Consultation comments received on Rail Industry Standard
RIS-3119-TOM
Accident and incident investigation Issue 3 Draft 2b

Closing date 11 October 2021

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Summary of comments submitted	Number	Comment categorisation key
Consulted		
Critical errors	1	CE
Editorial errors	5	ED
Typographical errors	3	TY
Observations	18	OB
Total returned	6	
Classification codes (CC)		
Document change	14	DC
No change	13	NC
Date responses published:		

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1	General		Given the aim of this standard is to align with the existing incident classification in SMIS, no comment has been made on the human performance categories and 10 IFs. However, does (or will) RSSB elicit feedback on the usability of these classifications, obtain evidence that they are appropriate/helpful (or otherwise) and refine them over time? Or have they been sufficiently tested already such that this is not		3	OB	NC	The classification incorporated in SMIS is based on a framework which was user tested in 2016 including investigators. RSSB will review the cause classifications by duty holders as they are entered in SMIS and provide feedback on the accuracy of those classifications. This will enable users to gain confidence with the system and how to apply it. This review process will also enable RSSB to identify any issues with the cause classification. As the functionality is used by industry we will be open to feedback on usability and helpfulness of the system and if there is appetite to alter any categories we can consult on these changes. RSSB is planning to gather case study information on the usage of the system which will inform how useful it is.

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			envisaged necessary and in fact would interfere with the planned aim of data consistency?					
2	General		Recent ORR discussions with RSSB and others have concluded that an unintended, unfortunate consequence of work on NTS has resulted in the industry seeking to use NTS as a possible 'quick fix' following incidents, rather than the industry adopting more challenging but lasting solutions, e.g. equipment re-design. This standard is an opportunity to address this current tendency. Could more consideration be given as to how to do that?	For example, in Table 19 'decision error' – the mitigations focus on the arguably 'softer' mitigations of training (mentioned twice), supervision, etc. Could examples of system re-design be included here as well? Systems need to be designed to ensure that users have the right information, at the right time in the right format – otherwise users have no chance of making the correct decisions, no matter what the training! It's important that we increase awareness in the industry of the impact of system design on human error and this is a chance to do that. Another opportunity would be under 'changes to design of the workplace' under slip/lapse in the same table – providing examples here, as has been done elsewhere, would be helpful.	3	OB	DC	Many thanks for your comment. Whilst this section was not altered as part of this project, we recognise the need to emphasise the most effective recommendations. As a result, we have updated clause K3.39 to highlight that recommendations such as system redesign are the most effective, and measures targeted at the individual are likely to be less effective. In addition, we have re-ordered the lists of possible recommendations in table 19, so the most effective recommendations (systemic fixes) are at the top of the list. Other recommendations will be made as a result of this project, including development of the training offering, which will include developing more rigorous and in-depth guidance and training on recommendations and their levels of effectiveness.
3	10	1.3.2	Fully support this, as a single report ensures single source of the truth, aligned outcomes and learning, and	This will be more appropriate with more significant investigations- e.g.	2	OB	NC	This is contained within Part 1 of RIS-3119-TOM Issue 3, and within the guiding principles of co-operation, from clauses 2.4.2 to 2.4.4. It is not yet considered that this is one of the underpinning requirements at this stage. Transport operators have a duty of co-operation according

