Consultation comments and responses

Document Title: Defective On-Train Equipment and Rule Book module TW5 Preparation and movement of trains: Defective or isolated vehicles and on-train equipment.

Document number: GERT8000 – TW5

Consultation closing date: 26 April 2022

1. Responders to consultation

No	Name	Company
1	Judith Walker	WM Trains
2	Una Byrne	Aslef
3	Adrian Hugill	Cross Country
4	Luke Davies	East Midlands Railways
5	Emma Mons-White	Nexus
6	Matt Stanley	Eurostar

2. Summary of comments

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

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	52	19.1	The first half of the clause makes sense but then the second part is a little contradictory. I think the first part is talking about if the leading vehicle is the only sander working in normal operation and is defective, whereas the second part is when there are multiple sanders that would work in normal operation and the leading set is defective?		1	NC			The first clause can apply to all types of configurations. The second clause is to be read in sequence with the first one, and it clarifies the conditions specific to that type of failure (leading installed set of sanders) in trains where multiple sanders are present. No change is deemed necessary.
2	30	8.4	Regarding, section 8.4, ASLEF is concerned about the increase of speeds within the simplified table. It proposes to allow trains to run at 60 MPH with no AWS in fog or falling snow. Currently the maximum speed would be 40 MPH, and 60 MPH on ERTMS lines. Where there are no signals currently the maximum speed would be 25 MPH.		2	DC			No increase in speeds has been implemented. If the DSD defect happens at the same time as an AWS, TPWS or ERTMS defect, the conditions for that failure would apply. Extra clause now added: "If the DSD becomes defective at the same time as an AWS, TPWS or ERTMS failure, you must apply the conditions for that failure."
3	12-13	1.1c)	Proposed wording in TW5 would require the following communication chain: • Driver to contact Signaller • Signaller to contact Operations Control • Operations Control to liaise/confirm with the TOC Control • Operations Control responds to Signaller • Signaller relays information to Driver (this may include authority to move) This all adds further time to the defective train recovery process and increased impact to customers waiting for multiple stages of approval and authority to move following an on-train defect. Will this lead to adverse behaviours from traincrew of not reporting defects and/or a more stringent "out of service" stance rather than become involved with multiple communications. Additional risk that telephone lines to key personnel become blocked due to the length and complexity of the calls taking place and more urgent incoming calls being placed on-hold/in-queue.	Guidance required on threshold of incident nature before involving Operations Control and/or TOC Control as part of daisy chain communications. Such escalation only required for severe/significant safety related issues, otherwise the requirements set out in TW5 would apply without the need for an intervention of Operations Control and/or TOC Control.	3	NC			The extra clause that has been introduced is an acknowledgment that, in certain situations, and thanks to GSM-R, the driver may be in direct contact with their operations control or depot. The instruction has been added to remind the driver they need permission to move in those cases. No extra layer has been added to the communication chain.
4	12-13	1.1c)	What consideration has RSSB taken into account as part of the economic business case for this change for the cost of delays in operating performance for the changes proposed to include additional layers of communication and decision making?	Please advise if RSSB reviewed the performance costs associated with making this change.	3	NC			No extra layer of communication has been added. See response to comment number 3.

