

Consultation comments and responses

Document Title: Train stopped by train failure. Document number: GERT8000-M2 Consultation closing date: 14 June 2023

1. Responders to consultation

No	Name	Company
1	Will Tisdale	Northern Railway
2	Tony James	WM Trains
3	Stewart Player / Kevin Curtis / Nigel Trower	SW Railway
4	Jonathan Ellerbeck	GWRR
5	Gary Mewis	TfL
6	Phil Barrett	RDG
7	lan Potter	MTREL
8	Nicola Wilkinson	Transport for Wales
9	Ian Carroll	Network Rail
10	Steve Burgess	Network Rail
11	Justin Willett	Network Rail
12	Tim Leighton	Network Rail
13	Paul Ashton	Network Rail
14	Peter Williams	Network Rail
15	Martin Bloomfield	Network Rail

2. Summary of comments

Code	Description	Total
-	Consulted	454
CE	Critical errors	
ED	Editorial errors	
ТҮ	Typographical errors	
ОВ	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	Ву	Way forward	Page	Clause	Response
			I am very supportive of this change, as having undertaker effectiveness of detonators I remained concerned over th these as a risk control. Therefore we need to look at alter undertaken the processes where they are used, including I do however question why there is both a speed restricti use of GSM-R to speak to the assisting driver? I would of coupled with operational professional judgement that the required control if I have not been able to speak to the dr As a driver, if I have spoken to the driver of the failed trai am I going at a set speed? There is the obvious distraction monitoring that introduces a set speed brings, and at a cr to be looking out of the windscreen. My only other comment is the clarity of action in how the there is only a requirement to lay assistance detonator pr with the ability of the assisting train to sight the failed trai visibility.	a the research on the ne level of reliance we place on mative and simpler ways to assistance to failed trains. on and the requirement for the thought within the risk work e speed would only be a river of the assisting train? n, know where they are why n of increased speedo itical point where I really want e rules are written, such as rotection when there a concern in- e.g. when there is poor	11	NC			As explained in the Busi detail of the proposed of risk assessment (QRA) s qualitative risk assessm situations where the QF recommendation. Remo detonators as assistance remove significant risks increase in collision risk control measures. Provi between the two driver of the exact whereabour reducing that increased absolute maximum spect assisting train which, as leads to a 0.2% reduction consultation comment, communication would a clearly visible from an a enter the section as an requirement to put the been removed. The abs was arrived at as this ap level track of 325 metre available under present assisting train fail to loc explodes the detonator maximum speed to be of caution as defined in m meaning that, having ta visibility, the driver wou obstruction and it must than a target speed. The was considered particul having to proceed for so report as a long block so increase in collision risk 61% to 16% and togethe In poor visibility withou shown to be an increase considered to be offset train to meet the assisti use of detonators which of reducing their use.



ness Case for Change (BCfC) the changes is based on the quantified supported by an element of ent to develop proposals for those RA did not provide a complete oval of a requirement to place e protection is shown by the QRA to to a driver going trackside, but an of 33% without any alternative ision of GSM-R radio communication rs to assist in a greater understanding its of the failed train is assessed as risk to 3%. Adding to this an ed during the movement of the now, must be made at caution, on in collision risk. Following a it has been agreed that GSM-R add limited value if the failed train is assisting train waiting to be allowed to assisting train. In that situation, the two drivers in communication has solute maximum speed of 25 mph oproximates to a braking distance on es which is similar to that which is rules should the driver of the cate the driver of the failed train and rs. 25 mph is however an absolute observed whilst proceeding at odule TW1 of the Rule Book as aken into account conditions such as uld be able to stop short of any be regarded as a ceiling speed rather e imposition of a maximum speed larly in relation to an assisting train ome distance (expressed in the QRA ection) where in isolation the is assessed as being reduced from er with GSM-R communication to 3%. t GSM-R communication there is ed collision risk, which qualitatively is by requiring the driver of the failed ing train, but without requiring the would be counter to the objective

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
2	P.4	M2 – Section 1.1	Diagram M2.1 and M2.2 has been withdrawn	The diagrams M2.1 and M2.2 have been removed and this would be useful to resubmit as these are useful for training purposes or where trainee staff are reviewing the rule book contents explaining these requirements. These support any changes to M2 Section 1.	15	NC	3	1.1	An updated equivalent of situation in normal circu useful information as no of the failed train would the assisting train at var themselves to a single d would significantly amp
3	P.5	M2 – Section 2	Am I correct in understanding that the protection detonators at 300 metres have been withdrawn for ESW and TBW working? If this is the case, please refer to my suggestion.	I would support a further review of retaining the existing instruction for placing three detonators at 300 metres where emergency special working or temporary block working is in place where the visibility of the portion is less than 300 metres due to poor visibility around curvature, darkness or poor weather.	15	NC	5	2.2	None of the risk assess for retention of the assi work did not consider a emergency protection a the signaller could not in emergency special work in force. This has been r of the driver's actions in module. This includes re not appeared since 2003 detonators as assistance remove significant risks increase in collision risk control measures. Provi between the two driver of the exact whereabour reducing that increased GSM-R communication collision risk, which qua by requiring the driver of assisting train, but with which would be counter use. As the driver of the the signaller it is probab cannot be established b poor visibility the driver meet the assisting train signal. In good visibility approaching at caution distance.
4	P.5	M2 – Section 2.2	Diagram M2.3 has been withdrawn	The diagrams M2.3 has been removed and this would be useful to resubmit as these are useful for training purposes or where trainee staff are reviewing the rule book contents explaining these requirements.	15	NC		Diagram M2.3	An updated equivalent of situation in normal circu useful information as th would no longer appear assisting train at varying a single diagram and it i significantly amplify the



of either diagram representing the umstances could not depict any very either the detonators nor the driver d appear. The requirements to meet rying locations do not lend diagram and it is not considered this olify the text.

ment work recommended any case istance protection detonators. That any changes to the requirements for and the requirement for this when immediately be contacted and either king or temporary block working was retained, together with amplification line with the other changes to this estoring some instructions that have 3. Removal of a requirement to place e protection is shown by the QRA to to a driver going trackside, but an of 33% without any alternative ision of GSM-R radio communication rs to assist in a greater understanding its of the failed train is assessed as I risk to 3%. In poor visibility without there is shown to be an increased litatively is considered to be offset of the failed train to meet the out requiring the use of detonators r to the objective of reducing their e failed train was unable to contact ble that GSM-R communication between the two drivers, and during r of the failed train will be required to whilst displaying a hand danger the assisting train would be a train that can be seen from a

of either diagram representing the umstances could not depict any very ne assistance protection detonators r. The requirements to meet the g locations do not lend themselves to is not considered this would e text.

