48	ed	Delete the second “red” in the second line.	As comment.
24	Paragraph 49	te	This requirement is applicable only when automatic raising of the barriers is effective. The text should be qualified accordingly.	
25	Paragraph 50	ed	Add “the” before “barriers” in the first line and re-word the last sentence as in proposed revised text to clarify the requirement.	If all the red road traffic light signals facing in one direction fail before the barriers start to descend, they should remain in the raised position.
25	Paragraph 51	ed	Delete “are” in the second line.	As comment.
25	Paragraph 51	ed	The wording with respect to interlocking in the second sentence is different to that in the second sentence of paragraph 38.	
25	Paragraphs 51 and 53	ed	Suggest “danger” is changed to “Stop” to be consistent with the text in Table 1, Section 5 on page 17.	As comment.
25	Paragraph 51	te	Delete all text after “approach locking”. The signals must always be set at stop and free of approach locking to raise the barriers.	As comment.
25	Paragraph 52	ed	Suggest “operating position” in the second line is changed to “control point” because the latter term is used in paragraphs 54 and 55 and is defined in Appendix D.	As comment.

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25	Paragraph 53	ed	The wording of the first sentence with respect to the road traffic light signals is different to that in the first sentence of paragraph 39.	
25	Paragraph 53	te	Delete “if not already initiated” in the third line. If the amber lights are already showing, a normal sequence has been initiated and the barriers should lower.	As comment.
26	Paragraph 56	ed	The wording of the last sentence should be the same as in the last sentence in paragraph 41.	As comment.
26	Paragraph 57	ed	Suggest the first sentence should read as in proposed revised text.	The crossing normally operates automatically.
26	Paragraph 60	ed	Suggest the first sentence should start as in proposed revised text and the second sentence should start “It is unlikely to be suitable...”	This type of crossing may be suitable at sites where...
27	Paragraph 61 (c)	ed	Suggest “obstruction” is changed to “obstacle” and “may” in the second line is deleted.	As comment.
27	Paragraph 61 (d)	ed	The text of 61(d) should be included in 61(c) as in paragraph 46.	
27	Paragraph 61 (d)	ed	In the third line, delete “barrier timings may need to be lengthened accordingly” and replace with proposed revised text.	It may be necessary to delay the lowering of the right-hand side barriers. This delay is in addition to that required if an obstacle is detected.

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27	Paragraphs 61 (e) and 61 (f)	ed	61 (e) and 61 (f) are not part of the sequence of events to close the crossing to road traffic and should be described in separate paragraphs.	
27	Paragraph 61 (e)	ed	Delete “facing approaching road traffic” in second line.	As comment.
27	Paragraph 61 (f)	ed	Re-word the last sentence as in proposed revised text to clarify the requirement.	If all the red road traffic light signals facing in one direction fail before the barriers start to descend, they should remain in the raised position.
27	Paragraph 63 (b)	ed	Add “least” after “at” in the second line.	As comment.
28	Paragraph 64	te	Delete all text after “approach locking”. The signals must always be set at stop and free of approach locking to raise the barriers.	As comment.
28	Paragraphs 64 and 67	ed	Suggest “danger” is changed to “Stop” to be consistent with the proposed revised text in Table 1, Section 5A on page 17.	As comment.
28	Paragraph 66	ed	Suggest “operating position” in the first line is changed to “control point” because the latter term is used in paragraph 68 and is defined in Appendix D.	As comment.
28	Paragraph 67	te	Delete “if not already initiated” in the third line. If the amber lights are already showing, a normal sequence has been initiated and the barriers should lower.	As comment.

Page	Section	*Type of comment	Comments (explanation why change is required)	Proposed revised text
28	Paragraph 71	ed	At the end of the last line, “can” should read “cannot”.	As comment.
29	Paragraph 72	ed	In the last line, “supervising point” should be italicised.	
29	Paragraph 75	ed	Add “be” after “should” in the third line.	As comment.
29	Paragraph 76	ed	The wording of the text should be the same as in paragraphs 46 and 61.	The sequence of events to close the crossing to road traffic is as follows:
30	Paragraph 76 (c)	te	Delete the last sentence. This has no relevance to AHBC.	
30	Paragraph 77	ed	The text of this paragraph should be the same as that in paragraph 94 on page 33.	
30	Paragraph 78	ed	Suggest “after a train has cleared the crossing” is moved from the end to the beginning of the first sentence and “unless another train is approaching” is added after “simultaneously”.	After a train has cleared the crossing, both barriers should begin to rise simultaneously, unless another train is approaching, and should normally take 4 to 10 seconds...
30	Paragraph 78	te	Delete “begin to rise” at the end of the paragraph and replace with text as in paragraph 95 on page 33.	...have risen to at least an angle of 45 degrees above the horizontal.

