Rail Resilience Project (RRP)

Emergency Management Review:

Findings and Recommendations Report

17 September 2021

Version 1.3

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29 June 2021	Version 1.1	Reordering of findings	Thomas Croall
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17 September 2021	Version 1.3	Reordering of reported practices in Appendix E and minor editorial corrections.	Thomas Croall

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Foreword

"*Dear Colleague,*

I'm very happy to lend my full endorsement to the excellent work that has been carried out by the Cross-Industry Rail resilience working group, reviewing the Industry's approach to Emergency Management, following the widely supported Industry conference last January that asked for this work to be prioritised.

I was very happy to Chair an Industry Board reviewing the work of the Group because I have a close, personal association with the subject after 30 years of operational experience, where I have seen how brilliantly the industry can respond to significant incidents, but also how fragile our capability can sometimes be. It's my view, that this is an area, where the Industry and particularly our frontline staff and Control Centres regularly over-achieve despite a relatively informal approach to our preparations. Very often, because of the exceptional efforts of individuals and small teams' serious incidents are contained.

This report is recommending a more structured approach to this key area to provide standards, processes, training, measurement, and review so that we recognise and preserve what we do well, whilst understanding where our fragility lies, so that we can then address those issues.

Finally, whilst the focus has been on Emergency Management, the working group has also been determined to produce recommendations that not only strengthen our ability to respond to major incidents, but actually enhance our response to all incidents and therefore benefit the safe and punctual operation of our railway on a daily basis."

Steve Murphy,

Chair of Project Board, Rail Resilience Project

and

CEO MTR UK & Ireland

August 2021

Executive Summary

The UK railway faces a range of threats, hazards and operational challenges that jeopardise its ability to run services safely, securely and uphold customer confidence. Effective emergency management (EM) capability has never been more critical. The RRP Emergency Management Review has made a range of recommendations to address the inadequacies and capability gaps identified.

Whilst events such as the 2020 Stonehaven derailment and 2018 'Beast from the East' winter weather are rare, the risk they pose is significant and, in some cases, escalating (climate change and infrastructure deterioration); at worst they can lead to loss of life and at best cause significant detriment to customers and exact a heavy toll on public confidence. A demonstrably resilient railway will contribute to improved rail-user safety and security; promote public, government and regulatory confidence; and reduce prudential risk to 'UK Plc'.

The Rail Resilience Project (RRP) was established following dialogue between industry leaders, Department for Transport and Cabinet Office about the current state of rail industry EM. This report outlines findings and recommendations from a 14-week industry-led review.

The review elicited evidence and views from across the UK mainland rail EM community to establish a 'state of the nation' across four thematic areas of enquiry:

Foundations of Emergency Management

- **Standards and guidance:** The industry lacks a common and consistent approach to EM, partly due to a lack of a coherent body of knowledge or standards. *Recommendation 2 [R2] should address this.*

- **Governance regulation and industry oversight:** There is patchy, inconsistent, and sometimes poor oversight of the state of EM at organisational and industry level, which fails to hold organisations or wider industry to account for failings.

Recommendations 2, 3, and 4 [R2, R3 and R4] should address this.

- **Culture, leadership engagement and support:** Senior leadership support for and understanding of EM, outside of major incident response, is inconsistent. *Recommendations 1 and 3 [R1 and R3] should address this.*

- **Managing & measuring performance:** There is no systemic and systematic performance measurement for EM risk and capability across the rail industry. *Recommendations 4 and 5 [R4 and R5] should address this.*

People and Resources

- **Resourcing:** Resourcing for the whole lifecycle of EM activities is unsystematic and inadequate. *Recommendations 5, 7, 8 and 9 [R5, R7, R8 and R9] should address this.*

- **Training and competency management:** The industry has no consistent and cohesive competency management standards in place for EM. *Recommendation 1 [R1] should address this.*

Emergency Management Practice

- **Anticipation, assessment & prevention:** Formalised and transparent processes for anticipation and assessment of EM risk are absent, meaning that risk management is not being effectively used to drive EM activity. *Recommendations 3, 4, 5 and 6 [R3, R4, R5, and R6] should address this.*

- **Planning for response and recovery:** There is no consistent approach to the structure or format of rail emergency plans, leading to reduced effectiveness across industry and when engaging with multi-agency partners. *Recommendations 2 and 9 [R2 and R9] should address this.*

- **Testing & exercising:** Testing and exercising of staff, arrangements, processes, and plans is often ad hoc, infrequent, and large-scale when 'little and often' would deliver better and more sustainable results. *Recommendations 2, 7 and 9 [R2, R7 and R9] should address this.*

- **Embedding learning and improving:** There is little or no effective sharing of

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learning between industry organisations nor central repository for lessons identified. Recommendations 7 and 9 [R7 and R9] should address this.

Partnership Working

- **Interoperability - working with other EM responders**: Engagement with Local Resilience Forum and multiagency partners is generally poor and inconsistent across industry. *Recommendations 1, 3, 5, and 8 [R1, R3, R5 and R8] should address this.*

- **Collaboration - working with other industry partners:** The industry's current approach to joint EM working via collaborative forums for discussion and collective working does not account for all key partners and rely nearly entirely on overstretched emergency planners. Recommendations 7 and 9 [R7 and R9] should address this.

It is important to note that the report and subsequent findings are designed to represent the overall industry position - some organisations we spoke to were more advanced in some respects than others, and levels of maturity as might be articulated in the ORR's Risk Management Maturity Model (RM3), were very varied.

Whilst it is beyond the scope of this review to diagnose the underlying causes of each individual finding, we believe there to be a significant interplay of cause and effect between the issues identified. Viewing the findings collectively a clear picture emerges that there is a lack of systemic consideration in both the design and deployment of rail EM.

The overall findings are summarised as:

- EM activities are substantively being delivered in an ad hoc and piecemeal fashion as opposed to being treated as component parts of an integrated management system with a clear line of sight through each organisation's management system and into industry governance.

- EM activity is too often considered / undertaken as a compliance burden as opposed to a core activity that provides valuable contribution to achieving both customer and organisational - outcomes.

This review makes nine recommendations (see table below) that, once implemented should lead to improved processes, greater understanding of risk and enhanced planning capability on a cross-industry basis. This should benefit customer and stakeholder satisfaction and safety, as well as supporting the industry's and Government's wider strategic objectives for the industry as outlined in the Williams-Shapps Plan for Rail.

It is now incumbent on the industry to take action to address the issues raised. To do nothing is not an option. To make change, the industry must take the outputs and recommendations from this review as the core scope of an industry-wide change programme.

Although it is clear that resources within the organisations in scope of the research are stretched and that therefore a programme team is likely to be required to implement any change, it is clear that the industry must play its part in contributing to each of the projects where relevant. Each recommendation refers to a cross-industry team; this term is flexible but should be read as being made up of programme team members (tbc) working alongside partners from TOCs, FOCs, NR and their industry partners in RDG, BTP, ORR, RSSB, funding bodies and other EM responders.

The industry must ensure adequate centralised governance, resource, and funding to deliver this programme of activity. The sequencing for implementing the recommendations and the interplay between them, will be important to ensure that the foundations are in place first.

Within the recommendations are relatively easy wins, as well as challenging longer-term deliverables that will take two years or more to define and deliver. It is recommended further work is undertaken to develop this change programme.

Recommendations	
R1	The industry must jointly develop a coherent, scalable competency framework for EM roles.
R2	The industry must develop a suitable body of knowledge and standards for EM.
R3	The industry must develop suitable structures to govern EM at both organisational and industry-wide levels.
R4	The industry must jointly develop a suite of metrics to drive improved EM performance.
R5	The industry must be able to assess EM capability.
R6	The industry's organisations must integrate wider risks (e.g. pandemic, fuel disruption) into their existing risk management processes to improve visibility and treatment of EM threats and hazards.
R7	The industry must establish a central knowledge hub to enable industry-wide information sharing.
R8	The industry must play a full role in the wider EM and responder community.
R9	The industry must reinvigorate the existing industry management forums to drive better collaboration and include all relevant industry partners.

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Contents

1   Rail Resilience Project (RRP) overview

1.1   Introduction

Following a number of incidents in 2018, notably severe weather leading to the stranding of many trains and their passengers nationally, there was confirmation to the rail industry (the industry) of the need for a more coherent and cohesive approach to managing rail emergencies in the UK.

The Cabinet Office asked the Emergency Planning College (EPC) to help scope a review of rail industry emergency management (EM). Initial meetings held by the EPC with Rail Delivery Group (RDG) and Network Rail (NR) in mid-2019, generated an understanding of where attendees believed rail industry EM needed to be and where it actually was. There were close similarities between the two, as well as gaps. It was noted that numerous examples of good practice already exist, industry improvements continue, and development plans were in discussion. However, there are inconsistencies - good practice is not always shared, and improvement initiatives are not always widely visible. RDG confirmed that many of the Forward Business Plan workstreams of the primarily passenger operator-focussed Emergency Planning Group (EPG), are aligned to some of the perceived gaps and weaknesses identified.

What was needed was a solid understanding of the current status of EM in the mainline rail industry in England, Wales and Scotland (covering passenger and freight operators as well as infrastructure owners). Having an evidence-based analysis of the current situation would allow the right course of action to be determined. Further meetings with other stakeholders, including British Transport Police (BTP) and Department for Transport (DfT), gave further support to the need to conduct a review and gap analysis of mainland UK rail EM.

Despite various external factors (notably the protracted departure of Britain from the EU (Brexit), a general election and more recently the impact of the COVID-19 pandemic) delaying the start of the project the first kick-off meeting for the project took place in January 2021 online. At that meeting it was agreed that a small team would be pulled together to: *Conduct a 12-week fact-finding review into the current state of rail resilience planning and response in the GB[1] rail industry and to identify areas of improvement to inform a longer-term programme of activity.*

The fact-finding review project (for the purposes of this paper the Rail Resilience Project - RRP) began in earnest in early Feb 2021 and concludes with the production of this report in May 2021.

There are two versions of this report. This more detailed report is designed to provide robust detail about the research process and evidence provided and is supported by shorter briefing packs which can be used for stakeholder engagement for those who do not require so much detail about the process behind the research.

1.2   Objectives and Scope

The RRP has three Objectives, which are to:

1.   Evaluate the industry's current capability to effectively identify, plan for, respond and manage potential and actual major incidents.
2.   Identify areas of improvement within the industry's current approach
3.   Provide recommendations on the activity required to address the areas of improvement

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[1] GB Rail Industry refers here to mainline railways in England, Wales and Scotland.

It is important to note that the scope of the project does not extend to the implementation of the recommendations - it sets out a suite of recommendations which would address the areas of weakness identified. It is for the industry, through its existing governance mechanisms, to determine, in partnership with funding organisations and key partners, who will carry out any follow-on work to implement it and how this work might be funded and resourced. Further details about the next steps are set out in Chapter 4.

1.2.1 Research Scope

Resilience means many things to different people and professions. For the purpose of this review the RRP Project Team were interested (in line with Objective 1) in finding out more about the resources engaged in activities that -industry organisations *use to identify, plan for, respond and manage potential and actual major incidents.*

The RRP uses the concept of Integrated Emergency Management (IEM) to define the boundaries of activities to be considered during the fact-finding project. IEM comprises six related activities: anticipation, assessment, prevention, preparation, response, and recovery and supports the wider UK approach to incident management outlined by the Civil Contingencies Act (2004).

Integrated emergency management and the Act

Integrated emergency management	Emergency Preparedness	Emergency Response and Recovery
Anticipation	√	
Assessment	√	
Prevention	√	
Preparation	√	
Response		√
Recovery management		√

Figure 1: **Emergency Preparedness - Non-Statutory Guidance accompanying the Civil Contingencies Act 2004**

The Project Team also used the Standard *BS ISO 22325: 2016 Security and resilience — Emergency management— Guidelines for capability assessment,* to direct the areas covered in the fact-finding project. The areas suggested by the Standard are leadership, resource management, information and communication, risk management, coordination and cooperation, emergency management planning, exercise programme, incident management system.

1.2.2 Organisational Scope

The organisational scope of the RRP is: *Any significant train & freight operating company running passenger or freight trains on, or infrastructure owner and manager of, mainline GB rail infrastructure.* The following organisations were identified as being within that scope:

- Infrastructure managers: Network Rail Regions
- Passenger - Train Operating Companies
- Non-passenger – Freight Operating Companies

In-scope organisations were asked to contribute information to the review. The review does not attempt to address issues relating to resilience and incident management in other key partner organisations such as BTP: however, several of the recommendations relate to the way that the in-

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scope organisations interact with BTP, LRFs, Trade Unions, Customers for example, and it is expected that future activities undertaken to implement change will involve close interaction with those key stakeholders. Other industries and organisations may find the results of the review of interest to their own operations (e.g. other transport operators in light rail, bus, and airline industries, as well as highways authorities etc.).
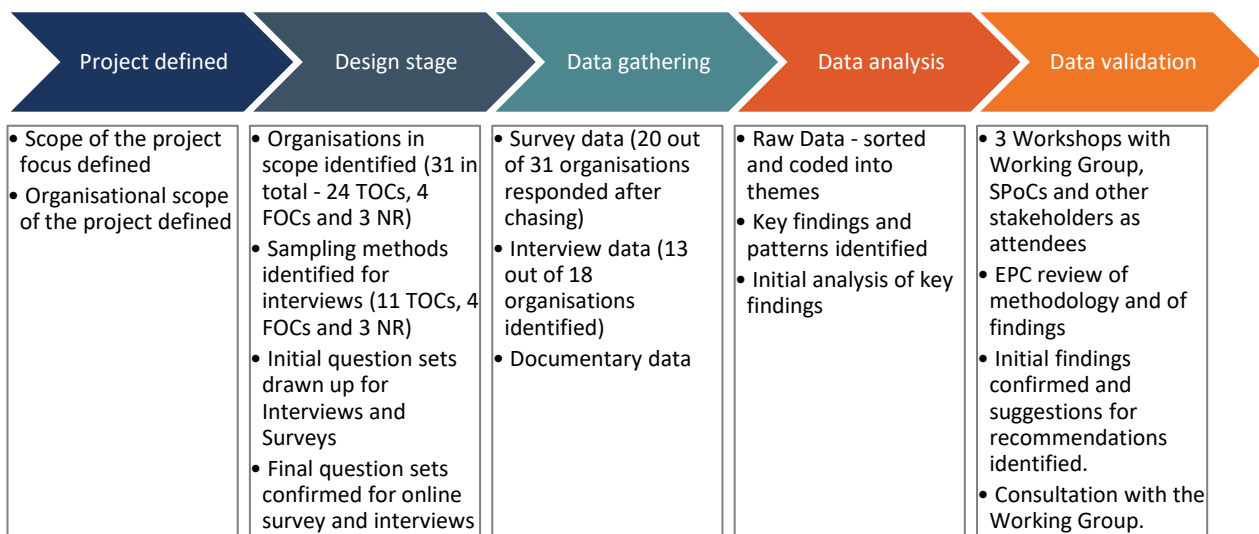
1.3 Methodology

The following section outlines in brief how the research underpinning this report has been conducted.   A diagram on the below summarises this and further details about the methodology are provided at Appendix A.