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5	5-6	2.2	Although this revised clause would not be appropriate for RfL managed infrastructure within the East London Line core route, we are not the only area of the GB main line railway that has geography of stations and running lines wholly within tunnel or 'red zone' areas. We accept that local operating instructions pertinent to these areas (usually contained within relevant Sectional Appendices) will supersede GERT8000 where appropriate, however as we could still have ESW and TBW within these areas, the proposed revisions are potentially confusing and we are concerned they could possibly be misconstrued or applied in error.	We would ask that the conditions for applying this emergency protection procedure be clarified – perhaps within 2.1 (which we accept is not proposed to change but which does set out when this would be applied). It must be absolutely clear to the users of this module – drivers and signallers – exactly when this all applies and who is doing what. RfL supports the intention of this proposed change, but the wording contains a lot of conditional application which makes it much harder to understand than perhaps it ought to be.	5	NC	5	2.2	As the risk assessment with requirements for en- to perpetuate the requires situation of an inability of during a period when en- temporary block workin. The wording of section 2.2 he long-standing omission of the failed train after plate also to align this with the Removal of a requirement protection is shown by the to a driver going tracksion 33% without any alternate GSM-R radio communicate assist in a greater under of the failed train is asset to 3%. In poor visibility with is shown to be an increase is considered to be offset train to meet the assistific use of detonators which of reducing their use. As possible to contact the set communication cannot of drivers. During poor visi by the driver of the failed signal and additions have cater for the variety of the
6	P.7	M2 3.1 item b)	Please note an observation for further consideration regarding if the visibility of the failed train is less than 300 metres due to weather, curvature, tunnel and other circumstances.	I would support a further review of retaining the existing instruction for placing three detonators at 300 metres where a portion for a divided train is left in section where the visibility of the failed train is less than 300 metres due to poor visibility around curvature, darkness or poor weather.	15	NC	8	3.1 b)	Removal of a requireme protection is shown by t to a driver going tracksid 33% without any alterna GSM-R radio communica assist in a greater under of the failed train is asse to 3%. In poor visibility w is shown to be an increa is considered to be offse train to meet the assisting use of detonators which of reducing their use.



work did not consider any changes to mergency protection, it is necessary rement for this in the particular to contact the signaller immediately mergency special working or ig is in force on the line concerned. 2.1 is unchanged. However, the has been changed, both to rectify a of any instructions to the driver of cing the emergency protection, and e possible scenarios in section 3.1. ent to place detonators as assistance the QRA to remove significant risks ide, but an increase in collision risk of ative control measures. Provision of cation between the two drivers to rstanding of the exact whereabouts essed as reducing that increased risk without GSM-R communication there ased collision risk, which qualitatively et by requiring the driver of the failed ng train, but without requiring the would be counter to the objective it has not been immediately signaller, it is probable that GSM-R be established between the two ibility the assisting train will be met ed train displaying a hand danger ve been necessary to section 2.2 to ocations at which this might happen.

ent to place detonators as assistance the QRA to remove significant risks ide, but an increase in collision risk of ative control measures. Provision of cation between the two drivers to rstanding of the exact whereabouts essed as reducing that increased risk without GSM-R communication there ased collision risk, which qualitatively et by requiring the driver of the failed ing train, but without requiring the h would be counter to the objective

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
7	P.7	M2 3.1 item b)	Please note an observation which may consider that should GSM-R comms be not available by all parties, protection arrangements for the train at 300 metres should be in place.	I would support that if GSM-R comms is not available between the assisting and failed train protection in form of detonators should be placed to protect the train covering visibility and access arrangements.	15	NC	8	3.1 b)	Removal of a requirement protection is shown by to a driver going tracksi 33% without any altern GSM-R radio communic assist in a greater under of the failed train is asso to 3%. In poor visibility is shown to be an increa- is considered to be offse train to meet the assist use of detonators which of reducing their use.
8	7	3.1	During poor visibility – display a hand danger signal, the dver of the assisting train may miss this and if they do the assisting train will be heading towards an unprotected failed train	During poor visibility – return back to original working of 3 dets, 300m from failed train, then driver of the assisting train will be sure to stop.	9	NC	8	3.1 b)	The existing rules are w danger signal that is the train at the assistance p distance of 300 metres. providing a final warnin observed. Removal of a assistance protection is significant risks to a driv collision risk of 33% wit measures. Provision of between the two driver of the exact whereabour reducing that increased GSM-R communication collision risk, which qua by requiring the driver of assisting train, but with which would be counter use.
9	7	3.1b	Scenarios when the drier would still be required to get out of the train and proceed on foot to a defined point: I understand this outcome is the result of extensive risk work. It's a great step forward overall but my reflection is that these are scenarios when we're expecting the driver to get out of the train and walk in poor visibility. Essentially it seems to me we are trading the greater risk of train collision with the heightened risk of slip/trip/fall for the driver and increased signaller workload of protecting the driver etc. Retaining these scenarios also makes for an overall more complex set of instructions.	I think it would be worth TOMSC specifically considering whether there is sufficient safety benefit to retain these clauses, particularly those where a clearly definable point is being used ie a stop signal or block marker that is less than 300 yards from your train, or a tunnel entrance that is less than 300 metres	12	NC	8	3.1 b)	The QRA work demonst combination of GSM-R maximum speed of 25 r collision risk below that but it is the former that times higher to an 11% conclusion that in these would be given by the a the driver of the failed t the risks to that driver of



ent to place detonators as assistance the QRA to remove significant risks ide, but an increase in collision risk of ative control measures. Provision of cation between the two drivers to rstanding of the exact whereabouts essed as reducing that increased risk without GSM-R communication there ased collision risk, which qualitatively et by requiring the driver of the failed ing train, but without requiring the h would be counter to the objective

ritten on the basis that it is the hand e means of stopping the assisting protection point, normally at a . The detonators serve as a means of ng should this not have been requirement to place detonators as shown by the QRA to remove ver going trackside, but an increase in hout any alternative control GSM-R radio communication rs to assist in a greater understanding uts of the failed train is assessed as I risk to 3%. In poor visibility without there is shown to be an increased alitatively is considered to be offset of the failed train to meet the out requiring the use of detonators r to the objective of reducing their

trated that in poor visibility the communication and an absolute mph is necessary to reduce the t involved in the use of detonators, t reduces that risk from a factor of 8.8 reduction. Qualitative work led to a e circumstances some mitigation addition of a hand danger signal from train, although this does reintroduce of leaving the cab.

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
10	7	3.1b	The phrase "300 metres (approximately 300 yards)" is used in 3 of the 4 bullets but not the second one	Sees a shame to use more words when less will do so why don't we remove the "(approximately 300 yards)" altogether or failing that just use it in the first bullet point as it then becomes obvious in the later ones	12	DC	8	3.1 b)	This is an oversight that the alternative distance
11	7	3.1a	General comment: How do we mitigate against the risk of the drivers agreeing to something signallers are not aware of? What is the role of the TOC Control or ISSTs (if any)?	In real world situations of failed trains there is a lot of communication between drivers and their respective controls – as well as with the signallers and Integrated Service Support Technicians (ISSTs). The proposed rule changes do not take these into account or give any indication as to how this might work.	5	NC	7	3.1 a)	It is correct to say that of but in this section agree the train has failed and assistance will be provid be taken to. It has to be are found necessary be away the signaller must influence how that mov
12	7	3.1b	How does this account for failures in extended red zone areas such as RfL, Merseyrail, ScotRail etc? There are uses of both metric and imperial measurements (metres and yards) in the bulleted list which are not consistent.	Such instructions cannot be applied in areas like ours (and many others). We accept that these areas would be likely to have specific local instructions, but as it seems the rule book is now catching up with the sort of situations we have had to write local instructions for perhaps consideration could be made to including these areas so they can be brought into the main rules for the first time?	5	NC	8	3.1 b)	As with the content of a represents an agreed ve applied across the netw existing requirements h impracticable to apply t continue to adopt mod based on the revised re present a difficulty. It is have to be demonstrate
				Measurement terms should be consistent.		DC	7	3.1 b)	An oversight has been o



t will be corrected by reintroducing of consistency.

other conversations may take place, eement has already been reached that d requires assistance, how that ided and where the failed train is to e assumed that if any further changes efore the failed train can be assisted at be made aware of this as it may wement is dealt with.

any rules, the published version version capable of being consistently work. If there are locations where the have to be modified because it is them, it may be necessary to dified arrangements in the future equirements, should these still is obvious that any alternative would ted not to worsen associated risks.

corrected for consistency.