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			makes better use of industries scares resource. Would suggest this becomes a requirement in the main body of the RIS. As this includes sharing information, does this need to include a consideration for GDPR (ref 2.7.1)	local/formal SPADs. There may also be barriers such as IT/Apps systems that are used for investigations. Therefore it would be helpful to include 'where possible' and a consideration when reviewing investigation systems to ensure they align to this requirement				to Railway and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS), and RSSB standards do not duplicate legislation. The guidance exists to better explain how and when to co-operate and work together. As part of their duty of co-operation the involved transport operators need to decide how they work together on investigations. It is not thought at this stage that making it a requirement in the standard to only conduct one investigation is the right approach, as there may be circumstances in which individual organisations need to carry out internal investigations in addition to a single-approach. In terms of General Data Protection Regulations (GDPR), a reference has been added to clause 2.7.1 as to the importance of taking this into account when sharing information and evidence between organisations.
4	16	2.7.1	Can this be expanded to re-confirm this does not remove the duty of cooperation and need to share, but needs to be taken into account when justifying this, the information that is shared, and how its shared etc	2.7 needs expanding to include some of the considerations when sharing investigation information and data, including justification for sharing, removing the personal identifiers, how the info is shared, stored, accessed etc	2	OB	DC	Added reference to sharing of information between transport operators into clause 2.7.1.
5	16	G2.6.6	Just needs full stop	Add full stop at end of sentence.	1	TY	DC	Thank you for noticing this omission. Full stop added to clause G2.6.6.
6	20	G3.7.6	Physical evidence includes anything that can be seen.	Physical evidence includes anything that can be seen or measured.	1	ED	DC	Thank you for your comment, sentence in clause G3.7.6 has been altered to include 'measured'.
7	21	G3.8.2	References immediate and underlying causes.	RAIB use immediate cause, causal factors and underlying factors, should we be consistent as an industry?	1	OB	NC	We recognise that terminology around accident investigation is variable and different organisations may prefer different terms. Of most importance is that the investigation is able to identify and describe the factors which led to an adverse event and that these should look beyond the immediate causes to the underlying factors.
8	31	A4.6	This person covers the overall management of the investigation process and specifically the	This paragraph is confusing, suggest simplifying	1	TY	DC	This paragraph has not been altered as a result of this project change, however it is considered that the phrasing of this is an error, and therefore clause A4.6 been updated to reflect this.

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			management of recording and signalling data,					
9	37	C4.6	Good Practice – Competence for investigators above the basic level could additionally include:	The list is a repeat of the list in C4.5, reads like an error	1	ED	DC	Although not part of the changes made in this project, agreed that this appears to be an error. List has been removed in C.4.5.
10	44	E2.1	severity and the potential severity	Severity or the potential severity	1	ED	NC	This has not been altered as part of this project, however the statement as it stands is understood to be correct. Both the actual severity, and the potential severity are taken into account, as shown in Appendix N.
11	46	F2.1	place by way of a telephone conference call,	place by way of a telephone conference call or online meeting	1	ED	DC	'Telephone' has been removed from clause F2.1 to allow for interpretation as to communication method.
12	50	H3,1	List of perishable evidence / non perishable both have TOPS &CCTV	Leave in perishable	1	CE	DC	Whilst this section has not been updated as part of this project, we have reviewed this, and consider that it is an error to have TOPS and TRUST listed in non-perishable, therefore this has been altered to rectify this issue.
13	51	H3.1	As part of the clause covering perishable evidence the text identifies On Train Data Recorders (clause s), it should be noted with the advent of modern traction vehicles the builders, owners and maintainers have access to different sources and levels of on train data not necessarily available to the operator, TMS logs and differing level of data channels for example can provide additional channels that could benefit an investigation	Make reference to differing levels of data available through OTDR and ask investigators to consider approaching their engineering teams for additional data	4	OB	NC	Thank you for your comment. As this section has not been altered, except for a minor editorial change from On Board Driving Data Recording Systems (ODDRS) to On Train Data Recorder (OTDR), it is not considered that this falls within the scope of this project. This is designed to provide an example that covers data recorders generally, and additional guidance on types and levels of data is not considered to be required. It is expected that the investigation panel will be chosen to include people with appropriate traction knowledge who have understanding of the capabilities and type of OTDR fitted to the train/s involved. However this comment will be fed into the 12 month review to consider if additional guidance would be useful in a future revision.
14	51	H4	This clause gives many examples of non perishable evidence, can we consider adding new and emerging	Reword or add additional clauses to the list to take into account the examples given.	4	OB	NC	This section has not been altered as part of this project scope, therefore we have not changed this clause. However it would be useful to include references to relevant and useful new technologies, and to additional sources of research. This comment will be recorded and fed into the 12-month review of this standard.