Having defined the project parameters of the project, the kinds of organisations that came under that scope were identified for contribution to fact-finding. The following **organisations were identified as being in scope** (full list at Appendix A):

- Infrastructure managers: Network Rail
- Passenger - Train Operating Companies
- Non-passenger – Freight Operating Companies

The project team **identified a sampling method,** recognising the feasibility challenges associated with trying to interview 29 organisations[2] and also, with feedback from the Project Board **designed the final question sets** used in the online survey and interviews.

Project defined	Design stage	Data gathering	Data analysis	Data validation
• Scope of the project focus defined • Organisational scope of the project defined	• Organisations in scope identified (31 in total - 24 TOCs, 4 FOCs and 3 NR) • Sampling methods identified for interviews (11 TOCs, 4 FOCs and 3 NR) • Initial question sets drawn up for Interviews and Surveys • Final question sets confirmed for online survey and interviews	• Survey data (20 out of 31 organisations responded after chasing) • Interview data (13 out of 18 organisations identified) • Documentary data	• Raw Data - sorted and coded into themes • Key findings and patterns identified • Initial analysis of key findings	• 3 Workshops with Working Group, SPoCs and other stakeholders as attendees • EPC review of methodology and of findings • Initial findings confirmed and suggestions for recommendations identified. • Consultation with the Working Group.

Three primary methods were used to gather analysed during this project. The main two mechanisms were data gathering via an **online survey and interviews.** Respondents for the online survey and the interview were provided with the questions in advance, so that they could prepare as needed and also for transparency. Of the organisations identified as being part of the sample, 20 completed online surveys and 13 were able to complete a face-to-face interview via MS Teams. The interviews lasted around 2 hours each, which generated around 26 hours of interview data to analyse.

On an ad hoc basis as needed and the third source of data, some SPoCs were also asked to **provide documentary information** for the project, which included for example performance data and post-incident reports. The Project Team also **engaged extensively with Keith Newton from**

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[2] Network Rail is only one organisation but was broken into 3 regions.

Network Rail who was almost simultaneously carrying out an audit of contingency planning and incident management across Network Rail and whose findings to a great extent mirror ours:

- Insufficient liaison with Local Resilience Forums
- Little evidence of an effective hazard assessment and risk process, including definition of what criteria is to be applied for operational risk assessment
- Poor definition of competency requirements for emergency planners or activities undertaken by operational employees related to operational risk assessment and local emergency plan development and management
- A lack of defined process for the maintenance testing and exercise of plans
- A lack of suitable metrics
- Unclear how legislative and regulatory framework is discharged through industry/NR standards
- A lack of resources
- A lack of an end-to-end process design

The responses from both the interviews and online surveys generated **two large spreadsheets of raw data**, which then had to be coded (allocated) to a particular area of the report. Once the raw data was chunked into the relevant areas of the thematic areas addressed by the report, we were then able to review and code the data in a more granular manner. Thus, common themes started to emerge from the collective anonymised responses.

Findings identified by Project Team were **challenged and tested via a set of 3 workshops** attended by SPoCs, members of the RDG and Emergency Planning Group (EPG), and colleagues from RSSB and stakeholder organisations. Each of the three-hour workshops covered multiple and different themes and was broken down into roughly 3 one-hour sessions.

Workshops notes informed the **initial findings and recommendations** that were briefed to the board in draft form on Friday 23 April. Comments received from the board at that briefing and from working group members (who fed back on the whole document) were then incorporated into the final report. One final test of the findings is reflected in Annex A: **RRP case studies.**

The report's methodology and the draft findings have themselves been subject to **a review by the Cabinet Office Emergency Planning College** - the output of which has been provided to the project board and EPC's recommendations in relation to methodology have subsequently been incorporated where possible in this current final report.

1.4   Industry context

The Rail Resilience Project comes at a time of significant change and challenge in the rail industry. Even before the onset of the COVID-19 pandemic the need for root and branch reform of how the rail industry is structured and organised was clear. The disruption caused by the 2018 timetable introduction showed the negative impact that fragmentation, misaligned incentives, and a lack of an overall strategic focus had on safety, performance, reputation and in turn on customers.

That is why the industry welcomed the announcement, in 2018, of the Williams Review and have welcomed the publication of the Williams-Shapps Plan for Rail. Many of the reforms contained in this document are welcome and in line with what the industry called for. Getting the detail right going forward will though be critical to ensuring that this white paper fulfils its potential and delivers a more joined-up, accountable safe railway which works in the best interests of customers, which continues to provide good, long-term career prospects for its workforce and is capable of successfully managing incidents of different scales.

The COVID-19 pandemic has, if anything, only served to highlight the need for reform. Despite the success of the UK's vaccine rollout and the prospect of a resumption of normal activity, travel patterns will not return to pre-crisis patterns for many years, if at all, driven by a rise in flexible and home working and other changes in the way people live their lives. At the same time, the levels of taxpayer support that has been provided to keep the railway running during the pandemic is not

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sustainable and it is crucial that as lockdown restrictions are eased, people are attracted back to the railway. While there are many ways to build back demand, demonstrating that the railway continues to be a safe form of transport will be critical to improving customer confidence and supporting wider economic recovery. We believe that a more joined-up approach to emergency planning and response has a critical part to play in supporting this.

Such an approach will enable the railway to be better prepared for the multitude of challenges that it faces, both now and in the coming years. The tragic events at Stonehaven in Scotland in August 2020 acted as a reminder that while safety on the UK's railway has improved significantly over recent years (indeed Stonehaven was the first occasion involving passenger fatalities on the network since 2007) challenges remain, in particular the impact that climate change, engineering integrity, the digitalisation of rail and extreme weather will have on the rail network as a whole, given the in part aging Victorian infrastructure.

Alongside this, there remains the ongoing challenge of the COVID-19 pandemic and the recovery from this, continuing changes connected with Brexit and an ever-shifting security situation and terrorism threat. The stringent focus on security irrespective of risk has drained finite resources away from other rail risks. All of these and other risks require a degree of cross-industry consideration and management, in particular when considering risk mitigations, responding to major incidents and post-incident review, and embedding of lessons learned.

The rail industry response to COVID-19 has, in many ways, seen unprecedented levels of cross-industry working and collaboration across a variety of areas, including operations and communications. This has generally been welcomed and contributed to positive perceptions for how the industry has managed the crisis. While in some cases pre-existing groups and forums were used to facilitate this response, the use of the Cross-Industry Crisis Command Framework has been critical in driving this collaboration. This framework was developed by the Rail Delivery Group (RDG) in conjunction with operators and Network Rail principally to managed cross-industry communication and commercial decision making in the run up to a potential no-deal Brexit. The structures in this framework were first stood up in February/March 2020 and augmented by other structures to successfully manage operational strategy and decision-making.

This approach, which has resulted in joint industry approaches across a range of areas including cleaning, station management and communications, has demonstrated the benefits of having robust structures and processes in place which can be rapidly stood up and which are recognised and understood across the industry. Not only can this potentially improve the response to the actual incident or crisis, but it also helps enhance customer and wider stakeholder satisfaction, mitigating criticisms that the industry is fragmented and ensuring that a more holistic or strategic approach is adopted where required.

It is also recognised that important stakeholder organisations and their arrangement may change in the future. For example, the British Transport Police (BTP) and Local Resilience Forum (LRF) arrangements and any recommendations made should be considered in this context.

Taking into account these lessons and experiences when reviewing and reforming the industry's approach to EM is, we believe, critical. If done correctly, this should mean not only improved processes, understanding and enhanced planning on a cross-industry basis, but a consequential increase in customer and stakeholder satisfaction and safety.

The recommendations outlined in this report seek to deliver on these objectives and are in line with the key aims of the Williams-Shapps Plan for Rail, specifically the desire to deliver a simplified, more efficient, and accountable railway that works in the best interests of its' customers.

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2 Findings by thematic area

The following main chapter outlines the findings of the RRP. The data was broken down into thematic areas and then sub-topic areas within that. Each section provides an overview of the findings from our research and a conclusion statement. This conclusion is then linked to the recommendations which are summarised at the end of the chapter. It is important to note that the report and subsequent findings are designed to represent the overall industry position - it is clear that some organisations we spoke to were more advanced in some respects than others.

The headline statements [written in orange] that summarise the overall industry position at the start of each section are unlikely to apply equally to each organisation but are provided to point out the main takeaway point.

Thematic Area	Sub-topics
Foundations of Emergency Management	Standards and guidance Governance regulation and industry oversight Culture, leadership engagement and support Managing and measuring performance
People and resources	Resources Training and competency management
Emergency Management Practice	Anticipation, Assessment and Prevention Planning for response and recovery Testing and exercising Embedding learning and improving
Partnership working	Interoperability - working with other EM responders Collaboration - working with other industry partners

2.1 Foundations of Emergency Management

This section covers topics which provide the foundations good EM. Broadly, it covers standards and governance structures therefore providing a structure within which EM work gets done. Without this structure consistently in place across the industry, EM is fragmented, pulling in different directions, or not pulling at all

2.1.1 Standards and Guidance

The rail industry lacks a common, consistent approach to EM in part due to a lack of a coherent body of knowledge or standards.

Alongside the commercial, reputational, ethical, and financial benefits of responding well to an incident, legal and industry prompts exist to steer the direction taken for emergency preparedness and response.

The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (as

amended). The ROGS require most railway undertakings to maintain a safety management system (SMS) and hold a safety certificate or authorisation indicating the SMS has been accepted by the Office of Rail and Road (ORR)[3]. Sch. 1, para. 2 places a statutory duty on these transport operators to ensure that accidents, incidents, near misses and other dangerous occurrences are reported, investigated, and analysed and that any necessary preventative measures (for the future) are taken. These regulations also require transport operators to produce plans

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[3] https://www.orr.gov.uk/sites/default/files/2020-11/rogs-guidance-october-2020.pdf

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to manage such events under their safety management system and to co-operate with other duty holders - little guidance is provided on how to achieve this.

The UK's primary legislative framework underpinning the response to major incidents and emergencies is **the Civil Contingencies Act 2004**. It defines an 'Emergency' and makes provisions for two types of responders who therefore have duties under the Act. TOCs, FOCs and Network Rail are all Category 2 responders under the Act and are required to co-operate and share information with other Cat 1 and 2 responders to ensure that they are well integrated within wider emergency planning frameworks. They must contribute their expertise on risks and essential services in the form of the Local Resilience Forums. The UK's structured approach to EM incorporates a lifecycle of activity linking pre-incident activity with the response and recovery - this is known as Integrated Emergency Management (IEM).[4]

Other relevant documents that <u>should</u> be informing incident response include:

- Railways (Accident Investigation and Reporting) Regulations 2005 (and amendment)
- Control of Major Accident Hazard (COMAH) Regulations 1999
- Emergency Response and Recovery - Non-statutory guidance accompanying the Civil Contingencies Act 2004[5]
- Cabinet Office - Expectations and Indicators of Good Practice Set for Category 1 and 2 Responders[6]
- Cabinet Office - National Resilience Standards for LRFs (August 2020)[7]
- National Occupational Standards for Civil Contingencies[8]

- RDG Cross-Industry Crisis Command Framework and Extensive RDG GNs (guidance notes) and ACOPs (Associated Code of Practice) - incl. Rail Delivery Group (RDG) Approved Code of Practice RDGACOP011 'Joint Industry Provision of Humanitarian Response Following a Major Passenger Rail Incident'
- NR National Emergency Plan
- RSSB - RIS-3119-TOM Railway Industry Standards for Accident and Incident Investigation
- JESIP Joint Emergency Services Interoperability Principles

A full list of relevant standards and guidance are provided at Appendix F.

Our research shows that reflected in general across the review findings, there is a lack of standardisation of the whole lifecycle of EM activity at both an organisational level and across the industry and with external partners. **No one really knows what 'good' looks like for EM - everyone has their own interpretation of what it *could* look like without an industry view of it being articulated and set.** Although there is a wealth of documents available that might be able to add consistency to EM management there is no single standard way of using of the standards available and no single joint doctrine underpinning EM at an industry level.

With the exception of parts of 'response', much of the activity undertaken is ad-hoc and/or follows a general but undocumented schedule. The legal and regulatory requirement is unclear in terms of what the industry position is, what it means for the industry and how to be compliant. The absence of standardisations risks

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[4] The Rail part was written in 2006 and only covers Incident Care Teams - Guidance: Civil Contingencies Act - Category 2 Responders: overview of sectors and emergency planning arrangements: https://www.gov.uk/government/publications/civil-contingencies-act-category-2-responders-overview-of-sectors-and-emergency-planning-arrangements
[5] Emergency Response and Recovery (2013) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/253488/Emergency_Response_and_Recovery_5th_edition_October_2013.pdf

[6] Expectations and Indicators of Good Practice Set for Category 1 and 2 Responders (2013) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/252341/Expectation_and_Indicators_of_Good_Practice_Set_for_category_1_2_Responders.pdf
[7]https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/913502/NRS_for_LRFs_V3.0__Aug2020.pdf
[8] https://www.ukstandards.org.uk/

inconsistency of application, efficacy/quality issues and limits repeatability and assurance. These risks are amplified for organisations that rely on one individual to manage the entire EM lifecycle - even more so for the large organisations who have responsibilities across different countries and sectors.

From our data we can see that the main industry document that organisations reported referring to is the non-statutory industry standard **RIS 3118: Incident Response Planning & Management.** This RSSB document contains requirements[9] and guidance for the development of rail incident response plans and management.

Although it provides clearly articulated information about what might be required and the reasons for this in some parts of the EM lifecycle - it is historically based on Railway Standards but compliance against it is no

longer an industry requirement, it is not mandatory, it is no longer an industry requirement (more of a nice to have), it does not cover all the aspects of EM (e.g. the incorporation of risk management into planning and training activity, the need to ensure competency not only of emergency planners but other staff involved in response etc.), it is only really focused on incidents involving physical train assets and it does not adequately provide detailed guidance about HOW to do what is required. RIS 3118 would seem like the ideal tool to review, revise and update. It is clearly well known and established in the industry and it is contributing in part to some sense of consistent practice, but more could be done.

The Cabinet Office Expectations and Indicators of Good Practice Set for Category 1 and 2 Responders articulates much of what is missing at a generic level

. **Conclusion:** There are inconsistencies in approach to EM as a whole system of working parts. This is driven in part because there is no single standard that every organisation and individual is required to adhere to. Many opportunities for common working practices are missed and pockets of excellence are isolated. What is needed is a common standardised approach for EM for the rail industry. This can then be used to drive arrangements and acts as a common end state that all can work towards. This can then be incorporated into assessment, governance and assurance processes and should make joined up collaborative working easier.