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
13	7	3.1b	In poor visibility with no GSM-r contact our opinion is that if the driver is having to get out of the cab and walk trackside to stand 300 metres from the train to meet the assisting train, then detonators should be placed as per the current arrangement. Detonators were primarily intended for use in poor weather, hence the original term "fog signal". The main benefit of removing the requirement to place detonators for assistance protection is that the driver can remain in the train. If they are leaving the train, that benefit is lost, and detonators should be placed to give the assisting train another prompt that they have arrived at the point where they are to pick up the driver of the failed train. Depending on the level of poor visibility (thick fog for example), a flag or light may not be adequate.	Reintroduce the requirement to place detonators in the poor visibility with no GSM-r contact scenario. One detonator may be adequate, as per the usage of them by handsignallers.	1	NC	8	3.1 b)	The objective of the prodetonators, so that they that drivers no longer has Particular attention was situation of poor visibilit two control measures of absolute maximum spece 51% reduction in collision comparison with the use having the greatest sign proceed at caution wou lower approach speed. It assess an alternative wh be established. It should existing arrangements, to of the driver of the faile as the assisting train will has not been stopped by detonators can be at a lithe failed train.
14	7	3.1 b	There's no requirement for the driver of the failed train to display a danger signal to the driver of the assisting train during poor visibility – this seems important if the driver must leave their train and wait 300m in rear of the failed train to meet the assisting train during poor visibility. There is risk that the assisting driver does not see the driver of the failed train.	To include the use that the driver of the failed train displays a danger signal to the driver of the assisting train during poor visibility.	4	NC	8	3.1 b)	This requirement is inclu approaching. The assisti section until the driver of where the assisting train considered to be alread
15	7	3.1 a	"If you cannot speak to the driver of the assisting train by means of GSM-R radio, you must remain on the train and wait for the assisting train to arrive" Is this the best alternative method of work? It will increase the time it takes to move a failed train; A freight train could be 750m long causing the assisting driver to walk a minimum of 1.5km while on or near the line after stopping at the rear of the failed train to walk and make contact with the driver of the failed train to then return to the assisting train. That's not including if the drivers have to walk to either end of the train to deal with the fault. Additionally, the 750m might not be safe to walk and require line blockages etc.	To review the requirements	4	NC	8	3.1 b)	During good visibility, the remain with it and if GSI established with the drives such as the location of the the signaller. This would could be allowed to entre is necessary to proceed before this can happen. driver of the failed traine example to assist with connecessary arrangements be made. This would reconnecessary TW1 to be applied.
16		3.1 a	How is a driver going to know a red taillight is displayed? Freight trains use battery powered portable tail lamps, which often fall off which might not be reported to the signaller due to the frequent moves that take place during quiet times on the network.	Review the requirements	4	NC	7	3.1 a)	This is not a new require unchanged in section 1. assisted from the rear, a tail lamp on the rear and can only be done by viso
17	7	3.1 A	The language used in section 3.2 is 'Normal Arrangement' and 'During Poor Visibility' which isn't the case in 3.1 in it's entirety.	Consider adding 'Normal Arrangement' to 3.1.A title	8	DC	7	3.1 a)	This may provide a degr will be made as suggest



pject has been to reduce the use of y no longer have to be provided and ave to be competent to use them. given in the QRA work to the ity. The report concluded that the f GSM-R communication and an ed for the assisting train result in a on risk in poor visibility by se of detonators, with the first-named nificance. The requirement to Ild in such conditions, result in a Hence the need to qualitatively hen GSM-R communication cannot d be borne in mind that in the reliance is placed on the observation ed train and the hand danger signal, Il only explode the detonators if it by the hand danger signal. The lesser distance than 300 metres from

uded when the assisting train is sing train cannot be admitted to the of the failed train is at the location n will be met and this point is dy addressed.

he driver of the failed train can 5M-R communication cannot be iver of the assisting train, information the failed train will be passed through d suggest that the assisting train ter the section more quickly than if it to the assistance protection point . If however there is a need for the n to be at the rear of the train, for coupling, this would require any ts such as blocking an adjacent line to quire the arrangements in module

ement, being carried forward .3. Before agreeing that a train can be a driver must confirm that there is a id, in the case of a freight train, this ual inspection.

ree of consistency and the amended ted.

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
18	7	2.2	Removing the need to place standard assistance protection seems to be removing a safeguard should any issues arise prior to placing 'full protection' or making other protection arrangements with the signaller.	To further review the removal of standard assistance protection detonators (300 metres) taking into account how the risk changes in poor weather, darkness and other features such as track curvature.	14	NC	5	2.2	As the risk assessment with requirements for en- to perpetuate the requi- situation of an inability of during a period when en- temporary block working Removal of a requirement protection is shown by to to a driver going tracksing 33% without any alterna GSM-R radio communic assist in a greater under of the failed train is asset to 3%. In poor visibility wi is shown to be an increa- is considered to be offset train to meet the assisti use of detonators which of reducing their use. Do will be met by the drive danger signal and additi 2.2 to cater for the varies happen.
19	7&9	3.1b & 3.2b	Is it possible that 'a tunnel entrance' might be misinterpreted as one that is in the direction of train travel (i.e. the opposite end to the failed train).	The clause should clearly state whether the tunnel entrance / exit is in relation to the driver of the failed train or the assisting train for clarity.	2	NC	8 and 9	3.1 b) and 3.2 b)	This did indeed require avoid ambiguity, recogn the failed train from eith wording is written from failed train and clarity h addition of instructions within a tunnel. Whiche train is proceeding it wil 300 metre distance that the further end of the tu appeared to be a simple this to the entry to and perspective of an assisti either direction.
20	7&9	3.1b & 3.2b	We need to make sure that the driver is clearly visible to the driver of the assisting train.	Consider adding some wording to ensure the driver places themselves where they are visible to the approaching assisting train.	2	NC	8	3.1 b)	It is considered sufficien must be shown to the d obvious that this has to darkness it would not no of the failed train would



work did not consider any changes to mergency protection, it is necessary irement for this in the particular to contact the signaller immediately mergency special working or ng is in force on the line concerned. ent to place detonators as assistance the QRA to remove significant risks ide, but an increase in collision risk of ative control measures. Provision of cation between the two drivers to rstanding of the exact whereabouts essed as reducing that increased risk without GSM-R communication there ased collision risk, which qualitatively et by requiring the driver of the failed ing train, but without requiring the would be counter to the objective uring poor visibility the assisting train r of the failed train displaying a hand ions have been necessary to section ety of locations at which this might

careful consideration as to how to hising that assistance may approach ther direction. In both sections the in the point of view of the driver of the has possibly been added by the concerning a train that has failed ever direction the driver of the failed ill be an entrance to a tunnel within a t is encountered, or equally that it is unnel from the failed train. This er option than attempting to relate exit from a tunnel from the ing train that can approach from

nt to state that a hand danger signal driver of the assisting train. It is be clearly visible, and during necessarily be the case that the driver d be clearly visible.