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			technologies to this list RAATS for example. Another area to consider is encouraging the investigator to review any RSSB SPARK research projects into the subject or matter area being investigated as this may provide an insight that had not been considered up until that point.					
15	61	H7.8	the first consideration is whether there is a human performance issue, which can be an error, intentional rule breaking	the first consideration is whether there is a human performance issue, which can be an error, intentional rule breaking. Decision error..	1	ED	DC	Reference to 'error' in original version was intended to cover both the decision errors and the slips or lapses. However, agreed that this may not be entirely clear. Clause H7.8 amended to be clear around the different human performance issues. Sentence now reads: 'human performance issue, which can be a slip or lapse, decision error, intentional rule break, or the individual unable to respond'.
16	61	H7.8	the five categories in the HPF	the four categories in the HPF	1	TY	DC	Remaining as 5, as 'Don't know' is the fifth category. Corresponding figure to be updated to reflect this.
17	67 & 68	Tables 9 & 10	No examples for 'rushing'? I understand why there wouldn't be for 'Don't know' but it looks a bit like examples couldn't be thought of for 'rushing' but there may be another reason?		3	OB	DC	Many thanks for your comment, we have added examples and some explanation into the 'rushing' sub-category in Tables 9 and 10 for clarity in intentional rule breaking and decision error.
18	68	Table 9	Rushing/none	There could be examples here.	1	OB	DC	Many thanks for your comment, we have added an example and some explanation into the 'rushing' sub-category for clarity.
19	99	K3.6	Along with a copy of the remit.	The 'specifics' extract of the remit (the full remit can be an appendix as it distracts the flow of the reader.	1	OB	NC	Clause K3.6 Changed to reference 'details of the remit and where it can be found' to allow for interpretation as to the best presentation method for this information.
20	99	K3.8		Add: leave out technical details such as train head codes, this is contained elsewhere and	1	OB	NC	It is considered that this is currently covered within 'as much detail as necessary', and would be too specific an example, and some organisations may consider it useful to include headcodes to differentiate between trains if there

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				distracts from the executive summary				are multiple trains involved.
21	107	Appendix L	Could the sharing of reports reference existing industry activities as well as LOE, such as sharing outcomes from SPAD investigations at OPSRAMs/TOSGs, and RIS-3704-TOM	Inclusion of sharing outcomes and learning from SPAD investigations, with reference to RIS-3704-TOM, which would benefit from this inclusion as well	2	OB	NC	Added bullet point to L3.7 to reference sharing outcomes from SPAD investigations.
22	109	L3.6	References RSSB LOE annual report	This has not been published since 2016, just refer to the resource not the report	1	OB	DC	L3.6 has been altered to read 'RSSB LOE reports', to avoid confusion.
23	114	Appendix N	I still think this is more consequence (credible consequence) rather than learning. Therefore this would benefit from guidance that includes-proportionality taking into account if there is any learning to be extracted from the event, such as failure of controls etc. Otherwise I have a concern industry will struggle to apply this, and keep on producing reports that don't provide the learning on what needs to change	Change the focus of proportionality to focus on extracting the learning from the event, e.g. if controls have failed, rather than just the possible credible consequence. If there is nothing new to learn, this should influence the time and effort spent on investigating.	2	OB	NC	As this section has not been altered during this project, (apart from amending an error on the first flow chart diagram), a more significant change would be required to address this, would need to be fully considered, go through a proper consultation and review process, it is considered this would need to be properly reviewed and addressed at a future stage, or dealt with in other ways detailed below. Some concerns around changing the emphasis of proportionality to be on 'learning points', is that it may be quite difficult to judge at the beginning of the investigation process whether there is something new to learn when not all the information is yet available. This may import a risk that offering this option allows operators to not investigate potentially significant events because they deem there to be no learning from the initial information and reports. Further review of Appendix N will be incorporated into the 12-month review to consider if further changes are required. In terms of SPAD investigations, as this may be more common in terms of very similar SPAD events resulting in a "repeat" of a very similar investigation, the clauses P.7.9 and P.7.10 cover situations in which the causes can be clearly determined, allowing the decision to be made to lower the level of investigation required.
24	127	Appendix P	There is now operational experience of ETCS overlay events that would be worth including for consistency,	Include within P.3.2 the provision of conflicting information with an ETCS	2	OB	NC	Thank you for your comment. As this section has not been altered (except for P7), and a change of this nature would require proper review and consultation, it is considered that it would be best for this suggested change to be fed into the