No	Page	Clause	Comment	Suggestion	By	Way forward	Page	Clause	Response
5	50	17	New requirements would place an additional constraint on fleet delivery and/or service disruption in the event of a OTDR in the leading vehicle being found defective despite the current arrangements being accepted practice for nearly 20 years following the widescale introduction of on-train data recorders. Many or most OTDR systems do not indicate defective individual channels of data, and only indicate a healthy or fault status in the event of a system functional failure, therefore it is highly possible for a train to remain in operational service for many days before manual intervention of data may realise that expected data is not available. On this basis, and the rationale for proposing this change, how are Operators expected to comply with the revised requirements? Consider challenge/deviation against NTSN; particularly where OTDR installation pre-dates the NTSN publication. Such a change also poses and increased risk of vandalism within driving cabs that would now result in out-of-service decisions being taken and ensuing service disruption and delays.	Revert to original wording, and permit Railway Undertakings to manage defective OTDR within a permitted timescale e.g. train taken out of service at end of day or within 24 hours. This is based on OTDR being a passive system that adds no real-time enhancement to the safety performance of train operations. Many OTDR systems are now upgraded to permit real-time (or near real-time) data acquisition and therefore in the event of a system becoming defective can be managed within a controlled time period (as above) without the need for unnecessary service disruption.	3	NC			The first clause has not been subject to any change and remains as was: "if you are aware". This will allow current practices to continue. However, once the defect is identified, action must be taken. The following sentence was indeed removed: "This applies unless a working OTDR is provided elsewhere on the train". The requirement remains for OTDR that records activity in the leading cab, wherever it is located. The second sentence did not add relevant information. The main change introduced has been in order to improve consistency with the rest of the module by separating between starting "from a maintenance depot" and "other than a maintenance depot or during a journey" (in proposed issue 11) rather than "starting a journey" and "during a journey" (issue 10).
6	67-69	26.2c)	Proposed changes place new obligations on Driver (and/or Train Preparer) to “visually” examine wheel tread conditions looking for “obvious” defects. This may not be currently undertaken; either with the maintainers or via Drivers, and the latter could require additional training to be given to identify wheel tread defects and ongoing management of competency of Driver’s to perform these visual inspections. Discussions on Preparation Time allowances may be required involving discussions with Trades Unions where additional work is now required, which may contribute towards deteriorating industrial relations across the industry. Permitted speeds for wheel flat (or tread defects) have been removed from the proposed TW5. Potential risk the removal of this information is overlooked or misinterpreted by individual operators, and incorrect speed limits transposed from other standards.	Make specific reference to the applicable standard(s) where the speed limits are contained to avoid potential for misinterpretation.	3	DC			No "new obligations" have been introduced. There has only been a change in terminology. All other actions remain the same as in issue 10. However, the terminology used for ‘starting a journey’ has been changed to “if you become aware” in order to assist clarity and eliminate the possible misinterpretation. Terminology for ‘during a journey’ remains the same. The driver is already expected to visually examine the wheel tread conditions when aware of a locked wheel or dragging brake during a journey. The instructions for drivers and corresponding restrictions consider that the assessment is made without specific training. These instructions relate to assessments and corresponding actions in the event of a locked wheel or dragging brake during operation. Preparation is addressed by other requirements. RIS-2766-RST provides corresponding instructions for maintainers. An extra clause of guidance has been added to RIS-3437-TOM in order to provide extra information on this (G 4.29.1.4). The permitted speeds allowing the movement of the train following assessment by the driver have now been reinstated, with the further inclusion of “unless instructed otherwise by a rolling stock technician”; as they are in authority to advise differently. In addition, the table instructions have been further clarified by adding “not move the train until instructed to do so by the signaller”.

No	Page	Clause	Comment	Suggestion	By	Way forward	Page	Clause	Response
7	10	1.1 a	*Gearbox failure* The new Class 810 BMU is fitted with a Gearbox failure detection system (same concept as on-board Hot Axle Box detection system). TW5 is silent on gearbox failure (regardless of whether there is a train detection system).	Can RSSB consider inclusion of such a failure in a future issue of TW5?	4	NC			Out of scope. The gearbox failure detection system mentioned is currently not a widespread type of system and, as such, not a system applicable to other operators. In this instance, the railway undertaking will need to ensure their contingency plans incorporate the relevant actions in case of failure. Although no changes are possible at this time, the project will note the comment for consideration in the future.
8	22	5.4 and 5.5	*Brake no longer operating on the leading vehicle of a passenger train and Brake no longer operating on the last vehicle – use of hand or parking brake* In 5.4, the reference to a hand or parking brake which can be applied in an emergency, the movement is restricted to 5mph/10kph. In 5.5, the reference to a hand or parking brake is different (no speed restriction, no mention of application in an emergency).	Should these clauses be aligned?	4	NC			Out of scope. No changes have been applied to the mentioned clauses. For clarification: in section 5.4, the restriction on speed is appropriate since the parking brake is the only means of stopping the train. In section 5.5, there is no reliance on the parking brake due to the position of the vehicle. Although no changes are possible at this time, it is now identified the language could be changed to improve clarity. This project will note the comment for consideration in the future.
9	31	9.1 & 9.2	*"You must not allow a train to start a journey if **you** do not have a clear view of…"* "If **you** have not got a clear view of the line ahead…"	Instruction written with a focus on the Driver only. Consider expanding scope of instruction to include visibility of other on train staff such as instructors/assessors or Guards.	4	NC			Out of scope. Although it will not be possible to address instructions to instructors/assessors, it is recognised the section's wording could be improved for clarity. The project will note this comment for consideration in the future.
10	40	14.2	*Headlight failure – starting a journey from somewhere other than a maintenance depot* The clause as drafted reads that it is permitted for trains now displaying both headlights (and a high level marker light) can start a journey with either one headlight failed or the high level marker light failed.	Can RSSB confirm this interpretation is correct? This would be consist with the Table on page 42, part of clause 14.3 – A failure of one headlight beam, the train may proceed normally.	4	NC			Out of scope. No changes have been made to this section. This section, while initially incorporated into the project, was later de-scoped due to inconsistencies and issues found, and will form part of a new project that will commence shortly after the publication of the current one. The project will note this comment for consideration.
11	48	15.8	*No evidence of overheating after a built-in hot axle box activation* The drafting relating to another built-in hot axle box detector activation, or a lineside activation occurring…is this intended to be in relation to the same axle box that created the first activation (for which no evidence of overheating was found), or any axle box on the train? Drafting as is reads that its in relation to any axle box. To note, if a false activation of a built-in HABD, its likely the driver will isolate this particular detector as it would otherwise continue to alarm.		4	DC			In order to ensure clarity, the second clause has been amended to read: "*If the train is stopped because <u>of a second activation of the same</u> built-in hot axle box detector, or a lineside activation occurs, you must".* Not all hot-axle box detector types can be isolated. The railway undertaking can adapt their contingency plans to better suit their traction types. No further changes to TW5 are deemed necessary.