Relevant Recommendations:

- Recommendation 2 - Standard for EM

2.1.2   Governance, Regulation, and Industry Oversight

There is patchy, inconsistent, and sometimes poor oversight of the state of EM at organisational and industry level, which fails to hold organisations or wider industry to account for failings.

It is difficult to secure buy-in for organisational commitment to something without the issue being seen as important. **Robust scrutiny and governance arrangements** must be in place to support the visibility and management of EM risk and arrangements in a timely manner -, before, during and after an emergency response.

Such structures must be in place at an organisational, group and industry level. Those with ultimate accountability and oversight of EM arrangements must have a mechanism for getting assurance and understanding where risks exist.

At an organisational level, several organisations reported having dedicated cross-functional governance committees to oversee and assure EM activity with membership from across the organisation. Others reported EM featuring as an agenda consideration of their safety and/or security

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[9] Although these are not routinely audited for compliance against.

committees, however, coverage of EM at these committees was not always consistent. The organisations that did not have established governance arrangements for EM generally reported more difficultly in attaining management buy-in, resourcing and follow through of actions arising out of exercises, incidents and reviews.

Consideration of EM within industry legislation/regulation is sparse and dispersed across multiple bodies including the industry regulator - ORR (Office of Road and Rail), funding bodies (such as Department for Transport, Transport for Wales and Transport Scotland etc.). At time same time the Civil Contingencies Act 2004 (CCA) specifically outlines UK EM management requirements, but is not specific to rail and is not uniformly understood and accounted for in practice across the industry. The absence of a primary legislation/regulation and oversight body that addresses all aspects of rail industry EM has led to EM not receiving robust oversight.

The CCA is being reviewed in March 2022 - which is an opportunity for the rail industry to engage with the legal requirements under the CCA. Governance structures must support the requirements set out by the CCA and must recognise what those requirements are.

Although generally seen as the industry's collective mind on various collaborative projects, RDG has no ability to require, compel or enforce its members to do anything - it provides guidance for industry at industry's behest and has no direct front line role in responding to emergencies. Therefore, unless it is given a mandate by the industry to act on its behalf, it does not solve **the issue that there is no 'single controlling mind' that can hold rail organisations to account for EM** - a point also articulated more broadly in the Williams Review.

Most respondents noted there is currently limited interrogation of rail industry EM activities at industry level. Multiple

respondents noted that regulatory scrutiny that is undertaken would seem to be driven by the professional interests/backgrounds/skills of the inspector or individual involved and that at times it is influenced by the latest hot topic. It is an arbitrary outcome rather than systematic and structured review of EM activity and outcomes. A Regulator can only ultimately regulate against regulations, so the relative lack of regulations relating to EP by definition means formal regulation is limited and that scrutiny may have to come from within the industry instead.

Respondents who had received such scrutiny generally reported it to have been a positive in driving improvements. One organisation mentioned that historically the ORR required lengthy documents for regulatory compliance, which do not lend themselves well to use in an incident, but the move to a less prescriptive requirement means this is starting to change.

Regulatory requirements for safety and security are significantly more robust, with plans linked to clear KPIs, being customer driven and supported by a well understood framework (such as the National Railways Security Programme (NRSP)). This in turn drives organisational attention and resourcing. The fact that resources for EM planning are often in the same or adjacent teams to individuals managing safety and security - so the regulatory imperative for these parts of the organisation means that EM becomes a lower priority which is then ignored, underfunded and under-scrutinised. Because the EM side of things is more open to interpretation and less prescriptive - it means that there is less onus to have to get it done when prioritising work.

Some organisations noted that the new ERMAs[10] have raised the profile of emergency planning as DfT, Transport Scotland and Transport for Wales are seeking assurance that plans are in place and inspecting documentation. However, the

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[10] Emergency Recovery Measures Agreements: https://www.gov.uk/government/speeches/rail-update-emergency-recovery-measures-agreements

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level of documentary review varies between organisations and funding providers and many organisations were concerned that the new arrangements for budgetary sign off would be problematic in relation to an emergency where swift action is needed.

The way the ERMAs are set up by the DfT is that there are no performance measures for EM, nor for safety/security. Key indicators for the ERMA are that you are a good and

efficient operator, collaboration, performance and key deliverables. ERMAs only apply to franchised passenger operators and not to Open Access Operators, Network Rail, FOCs etc. who do not have the same funding relationship. The absence of EM as a measurable requirement in ERMAs between franchised operators and DfT was noted to be a key absence and missed opportunity to set requirements and influence organisation attention to EM.

Conclusion: There is inconsistent and sometimes poor or patchy oversight of the state of EM at organisational and industry level. What is needed is a consistent framework holding TOCs, FOCs and NR to account, allowing a consistent application of standards/guidance, and crucially enabling the industry to self-regulate where possible. There are strong links between this part of the report and the findings from the Standards section above. Better awareness, buy-in and support of EM at strategic level, would in turn lead to more effective use of resources and industry leaders with a better understanding of the risks being faced and the capabilities available for mitigating them. This must be based on a common standard for what is being done, governance structures for monitoring them and mechanisms for measuring performance against the standards.

Relevant Recommendations:

- Recommendation 2 - Standard for EM
- Recommendation 3 - Governance structures
- Recommendation 4 - KRIs/KPIs and performance management

2.1.3 Culture and Leadership engagement/support

There is inconsistent senior leadership support for and understanding of EM, outside of major incident response.

Linking strongly to governance and standards, **leadership support and engagement for EM** is crucial. With the right governance structures in place senior managers will be aware of and able to positively influence EM preparedness and response capability. Having the right standard to work towards will provide that oversight with the structure it needs. The intentions of the senior management team 'set the tone' for the rest of the organisation. Although culture cannot be entirely driven by a top-down approach it is certainly informed and influenced by it, as resourcing decisions will direct the attention of the organisation from one thing onto another and can in many intangible ways prevent people from responding in a resilient manner.

When we asked about how much support and engagement organisations had from their senior managers there were mixed responses. Some respondents reported leadership awareness and buy-in challenges.

From a competency and awareness perspective it was generally felt that most top managers were not sufficiently versed in the topic of EM to know what support was needed. Several respondents felt their management have a false sense of confidence in their organisation's capabilities. This may be attributable to a lack of transparent risk assessment and reporting governance structures highlighted above. Elsewhere, however other respondents noted the significant support they received from their managers in terms of time in front of them to make the case for extra budget when needed, support to make changes to address weaknesses identified and so on. Most respondents in the online survey agreed or strongly-agreed that senior management provide support and advocacy for EM in their organisation, but this appeared to be contradicted in the interviews and feedback from the workshops and indeed in the organisations who did not take up the offer to participate in the research.

Overall, there was a sense that management support was not always visible during the planning and preparation phases of EM, but there was a push (linking to 'can-do' culture) to get the job done and support the response when an incident happens. This suggests that the culture in the industry is to hope that the worst won't happen and to rely on goodwill rather than take a structured approach when it does. There was a concern that there were pockets of a "culture of it won't happen to us," in senior management. One individual we spoke to highlighted their concerns about senior managers' understandings of the role of Rail Industry Gold - "Unless senior leaders understand their role in EM and buy into it, there is little point in having SQEPed[11] individuals working on plans, because the plans won't be used."

These issues may be collectively attributed to high turnover of top management, bias of regulatory focus to safety/security, limited articulation of how EM contributes to strategic objectives and risk management and limited governed to promote regular and transparent visibility of EM capability/risk

At an industry level there is a high churn of senior managers and frequent changes to strategic leadership roles making it challenging for senior managers to develop their professional awareness and knowledge of EM. As there is no industry-level training programme for senior managers, this is done on an ad hoc basis and will differ from organisation to organisation. Where senior managers transfer from BTP, they are perhaps likely to exhibit a preference for security risks.

Several interviewees reported where those in leadership roles responsible for EM have had a previous career in the police/BTP, there is a tendency towards a directive style of leadership as opposed to a participative style of leadership. This experiential/style bias has also led to a focus on the response component of the EM lifecycle at the cost of the other lifecycle activities such as risk

assessments (in relation to EM risk) and prevention

Linking back to **culture**, resilience culture is an emerging concept in the rail industry and therefore many found it difficult to articulate. One respondent rightly pointed towards the fact that culture is about more than just words - it is about actions that back them up and these actions might include giving time to EM topics in governance meetings, providing adequate funding to resource the activities needed for resilience activities and taking the requirement for EM seriously. Several respondents noted how resilience is an afterthought of decision making and change as opposed to being an integral consideration at inception. The **ORR's Risk Management Maturity Model (RM3) for health and safety management systems is well understood and adopted in the industry, although it provides minimal detail on EM.** There is scope for the RM3 maturity model to be augmented and evolved to include EM which could help with the articulation of a resilience culture.

This is in stark contrast to the visible and well-defined safety culture that permeates the railway. Respondents were able to provide examples of what contributes to this (e.g. safety briefings at the start of meetings). Safety permeates through everything in rail, partly driven by the focus at a high level from ORR, BTP and DfT on safety and security in recent years (as outlined in the section above).   This is not the case for resilience - partly because resilience as a term is a bit nebulous and means different things to different people - by bringing consistency through standards and governance it should be possible to change this.COVID-19 has driven organisations to think and do more about resilience as it has required organisations to respond collectively in a way that addresses organisational, customer, safety and security needs altogether rather than as standalone issues. It is clear that if the industry makes changes to embed EM and resilience into the structural fabric of the industry, resilience will in turn be reflected in the organisational culture. Development of

[11] Suitably Qualified and Experienced Person

resilience culture that permeate through all layers of the organisation will ensure effective and sustainable EM outcomes as well as being a result of some of the activities outlined above. It is clear that the railway industry has a very strong culture and way of getting things done - embedding resilience into this is going to be a long-term goal but will follow with the right strategic buy in and structural changes to governance processes.

The general feeling is that we are not there with senior engagement and support and also resilience culture. There must be a fundamental reassessment so that senior

managers start to own the risk of ill-prepared organisations.

There have been great strides in these areas in the last 18 months, partly because so many people have been actively involved in doing it in some way shape or form for COVID-19, but it needs to be further embedded in working practices and decision making to continue in the future. There is also the risk that these COVID-19 related improvements will simply evaporate away as the industry returns to BAU unless they are properly nurtured.

Conclusion: The organisational structure of the rail industry means that senior managers change frequently. This has a negative impact on their own ability to provide strategic leadership in emergencies and to maintain an overview and support EM activities and embed it in their organisations. The culture of the railway is to get stuck in when needed, but this is not necessarily conducive to consistent quality response. Senior managers sow the seeds for the organisational culture in which EM is supported or not by the decisions that they take and their actions. What is needed is a cohort of senior managers who understand what is required of them in relation to EM, have the right training and development to be able to support EM throughout the EM lifecycle (not just 'seat of the pants' during response) and governance structures in place to provide oversight and assurance of EM and to give it the visibility it needs.

Relevant Recommendations:

- Recommendation 1 - Competency management framework
- Recommendation 3 - Improved governance and oversight

2.1.4 Managing and measuring performance

There is no systemic and systematic performance measurement for EM risk and capability across the rail industry and performance is conceptually limited to trains not people.

Our research shows that very few respondents evaluate EM risk and capability though any form of regular management information that is linked to reporting governance structures. Nearly 50% of survey respondents stated their organisation had no systems or specific metrics for measuring performance in EM (either preparation or response). Several respondents noted the lack of standards for such measures, and this was also cited as a reason why some respondents made no attempt to gather or measure performance data.

Without regular management reporting using both Key Risk Indicators (KRIs) and Key

Performance Indicators (KPIs) - management are likely to be unsighted on the risk the organisation is carrying in terms of its ability to respond positively to future incidents.

There is no systemic and systematic performance measurement for EM risk and capability across the rail industry. The industry lacks robust data and associated indicators to drive performance in this area and there is also no sense of what a standard industry definition of what 'good' would look like. Where quantitative measures are in place, they frame the problem as being one whereby success is no delay.

The lack of a consistent industry perspective on what a 'good' response amounts to is hampering organisational attempts to see if they are prepared to produce this kind of response and

subsequently to check if any actual response is meeting that target.

Before an incident - most respondents rely upon qualitative post-exercise/incident reviews and audits to evaluate their performance however this is infrequent and concentrates on looking at events after they happen as opposed to real time indicators of risk and performance.

The CCIL system used by Network Rail control centres is used on an ad hoc basis to capture the arrival times of an array of rail industry responders these may be MOMs, TOC staff, engineers etc. There is no Standard that governs this process, and it is dependent on individual controllers and/or local practices as to what is captured and when. There are no KPIs associated with this ad hoc recording therefore performance measurement is not possible. Interrogation of CCIL indicates that over the last three years only 6% of incidents recorded on the system can be used to evaluate/measure incident response times.

There is one notable exception is for fatalities occurring on the rail network. There are clear performance targets for clearing these incidents and this in turn leads to recording of arrival times for responders. But even this is limited as the end point is when lines re-open; this doesn't necessarily even reflect when train running resumes, let alone wider impact on passengers. This performance data is provided to the National Disruption Fusion Unit (NDFU) via completion of a proforma (separate to CCIL) by the NOC.

It is worth noting that the only quantitative measurement by Cat 1 responders is time for in-attendance. Cat 1 responders can meet response times due to locations of resources and their ability to use a blue light response. It is not clear whether having the same expectation could be truly met by Cat 2 responders whose primary role is not just response and whose resources may be distributed across a wide geographic area. This is why further mutual aid and collaboration between rail organisations and key stakeholders, not least because it is they who sometimes add to the delay, would be beneficial as it makes up for this.

The industry **does measure overall incident impact by use of the 'Delay Minutes' metric** but measuring only in this one dimension fails to capture what a good response looks like and frames good only in terms of delays. **Thinking about performance only in terms of delay minutes defines performance as only being relevant to those trains (rather than conceptually the passengers on them) being delayed.** Not only are passengers missing from this concept as a whole, the incident is conceptually *managed* once the delay has been removed and the timetable back online.

There is a need to make a manifest change in the way the industry thinks about 'performance' when it comes to incidents, specifically major incidents. **Standard ways of defining what good looks like might not be appropriate for larger incidents - e.g. getting a line clear might not be possible if there is a contaminated train or major crime scene in place.**

Clearly there is a link between delayed passengers and delayed trains - but an hour's delay to a branch line train conveying a dozen passengers is rather different in overall impact from a commuter train suffering the same delay but with 1500 passengers on board. Nevertheless, it is 'delay minutes' that drive the whole performance regime and the financial impacts of this on NR and operators.