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			as we are having to define the categories as they occur	overlay system- e.g. no movement authority, however the driver is provided with a green/proceed signal. ETCS movement authority is primary, however the driver is also being provided with conflicting signal information that under level NTC they would correctly react to and proceed. Also, where a ETCS MA is provided and the train (could be when operating under ATO) travels passed a red aspect but is still within the MA (e.g. due to alignment/odometry issues)				12-month review of the standard, as this does not fall within the scope of the project, but is a useful comment and will be worth considering references to new technologies in future revisions.
25	127	Appendix P	Where we have MA exceedance under ETCS and the train is fully supervised, there is arguably a lower risk exposure. Therefore this should be included within the explanation of SPADs as low frequency and high consequence events, as where there is a system to supervise and limit the train from going too far under ETCS, this is a more reliable control. Currently the standard can encourage a legacy understanding of SPADs to be applied to modern ETCS control systems.	Inclusion with the explanation that high consequence (trains going too far) can however be controlled by fully supervised systems where in operation such as ETCS. Therefore the operational response and investigation should take this into account.	2	OB	NC	Thank you for your comment. As this section has not been altered (except for P7), and a change of this nature would require proper review and consultation, it is considered that it would be best for this suggested change to be fed into the 12 month review of the standard, as this does not fall within the scope of the project, but is a useful comment and will be worth considering references to new technologies in future revisions.
26	51	H.3	"H.3 Sources of evidence - perishable evidence H.3.1 Perishable	As the RIS is a guidance document for duty-holders, it	5	OB	NC	Thank you for your comment. As this section has not been altered, except for a minor editorial change from ODDRS to OTDR, it is not considered that this falls within the scope of

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			evidence, that is, things that might change or be moved over time, are best collected quickly following an adverse event (this list is not exhaustive): … s) Data from data recorders, including On Train Data Recorder (OTDR) and Solid State Interlocking or Integrated Electronic Control Centre (SSI / IECC) event recorder data, for an appropriate period before the adverse event." ASLEF Executive Committee have reviewed the draft document and query H.3(s) which states that downloads from an appropriate time before an incident should be examined. ASLEF is concerned that this would allow fishing trips or unnecessary trawling of OTMR/downloads, if what is an appropriate time is left down to the individual operating companies to determine.	would be apt to give appropriate guidance as to what is an appropriate period of time before the adverse event that operating companies should collect perishable data for. There may be variables which need to be taken into account, so the duration of time specified could reflect this accordingly. This would seem preferable to operating companies being left to determine what is appropriate without any guidance, and thereby risking unnecessary data trawling or fishing trips.				this project. A change of this nature would require proper review and consultation, and careful thought around guidance, so it is considered that it would be best for this suggested change to be looked at during the 12-month review of the standard.
27			References to Appendix F and P in terms of lead investigations and proportionality application are not clearly referenced in the requirements of the standard in terms of where additional information can be found.	Add in reference to Appendices F and P in terms of collaboration, choice of lead investigator and supporting expertise, and proportionality.	6	OB	DC	Clause G.3.6.4 amended to add reference to Appendix P, and G3.5.6 added to contain references to Appendix F and P.