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
21	8	3.1 B	You must: • stay at this point and wait for the assisting train to arrive • display a hand danger signal to the driver of the assisting train when it approaches. There is no mention in this section of the need to board the assisting train. I appreciate it's referenced in 3.4 but no signposting currently.	Either signpost to section 3.4 for next steps (from 3.1.B), add necessary next steps to 3.1.B (and keep 3.4) or consider merging 3.4 into 3.1.B (removing the need for 3.4).	8	NC	8	3.1 b)	The proposed presentat with the principle of pre- which they occur, so that an assisting train can be those when the driver is those that apply during when the assisting train failed train, and 3.4 those after having met the assist
22	P.8	M2 3.2 a)	To proceed at caution and travel at a speed not exceeding 25 mph (40 km/h)	I believe stating that a ceiling speed may be perceived by Train Drivers as a speed that they may travel rather than retaining the current caution instruction. Travelling at caution indicates to a Driver that the speed is subject to their route knowledge based on the Drivers judgement and experience around visibility, route knowledge, weather conditions, complexity of signalling, and other associated route knowledge elements.	15	NC	8	3.2 a)	The QRA work considered maximum speed would increased collision risk be detonators is reduced for reduction is from a factor mph maximum approxim distance of 325 metres of approximately 300 metre by the use of detonators proceed at caution and mph, which aligns with the Rule Book, is design target speed. Applying to Book module TW1 would lower than this where co
23	8	3.2a	Should we just state at caution and not include a speed? A ceiling speed may become a target speed and increase the risk of collision?		13	NC	8	3.2 a)	The QRA work considered maximum speed would increased collision risk k detonators is reduced for reduction is from a factor mph maximum approxin distance of 325 metres of approximately 300 metres by the use of detonator proceed at caution and mph, which aligns with the Rule Book, is design target speed. Applying to Book module TW1 woul lower than this where co



tion has the advantage of consistency esenting actions in the sequence in at section 3.1 covers actions before e allowed to proceed, section 3.2 s given permission to proceed, 3.3 the movement, including those n will be met by the driver of the use of the driver of the failed train sisting train.

red whether imposition of an absolute reduce the collision risk. Overall, the by comparison with the use of from 19% to 4%. In poor visibility the for of 6.8 to a small increase. A 25 mately equates to a stopping on level track. This is similar to the free warning that would be provided rs. The wording that the driver must travel at a speed not exceeding 25 that previously used elsewhere in hed to avoid any suggestion of a the definition of 'at caution' in Rule Ild result in the actual speed being conditions dictate this.

red whether imposition of an absolute reduce the collision risk. Overall, the by comparison with the use of from 19% to 4%. In poor visibility the for of 6.8 to a small increase. A 25 mately equates to a stopping on level track. This is similar to the free warning that would be provided rs. The wording that the driver must travel at a speed not exceeding 25 that previously used elsewhere in need to avoid any suggestion of a the definition of 'at caution' in Rule Ild result in the actual speed being conditions dictate this.

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24	P.8	M2 3.2 b)	Please note an observation for further consideration regarding if the visibility of a failed train is less than 300 metres due to weather, curvature, tunnel and other circumstances.	I would support a further review of retaining the existing instruction for placing protection detonators at 300 metres where a failed train visibility is less than 300 metres due to poor visibility around curvature, darkness or poor weather.	15	NC	9	3.2 b)	Poor visibility is consider throughout the Rule Boor relation to the expected nor a tunnel are regard factor such as fog is also project has been to red they no longer have to longer have to be comp attention was given in the poor visibility. The repor measures of GSM-R corr maximum speed for the reduction in collision rise with the use of detonate greatest significance. The would, in such condition Hence the need to qual GSM-R communication borne in mind that in the placed on the observation and the hand danger signed. The distance than 300 metrice
25	8	3.2	Where the instruction states that the signaller shall put the assisting train in touch with the driver of the failed train.	Can we add some wording to ensure that this is done once the assisting train is at a stand just for clarity as the signaller should not be doing this whilst a train is moving.	10	NC	7	3.1 a)	Section 3.1 a) states that is ready to enter the set stationary at the time.
26	8	3.2	We have introduced a new speed to the signallers when conducting this process which has a risk of the signaller becoming confused with other speeds.	Change the speed to a maximum of 20mph, which allows consistency with other areas of the rule book thus reducing the risk of confusion upon application.	10	DC	9	3.2 a)	This raises an interestin previously. If the Rule B must observe in a given for the signaller to 'repo- state the nature of the preferable to refer to the directed at the driver. similar situation has be on module M1. As this a this has been removed
27	8	3.2a	Where it states that the signaller must tell the driver of the assisting train where the failed train must be taken to. It is not clear at which point that the signaller will do this?	Reword to state: Once the driver of the assisting train has spoken to the driver of the failed train you may now advise the driver of the assisting train where the failed train is to be taken.	10	NC	8	3.2 a)	Sections 3.1 and 3.2 sho sequential order. In sec to enter the section, an information to the drive through the signaller. S actions including giving permission to proceed.



ered in the same context as that used ook, namely that visibility is poor in ed conditions, and neither darkness ded as poor visibility unless some so affecting this. The objective of the duce the use of detonators, so that be provided and that drivers no petent to use them. Particular the QRA work to the situation of ort concluded that the two control mmunication and an absolute e assisting train result in a 51% sk in poor visibility by comparison tors, with the first-named having the The requirement to proceed at caution ons, result in a lower approach speed. litatively assess an alternative when cannot be established. It should be he existing arrangements, reliance is tion of the driver of the failed train ignal, as the assisting train will only if it has not been stopped by the detonators can be at a lesser res from the failed train.

at this occurs when the assisting train ction. It would therefore be

ng point that has been considered Book specifies instructions a driver n situation, it should not be necessary beat' these to the driver, but only to e movement. It would therefore be the 25 mph speed only in a rule This would be consistent with how a een dealt with following a comment appears for the driver in section 3.3, I from section 3.2 a).

nould be read as effectively being in ction 3.1, an assisting train is available nd the driver provides the necessary ver of the assisting train, directly or Section 3.2 covers the signallers g the dri8ver of the assisting train

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
28	8	3.2a	It is not clear under normal arrangements when it has been possible for both drivers to speak to each other, whether upon authorising the assisting train to pass the protecting signal at danger at what maximum speed does the assisting train enter the occupied section?	As per my previous comment regarding speed, irrespective of whether the drivers have communicated the assisting train should always be advised to proceed at a maximum of 20mph to avoid confusion.	10	DC	9	3.2 a)	The QRA work consider maximum speed would increased collision risk k detonators is reduced fir reduction is from a factor mph maximum approxin distance of 325 metres approximately 300 metro by the use of detonator proceed at caution and mph, which aligns with the Rule Book, is design target speed. Applying to Book module TW1 woul lower than this where co Book specifies instruction situation, it should not here 'repeat' these to the drift the movement. It would the 25 mph speed only would be consistent with dealt with following a co appears for the driver in from section 3.2 a).
29	8	3.2	You must put the driver of the assisting train in contact with the driver of the failed train by GSM-R radio. You must tell the driver of the assisting train where the failed train must be taken to. If necessary, you must instruct the driver to pass at danger the signal protecting the obstructed line or pass an end of authority (EoA) without a movement authority (MA). If you cannot put the driver of the failed train and the driver of the assisting train in contact via GSM-R radio, you must: • instruct the driver of the assisting train to proceed at caution during the movement towards the failed train and travel at a speed not exceeding 25 mph (40 km/h) • give the driver of the failed train any necessary information regarding the movement.	My worry is the around the how we ensure that there is no confusion over who is authorising / directing the movement can the communications protocol be more defined? Consider Can we clarify at which point control / guidance of the assisting train is passed to the driver of the failed train perhaps at the end of the initial conversation?	7	NC	8	3.2	It is not the intention the assisting train remains i train having been guide location of the failed tra- failed train. If necessary by means of GSM-R con drivers. It might be that the front that the driven the assisting train can b