No	Page	Clause	Comment	Suggestion	By	Way forward	Page	Clause	Response
12	52	19.1 and 19.2	*Sanding equipment to assist train braking* Both clauses refer to *"the sanding equipment in any vehicle that will be a leading vehicle during a journey is defective"*. The new EMR Class 810 BMU is fitted with sanding equipment but this is located on the first bogie of the second vehicle (axle 5) so the clause as drafted could be interpreted as not being covered, which we are sure is not the intention (the term "leading vehicle" is used in TW5 clause 5 Brake defects to describe the first vehicle in the formation). This same comment is made in the feedback on RIS-3437-TOM clause 4.20.1.1.a.	RSSB to redraft to take account of vehicles fitted with sanders that are not vehicle one in direction of travel Possible suggested words to add: *"…in any vehicle that will be a leading vehicle or vehicle towards the leading part of the train formation during the journey is defective"*	4	DC			Sections 19.1 and 19.2 have been amended to include new wording "any sanding equipment that will be the leading installed set at any time during the planned workings".
13	54	21.1 and 21.2	*Speedometer failure* Clause 21.1 refers to "a working speedometer" whilst clause 21.2 refers to an "authorised working speedometer". These clauses should be aligned for consistency, and allow flexibility for the operator to determine if an alternate speedometer (the Class 810 along with other Class 80x units has an alternate speedometer displayed on the TMS screen) is acceptable to be used for that particular journey. For example, it may be acceptable for a local journey of 30 miles but may not be acceptable for one of 500 miles.	Proposed clause 21.1: *"You must not allow a train to start a journey unless there is an **authorised** working speedometer displaying the correct units of speed in any cab which is required to be driven from."*	4	NC			Out of scope. Although the wording in this section is currently believed to be correct at this time, there is a new project in the process of being created in order to continue work on the sections de-scoped from this project. One of those sections will look at the failure of the Driver machine interface (DMI), so the speedometer is likely to be incorporated. The project will note this comment for consideration.
14	30	8.4	This section contains a table with speeds for passenger trains and freight when the DSD is defective. For Metro vehicles, both current and new fleet, the maximum speed for our trains under normal circumstances is 80 km/h. Our DOTE requires that the new class 555 vehicles must not exceed 50 km/h where a competent person is not provided. For freight operations, we will be imposing a lower maximum permitted speed (20mph).	We do not propose that Nexus specific speeds are included as part of this, but would appreciate being able to apply the RSSB Rule instead of having a Metro Specific Rule. Could this table be possibly supplemented with a line saying something along the lines of 'or as per local instructions where they differ'?	5	NC			For different types of vehicles, like metro vehicles, where the rule book does not apply, local instructions will need to be in place. Introducing the suggested text would import unintended consequences to the types of vehicles for which the rules are intended.
15	30	8.4	The interface at Ashford, Kent, would be an anomaly. The speed through the Up/Down CTRL Chord is 100km/h or 60mph. (The conversion is 96.56km/h). The speed of 95km/h is in conflict with NRHS rulebook (TW5 B5.2.3 b) of 100km/h	Round up conversion to 100km/h to maintain standardisation.	6	NC			GERT8000-AM ERTMS issue 1, published by RSSB in 2009, contained the relevant tables for speed conversions. Although this document was withdrawn in 2013, these tables remain the point of reference. In this document: Table A contained values to convert from mph to km/h. In this table, 60 mph = 95 km/h. Table B contained values to convert from km/h to mph. In this table, 95 km/h and 100 km/h = 60 mph. The conversions used in TW5 would have used Table A. However, although the values are deemed correct at this time, RSSB will note the comment and we will take this up internally.