Many respondents felt that response times were not perhaps the best way to think about assessing an 'effective' response and whilst further work is needed to identify useful measurable indicators (beyond just response times) **a common theme that came up during the workshops was the lack of people/passenger related indicators.**

RDG's Customer Insights Team already produce passenger-focused insights including their long-standing Passenger Information During Disruption (PIDD) survey and associated interviews. This information is available to all operators via an online portal and RDG's members are able to use the information as they see fit. The Customer Insights Team would welcome suggestions

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from the RRP for changes to their surveys and such data could help organisations understand the passenger impact of incidents. Passenger focus groups could play a useful part in helping to define indicators related to passengers and the PIDD survey could be further used to gather data (both quantitative and qualitative) to enable organisations to see the incident response from a passenger perspective.

Conclusions: Data about performance is inadequate and inconsistently available. This is in concert with a lack of clarity about what good performance looks like. Typically, performance is framed in terms of getting the 'train set' back online and recovering the timetable but it rarely takes into account passengers. What is needed are a better set of tools to manage performance in a more consistent manner, in a way that accounts rail assets as well as the passengers and customers being served, together with an ability to take account of the actions/decisions of others.

There is no common method for providing assurance to senior managers about the state of EM or to direct resourcing decisions. What is needed is for organisations are able to determine their own readiness state and can use this as a tool for other governance and oversight purposes to help direct focus and prioritise resources.

Relevant recommendations:

- Recommendation 4 – Management reporting of EM KRIs and KPIs
- Recommendation 5 - Self-assessment tool

2.2 People and Resources

2.2.1 Resources

Resourcing for the EM process is unsystematic and inadequate.

The ROGS require that relevant organisations have plans in place to respond to incidents and the Civil Contingencies Act (2004) requires that relevant organisations share their plans with other EM responders. Satisfying those requirements is a sizable and ongoing task; there is no point any organisation can rest on its laurels.

One challenge, not unique to the rail industry, is a lack of consistency when it comes to the job title and roles of the individuals involved in the day-to-day preparation for emergencies. Historically called Emergency Planners - however these days there are a range of job titles used (Emergency Planners, Business Continuity Managers, Resilience Managers etc.) and to a degree this is also influenced where they sit in the organisation.

The breadth of activities they undertake touch on a range of areas in the organisation, most commonly, Emergency Planning, Business Continuity, Risk Management, Safety, Security, Station staff, On-call teams, Control and other routine responders and of course

senior managers. Outside the response and recovery phase a typical and effective emergency planner (or resilience professional) *might* be involved in risk assessments, plan development and writing, engaging external organisations, delivering training, developing and facilitating exercises, engaging with different parts of their organisations to ensure the plans are not siloed etc. As one respondent stated "*I'm doing it from company-strategic level to [operational parts] of station plans. Huge scope."*

In the response phase of an incident Emergency Planners might typically become a strategic or tactical advisor to the incident manager, not least because for the most part they are often the one person who has a good overview of the plans, resources and structures in place to manage the incident and knows external partners and their plans, having done the bulk of the preparations.

Our research showed that resources allocated to EM (preparedness and response) are thin on the ground and often isolated. This is compounded by a lack

governance, including supporting information (data) on which to make informed decisions. **There are pockets of excellence in the industry, but these individuals are not always well linked in with others in their own organisation or working as part of a wider industry process. It should be made clear that this is not the fault of the individuals involved, but that this is a result of a structural weaknesses, as well as poor management and recruitment strategies**.

Fragmented governance structures and lack of a coherent goal mean that the industry has no cohesive approach to managing incidents consistently. As is also highlighted in the NR audit of contingency planning that was recently concluded - the industry is complex. We found that each organisation uses a different approach which frequently do not align - this makes collaboration challenging and limits opportunities for working together and learning in relation to planning and response activities.

The majority of respondents reported only having one full time equivalent (FTE) to deliver EM preparedness activities and often in smaller organisations this was distributed across multiple people, sometimes without a coherent approach to linking these multiple individuals together. In many organisations the EM role was often one 'hat' being worn by an individual also engaged in security and safety management, which often takes priority, leaving little time to do EM work. One reported that he felt like a "One-man band doing EM planning [...] just doing the basics." Organisations relying on one person for EM are likely carrying a significant risk, however from a Health and Safety perspective (given passenger and staff lives are at risk if incident management it not effective), finances should not get in the way of making changes that would improve safety.

Limited resources mean many respondents seemed to be **treading water to keep on top of the day-to-day activities**, with little scope for unplanned work (e.g. responding to incidents) or improvements (e.g. engaging with external partners). Any significant disruptions affect their ability to deliver routine planning activity. Under-resourcing

may be leading to inadequate management of key risks and examples cited included attention given the outputs of the National Security Risk Assessment and to specialised planning areas such as COMAH, pipelines, reservoirs and protesters. Many respondents wanted or needed additional dedicated competent EM individual to support EM activity.

Several respondents raised a concern around the **risk to the organisation of losing key individuals** (their knowledge, competency, experience and relationships in and out of the organisation) in the event of an organisational restructure, redundancy, retirement or other opportunities drawing people away. There appears to be little succession planning or accounting for the risk to the organisation during organisational changes that results in retirement, leavers or restructures.

Additionally, there is concern that although **control rooms are resourced to manage day-to-day routine incidents**, there is little capacity to support concurrent large and/or wide area disruptions. Furthermore, the control environment is becoming increasingly more complicated and demanding.

It was clear that COVID-19 constraints have led to many members of staff being on reduced hours or even furloughed, which naturally impacted on the resources available to plan for and also respond to incidents during the COVID-19 period e.g. suspension of exercising during the pandemic was cited on multiple occasions. Partly because of the lack of resources to plan an exercise and also access to the individuals who might respond. One respondent advised that their organisation had been told that "*everything that can be postponed has to be postponed*".

Following a similar review to this RRP after the Manchester Arena attack, BTP went back to the basics of doctrine and foundations of good EM and now have a dedicated EM team. The team is resourced to allow the team to attend LRFs, participate in and design exercises, develop and deliver training and do contingency planning etc. They do not 'double-hat'.

Having the right resources in place to do the right thing also adheres to the principle of

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'subsidiarity'[12] in which operations are managed and decisions are made at the lowest appropriate level

Conclusion: Resourcing for EM is inadequate for a range of reasons, including (but not limited to) - individuals doing day-to-day EM being pulled in different directions (often onto 'higher priority' activities relating to safety and security), modest use of collaboration in common planning activities meaning work is repeated unnecessarily and also a lack of common understanding of what is needed to do the work (in planning and response). What is needed is a way of using the limited resources more effectively (smarter and not harder) as well as augmenting teams where necessary so that they are able to do the necessary preparation and response activity (including engaging with other industry and external partners). This must be tied into governance structures so that resourcing is linked to the risk profile.

Relevant Recommendations:
- Recommendation 5 - Self-assessment tool
- Recommendation 7 - Tools for information sharing
- Recommendation 8 - Re-engage with external partners
- Recommendation 9 - Reinvigorate the industry collaborative forums

2.2.2 Training and Competency Management

The industry has no consistent and cohesive competency management standards in place for all EM roles.

Managing competency is important in planning and response elements of EM and should be considered at all levels of the organisation. Some organisations and parts of organisations are more effective in this area than others, but the industry lacks a cohesive approach as a whole. Two contrasting examples are provided here:

"There is no process for training and development of staff who are in emergency planning roles. There is training available, but it's not formalised into a competency process. The competency regime for Control roles is also light on incident management. Response roles are in a better position and have a formal competency process."

"All staff identified are required to undertake a 2-day major incident plan training course before they are put into the command structure for response."

In terms of emergency planning staff there is no consistent training requirement (at an industry level) for the role and people are recruited from a range of different backgrounds without addressing their training needs for the role - although RDG's Guidance Note GN011 - Emergency Planning – Knowledge, Understanding and Responsibilities - in part describes the requirement. There is no industry training available that describes at a basic level for anyone who might be involved in supporting the railway response to a major incident, what the basic structure and framework is and how this links into the wider UK emergency response arrangements. Some organisations, including BTP and NR, pay for the professional organisation membership for their EP staff (e.g. BCI, EPS or ICPEM) for their professional development and to encourage participation in wider EM conversation.

Few organisations have competency standards consistently in place for those involved in emergency response. Some roles such as RIO (MOM), SIO, RIC and TOLO do

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[12] Subsidiarity - The UK's approach to emergency response and recovery is founded on a bottom-up approach in which operations are managed and decisions are made at the lowest appropriate level. In all cases, local agencies are the building blocks of response and recovery operations.
https://assets.publishing.service.gov.uk/government/uploads/syste

m/uploads/attachment_data/file/253488/Emergency_Response_and_Recovery_5th_edition_October_2013.pdf

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have this to a degree[13], but this could be further enhanced and embedded within a greater competency framework for all EM response roles - including other control staff, on call staff (in addition to RIO (MOM), SIO, RIC and TOLO - such as engineering, HR, finance etc.), the executive team and senior.

There was a notable lack of reference to control room staff training for managing incidents. The implicit assumption is that they do this on a day-to-day basis and do not require more training to manage major incidents. However, people behave differently in larger incidents and training should account for this and also include human factors training (RSSB would be well placed to assist with this). This is the time they are likely to need to implement new plans and procedures because of the scale and complexity of the incident and where training would be beneficial, not least because they may need to hand over the command of the incident to a senior manager. In this case that individual should be trained and competent to perform that role, but our research suggests that many senior managers may not be trained or experienced (i.e. competent) in doing so. Another point is that control staff tend to be focused on keeping and getting the trains running rather more than on passengers.

The Rail Incident Care Team is a standout area where competency management is being comprehensively addressed, with a competency framework document covering recruitment and ongoing training and development. Trainers are accredited and assessed by NSAR (National Skills Academy for Rail) for competency. However, this area of voluntary commitment takes significant work in addition to 'normal duties' for all involved and is consistently under-resourced.

Linking in with the interoperability theme covered later, **there appears to be little awareness and training around JESIP (Joint Emergency Services Interoperability Programme[14]) and Resilience Direct (RD) -** two pillars of wider multi-agency EM ways of working in the UK.

The concern in the TOC community is that RD has the potential to be very resource hungry which, in turn, has financial implications.

Outside the rail industry, organisations like the Emergency Planning Society have also been trying to professionalise the role of the 'Resilience Professional' and there is a suite of National Occupational Standards for Civil Contingencies[15]. Any future RRP work should align to the direction that that work is taking. They have also helped the BTP produce a standardised job description for an emergency planner.

> **Conclusion:** There is no defined baseline for competency (skills, behaviours, knowledge etc.) in EM. There are inconsistencies in training and development for those with a role in planning for and responding to incidents as well as inconsistencies in terms of who receives training. What is needed is clarity on who should be trained and developed, what they should know or be able to do, how this competency should be assessed and assured and by whom. The competency framework will also need to address annual development and sustaining competency; including what is needed to remain competent for the role. Such a framework and accompanying system of training means incident response will become more aligned across the industry and with other Cat 1 and 2 responders and that resources can be used for mutual support and staff who move will need less training.
>
> **Relevant recommendations:**
> - Recommendation 1: Competency Management Framework

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[13] See for example the RDG Guidance Note RDG-GN-OPS-016 TOLO Guide.

[14] Some people also generically refer to JESIP in relation to their 5 principles - the P has changed during the JESIP lifetime.

[15] There were 36 standards produced by Skills for Justice at last count: https://www.ukstandards.org.uk/

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2.3 Emergency Management Practice

The following section covers the EM lifecycle in terms of starting from a basic of risk assessment, through working to prevent incidents where possible and developing plans to manage incidents, through training, testing and exercising into response and recovery. This section relates to the day-to-day work undertaken mostly by EM professionals.

2.3.1 Anticipation, Assessment & Prevention

Formalised and transparent processes for anticipation and assessment of EM risk are absent meaning that risk management is not being effectively used to drive EM activity.

EM needs to be proportionate and also driven by the threats and hazards that the organisation might have to deal with. The National Security Risk Assessment (NSRA)[16] is already in place and should be a key document in this regard. The rail industry should integrate relevant parts of the NSRA into their existing risk management practices. It is already used by BTP to influence recent focuses on pandemics and severe weather. At a national level sits the UK National Risk Register[17] which covers malicious and non-malicious national security risks.

Anticipation and assessment of risk in a formalised and transparent manner is not being effectively used to drive EM activity in rail. Risk in relation to EM is poorly articulated and organisational risk appetite is a concept that does not seem to be actively applied or understood. We found that **although a huge amount of risk assessment activity takes place in the rail industry (which is to be expected given the industry's focus on safety), risk assessment and management does not influence emergency planning and preparedness activity itself.**

Risk is conceived as centring around hazards and threats that relate to physical vulnerabilities to the rail infrastructure and rolling stock - e.g. physical terrorist attacks,

weather events and accidents leading to derailments etc., with a limited extension into historically relevant issues such as pandemics (Swine Flu and now COVID-19) as well as industrial relations. Less tangible and emerging threats such as cyber-attacks (which might also have physical consequences given the digital nature of the railway[18]) are less well addressed, although risk related to Network and Information Systems (NIS) Regulation Critical systems seem to be reasonably well understood within specific parts of the industry. Risk appears to be managed to maintain compliance as opposed to meeting the organisation's, customers' and safety needs. It is heavily driven by the specific mitigations/controls required by legislation/regulation e.g. *"security is driven and mitigated by adoption of the NRSP (National Railways Security Programme), fire risk is mitigated by compliance with fire safety legislation."*

The current approaches to risk assessment and management in relation to EM are ad-hoc and do not link organisational risk management practices with EM internally or indeed with external multi-agency partners. Few of the respondents could confirm they have a formally documented process for this. There is no standardised process or tool for organisations in the industry to use that helps them identify and link risks at a national, regional or local level with their own organisational risks and that links in with the Local Resilience Forums (LRFs) on risks.

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[16] National Security Risk Assessment - overview https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/62484/Factsheet2-National-Security-Risk-Assessment.pdf
[17] UK National Risk Register https://www.gov.uk/government/publications/national-risk-register-2020

[18] Although robust IT systems are in place, these do need to be integrated into EM processes - e.g. the effect such an attack may have on integrated control, the management of a train or signalling.

"We have a risk register, but this has probably not been developed or broadened through the pandemic. It is probably sufficient but not fully developed. We've learned from LRF colleagues and now sit on their Risk groups. They have a table of risks with a readiness score. It's just a different mentality in those other organisations, it is built into and endemic in their thinking. We just don't take it seriously enough in the industry. We'd never even heard of the National Risk Register before!"

Very few respondents evaluate EM risk and the capability of the organisation to respond to that risk through any form of regular management information linked to reporting governance structures. Most respondents rely upon qualitative post-exercise/incident reviews and audits to evaluate their

performance however this is infrequent and concentrates on looking at events after they happen as opposed to real time indicators of risk and performance.