red whether imposition of an absolute reduce the collision risk. Overall, the by comparison with the use of rom 19% to 4%. In poor visibility the or of 6.8 to a small increase. A 25 mately equates to a stopping on level track. This is similar to the res warning that would be provided rs. The wording that the driver must I travel at a speed not exceeding 25 that previously used elsewhere in ned to avoid any suggestion of a the definition of 'at caution' in Rule Id result in the actual speed being conditions dictate this. If the Rule ions a driver must observe in a given be necessary for the signaller to iver, but only to state the nature of Id therefore be preferable to refer to in a rule directed at the driver. This th how a similar situation has been comment on module M1. As this in section 3.3, this has been removed

hat this happens. The driver of the in control of the movement of that ed by the information, such as the ain, provided by the driver of the y, further clarification can be sought mmunication between the two t if assistance is being provided from r of the failed train could confirm that be seen approaching.

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
30	8	3.2a	In the real world signallers would have to liaise with TOC Control (or others) to ascertain exactly where a train would be sent to – such decisions are unlikely to be made by a signaller alone. It would not be possible for drivers to ascertain this on their own if the discussions were between them via GSMR alone. This may not be what was intended in this revised wording, but that is how it could be construed. POSA isn't mentioned, yet this could be active in such circumstances? The maximum speed stated can only be the higher of any other applicable restriction in the area concerned – care should be given that 25mph is not taken as the directed speed.	Although the instruction is clear that the signaller tells the driver(s) where they will be going to, this won't be something that the signaller is likely to be able to ascertain on their own. The wording is confusing in that this is stated AFTER the drivers have been put in touch with each other – and clearly they won't be in a position to make such a designation. Could you please look at the order or wording of this to make it clearer?	5	NC	8	3.2 a)	The intention of the rule by the two drivers invol as to the train to be use failed train will indeed h the control organisation is merely passing on the decision. This is not a situation in facility to be used. The requirement is to p 25 mph at any time dur true that when proceed in module TW1 any low might be considered as caution must still be ob:
31	8	3.2 (a)	New speed of 25mph, means another speed for Signaller to remember during perturbed working	Switch to 20mph to standardise speeds	9	DC	8	3.2.a)	If the Rule Book specifie in a given situation, it sl signaller to 'repeat' the nature of the movemen to refer to the 25 mph s driver. This would be co has been dealt with foll this appears for the driv removed from section 3
32	8 & 10	3.2 & 3.3	Is there a reason why a speed of 25mph was chosen?	Drivers may more easily remember 20mph as this is more in keeping with other situations where they are driving on 'line of sight'.	2	NC	8 and 10	3.2 and 3.3	The QRA work consider maximum speed would increased collision risk l detonators is reduced fi reduction is from a fact mph maximum approxi distance of 325 metres approximately 300 met by the use of detonator proceed at caution and mph, which aligns with the Rule Book, is design target speed. Applying to Book module TW1 wou lower than this where c



les is to define the actions to be taken lved and the signaller. The decisions ed to assist and the disposal of the have been with the involvement of n and passed on to the signaller, who at information rather than taking a

which module PoSA allows the

proceed at caution and not to exceed ring the movement. It is of course ding at caution in the manner set out ver permissible speed than that which a consistent with proceeding at oserved.

es instructions a driver must observe hould not be necessary for the set to the driver, but only to state the nt. It would therefore be preferable speed only in a rule directed at the onsistent with how a similar situation lowing a comment on module M1. As ver in section 3.3, this has been 3.2 a).

red whether imposition of an absolute I reduce the collision risk. Overall, the by comparison with the use of from 19% to 4%. In poor visibility the tor of 6.8 to a small increase. A 25 imately equates to a stopping on level track. This is similar to the tres warning that would be provided rs. The wording that the driver must I travel at a speed not exceeding 25 that previously used elsewhere in ned to avoid any suggestion of a the definition of 'at caution' in Rule and result in the actual speed being conditions dictate this.

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
33	8	3.2a	The signaller should be instructing the driver of the assisting train to drive at caution in all circumstances. This section only stipulates caution and a max speed of 25 mph if the drivers cannot talk over GSM-r. Whereas section 3.3 states that the assisting train driver must proceed at caution and not exceed 25mph.	Add that the signaller should instruct the driver to drive at caution, not exceeding 25mph. The emphasis should be on the need to drive at caution as opposed to the maximum speed allowable too.	1	DC	8	3.2 a)	The requirement is to pr a speed of 25 mph at an 'at caution' in Rule book actual speed being lowe this. If the Rule Book spe observe in a given situat the signaller to 'repeat' the nature of the mover preferable to refer to th directed at the driver. T similar situation has bee on module M1. As this a this has been removed f
34	9	3.2 (b)	No Assistance protection during poor visibility – increased risk	Return assistance protection dets during poor visibility	9	NC	9	3.2 b)	The objective of the pro detonators, so that they that drivers no longer ha Particular attention was situation of poor visibilit two control measures of absolute maximum spec 51% reduction in collision comparison with the use having the greatest sign proceed at caution wou lower approach speed. If assess an alternative wh be established. It should existing arrangements, no of the driver of the faile as the assisting train will has not been stopped by detonators can be at a later the failed train.
35	9	3.1	As per comment in the steering group when the driver of the assisting train can see the failed train why is the patching through to the failed driver needed as not required by the risk assessment. This makes the rules more complicated than is required. In addition to purpose of why the drivers need to talk to each other which is location and any assistance requirements.	The rules would be supported if the driver of the assisting train does not need to talk to the driver of the failed train if the failed train can be seen. Also would help if the reason for the communication was clear.	6	DC	7 and 8	3.1 a) and 3.2 a)	A reason for establishing the two drivers is to esta- location of the failed tra- referred to, it has been clearly visible from the I waiting to proceed, this provision of GSM-R com The rules have been am this is unnecessary in th
36	9	3.2b	If the suggestion (1) above is adopted this section will also need updating.		1	DC	9	3.2 b)	As explained in the resp removed from the signa only as an instruction to



proceed at caution and not to exceed ny point. Applying the definition of k module TW1 would result in the er than this where conditions dictate becifies instructions a driver must ation, it should not be necessary for these to the driver, but only to state ment. It would therefore be the 25 mph speed only in a rule This would be consistent with how a en dealt with following a comment appears for the driver in section 3.3, from section 3.2 a).

pject has been to reduce the use of y no longer have to be provided and ave to be competent to use them. given in the QRA work to the ity. The report concluded that the of GSM-R communication and an ed for the assisting train result in a on risk in poor visibility by se of detonators, with the first-named nificance. The requirement to Ild in such conditions, result in a Hence the need to qualitatively hen GSM-R communication cannot d be borne in mind that in the reliance is placed on the observation ed train and the hand danger signal, Il only explode the detonators if it by the hand danger signal. The lesser distance than 300 metres from

ng GSM-R communication between tablish as accurately as possible the ain. Following the discussions agreed that if the failed train will be location where the assisting train is a fact is already known and the munication would add little value. hended in both sections to state that his situation.

ponse to that comment, this has been aller's instructions and will appear the driver in section 3.3.