Page	Section	*Type of comment	Comments (explanation why change is required)	Proposed revised text
30	Paragraph 79	ed	In second line, "barrier" should read "barriers".	As comment.
30	Paragraph 81	ed	Suggest "danger" is changed to "Stop" to be consistent with the text in Table 1 on page 17.	As comment.
30	Paragraph 81	ed	In the first line, "strike-in point" should be italicised.	
31	Paragraph 82 (a) and Note	ed	The referenced paragraph at the end of paragraph 82 (a) and in the note should be 75, not 64.	
31	Paragraph 83	ed	The wording in this paragraph should be the same as that in paragraphs 108 and 131.	
32	Paragraph 88	ed	At the end of the second line, "can" should read "cannot".	As comment.
33	Paragraph 95	ed	Suggest "after a train has cleared the crossing" is moved from the end to the beginning of the first sentence and "unless another train is approaching" is added after "simultaneously".	After a train has cleared the crossing, both barriers should begin to rise simultaneously, unless another train is approaching, and should normally take 4 to 10 seconds...
33	Paragraph 96	ed	In the second line, "crossing speed" should be italicised.	

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35	Paragraphs 106 (a) 107 (b) and Note	ed	The referenced paragraph at the end of paragraphs 106 (a) and 107 (b) and in the note at the end of paragraph 106 should be 92, not 81.	
36	Paragraph 112	ed	Delete “on dual line” in the second line to be consistent with the text in paragraph 88 on page 32.	
36	Paragraph 112	ed	The minimum road open time is specified as 10 seconds for AHBC and ABCL in paragraphs 71 and 88, but not for AOCL in paragraph 112.	
36	Paragraph 114	ed	For consistency, the text of paragraphs 90 and 114 should be the same.	
36	Paragraph 115	ed	The text of the note at the end of paragraph 115 is included in paragraph 96 for ABCL i.e. not as a note. The order of paragraphs for the method of operation section is also different.	
36	Paragraph 116	ed	For consistency, the text of paragraphs 75, 92 and 116 should be the same. The wording at the start is different.	
37	Paragraph 118	ed	In the last line, “can” should read “cannot”.	As comment.
37	Paragraph 119	ed	The referenced Section in the third line should be 19, not 18.	

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38	Paragraph 126	ed	For consistency, the text of the second sentence in paragraph 104 should be included in paragraph 126.	
38	Paragraph 128 (a)	ed	In the third line, “are” should read “is” and the referenced paragraph in the last line should be 116, not 105.	As comment.
39	Paragraph 129 (b)	ed	The referenced paragraph in the last line should be 116, not 105.	
39	Paragraph 132	ed	In the fifth line, “the trains” should read “their trains”.	As comment.
41	Section 10	ed	“(UWCs)” should read “(UWC)”.	As comment.
41	Paragraph 140	ed	Suggest the third and fourth sentences are deleted and replaced by the proposed revised text.	The gates open away from the railway. The gates or barriers are normally closed across the road and are operated by the road users.
41	Paragraph 143 (c)	ed	In the second line, “railway” should read “barrier”.	As comment.
42	Paragraph 144 (b)	ed	Add “(vi) the actual daily road user exceeds 50”.	As comment.

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42	Paragraph 144 (c)	ed	The referenced Section in the first line should be 18, not 17.	
43	Paragraph 152	ed	The referenced Appendix in the second line should be D, not E.	
44	Paragraph 160 (c)	ed	The referenced Section should be 18, not 17.	
46	Paragraph 172	ed	At the end of the second line, delete “half-barrier”. The requirement is applicable to ABCL and AOCL.	As comment.
47	Paragraph 177	ed	In the last line, “road” should read “roads”.	As comment.
47	Paragraph 178	ed	Delete first line of text and replace with proposed revised text.	The threshold should not be on the railway side...
49	Table 3	ed	In second line of third footnote, “wit” should read “with”.	As comment.
49	Section 13	ed	Section title should read “Barrow crossings”. Contents page to be amended also.	As comment.