Where risk does link to planning and preparedness activity, there seems to be a focus on gross (uncontrolled/untreated) risk exposure, with little evidence of follow through to establish controls (mitigations) and assess effectiveness of those controls to establish the (net risk) residual exposure.

Anticipation and assessment of risk in a formalised and transparent manner is not being effectively used to drive EM activity. Organisations that reported more robust risk management approaches were those that had established governance arrangements in place for regular oversight and assurance.

Conclusion: There is no common industry perspective on common risks to the industry in one single place at present - individual risks such as stranded trains (and passengers), fire, derailment etc. may be dealt with in a piecemeal fashion but not systematically. In addition, risk is seen through the lens of physical, specifically safety/security risks. What is needed is for EM risks to be more consistently woven into organisational risk management practices and governance, better understandings of common risk across the industry and better use of resources in determining common and emerging risks that relate to EM (climate change, digital railways, ageing infrastructure etc.).

Relevant Recommendations:

- Recommendation 3 - Improved governance and oversight
- Recommendation 4 - Management reporting of EM KRIs and KPIs
- Recommendation 5 - Self-assessment tool
- Recommendation 6 - Integrate EM risks into organisation risk management practices.

2.3.2 Planning for response and recovery

There is no consistent approach to the structure or format of rail emergency plans leading to reduced effectiveness across industry and when engaging with multi-agency partners.

Fundamentally, planning should be driven by an understanding of the risk which identifies that a plan / plans are needed to address the risk. The level of detail will depend on the complexity of the risk. Plans must be digital, accessible and linked in with Incident Management Systems to be fit for purpose these days.

There is no central rail guide to what a good major incident plan looks like and as a result plans are likely to vary in approach and terminology (where this is not defined already

in the NRNEP) and are unlikely to work well in incidents where multiple rail organisations are responding simultaneously as the plans might not mesh together easily. Furthermore, linking to training and standards again - those writing plans may not always have the background skills or knowledge to be familiar with what should be in plans and good practice on how to develop them. The Cabinet Office Expectations and Indicators of Good Practice Set for Category 1 and 2 Responders will be helpful here.

The Network Rail National Emergency Plan (NRNEP) gives an overall structure to the response to a major incident involving a train on the rail network in England, Scotland and Wales, by providing general organisation terminology and role identification when

creating coordinated incident response plans. **There is no industry agreed definition for what constitutes different levels of incident and what this classification signals to others who are notified of this.** For example, when does a routine incident become a major incident[19] and what does that mean in the rail industry in terms of the changes in organisational structure, communications, resources etc.? Some organisations use terms like 'Code Black' or 'Code Red' but this is applied inconsistently. This means that only the organisation declaring the major incident / Code Black etc. knows what that means and what should follow from that declaration. This confusion/lack of standardisation does nothing to strengthen the relationships with Cat 1/2 planners and responders.

Our research shows that some respondents were concerned that planning efforts are too high-level and generalised with insufficient time and attention being allotted to the development of specialised threats and hazards plans/capability such as COMAH (Control of Major Accident Hazards), pipelines, reservoirs and protests for example.

The general feeling was that the plans were adequate, but that often plans and checklists are seen as the solution, when in fact they are just a holding place for an agreed way of doing things. This is only useful if people then do the things in the plan when an incident happens - otherwise they hold no value. One person noted that she is always asked to pull together checklists for people, but she could see from their system that no one had used them in incidents - so it

seemed pointless to develop them. Plans are only useful if responders are trained and equipped to carry them out - otherwise they default to their own individual plan.

Often during major incidents, management of the incident passes from the group of people used to managing them on a daily basis, to a new command structure less familiar with incident management. There is potential for issues in particular around the handover phase and this appeared to be an area of concern amongst respondents.

Although some passengers might have longstanding relationships with one or two specific TOCs, they are also likely to view the collective 'railway' as one entity and expect consistency of messaging and responses from different operators, particularly if their typical journeys are multi-modal (this was very clear during COVID-19). **Communications with passengers during smaller (but still multi-rail organisation) incidents is tackled on an organisation-by-organisation basis rather than agreeing a collective approach to comms.** RDG would look to play a part in customer communications during larger incidents where appropriate (as happened in recent Hitachi cracks incident). Operators are not compelled to work together and joined up comms is based on the goodwill and enthusiasm of comms leads. The industry's Cross-Industry Crisis Command Framework is particularly communications led but is designed for larger cross-industry incidents.

When thinking about recovery in the rail industry, **there is a culture of considering 'recovery' in terms of recovering the**

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[19] JESIP defines a Major Incident as: *An event or situation with a range of serious consequences which requires special arrangements to be implemented by one or more emergency responder agency.* Notes
1. "Emergency responder agency" describes all category one and two responders as defined in the Civil Contingencies Act (2004) and associated guidance.
2. It is beyond the scope of business-as-usual operations, and is likely to involve serious harm, damage, disruption or risk to human life or welfare, essential services, the environment or national security.

3. It may involve a single-agency response, but is more likely to require a multi-agency response in support of a lead responder.
4. The severity of consequences associated with a major incident are likely to constrain or complicate the ability of responders to resource and manage the incident, although a major incident is unlikely to affect all responders equally.
5. The decision to declare a major incident will always be a judgement made in a specific local and operational context, and there are no precise and universal thresholds or triggers.

physical assets of the rail or recovering the timetable. The human aspects of incidents are less well considered outside the very human-focused Incident Care Teams. Unfortunately, as a voluntary scheme Rail Incident Care Teams, are not always embedded and visible in the rest of the command structure and may be overlooked. Many ICT champions have struggled

tomaintain capability during COVID-19 due to resourcing issues and competing priorities.

COVID-19 has demonstrated the importance of including all relevant parts of the organisation in discussions when developing the organisation's arrangements - including Trade Unions.

Conclusion: There is no consistent approach to rail emergency plan structure, content or format. Each organisation has its own plan structure, which means standards are likely to differ and cannot be easily integrated to support mutual aid for other operators. The exceptions to this are the few key roles in the NRNEP. What is needed is guidance on how to develop a 'good' emergency plan(s) as well as a consistent format which could be adopted across the industry - saving time and effort. Language used for declaring a major incident must be clear and concise, given the need to convey information to other emergency services. Plans must be developed and exercised in concert with other key multi-agency EM responders to ensure they are fit for purpose. Plans needs to recognise the JESIP principles and include elements such as METHANE. Critically, those writing the plans should be provided with the right skills to be able to do so effectively.

Relevant Recommendations:

- Recommendation 2 - A standard for EM (updated RIS 3118) should also capture details about effective plan writing, different categories for incidents (routine, critical and major etc.), clear articulation of how the ICT aligns to the wider incident command structure).
- Recommendation 9 - Better industry collaboration

2.3.3 Testing & exercising

Testing and exercising of staff, arrangements, processes and plans is often ad hoc, infrequent and large-scale when 'little and often' would deliver better, more sustainable and cost-effective results.

Testing and exercising are key mechanisms for validating plans and capability, providing an opportunity for responders to practice, to raise awareness of plans and particular hazards. They can also provide assurance to internal and external stakeholders that the organisation is capable of managing the response to an incident. In addition, they allow responders get to know one-other and also organisational processes before they are needed in an incident.

A testing and exercising programme should link back to both the training needs analysis as well as the plans that are in development and review, which in turn links back to the risk management process which ought to have prompted focus on those plans. Having this kind of cyclical programme is part of an

effective management process which feeds into governance structures and an overall competency management system. Through these management processes, feedback from testing and exercising should be actioned to effect change and make improvements.

Testing and exercising of plans, processes, capabilities and skills does take place, however the timing and focus is opportunistic when resources and/or management attention allows and is therefore often ad hoc. Although a routine practice, the maturity of testing and exercising approaches, and frequency with which they took place varied greatly. Few organisations described having a standardised approach to designing and delivering testing and exercising. Most respondents exercised infrequently (yearly) using larger more complex simulations; at least half of the respondents noted that they had held a major incident exercise of some form since 2018. One respondent's organisation reported deriving great value

from shorter yet more frequent exercises (every 6-8 weeks). Some organisations have been known to approach BTP, for BTP to carry out their exercising on their behalf - this may in part be for ease, but also to save time because of issues around capacity and competency in the organisation and also a culture of the expectations placed on BTP.

A range of reasons can be surmised for the more ad hoc approach taken by the majority of organisations, including: a lack of resource, immature capability in EM, a paucity of exercise development and facilitation skills within the industry or in certain areas - the challenge of effective exercising for smaller organisations or those without dedicated resources and at times lack of buy in by senior managers as to the importance of exercising.

Exercise development and delivery can be resource intensive, particularly larger live exercises - the planning for Exercise Unified Response in 2016 took nearly 18 months and involved over 70 organisations. Because larger and more complex simulations require significant time and resource to deliver – there is scope for a more collaborative approach at industry level, not least because a large major incident is likely to involve multiple partners within and external to the rail industry. Exercises which only 'imagine' the response of other organisations may not reflect the reality of that response.

Several organisations mentioned they found it beneficial to participate in other organisations' exercises, in particular smaller organisations who do not have the capability in house to put on significant exercises. A number of respondents noted that finding out about exercise observation and participation opportunities was not always easy. In addition, multiple organisations stated that

they use external providers to develop and deliver exercises, because this can free up those who might otherwise need to facilitate the exercise so they can be part of the exercise as a player and get more out of it. It also provides an external perspective on the organisational response.

There were some examples of leading practice whereby exercising is a systematic part of programmed activity, linking in with risk and planning activities and engaging with other industry and emergency response partners. One respondent noted *"We have a longer-term Testing and Exercising programme linked to planning and risks identified through mini inter-departmental exercises and the formal strategy for exercising will remain as a Crisis Management Exercise to Test our Director Team and On Call regime."*

It was heartening to see that exercises types, locations and scenarios varied and some organisations included multiple internal teams in the exercise planning. Notably, reference to exercise objectives did not feature extensively in responses, suggesting that exercises are being carried out as more of a tick box activity rather than designed to test, validate, etc. specific things. It was flagged that good EM practice

as articulated in guidance such as the "Preparing Scotland exercise guidance 2018" requires that all exercises have an aim and objectives which are communicated to all attendees.

Respondents welcomed the idea of a more collaborative approach to sharing exercising tools and ideas as it was felt that the effort and learning from exercises tended to stay within the organisation even though others might benefit from it.

Conclusion: The sharing of information and resources (particularly around exercises and incidents) is inconsistent and patchy, when if done well would benefit all organisations involved. There is no one place to go to for information and so it is scattered across different organisations and filing systems - sharing predominantly relies on knowing the right person rather than by design. What is needed is for sharing to become easier to do, and a routine practice which is part of the culture of good incident management - both in terms of organisations being willing to share less than rosy reports with industry partners and also in terms of a willingness by those other organisations to read and incorporate learning from outside their own organisation. This would mean that less time and effort will be spent on designing resources that are already available and better use of post incident and post exercise learning across the industry.

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Relevant Recommendations:

- Recommendation 7 - Online hub for resources and information sharing
- Recommendation 2 - Standard - should also capture details of guidance on testing & exercising programmes (to include linking exercising and testing to programmes of activity in EM driven by risk awareness etc.).
- Recommendation 9 - Better industry collaboration - should also address the need for more opportunities in shared exercising.

2.3.4 Embedding Learning and Improving

There is little or no effective sharing of learning between industry organisations nor central repository for lessons identified[20].

There are two primary mechanisms for embedding learning and making improvements to EM arrangements and that is through incidents and exercises. The incidents and exercises do not have to have involved the organisation directly - it is possible to learn from others. This is why it is important to document and share learning from both kinds of event with other industry partners.

Equally important is to have a process for managing and effecting action as a result of learning and recommendations. It is pointless to have held an exercise, identify a learning point and then do nothing to address this. However, this may also be a case of organisational memory loss, due to a lack of clarity and governance around translating lessons identified into lessons learned. If no action takes place as a result, the organisation will stay stuck repeating the same mistakes again and again.

Respondents noted that they consistently learned from incidents and exercises and used this learning to inform future responses by making changes to arrangements. Although they noted the importance of debriefing after incidents and exercises, sometimes this learning is not captured and shared with others in the industry as well as it could be.

There appears to be no clear mechanism for sharing knowledge about incidents and exercises (although EPG does ask for this, there is no storage area for any presentations given and so unless at the meeting, the learning is not easily shared with others) and also it takes time for organisations to be able to discuss events openly (especially if there are other concurrent investigations going on – this can take months to emerge). As mentioned already there may also be a reticence to share or expose organisational weaknesses to other commercial competitors. Legal restrictions may also present a barrier, such as ongoing or pending criminal investigations or prosecutions.

Accepting that sharing 100% of incident and exercise lessons is never going to be possible and does not happen all the time even in the wider EM responder community, it could still be improved in the rail industry. Resilience Direct already has a Joint Organisational Learning (JOL) element which provides an online hub for learning from incidents and exercises, and this is used by the wider LRF community.

Collectively there seemed to be an absence of sufficient resourcing, regular risks / performance reporting and governance structures, to address issues and opportunities for improvement that are identified. This could be improved by a standardised and auditable process for debriefing, recording learning and managing SMART[21] recommendations emerging to effect change.

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[20] Lessons identified is used here rather than lessons learned -if nothings happens to address the lessons identified, no learning actually takes place.

[21] Simple, Measurable, Achievable, Realistic & Timebound

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There appears to be a cultural bias towards an all-hands on deck approach to incident response in the moment, however, culturally in the calm after an incident there is less value placed on learning and remediation - there seems to be a hurry to move on to the next pressing issue. The paucity of easily accessible post-incident reports was highlighted during the case study element of the review. It was extremely difficult to find documented information about the response to the incidents other than in scant logs which provided very little useful detail.

Rail Accident Investigation Branch (RAIB) write very thorough post incident reports and highlight repeated failures; however these tend except in unusual circumstances to focus only on the cause of the incident rather than the response to it.

There is no central repository for learning from incidents and accidents and exercises, or indeed central accountability for managing industry level recommendations emerging from these post incident and exercise reports. Opportunities also exist for learning from other industries and partner agencies - of particular relevance might be other transport sectors and LRF partners.

Conclusion: As seen elsewhere in this report, learning from incidents and exercises is captured to a certain degree, but this learning and the potential benefit from it tends to be restricted to the organisation involved and recommendations are not always managed through a process to ensure they are actioned for effect. What is needed is a better way for learning to be shared with others and for organisations to be more open to learning from incidents elsewhere.

Relevant Recommendations:

- Recommendation 7 - An online Hub for information sharing in relation to learning
- Recommendation 9 - Better collaboration with industry partners (this should include more effective capturing of industry knowledge about incident response).