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
37	9	3.2b	How would the signaller be able to 'make sure that the driver of the failed train will do one of the following' ?	Wording needs to be reasonable – all a signaller could do would be to issue an instruction(s) – after that it is up to those they've given it to apply; the signaller can't be 'sure' of anything in that regard.	5	NC	9	3.2 b)	As a result of the conve train that will have take in sections 2.2 and 3.1 a where the assisting trai assisting train to enter t that the driver is alread reached it by the time t that extent that the sign necessary conditions ar movement
		The selection of bulleted options is confusing and hard to understand. Even after reading a few times it still isn't clear and the wording is very complicated. There are a large number of 'what if' situations which don't help with clarity. There is a bullet at the bottom of the page which states that	Please reconsider or rework this section to make these options clearer for signaller users.					There are a variety of p that arise when emerge completeness, all of the This is preferable to list appears to be no obvior	
			There is a bullet at the bottom of the page which states that the signaller 'must tell the driver of the assisting train: the exact location of the failed train' – a signaller cannot know this from a workstation or diagram. The best they would ever know is which section they are in OR a description of where the train is that they may have received from the driver of the train concerned.	This bullet should be looked at to reflect what a signaller can reliably tell a driver regarding train location.					This corresponds to the of the failed train who v precisely as possible. As precise description that
			The issues of TOC Control interface and info, and also POSA apply to the final parts of this item as well.						The same comments or
38	9	3.2 B	 If the driver is not at the point ready to meet the assisting train, you must: ask the driver of the failed train how long it will take to get to that point (how would this communication take place if the Driver has already left the train?) wait a suitable time before authorising the driver of the assisting train to enter the section. (What is classed as a suitable time?) 	Not overly clear currently on what the two bullet points mean or how they are to be conducted. Further detail required in the points.	8	NC	9	32 b)	This is effectively a perp If it has already been es train has gone to the ap can be permitted to pro period of time must ela reality, the latter can or failed train.



ersations with the driver of the failed en place either in situations described a), it will have been established n will be met. Before allowing the the section, the signaller has to know ly at that location, or will have the assisting train arrives there. It is to naller must be sure that the re in place before permitting the

ossible situations, including those ency protection is necessary. For em have been shown in one place. ing them separately and there us simplification.

information provided by the driver will have described the location as s stated, this may well be a more t a signaller could have provided.

n these two issues also apply here.

petuation of an existing requirement. stablished that the driver of the failed opropriate location, the assisting train oceed immediately, but otherwise a apse before this can happen. In nly apply if the driver is with the

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
39	9	3.2 B	You must tell the driver of the assisting train: • the exact location of the failed train • the point from which the assisting train will be met • where the failed train must be taken to	There is a reference to what to do if the Driver of the failed train is not at the meeting point in 3.3 (although it might be worth considering adding in 3.3 a reference to contacting the Signaller if that is suitable), but nothing currently in 3.2 B. Consideration to be given to adding to 3.2 B a point around telling the driver of the assisting train what to do if the driver of the failed train is not at the meeting point.	8	NC	9	3.2 b)	Section 3.2 contains the driver's are in section 3 being at the expected p
40	9	3.2b	There is no mention of actions for an adjacent line within a tunnel should this scenario present itself.	Whilst a driver of a failed train is walking through a tunnel to meet the assisting train, all trains on an adjacent line within the tunnel must be stopped and cautioned until the driver of the failed train has confirmed that they are clear of the tunnel.	10	NC	9	3.2b)	This requirement appear continue to apply. Ther in continuing the presen describe the driver/sign to cover the specifics of the various block syster
41	8	3.2a	Should we just state at caution and not include a speed? A ceiling speed may become a target speed and increase the risk of collision?		13	DC	9	3.2 a)	The requirement is to p a speed of 25 mph at ar 'at caution' in Rule Boo actual speed being lowe this. If the Rule Book sp observe in a given situa the signaller to 'repeat' the nature of the move preferable to refer to the directed at the driver. similar situation has bee on module M1. As this a this has been removed
42	10	3.3	Providing a ceiling speed can have an adverse effect where drivers drive 'at' that speed (a speed to be attained).	Remove the ceiling speed of 25mph and just say 'at caution'.	14	NC	10	3.3	The requirement is to p a speed of 25 mph at ar 'at caution' in Rule Boo actual speed being lowe this.



e instructions to the signaller, and the 3.3 which deals with the driver not picking-up point.

ears in block regulation 7 and will are appears to be no apparent difficulty ent practice of using module M2 to gnaller arrangements and regulation 7 of signalling an assisting train under ems.

proceed at caution and not to exceed any point. Applying the definition of ok module TW1 would result in the ver than this where conditions dictate pecifies instructions a driver must ation, it should not be necessary for c' these to the driver, but only to state ement. It would therefore be the 25 mph speed only in a rule This would be consistent with how a een dealt with following a comment appears for the driver in section 3.3, I from section 3.2 a).

proceed at caution and not to exceed any point. Applying the definition of ok module TW1 would result in the ver than this where conditions dictate

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
43	10	3.3	Introduction of a new speed	Change the speed to a maximum of 20mph as per previous comments.	10	NC	10	3.3	The QRA work consider maximum speed would increased collision risk detonators is reduced f reduction is from a fact mph maximum approxi distance of 325 metres approximately 300 met by the use of detonator proceed at caution and mph, which aligns with the Rule Book, is design target speed. Applying Book module TW1 wou lower than this where o
44	P.10	M2 3.3	To proceed at caution and travel at a speed not exceeding 25 mph (40 km/h)	I believe stating that a ceiling speed may be perceived by Train Drivers as a speed that they may travel rather than retaining the current caution instruction. Travelling at caution indicates to a Driver that the speed is subject to their route knowledge based on the Drivers judgement and experience around visibility, route knowledge, weather conditions, complexity of signalling, and other associated route knowledge elements.	15	NC	10	3.3	The QRA work consider maximum speed would increased collision risk detonators is reduced f reduction is from a fact mph maximum approxi distance of 325 metres approximately 300 met by the use of detonator proceed at caution and mph, which aligns with the Rule Book, is design target speed. Applying Book module TW1 wou lower than this where o



red whether imposition of an absolute d reduce the collision risk. Overall, the by comparison with the use of from 19% to 4%. In poor visibility the tor of 6.8 to a small increase. A 25 simately equates to a stopping s on level track. This is similar to the tres warning that would be provided ors. The wording that the driver must d travel at a speed not exceeding 25 in that previously used elsewhere in ned to avoid any suggestion of a the definition of 'at caution' in Rule uld result in the actual speed being conditions dictate this.

ered whether imposition of an absolute d reduce the collision risk. Overall, the by comparison with the use of from 19% to 4%. In poor visibility the ctor of 6.8 to a small increase. A 25 kimately equates to a stopping s on level track. This is similar to the etres warning that would be provided ors. The wording that the driver must d travel at a speed not exceeding 25 in that previously used elsewhere in gred to avoid any suggestion of a g the definition of 'at caution' in Rule uld result in the actual speed being conditions dictate this.

