Consultation comments received on GEGN8532 Issue 5 - Guidance on 'Signals, Railway Track, Explosive' (also known as 'Detonators')

Summary of comments submitted	Number	Comment categorisation key
Consulted		
Critical errors		CE
Editorial errors		ED
Typographical errors		TY
Observations	3	OB
Total returned		
Classification codes (CC)		
Document change	2	DC
No change	1	NC
Date responses published:		

Closing date 16 November 2021

1. Dean Fry, Transport for Wales
2. Laurence Gregory, Angel Trains
3. Mark Farrell, GWR

No	Page	Section	Comment	Proposed revised text	By	Section	Page	CC		[RSSB draft responses]]
								Way forward		
1			Whilst the standard provides guidance on the types of detonators, applicable regulations, acquisition, storage, transport and disposal; I have no specific comments on the guidance as written. However, is it time that industry looked at the continued use of detonators as a warning device, given the studies already carried out – see adjacent column?	Studies coordinated and published by RSSB in the use and effectiveness of detonators have been carried out over the years, specifically: T507 – 2006 'Review of the continued use of detonators' and more recently. T1167 – June / October 2019 – 'Evaluating the Effectiveness of Detonator and Possession Limit Board Protection Testing the Effectiveness of Detonators' and, T1155 July 2020 Quantified Risk	2			OB	NC	Following the publication of the two recent research reports T1155 and T1167, there are three workstreams which will be considering the potential alternatives to the use of detonators: • Project 19-005 is concerned with the provision of secondary communications in the absence of GSM-R radio. Part of this project will be concerned with the use of detonators in connection with assistance and emergency protection. • Following project T1167 a Network Rail workstream is considering the alternatives for protection of engineering work. • A recent Request for Help from Network

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				Assessment of the Use of Detonators and Alternatives Summary Report. In its conclusions, T507 notes that 'Discussions with LUL indicated that detonators have not been used significantly for the last 5 years, as they are looking into the use of alternative methods of protection, to eliminate them from the network. This will eliminate the hazards associated mainly with theft. Indeed, theft and vandalism, along with incorrect use of detonators are cited as concerns. The application of detonators has itself been attributed to death and injury a mentioned in the report. T507 considered alternative methods of protection such as the use of GPS technology. However, GPS technology back in 2006 was relatively new in railway signalling, concluding that in the short term there is no viable alternative method of protection that is likely to offer enhanced safety benefits to protect a failed train. Therefore, replacing detonators should not be considered until						rail proposes analysis of four remaining scenarios in which detonators are used, to determine whether the requirement to do so can be removed from the Rule Book. Between them, these activities will demonstrate the extent to which reliance on detonators can be reduced or eliminated.

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				better communications and positioning systems are available. Moving on 15 years and two further reports have been published; T1167 (2019) and T1155 (2020). T1167 recommends; 'the appropriateness of detonators as a suitable safety control measure has been brought into question. It is recommended that the use of detonators as a safety control measure be reviewed in the context of the overall risk assessment for protecting possessions and track workers'. T1155 mentions that some countries have abolished the use of detonators, due to them being potentially dangerous to the user, the impact on noise pollution, or being superseded by modern protection methods. Also, advances in technology have contributed to improving rail safety performance, such as improved rolling stock, signalling and train protection systems, and national roll-out of GSM-R. Thus, the risks of detonator protection may now be disproportionate to the						

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				value of their continued use. In its conclusions, proposed operational rule changes and recommendations for follow-up work are discussed. Have these been followed up and implemented by industry?						
2	9	2.4	Detonators for disposal	Could offer guidance on disposal	1			OB	DC	The existing standard could be made more useful to duty-holders. At present it merely states that disposal is in accordance with local instructions, but could contain guidance on how to establish a robust disposal procedure.
3	10	Net mass	Gun powder is not the correct term	Should read black powder	3			OB	DC	Use of the term 'black powder' would be preferable, as this would be consistent with how the substance is referred to in the RID regulations.