2.4 Partnership Working

2.4.1 Interoperability - working with other emergency management partners

Engagement with LRF and multiagency partners is generally poor and inconsistent across industry.

All rail in-scope organisations are required by the Civil Contingencies Act to share information and collaborate with multi-agency partners, typically Local Resilience Forums (LRF). Although RDG (ATOC at that time) and NR put in place a system for allocating Lead Rail Contacts for LRFs to manage the complexity of multiple operators and multiple LRFs fairly and evenly, adoption has been quite variable in practice and does not seem to be working. Some individuals responsible for this engagement are unaware of the Lead rail Contact system and requirement for minimum LRF (or Local Resilience Partnerships in Scotland) attendance.

Rail organisations must take more responsibility rather than leaving it to other organisations to represent them. If those representing organisations either do not attend LRFs or do not share with those they are representing the issues discussed and key information shared, then there is no effective representation of rail at all. Effective representation is specifically discussed in the non-statutory guidance accompanying the CCA. Improving multi-agency engagement is likely to emerge as a recommendation from the inquiry into the Manchester Arena attack - both Greater Manchester Police and BTP were criticised for their weakness in this area.

Some organisations clearly have a very strong working relationships with their LRF partners - others struggle to attend their allocated LRF meetings (most organisations cover 2 - 3, smaller TOCs only 1). Engaging with LRFs provides a route into a greater understanding of local risks, information and

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resource sharing, training and exercising opportunities and will be of significant value during any future incident response. Positive change has been visible during COVID-19. The benefit of railway engagement with multi-agency partners has become obvious both to the rail industry organisations and also to LRFs - it is critical to during the response and recovery phases of an incident.

The Joint Emergency Services Interoperability Programme (JESIP) encourages multi-agency working between all responding organisations. Various tools are available (JESIP Principles, training, an App, a lexicon etc.) but not widely adopted or even known about beyond the EM community.

They should be embedded in routine incident management as these will be invaluable in the times of major incidents.

Many LRFs and multi-agency partners use Resilience Direct (RD) as a secure means by which to share and store information during planning and response - it has been used extensively during COVID-19. Government uses the secure system to send and share Official Sensitive Information - organisations not aware of or able to access RD were at a disadvantage. Use of Resilience Direct in the rail community is patchy - in part lack of awareness and elsewhere because of concerns for resourcing that way of working (time and financial cost of doing so)

Conclusion: LRF and multi-agency awareness and engagement across the industry is generally poor despite an RDG/NR system being in place to manage this. Pockets of excellence do exist, however opportunities for training, exercising, learning and situational awareness are being missed. If rail organisations were linked into and aware of multi-agency needs and requirements in incident response (and vice versa), this would lead to better responses to incidents overall because plans would be more realistic and more integrated with other partners. Linking up would give rail organisations opportunities to take advantage of joint training, exercising and plan development opportunities.

Relevant Recommendations

- Recommendation 1 - Competency Framework to include the use of JESIP in training
- Recommendation 3 - Improved governance and oversight
- Recommendation 5 - Self-assessment - Engagement with LRFs (A CCA duty)
- Recommendation 8 - Re-engagement with LRFs is critical

2.4.2 Collaboration - working with industry partners

The industry's current approach to joint EM working via collaborative forums for discussion and collective working do not account for all key partners and rely nearly entirely on overstretched emergency planners.

There are pockets of excellence in the rail EM community, but these are not effectively linked up as a whole. **Multiple strands of collaboration exist, but they do not come together driven by the same goals.** There is no appropriate and coherent industry structure that engages all relevant industry partners on EM matters to drive improvement.

The **RDG Emergency Planning Group** is the primary means for EM collaboration between TOCs, RDG and NR at a national level. The EPG business plan is fed into Operations Council at RDG, although often

other 'more pressing' issues are given meeting time which pushes EM issues off the agenda - some of those we spoke to were not sure what sat above it to give it the strategic direction and buy-in such work needs at an industry level, nor how this contributed to resources being made available for work identified as being necessary. The EPG is part of the RDG Train Operators Operations Scheme, hence its membership comprises passenger operators, with Network Rail, BTP, DfT and ORR (but not FOC) also represented. Some respondents had mixed feelings about whether the format of the EPG's work was helpful and suggested some issues were raised again and again without resolving, and that not all issues were relevant to all parties.

Previously NR led regional **REPACC** meetings although these have been in decline in recent years parallel to the

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devolved approach in NR. Reasons for the decline in a consistent REPACC approach include content being discussed elsewhere, a lack of interest in attending from those invited and a recent refocusing on security. Several respondents said that these had worked well previously although that success was perhaps personality dependent.

It was suggested that the NR Route Security and Resilience Committees might be a better future fit for a more regional (in the broadest sense) approach to industry collaboration below national forums which would likely remain with RDG. The RSRCs, are mandated to happen under the NRSP at least once per year. Although this also currently has a security focus, there is an argument to be made for increasing the resilience focus (given the name and attendees) and increasing the frequency.

The industry needs a driver and forum improved opportunities for joint plan development, training, exercising and learning. The siloed approach to incident management is in part influenced by the current commercial structure of the industry, however, COVID-19 has demonstrated that working together can reduce the overall workload and enable freed-up resources to concentrate on making improvements.

Several respondents felt that information sharing about incidents and exercises could be improved by having a central place to store such information. An open culture of learning from mistakes is required, to overcome a sense of not wanting to air dirty laundry (in the event of a perceived failure).

Conclusion: The industry's forums for multi-organisation discussions and action in relation to EM issues are disjointed and do not routinely include all relevant partner agencies (TOCs, FOCs, NR, BTP, RDG etc.) or industry communities (EM, control, customer insight, comms etc.). What is needed are better industry forums (within a defined structure) for EM which promotes collaboration on joint industry issues and a better use of the limited resources available.

Relevant Recommendations

- Recommendation 9 - Better collaborative industry working in EM.
- Recommendation 7 - Central hub for information sharing

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3 Recommendations

The preceding paragraphs have outlined findings and **headline conclusions of the research by thematic area and sub-topic**. One or more recommendations were identified for each sub-topic area, which if implemented will contribute to improving EM in the rail industry. Thus far they have been introduced by title only and are described in more detail here.

It is clear that many sub-topic areas are supported by multiple recommendations and that each recommendation addresses multiple issues highlighted in the findings. They link together and so a coordinated programme of work is needed to ensure that they support each other. **For each recommendation, a named action is specified, and further detail is provided about how this should be carried out.** In some cases, this involves multiple parts.

A note on 'owners' for the recommendations and actions: The actions are all broadly directed towards a 'Cross-Industry Group' rather than any one individual agency because it is anticipated that if accepted by the Project Board, the implementation of these recommendations would need to be part of a joint industry approach and not a single agency effort. Part of the next step of this project would be to identify for each recommendation (and associated actions) who would need to be involved in developing the products and taking the further action to implement change. The nature of each 'working party' for each recommendation, will need to be determined. This is going to require input and action from TOCs, FOCs and NR working alongside other industry partners such as BTP, funding organisations and EM partners.

It is also clear that given the resourcing challenges faced by the emergency planning community, action is unlikely to be achieved solely by expecting individuals from in-scope organisations to join workstreams in a best endeavours approach. Therefore, thought must be given to designating resources for this programme.

The industry must now identify resources and leads for each workstream that will form the longer-term programme of work to implement the recommendations identified.

The industry, through its existing governance structures must work with owning groups, funding bodies and other key stakeholders to put this Programme of Work and appropriate resources in place within a governance structure that manages the process effectively. The sequencing, critical pathway for implementing the recommendations and the interplay between them, will be important to ensure that the foundations are in place first.

Recommendation and action	What should this include in practice?
Recommendation 1: The industry must jointly develop a coherent, scalable competency framework for EM roles.	
Action 1: A Cross-Industry Group to be established to develop an industry-level Competency Management Framework for EM.	Detail: This should include recruitment guidelines (including technical and non-technical skills, behaviours and attributes), training needs analysis, training requirements for different roles etc. to cover all the key roles involved in the emergency preparedness and response (including but not limited to control staff, emergency planning staff, senior managers, on call roles etc.). In future years, this could then be expanded to include common training modules - in particular for new Emergency Planners and a generic online module for all new starters in rail.
Recommendation 2: The industry must develop a suitable body of knowledge and standards for EM.	
Action 2: A Cross-Industry Group to be established to work	Detail: Develop a **Code of Practice** that industry organisations could sign up to.

(with RSSB) to develop key products to improve standardisation.	**With RSSB review and update the RIS 3118** so that it becomes the industry's doctrinal home for EM defining what good looks like across all areas of EM (including ICT - which is well defined in existing RDG documents but could be better incorporated into wider emergency plans). This should be the documented place to set out what is required from other recommendations / parts of this report that relate to inconsistencies in areas such as developing emergency plans, having the right governance structures in place, recruiting, training and competency management, testing and exercising effectively, learning and improving effectively.
	Develop a **legal and regulatory register** for EM in rail that describes what is required, what it means for the industry and how to be compliant. Each organisation can then use this to determine if and how they are meeting this.

Recommendation 3: The industry must develop suitable structures to govern EM at both organisational and industry-wide levels.	
Action 3: A Cross-Industry Group to be established to drive improvements in industry-level governance structure in relation to EM.	Detail: This must tackle governance at multiple levels. - At an organisational level - TOCs, FOCs and NR must commit to setting up (where not in place already) a suitable governance structure to provide EM direction, oversight and assurance is in place to allow timely visibility of EM risk and performance. As part of this organisations should conduct a RACI analysis to ensure EM risk is appropriately owned, resourced and governed. - At an industry level - the group must engage with RDG, the Regulator and DfT (as well as Transport for Wales and Transport Scotland) to agree how oversight activity of EM may be improved and where possible more structured.

Recommendation 4: The industry must jointly develop a suite of metrics to drive improved EM performance.	
Action 4: A Cross-Industry Group to be established to develop a suitable industry-level process and criteria for systematic gathering of leading key risk and performance indicators (KRIs and KPIs).	Detail: This recommendation would provide a means by which performance (KPIs) and capability (KRIs) could be determined. This would include but not be limited to response time data. This must be linked to a common industry level mechanism for determining how prepared organisations are to deliver a 'effective' response and subsequently whether a response was 'effective'. An 'effective' response will be defined. Passengers must be visible in the data being used and the RDG PIDD survey and interviews could be used to gather this.

Recommendation 5: The industry must be able to assess EM capability.	
Action 5: A Cross-Industry Group to be established to develop a self-assessment tool for EM capability.	Detail: This would be similar to the one developed for the Incident Care Team and based on the ORR's RM3 model which is familiar and adopted in the industry. This would allow organisations to systematically review their capability, and it would highlight areas where management attention is needed and where resources should be directed. KPIs and KRIs from Recommendation 4 would be used during the self-assessment process. This would be a management tool which should help inform resourcing decisions highlighted in the 'Resourcing' section earlier. Part of the process of using the tool would involve thinking about the coming years and succession planning / horizon scanning. This would outline different levels of maturity in EM (Ad hoc, Managed, Standardised, Predictable and Excellence) - it should cover Training and Exercising, Management Support, Funding etc.

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Recommendation 6: The industry's organisations must integrate wider risks (e.g. pandemic, fuel disruption) into their existing risk management processes to improve visibility and treatment of EM threats and hazards.	
Action 6: A Cross-Industry Group to be established to develop guidance to enable organisations to integrate EM risks into their wider risk management practices.	Detail: This should include guidance on integrating EM risk to organisational risk governance, including but not limited to: EM risk ownership, alignment to risk appetite, sources to inform identification, analysis, evaluation & treatment of EM risk (e.g. UK National Risk Register and LRF Community Risk Registers), regular review/surveillance & horizon scanning, EM risk & control effectiveness reporting and risk acceptance/retained risk.
Recommendation 7: The industry must establish a central knowledge hub to enable industry-wide information sharing.	
Action 7: A Cross-Industry Group to be established to develop an online Hub for resources.	Detail: Set up an online Hub repository for exercising resources - this would include templates, post exercise reports - the existing JOL platform on Resilience Direct is a good example and should be explored. Additional (longer-term) tasks should include development of a suite of template exercises for use by all.
Recommendation 8: The industry must play a full role in the wider EM and responder community.	
Action 8: A Cross-Industry Group to be established to reinvigorate LRF engagement in the rail industry.	Detail: This should include action to address participation at LRF meetings, the consistent adoption and use of Resilience Direct, and more consistent and comprehensive use of JESIP tools (principles, training, app, terminology etc.) in the industry.
Recommendation 9: The industry must reinvigorate the existing industry EM forums to drive better collaboration and include all relevant industry partners.	
Action 9: A Cross-Industry Group to be established to review and potentially restructure the industry collaboration forums for EM.	Detail: This recommendation addresses the weaker aspects of collaborative work in the industry. This must include all key rail partners including, TOCs, FOCs, NR, RDG and BTP, with representation from key LRF partners where necessary and also should include other key stakeholders such as TfL, passenger focus groups and Trade Unions. Smaller subgroups could feed into the main group and working on different aspects - e.g. training and exercising, a partner agency engagement, rail risk, plan development etc.

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4 Conclusion and proposed next steps

4.1 Summary of findings

Although the report thus far makes for sobering reading in some respects, the report has also identified a number of recommended steps and actions that can be taken to improve the situation as a whole. It is important to note that the report has been written from a collective industry perspective rather than directed towards any one organisation. However, they are intended to have a collectively positive outcome for all individuals.

Area	Sub-topic	Headline Finding
People and resources	Resources	Resourcing for the EM process is unsystematic and inadequate.
	Training and competency management	The industry has no consistent and cohesive competency management standards in place for EM.
Foundations of Emergency Management	Standards and guidance	The rail industry lacks a common, consistent approach to EM in part due to a lack of a coherent body of knowledge or standards.
	Governance regulation and industry oversight	There is patchy, inconsistent and sometimes poor oversight of the state of EM at organisational and industry level, which fails to hold organisations or wider industry to account for failings.
	Culture, leadership engagement and support	There is inconsistent senior leadership support for and understanding of EM, outside of major incident response.
	Managing and measuring performance	There is no systemic and systematic performance measurement for EM risk and capability across the rail industry
Emergency Management Practice	Anticipation, Assessment and Prevention	Formalised and transparent processes for anticipation and assessment of EM risk are absent meaning that risk management is not being effectively used to drive EM activity.
	Planning for response and recovery	There is no consistent approach to the structure or format of rail emergency plans leading to reduced effectiveness across industry and when engaging with multi-agency partners.
	Testing and exercising	Testing and exercising of staff, arrangements, processed and plans is often ad hoc, infrequent and large-scale when 'little and often' would deliver better and more sustainable results.
	Embedding learning and improving	There is little or no effective sharing of learning between industry organisations nor central repository for lessons identified.
Partnership working	Interoperability - working with other EM responders	Engagement with LRF and multiagency partners is generally poor and inconsistent across industry.
	Collaboration - working with other industry partners	The industry's current approach to joint EM working via collaborative forums for discussion and collective working do not account for all key partners and rely nearly entirely on overstretched emergency planners.