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
45	P.10	M2 3.3	Please note an observation for further consideration regarding if the visibility of a failed train is less than 300 metres due to weather, curvature, tunnel and other circumstances.	I would support a further review of retaining the existing instruction for placing detonators at 300 metres where a failed portion where the visibility of the portion is less than 300 metres due to poor visibility around curvature, darkness or poor weather.	15	NC	10	3.3	Poor visibility is consider throughout the Rule Boor relation to the expected nor a tunnel are regarded factor such as fog is also project has been to redu- they no longer have to be longer have to be comp attention was given in to visibility. The report cor- measures of GSM-R com- maximum speed for the reduction in collision riss with the use of detonate greatest significance. The would, in such condition Hence the need to quality GSM-R communication borne in mind that in the placed on the observati and the hand danger signed explode the detonators hand danger signal. The distance than 300 metro
46	10	3.3	Caution speed 25mph	Switch to 20mph to keep standardised speeds	9	NC	10	3.3	The QRA work considered maximum speed would increased collision risk k detonators is reduced for reduction is from a factor mph maximum approxin distance of 325 metres of approximately 300 metre by the use of detonator proceed at caution and mph, which aligns with the Rule Book, is design target speed. Applying to Book module TW1 woul lower than this where co



ered in the same context as that used ook, namely that visibility is poor in conditions, and neither darkness ed as poor visibility unless some o affecting this. The objective of the uce the use of detonators, so that be provided and that drivers no petent to use them. Particular the QRA work to the situation of poor ncluded that the two control mmunication and an absolute e assisting train result in a 51% sk in poor visibility by comparison cors, with the first-named having the he requirement to proceed at caution ns, result in a lower approach speed. litatively assess an alternative when cannot be established. It should be ne existing arrangements, reliance is ion of the driver of the failed train gnal, as the assisting train will only if it has not been stopped by the detonators can be at a lesser es from the failed train.

red whether imposition of an absolute reduce the collision risk. Overall, the by comparison with the use of from 19% to 4%. In poor visibility the for of 6.8 to a small increase. A 25 mately equates to a stopping on level track. This is similar to the free warning that would be provided rs. The wording that the driver must travel at a speed not exceeding 25 that previously used elsewhere in hed to avoid any suggestion of a the definition of 'at caution' in Rule Ild result in the actual speed being conditions dictate this.

No	Page	Clause	Comment	Suggestion	Ву	Way	Page	Clause	Response
47	10	3.3	The reference to exploding detonators seems a bit out of context but I understand why it's there (because of a situation where emergency protection has been laid).	I think this point needs moving to the end of the section, or somewhere better where it can be referenced alongside emergency protection for complete clarity. Additional detail required.	8	DC	11	3.3	This wording was retain to any emergency prote driver of the failed train protection has been laid reason. However, in the instruction is that exploid assisting train is now 30 and the assisting train r avoid a collision. As this will be deleted and the be as shown in section and location and whether a
48	10	3.3	The maximum speed stated can only be the higher of any other applicable restriction in the area concerned – care should be given that 25mph is not taken as the directed speed. The second and third paragraphs insinuate that the two drivers can authorise their own movements. This is potentially dangerous if misunderstood. We accept this isn't what is intended of course, but the wording should be clearer in that regard. Further down the page the instruction states that 'You must only enter a tunnel if: you know that the driver of the failed train is not in the tunnel and that the tunnel is clear.' How would the assisting train driver know this for sure?	All sections commented on here should be looked at for clearer and more accurate wording.	5	NC	10	3.3	The requirement is to p 25 mph at any time dur true that when proceed in module TW1 any low might be considered as caution must still be ob This does not seem to b failed train cannot be m such. The assisting train signaller. The provision was envisaged as possil location of the failed tra train later doubt that th would not be the basis authorised movements This has been retained possibly of limited relev does not apply if the dr been picked up, but cou train had to pass throug the assisting train is to l anticipated to get there cannot have reached th
49	10	3.3	This section implies that the GSM-r call can be made on the movement towards the failed train. This increases the risk of collision due to distraction.	Emphasise that any GSM-r communications which are required after the start of the movement towards the failed train should only occur after the assisting train has been brought to a stand.	1	NC	10	3.3	Although it is probable stand before using GSM and the ability to make content of section 39.1
50	11	3.4	First para. – which instruction is this referring to? It isn't clear.	Revise wording to make it clear what instruction is being referred to.	5	NC	11	3.4	The reference is to the wording is used to avoid



ned because of the possible relevance ection that had been laid by the n. It is also possible that emergency id by someone else for another e current issue the reason for this oding detonators implies that the 00 metres or less from the failed train must be stopped immediately to is is no longer an issue, the sentence e driver's actions would then always 13 of module TW1 depending on the a handsignal is displayed.

proceed at caution and not to exceed ring the movement. It is of course ding at caution in the manner set out wer permissible speed than that which s consistent with proceeding at bserved.

be a possible interpretation. The moved after it has been declared as in has been authorised to move by the for further GSM-R communication ibly a further enquiry to clarify the rain should the driver of the assisting this has been fully understood. It is of any alteration to the agreed and s.

from the previous issue, although it is evance. As written, the instruction river of the failed train has already ould still apply if the driver of the failed ugh a tunnel to reach the point where be met and has taken longer than e. In this case, the assisting train itself hat location.

that the train would be brought to a *A*-R, this is not necessarily the case, the call safely taking into account the of module TW1 must be applied.

remainder of section 3.4. This form of id a single lengthy second paragraph.

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
51		3.1 3.3	SP: Section 3.1 and 3.3 requires the signaller to connect the 2 drivers over the GSMR. It states "to give any information" but I believe that this needs expanding to outline what the 2 drivers must agree on.		3	NC	7 and 10	3.1 and 3.3	Apart from establishing will always be necessar that can be specified, be type of traction or train might influence the app adhesion being a possib
52		3.1 3.3	SP: Section 3.1 and 3.3 I believe this also requires a sentence about once the drivers have given their information the assisting driver must then speak to the signaller to gain authority to pass the signal at danger. The way it reads at the moment once the drivers have finished their GSMR call the driver will start the movement without getting signaller permission		3	NC	7 and 10	3.1 and 3.3	Section 3.1 refers to the confusion could not aris the current issue of mor possible need to be aut section 3.3, with reliand the signaller's instruction drivers' attention.
53		2.2	KC: "When you have completed emergency protection, you must return to your train" – this seems inconsistent with the justification with removing the need to lay detonators due to the risk of the driver walking 300m on ballast, if they have to walk 2000m (1.25 miles) then walk a further 2000m back to the train they have walked 4000m on ballast.		3	NC	6	2.2	The present project has emergency protection r included with little char any instructions on the emergency protection r since 2003. They have r revisions to module M2
54		2.2	KC: 2.2 Providing emergency protection – "you must proceed to a location which is one of the following: A location less than 1 ¼ miles from the train where you can communicate with the signaller" - in all other circumstances you place three detonators, why not in this instance?		3	NC	6	2.2	There is no intended ch clarify that the location contacted refers to one As this is the telephone to be provided as referr point is covered.
55		3.1 (a)	KC: "If you cannot speak to the driver of the assisting train by means of GSM-R you must remain on the train and wait for the assisting train to arrive" – how is this a safe default, if no comms surely protection must be laid?		3	NC	7	3.1 a)	Removal of a requirement protection is shown by to a driver going tracksi 33% without any altern GSM-R radio communic assist in a greater under of the failed train is asso to 3%. In poor visibility is shown to be an increa- is considered to be offse train to meet the assisti use of detonators which of reducing their use.