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49	Paragraph 188	te	In last line, time should be 30 seconds.	
50	Paragraph 189	te	In third line, time should be 30 seconds.	
50	Paragraph 194	ed	Delete first “effective” in second line.	As comment.
52	Paragraph 203	ed	The referenced Section should be 19, not 18.	
57	Paragraph 238	ed	In the third and fourth lines, “retro-reflective material” should read “retroreflecting material” as in Appendix D and should be italicised.	As comment.
57/58		ed	The text of paragraph 222 of the Railway Safety Principles and Guidance part 2 section E has been omitted. Is this intentional?	The moving parts of the barrier mechanism, excluding the boom and any skirt, should be shielded from the public.
59	Paragraph 246	ed	In the fourth line, “roads” should read “carriageways” to be consistent with the rest of the paragraph.	As comment.
59	Paragraph 247	ed	In the first and second lines, suggest “knocked over” is changed to “capsized” as in paragraph 282 or use “displaced” in both paragraphs.	As comment.

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61	Paragraph 262	ed	In first line, suggest "(often referred to as miniature warning lights)" is deleted.	
62	Paragraph 265	ed	In the second line, "LED lamps"" should be shown as "Light emitting diodes (LED)" and in the third line, "Lamps" should read "Lights".	As comment.
62	Paragraph 265	ed	In paragraph 250 of the Railway Safety Principles and Guidance part 2 section E, the minimum distance between the edges of the lenses is specified. Why has this been omitted?	The distance between the edges of the lenses should not be less than 40 mm.
62	Paragraph 266	ed	The referenced Section in the second line should be 19, not 18.	
62	Paragraph 268	ed	Suggest text of fifth line is changed to "so that instructions to drivers and instructions to pedestrians/riders are not confused".	As comment.
64	Paragraphs 279 and 280	ed	"Acute skew" and "obtuse skew" should be italicised.	
65	Paragraph 288	ed	Delete "fat man" in first line.	
68	Paragraph 309	ed	Add "the" before "conductor" in the first line.	As comment.

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68	Paragraph 310	ed	In the last sentence, delete “186 to 192” and replace with “202 and 203”.	As comment.
71	Paragraph 329	ed	Table 8 should be entitled “Recommended lengths of double white lines”.	As comment.
72	Paragraph 332	ed	In the third line, “will be required” should read “should be provided”. It is not clear if table 10 applies to other types of crossing.	As comment.
72	Table 10	ed	“Covering” should read “Overall”. Why was this changed from the wording in Railway Safety Principles and Guidance part 2 section E?	As comment.
80	Notes to Figure 9	ed	In the third line, “in advance of” should read “in front of” to be consistent with paragraph 316 and to avoid any confusion.	As comment.
87	Note at bottom of page	ed	The term “highway” is not used in the revised definition of “Tramway”. Suggest that “road” is changed to “highway” in Tramway definition.	As comment.
89	Terms	ed	In the Railway Safety Principles and Guidance part 2 section E, stations are specifically excluded from the definition of “infrastructure”. Why are they now included?	
95	1.1	ed	At the end of the fourth paragraph, “both road and rail” should be deleted. Level crossing users are those crossing the railway as defined in Appendix D on page 89.	

Page	Section	*Type of comment	Comments (explanation why change is required)	Proposed revised text
96	2.1	ed	In fifth line, change “and” to “or” after “footpath”.	As comment.
98	Third paragraph	ed	Is not the “other guidance” referenced in the fifth line in fact this document? Is this document Railway Safety Publication 7?	
98	Fifth paragraph	ed	Delete “which” in first line to make this text a sentence.	As comment.
98	Footnote 2	ed	First “Crossing” shown as “Crossins”.	
99	Bullet points	ed	Preceding text should start “There are three...”	As comment.
101	4.2	ed	In the twelfth line of the first paragraph, “an” should read “as”.	As comment.
104	4.4	ed	In the last line of the fourth paragraph, “better to” should read “to better”.	As comment.
106	4.7	ed	In the last line, “latter” should be “last”.	As comment.

* Type of comment: **ge** = general **te** = technical **ed** = editorial