Whilst it beyond the scope of this review to diagnose the underlying causes of each individual finding we believe there to be a significant interplay of cause and effect between the issues identified. Viewing the findings collectively a clear picture emerges that there is a lack of systemic consideration in both the design and deployment of rail EM.

The overall finding can be summarised as:

- EM activities are substantively being delivered in an ad hoc and piecemeal fashion as opposed to being treated as component parts of an integrated management system with a clear line of sight through industry governance to each organisation's management system and governance arrangements.

- EM activity is too often considered/undertaken as a compliance burden as opposed to a core deliverable that provides valuable contribution to achieving both organisational and customer - outcomes.

4.2 Case Study Review

The report findings were found to align significantly with the key points identified in the case study review undertaken as an additional validation exercise. The reviewed case studies highlight that:

- Different terminology, processes and structures exist between TOCs, FOCs and NR making joint-working a challenge.
- Communications between organisations (within and external to the rail industry) and control actions are sometimes disjointed in multi-organisation incidents
- A good incident response relies a great deal on enthusiasm and good will.
- The construct of a successful response is around the network running smoothly again rather than around the impact on affected passengers - the emphasis is on delivering the current operational requirements (e.g. getting trains moving) and passengers are not always at the heart of incident response.
- There is little evidence of a coordinated and coherent, multi-agency review process. There is no industry-wide system to confirm that lessons have been identified, and crucially that action has been taken to implement change as a result.
- Learning from incidents in the industry is very difficult - that we had difficulty accessing materials and individuals who might hold relevant information (beyond logs) is telling.
- Cross-pollination of learning lessons from industry incidents elsewhere is not happening

4.3 Summary of recommendations

The following table is a reminder of the overarching recommendations in brief, alongside the issues it should address and various assessments relating to the implementation of that recommendation in practice.

Cost refers to the time and financial cost of implementing the recommendation. **Ease** refers to the complexity of the task. **Urgency** refers to how soon this should be implemented (although this must be considered in concert with **sequencing and the duration** of the task). Some quicker and easier tasks may be contingent on getting other more foundational activities done. Finally, the 'impact' is an indication of how much of a difference this one recommendation might have if implemented. Because of the interlinkages between the recommendations the sequencing and any the impact of doing any one recommendation will have to be carefully considered as part of the initial programme planning.

Recommendation in Brief		Why?	Rating
1	Develop a Competency Framework for all common EM roles.	**Issue:** Inconsistencies in training and development for those with a role in planning for and responding to incidents. Inconsistencies in terms of who receives training. **Outcome:** Clarity on who should be trained and developed, what they should know or be able to do, plus assessment criteria and process. Training will be aligned - staff who move will need less training over time because they can carry industry knowledge with them. Savings made as plans are harmonised - more sharing can take place (or documents as well as resources potentially in mutual aid).	**Cost** Working group time **Ease** Intermediate **Urgency** Implement within 12 months **Impact** Major
2	Improved standards for EM in rail industry	**Issue:** Inconsistencies in approach to EM as a whole - there is no one standard that everyone is working to and many opportunities for common working practices are missed. Pockets of excellence are isolated. **Outcome**: A common end state that all can work towards, which should make joined up collaborative working easier. This should save money	**Cost** Working group time **Ease** Intermediate **Urgency** Implement within 12 months

		because all organisations are working towards the same things and could plan more effectively together.	**Impact** Major
3	Review and update governance structures and organisational and industry levels	**Issue**: Inconsistent often poor oversight at organisational and industry level of the state of EM. **Outcome**: Better awareness, buy-in and support of EM at strategic level, which should lead to more effective use of resources (if organisations are working more consistently towards the same things) and strategic direction.	**Cost** Working group time and engagement with different stakeholders **Ease** Intermediate - hard **Urgency** Implement within 12 months **Impact** Medium
4	Develop a common framework for understanding and monitoring performance	**Issue**: Inadequate and inconsistent data available about performance in concert with a lack of clarity about what good looks like. **Outcome**: Better tools to manage performance and make adjustments where necessary.	**Cost** Working group time **Ease** Intermediate **Urgency** Implement within 1-2 years **Impact** Medium
5	Develop a self-assessment tool	**Issue**: No common method for providing assurance to senior managers about the state of EM or to direct resourcing decisions. **Outcome**: Organisations are able to determine their own readiness state and can use this as a tool for other governance and oversight purposes to help direct focus and prioritise resources.	**Cost** Working group time and ongoing resources to use **Ease** Easy **Urgency** 0 - 6 months **Impact** Medium
6	Integrate EM risks into organisation risk management practices	**Issue**: EM risk is often poorly articulated at both an organisational and industry level subsequently risk management is not used effectively as a tool to direct EM focus. EM risk is seen through the lens of physical, specifically safety/security as opposed to taking and 'all threats/hazards approach'. EM risk management is lacking formal processes including integration into organisational governance and risk appetite. **Outcome**: EM risk is more consistently woven into wider risk management arrangements – resulting in a better understanding of EM risk across the industry and better use of resources in determining common risks.	**Cost** Working group time to develop integration guidance **Ease** Intermediate **Urgency** Implement within 12 months **Impact** Medium
7	An online hub for sharing resources	**Issue:** Sharing of information and resources (particularly around exercises and incidents) is inconsistent and patchy. There is no one place to go to for information and therefore sharing relies on knowing the right person rather than by design. **Outcome**: Sharing becomes a routine practice and easier. Less time and effort spent on designing resources that are already available and better use of post incident and post exercise learning across the industry.	**Cost** Working group time to set up and ongoing resource to maintain **Ease** Easy **Urgency** 0-6 months **Impact** Major
8	Reinvigorate LRF engagement	**Issue:** LRF and multi-agency awareness and engagement across the industry is generally poor but with pockets of strong and positive engagement. Opportunities for training, exercising, learning and situational awareness are being missed as a result. **Outcome**: Rail organisations are more aware of multi-agency needs and requirements in incident response (and vice versa), leading to better responses overall. Organisations can take advantage of joint training, exercising and plan development opportunities leading to better and more integrated plans.	**Cost** Working group time - and ongoing resources at organisation level **Ease** Intermediate **Urgency** 1-2 years **Impact** Major
9	Reinvigorate the Industry	**Issue:** The EPG structure has become a little stale and in need of invigorating to enable the right kind of conversations and activity to take place.	**Cost** Working group time and

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collaborative forums	**Outcome**: Better industry collaboration on joint industry issues and a better use of resources.	ongoing EPG commitment **Ease** Intermediate **Urgency** 6 - 12 months **Impact** Medium

4.4 Next steps

This report sets out a suite of findings as a result of the fact-finding project undertaken by the RRP Project Team. Findings have been generated and validated through discussions with participants, the Working Group, the Project Board and key industry partners. Recommendations to address weaknesses identified have been suggested by the Project Team and sense checked via the Working Group. The whole has been subject to independent review by the Emergency Planning College – a recognised centre of excellence in the field of EM.

It is now incumbent on the industry to take action to address the issues raised in the report. To do nothing is not an option. In order to make change, the industry must take the outputs and recommendations from this review as the core scope of an **industry change programme.** The industry must ensure adequate centralised governance, resource and funding to deliver this programme of activity. Within the recommendations are relatively easy wins, as well as challenging longer-term deliverables that will take two years or more to define and deliver. It is recommended further work is undertaken to develop this change programme.

The industry, through its existing governance structures, must now:

1. Determine which of the recommendations they wish to take forward (acknowledging that they support one another)
2. Undertake the required planning to set out the Programme:
    a. Determine and put in place the appropriate governance structure to take these forward (what is the programme management structure going to be, what order and sequencing will the work be carried out in, who does the programme report into etc.)
    b. Confirm how the programme will be resourced (who is going to do the work - what is the make-up of the different project teams required - internal staff, external support, key partner support etc.)
    c. Confirm how the programme will be funded (where is the funding coming from and how much is available)
3. Take action to implement the above.

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Appendices

Appendix A: Detailed Methodology

This section outlines in detail how the research underpinning this report has been conducted.

A: Design stage

Having first defined the parameters of the project, the Project Team identified which kinds of organisations came under that scope and would therefore be asked to contribute information during fact-finding. The following **organisations were identified as being in scope**:

- Infrastructure managers: Network Rail
- Passenger - Train Operating Companies
- Non-passenger – Freight Operating Companies

Passenger Operators		Infrastructure Owner	Freight Operators
1. Arriva Rail London 2. Avanti West Coast 3. c2c 4. Caledonian Sleeper 5. Chiltern 6. CrossCountry 7. East Midlands Railway 8. Eurostar 9. Govia Thameslink 10. Grand Central 11. Great Western Railway 12. Greater Anglia	13. Heathrow Express 14. Hull Trains 15. LNER 16. Merseyrail 17. MTREL/TfL Rail 18. Northern 19. ScotRail 20. South Western Railway 21. Southeastern 22. TransPennine Express 23. Transport for Wales 24. West Midlands Trains	1. NR Eastern 2. NR North West & Central 3. NR Scotland's Railway 4. NR Southern 5. NR Wales and Western	1. Freightliner 2. DB Cargo 3. GB Railfreight (GBRf) 4. Direct Rail Services (DRS)
TOC Sampling Approach: There are too many to be able to interview all of them therefore adopt a sampling approach covering: 1. All parts of England, Wales and Scotland 2. Range of operator types (commuter, regional & long distance) 3. A range of sizes (number of staff and geographic coverage) 4. A range of owning groups, franchise/OA 24 organisations and 11 interview invites sent		**NR Sampling Approach:** Use data from the ongoing Contingency Planning Audit with questions to address gaps in the format of the ongoing audit. All regions could be covered. 1 organisation and 4 interview invites sent	**FOC Sampling Approach:** As the population size is quite small, it is possible to speak 3. 4 organisations and 4 interview invites sent

The project could also have covered other specialist operators and non-mainline routes, however, due to the limitations on resources and time available within which to complete the project, there was a conscious decision to focus on the key players. It is noted, however, that the lessons and findings might be applicable to these organisations and the communications plan for disseminating the findings that accompanies this report will address this.

The project team then began to **identify a sampling method,** recognising the feasibility challenges associated with trying to interview 31 organisations. With the right sampling method it was determined that a smaller number could be interviewed which would represent all organisations in scope.

The Team also began drafting **initial outline question sets** for the interview and questions for the online survey to cover the scope of the project. The intention was for the online questionnaire to be detailed and with a relatively defined answers from a set of answer options that would be easily analysed. The interview would provide fewer questions but longer and more qualitative data. Following feedback from the Project Board, the Team redesigned the **final question sets** to make the number of questions vastly reduced for the online questionnaire.

The impact of this reduction was that each question had to become much more general in order to cover the scope of the scope of the research areas. Therefore, the coding of the responses later on became more critical, as the responses were more narrative and less defined. This restriction also limited the ability of the data set to provide statistical or quantifiable data. However, it also meant that there is more narrative data which can help us understand some of the structural reasons for the way that this have emerged.

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B: Data gathering

There were three primary methods for gathering data analysed during this project. The main two mechanisms were data gathering via an **online survey and interviews.** Respondents were provided with the questions in advance, so that they could prepare as needed and also for transparency.

Survey data	Using Survey Monkey
	All in scope organisations asked to respond
	Produced data in a way that was more easily analysable.
Interview data	Face to face on MS Teams
	Using a representative sample of organisations
	Provides more in depth qualitative data - useful for more detailed case studies
Documentary data	Collected during whole research period
	Performance data, reports and review documentation (incidents and exercises)
	Relevant standards

All in scope organisations were invited to respond and were given a three-week window to complete their response. Those who did not respond were reminded twice more to do so before the survey closed. Of the 31 organisations and NR Regions identified as in scope, 20 responded.

A smaller sample of organisations in scope were invited to attend an interview (via MS Teams). Of the 18 organisations identified as being part of the sample, 13 were able to complete a face-to-face interview. The interviews were conducted by two members of the Project Team, one lead the questions and the second took notes. Where there was a professional link between any of the interviewees and project team, that project team member was not the lead interviewer to preserve independence[22]. Because the interviews lasted around 2 hours each, there were around 26 hours of interview data to analyse. Although most organisations chose to use just their SPoC for the interview, the Participant Information and Briefing Sheets made it clear that the SPoC could attend with others if they felt more able to answer the questions.

On an ad hoc basis as needed, some SPoCs were also asked to **provide documentary information** for the project, which included for example performance data and post-incident reports.

C: Data Analysis

The responses from both the interviews and online surveys generated **two large spreadsheets of raw data**, which then had to be coded (allocated) to a particular area of the report. We promised respondents anonymity and so this raw data was only made available to those in the Project Team - not the wider Working Group.

We were looking to match responses gathered to the areas of the report, a process which we called 'data chunking', so that we could identify themes emerging from multiple respondents. In many cases, each survey question elicited answers relevant to one specific part of the report - this meant it was easy to 'chunk' up that data and allocate it for analysis in that part of the report. The interview responses, however, were much more varied and the types of question allowed for answers which could apply to any or multiple parts of the report. This part of the data chunking was more time consuming.

Once the raw data was chunked into the relevant areas of the thematic areas addressed by the report, we were then able to review and code the data in a more granular manner. Thus, common themes started to emerge from the collective anonymised responses. These were summarised in a separate spreadsheet and this formed the basis of discussions in the workshops outlined below.

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[22] One of the Project Team in particular has been working with a number of interview participants on other projects for a number of years (including the COVID-19 response, emergency exercises and various Incident Care Team projects). In a way this was also a benefit to the interviews as this meant that a good rapport was already established between interviewers and interviewees. However, the lead interviewer was always a different Project Team member so that no influence over responses could be suggested.

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D: Data Validation

The findings identified by Project Team during the analysis phase were then **challenged and tested via a set of 3 workshops** attended by SPoCs, members of the RDG and Emergency Planning Group (EPG), and colleagues from RSSB and stakeholder organisations. Each of the three-hour workshops covered multiple and different themes and was broken down into roughly 3 one-hour sessions.

		Room 1	Room 2	Room 3
Workshop 1	Session 1	Interoperability		
	Session 2	Collaboration		
	Session 3	Regulations and Industry Oversight	Standards	
Workshop 2	Session 1	Resources	Training & Competency	
	Session 2	Leadership & Culture	Governance	Leadership & Culture
	Session 3	Risk	Plans and Structures	Testing & Exercising
Workshop 3	Session 1	Learning opportunities	What does good look like?	
	Session 2	Performance	Lessons identified	
	Session 3	COVID-19 learning and improvement wishes	Improvements and barriers to improvement	

Workshop Objectives:

- To sense-check initial findings identified by the Project Team
- To evolve existing / create new ideas for the recommendations to address gaps and weaknesses identified, or to incorporate good work more consistently.
- To engage the Working Group members and SPoCs in the process so they feel involved in it and feel ownership of the RRP outcomes.