the location of the failed train which y, there is no other obvious detail ut this could include explaining the length, or any other factor that proach to the failed train, poor ple example.

e driver of the failed train and this se. So far as section 3.3 is concerned, adule M2 does not refer to the thorised to pass a signal at danger in ce being placed on this element of ons in section 3.2 being drawn to

s not considered any changes to requirements and these have been nge. However, it was recognised that driver's actions after carrying out have been omitted from this module now been restored to align with the 2.

ange in the requirements, except to from which the signaller can be at less than full protection distance. or signal box at which protection is red to in the third paragraph, this

ent to place detonators as assistance the QRA to remove significant risks ide, but an increase in collision risk of ative control measures. Provision of cation between the two drivers to rstanding of the exact whereabouts essed as reducing that increased risk without GSM-R communication there ased collision risk, which qualitatively et by requiring the driver of the failed ing train, but without requiring the h would be counter to the objective

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
56		3.1 (b)	KC: During poor visibility you are instructed to proceed to 300m and display a hand danger signal, no mention of detonators. It could be argued that the use of a red signal less than 300m may render the use of detonators unnecessary but in all other circumstances surely they should be laid.		3	NC	8	3.1 b)	The objective of the pro- detonators, so that they that drivers no longer h Particular attention was situation of poor visibili two control measures of absolute maximum spec- 51% reduction in collision comparison with the us- having the greatest sign proceed at caution woul lower approach speed. assess an alternative wh be established. It should existing arrangements, of the driver of the faile as the assisting train wi has not been stopped b detonators can be at a l the failed train.
57		3.1 (b)	KC: "During poor visibility if you cannot speak to the driver of the assisting train by means of GSM-R you must go to one of the following: A tunnel entrance that is less than 300m from the train" – you are then instructed to stay at this point and display a hand danger signal with again no detonators used even though you may be standing considerably less than 300m from the failed train.		3	NC	8	3.1 b)	As explained, the QRA we element of qualitative we additional controls shout available between the co anomaly was addressed less than 300 metres from required to walk to the more than one mile. The penalties and it seemed even at a distance of less
58		3.3	KC: The instruction for the driver to proceed at no more than 25mph is concerning as the feeling is that drivers will see this as a target speed, would this speed reflect the risk of a train that has failed on a curve which is on a downhill gradient in light drizzle which has no detonator protection?		3	NC	10	3.3	The QRA work consider maximum speed would increased collision risk l detonators is reduced fi reduction is from a fact mph maximum approxi distance of 325 metres approximately 300 met by the use of detonator proceed at caution and mph, which aligns with the Rule Book, is design target speed. Applying to Book module TW1 wou lower than this where c an earlier comment, it w that the driver of the fa the assisting train would



pject has been to reduce the use of y no longer have to be provided and ave to be competent to use them. given in the QRA work to the ity. The report concluded that the of GSM-R communication and an ed for the assisting train result in a on risk in poor visibility by se of detonators, with the first-named nificance. The requirement to uld, in such conditions, result in a Hence the need to qualitatively hen GSM-R communication cannot Id be borne in mind that in the reliance is placed on the observation ed train and the hand danger signal, ill only explode the detonators if it by the hand danger signal. The lesser distance than 300 metres from

work had to be supplemented by an work to consider acceptable uld GSM-R communication not be drivers. In doing so, a long-standing d, namely that if a tunnel mouth is om the failed train, the driver was far end, in some cases a distance of is introduces hazards and time d preferable to require a handsignal ss than 300 metres.

red whether imposition of an absolute reduce the collision risk. Overall, the by comparison with the use of rom 19% to 4%. In poor visibility the or of 6.8 to a small increase. A 25 mately equates to a stopping on level track. This is similar to the res warning that would be provided rs. The wording that the driver must travel at a speed not exceeding 25 that previously used elsewhere in ned to avoid any suggestion of a the definition of 'at caution' in Rule Id result in the actual speed being conditions dictate this. In response to was suggested that a possible fact iled train might pass to the driver of Id be any adhesion issues at the site.

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
59		3.3	KC: "you must speak to the driver of the failed train if it is necessary to get or give any necessary information during the movement" – This is not in line with our Driving Policy and could prove to be a distraction when entering an occupied section.		3	NC	10	3.3	Although it is probable t stand before using GSM and the ability to make content of section 39.1
60		3.3	KC: "you must stop on exploding detonators" – at this point none have been laid?		3	DC	10	3.3	This wording was retain to any emergency prote driver of the failed train protection has been laid reason. However, in the instruction is that explo assisting train is now 30 and the assisting train n avoid a collision. As this will be deleted and the be as shown in section 1 location and whether a
61			NT: Do I assume that basically it is the responsibility of the failed driver to identify to the assisting driver the location of the failed train, are both the drivers route knowledge on the same level, can they or are they good at identifying exactly where they are, bridge number, milepost, substation, foot crossing? What if a train has failed and the driver is sitting directly opposite 23mp for example and he identifies to the assisting engine that he is at "23 milepost" Excellent exact location for the failed driver but no one has mentioned that the train consists of 35 freightliner wagons or similar train of car transporters which is nearly half a mile long so the rear is at 22 and half, oh dear rear end collision by the assisting engine (Lunan Bay 1976 where they got the wrong location).		3	NC			An advantage of direct of drivers would be that be understanding of the loo to the driver of the assis case if a message has al- signaller. At the same ti referred to would be ex train type and length if the driver of the assisting tr between any trains over suggested of a further of assisting train subseque been fully understood.
62		3.2	NT: Second para - You must tell the driver of the assisting train where the failed train must be taken to. Absolutely no mention of where the failed train is, surely it is more important at this stage to identify where the failed train is, only once it has been coupled, brakes released and ready to move then you can say where it is now going.		3	NC	10	3.3	Under the normal arran the location of the failed driver of the failed train available, this is passed section 3.2. The assisting basis that it will assist th and this is what the sign as shown in section 3.2 assumed that the plann If it is then necessary to requirements in section alternative arrangemen train would have to be n



that the train would be brought to a 1-R, this is not necessarily the case, the call safely taking into account the of module TW1 must be applied.

ned because of the possible relevance ection that had been laid by the h. It is also possible that emergency d by someone else for another e current issue the reason for this oding detonators implies that the 00 metres or less from the failed train must be stopped immediately to is is no longer an issue, the sentence driver's actions would then always 13 of module TW1 depending on the handsignal is displayed.

communication between the two oth are able to reach a common ocation, expressed in terms significant sting train. This is not necessarily the lways been passed through the ime, the other information that is spected to include reference to the this is not likely to be obvious to the rain because there is no variation er the route. An opportunity is also conversation should the driver of the ently doubt that the location has

ngements described in section 3.1 a) d train will have been given by the n. When GSM-R communication is not on by the signaller as shown in ng train has been provided on the he failed train to a particular location naller would normally tell the driver a) or 3.2 b). For simplicity, it is ned arrangements can be carried out. o change those, whilst the ns 3.5 and 3.6 would still apply, nts for the movement of the assisted made before that can take place.

No	Page	Clause	Comment	Suggestion	Ву	Way forward	Page	Clause	Response
63		3.3	NT: Second para states "you must alwaysdriver", yet the 4th para says follow the instructions from the signaller. Confusing?		3	NC	10	3.3	The second paragraph ro being available betweer applies when this is not



refers to GSM-R communication n the two drivers, whereas the fourth t possible.