Outcomes:

- The process should Identify any findings that might have been missed and alternative ways of analysing the data
- Working Group members and SPoCs will gain awareness of the likely direction of the report – therefore there will be no surprises and this also demonstrates transparency of project methodology
- The Project Board can be assured of the rigour of the findings - this is a layer of validation
- The final recommendations will be more likely to be accepted by the Project Board and the operators because of the co-identification of them. This means there is a higher chance of them being implemented in the long-run.
- There is a better chance of the recommendations being the right solution

Workshop attendees were provided with a summary of the findings for the specific topic and asked to provide feedback on the following:

1) Do our summaries sound right? Is there anything missing?
2) What are the key findings?
3) Are any recommendations needed to address the findings? If so, what?

Comments and discussion were captured and the sessions were recorded for the purposes of note taking. The vast majority of points identified by the Project Team during analysis were confirmed as being valid by the attendees. There were challenges on some points, however these tended to be that the point raised was not universally applicable to all organisations and so the final wording should reflect the variation.

The notes from the Workshops informed the **initial findings and recommendations** that were briefed to the board in draft form on Friday 23 April. Comments received by the board were then incorporated into the final report as written here.

The report's methodology and the draft findings have themselves been subject to a review by the **Emergency Planning College** - the output of which has been provided to the project board and their recommendations in relation to methodology have subsequently been incorporated where possible in this current final report. This resulted in additional data being gathered from BTP, as well as RDG's Customer Insights Team and RDG Communications which was then **incorporated into the final report.**

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Appendix B: Question Sets

Online Survey Questions

1) Name of respondent
2) Organisation
3) How many full-time equivalent (FTE) members of staff does your organisation employ in the team(s)responsible for preparing for emergencies before they happen?
4) (Please include FTEs for those involved in risk assessment, prevention (related to those risks), plan development and writing, engagement with stakeholders, in-house training development and delivery, in-house exercising development and delivery etc.)
5) Where does emergency management/resilience sit within the organisation? (e.g. it sits within X directorate, with direct links to the BC team, the Security team, Risk Management Team)
6) Please provide the job title for:
7) The person with day-to-day responsibility for emergency management activities
8) The senior manager responsible and accountable for ensuring the organisation is ready to respond to emergencies
9) In relation to emergency management / resilience activities (risk assessment, recruitment, training, exercising, plan writing, etc.), what standards do you align to? (these could be internal, industry, national or international standards, please also state if this is certified)
10) Does your organisation have a process for assessing risks and hazards which informs resilience activities (plans, training and exercising etc.)? Yes - formally documented / Yes - but not documented/ No / Other (please specify)
11) What steps does your organisation take to manage risks identified so that the risk is mitigated (less likely to happen or less impactful if it were to happen)?
12) What key internal documents and frameworks underpin your organisation's emergency response?
13) Does your organisation have a generic incident response plan(s) that covers the following areas
14) Risks identified / Organisational structure clearly articulated / Triggers for activation clearly articulated / Activation process clearly articulated / Roles and responsibilities clearly articulated / Standdown process and timings clearly articulated / Recovery process clearly articulated / Other key parts of the plan (please specify)
15) How does your organisation ensure the plans and arrangements are fit for purpose internally?
16) How does your organisation ensure the plans and arrangements are interoperable with rail industry partners and emergency management partners?
17) Describe your organisation's engagement with other emergency responders (LRF, Emergency Planning Group etc.)
18) How does your organisation manage competency in relation to emergency management? (think about competency during the recruitment process, and as it applies to emergency planning staff, response staff, senior managers etc.)
19) Describe your organisation's approach to training and developing staff with an emergency planning or response role
20) What prompts your organisation to review your documented plans and arrangements?
21) Describe your organisation's approach to testing and exercising emergency plans and arrangements *(how frequently they take place, when the last one was, do you have a longer-term Testing and Exercising programme linked to planning and risks identified, is there a formal strategy for exercising etc)*
22) Describe how your organisation routinely captures key points and learning opportunities after any exercises, emergencies or incidents. (e.g. conduct debriefs, hot and cold, write post incident reports with recommendations etc.)
23) How does your organisation ensure that lessons identified during exercises, emergencies and incidents are turned into actions and improvements are made? (How do you manage the process and track progress? Are these also shared with industry partners?)
24) What are the key changes your organisation has made to emergency management in the last two years (2018-2020)? (this might be improvements or changes which have led to a degradation of response capabilities)
    21. In relation to your organisation's generic emergency plan(s) and supporting arrangements (referred to for brevity below as the Plan), to what extent do you agree or disagree with the following
25) I feel confident that the organisation's Plan is robust
26) I feel confident that those with a role in the Plan would be able to perform their roles as described
27) I feel confident that those responding for my organisation would be able to engage with other multi-agency responders in a way that helped the response.

28) I feel that there is senior management support and advocacy for emergency management in my organisation.
29) The Plan is built around a 3-tier incident management structure (Operational, Tactical and Strategic).
30) The organisation's Plan is compliant with the terminology and principles set out in Joint Emergency Services Interoperability Programme (JESIP).
31) Those who respond as part of the Plan can work comfortably with other responders
32) The Plan covers the recovery time period (not just the immediate activation and response)
33) The Plan covers the human aspects of any incident (casualties, incident care teams, staff welfare etc.)
34) The Plan covers the infrastructure or physical aspects of any incident (trains and rolling stock etc.)
35) When a lesson is identified in an incident or an exercise, we always make the necessary changes to ensure we do not repeat the same mistakes
36) My organisation reviews (debriefs) incidents as a matter of course, and has a process in place to capture and share learning

RRP Interview Schedule

1) Organisation Name
2) Interviewee(s) Name and Job Title
3) Interviewer Names
4) How would you define good incident response in the rail industry?
5) Which part of the integrated emergency management (IEM) lifecycle does your organisation find most difficult to deliver? [Anticipation, assessment, prevention, preparation (including training and exercising, plan writing etc.), response and recovery]
   b) Why do you think this is?
   c) Is this a weakness across the whole system or organisation, or just parts?
   d) What do you think needs to change to fix this?
6) Which part of your organisation's resilience/IEM activities do you think is most successful?
   b) Why do you think this is?
   c) To what extent does this apply to the whole programme or organisation, or is it just parts?
   d) What evidence do you have of this positive impact (in exercises or incidents etc.)?
7) What is the biggest challenge or barrier to making your organisation's IEM arrangements even better?
   b) Can you explain a bit more what you mean?
   c) Can you give an example?
   d) Does this barrier/challenge apply to the whole IEM lifecycle?
8) What is needed to improve IEM in your organisation, in your opinion?
   b) Why is this?
9) If you had more resources (people/time/money), what one change would you make in your organisation to improve resilience outcomes? (e.g. better response times, less impact on people, fewer incidents)
   b) Why is this?
   c) How easy or difficult would that be to implement?
10) What has been the most important lesson or observation you/your organisation have identified from recent emergencies or incidents (any kind of incident - derailment, crash, cyber-attack, pandemic etc.)?
    b) Has made any changes to incorporate this learning into future responses?
11) Can you share examples of changes you or your organisation have implemented/attempted in the past?
    b) Was it successful/unsuccessful and why?
    c) If you were to attempt it again, what would you do differently?
12) What changes have you made as a result of COVID-19?
    b) Will these be in place permanently or will you go back partly or entirely to older ways of doing things?
13) How would you describe the resilience culture in your organisation?
    b) Is there such a thing?
    c) What examples do you have of resilience being part of the culture?
14) How do you measure resilience/IEM risk & performance? (i.e. response times, distances between locations, numbers of staff, number of near misses etc.)
    b) Do you think these measures collectively provide an accurate representation of your organisation's capability at any point in time?
    c) Are there additional/measures you could envisage?
15) What could the industry do collectively to improve IEM? (As opposed to each operator working alone)
    b) Can you explain why you think that would improve the situation?
    c) Can you give an example?

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Appendix C: Overview of Project Governance

The project was set up following an industry meeting held on 12th January 2021. Project management activity was provided by Tennessee Price (RDG). The project followed RDG's Project Delivery Framework (PDF) throughout its lifecycle. Formal stage gate reviews were conducted to ensure the project team and stakeholders were aligned with each stage's outputs, resource and document requirements. Formal fortnightly progress reporting was implemented. The audience of these reports comprised of project board members, RDG senior colleagues and RDG's PMO office. The report included updates on progress against project plan, key milestones and updated on identified key risks.

The Project Working Group comprising volunteers from industry was mobilised under the direction of Guy Huckle (Network Rail). An initial Terms of Reference for this group was agreed by Steve Murphy (MTR), Oliver Bratton (Network Rail) and Susie Homan (RDG).

The project board met every 4 weeks with interim interactive briefing sessions to allow the project team to share information on key outputs of the project as they progressed. Key risks were shared with the board at appropriate milestones and board members were asked to provide direction where required.

The ultimate oversight for the project is provided by RDG Board. RDG's Operations Council, National Planning & Production Board, Freight Policy Group also maintained oversight of the project's activity.

Project Team	Organisation	A sub-set of the Working Group formed the Project Team who undertook most of the day-to-day project work.
Guy Huckle	Network Rail (Project Lead)	
Tennessee Price	RDG (Project Manager)	
Thomas Croall	Network Rail	
Louise Elstow	Fynbos Consulting (for RDG)	
James Cassidy	Fynbos Consulting N.B. - Part of the project team for a limited period of time	
Jason Reilly	Network Rail	
Alice Morton	Network Rail	
Robert Sawers	Network Rail	
Working Group	**Organisation**	The Working Group met weekly and assisted with the following duties;
Peter Lovegrove	RDG, Operational Resilience Manager	
Simon Moorcroft	RDG, Crisis Management Specialist	• To provide the Project Manager and Project Team with advice and guidance on their organisations
Ian Hall	Southeastern, Head of Resilience & Security	
Richard Jones	London Underground, Head of Network Delivery	• Helping foresee, identify and overcome logistical hurdles
Ray Shields	BTP, Chief Inspector	• Actively involved in engaging stakeholder to support the project outcomes
Mark Roden	ScotRail, Fire Engineer	
Steve Enright	Abellio, UK Head of Safety, Security & Sustainability	• Providing support for specific tasks as requested by the Project Team
Philip Murphy	NTS (DRS), Head of Resilience	
Tony Sawh	DfT, Resilience & Operations Manager	
Vanessa Porter	DfT, Head of Resilience Liaison	
Keith Newton	NR, Senior Quality Manager, System Operator	
Project Board	**Organisation**	A Project Board comprising representatives from industry and key partners was set up. The Project Board had the following duties;
Steve Murphy (Chair)	MTR Elizabeth Line, Managing Director	
Oliver Bratton	Network Rail, Director, Network Strategy & Operations	• To be accountable for the success or failure of the project
Sean O'Callaghan	BTP, Assistant Chief Constable	• To provide unified direction to the project and project manager
Paul Brogden	Metropolitan Police Service, Commander	
Mark Newton	RDG, Head of Policing and Security	• To provide the resources and authorise the funding for the project
Guy Huckle	NR, Chair RRP Working Group	• To provide visible and sustained support for the Project Manager
		• To ensure effective communication within the Project Team and with external stakeholders

Appendix D: Workshop Attendees

Workshop 1 (Mon 12 April, 09:00-12:00)

Facilitators	Attendees	Organisation & Role
Louise Elstow Thomas Croall Peter Lovegrove Susie Beevor	Phillipa Murphy	RSSB, Principal Strategy Implementation Manager
	Lucy Gallacher	East Midlands, Emergency Planner & Security Manager
	Mark Haggerty	SWR, Business Continuity/Emergency Planning Manager
	Andy McRae	GWR, Senior Possession Delivery & Communications
	Vanessa Porter	DfT, Head of Resilience Liaison
	Paul Jackson	Hull Trains, Head of Customer and Stakeholder Engagement

Workshop 2 (Tues 13 April, 10:00-13:00)

Many attendees were part of the RDG chaired Emergency Planning Group - a TOC-based group that looks collectively at EM in the rail industry. The EPG was due to meet on the day of Workshop 2 and so attendees were directed to the workshop instead.

Facilitators	Attendees	Organisation & Role
Louise Elstow Thomas Croall Peter Lovegrove Tennessee Price Susie Beevor	Lucy Gallacher	East Midlands, Emergency Planner & Security Manager
	Saul Gray	Southeastern, Fire Safety and Emergency Planning Manager
	Mark Roden	ScotRail, Fire Engineer
	Mark Manser	C2C, HSE Manager
	Jim Rawcliffe	LNER, Security and Emergency Planning Manager
	Russell Jones	MTREL Operations Standards Manager (West)
	David Slater	Cross Country, Head of Train Service Delivery
	Helen Child	Chiltern, HSSE Manager Customer Services & Emergency Planning
	Mark Haggerty	SWR, Business Continuity/Emergency Planning Manager
	Steve Robinson	GA, Security and Emergency Planning Manager
	Ian Hall	Southeastern, Head of Resilience & Security
	Jeni Redfern	GTR, Business Continuity & Emergency Planning Lead
	David Wilkinson	Northern, Community Safety Manager
	Roy Hallett	Grand Central, Head of Safety Operations
	Phil Barret	RDG, Head of Safety and Operations Development
	Steve Enright	Abellio, UK head of Safety, Security & Sustainability
	Scott Brangham	TfW, Business Resilience Manager
	Katie Goldsmith	TPE, Emergency Planning Manager
	Vanessa Porter	DfT, Head of Resilience Liaison
	David Mulhall	TPE, Head of Safety and Security
	Nicolas Bargeles	Eurostar, Head of Business Continuity
	Louise Lucas	Heathrow, Safety & Assurance Manager

Workshop 3 (Thurs 15 April, 13:00-16:00)

Facilitators	Attendees	Organisation & Role
Louise Elstow Thomas Croall Peter Lovegrove Tennessee Price Susie Beevor	Jason Reilly	NR, Security & Contingency Planning Specialist
	Gareth Jones	GWR
	Jeni Redfern	GTR, Business Continuity & Emergency Planning Lead
	James Burt	Independent Consultant and Chair of RDG EPG
	Simon Potter	Freightliner, Head of Occupational HSSE
	Mark Haggerty	SWR, Business Continuity/Emergency Planning Manager
	Amy Fisher	Eurostar, Disruption Improvement Manager
	Richard Berryman	GWR, Operations Control Manager
	Simon Silcock	Chiltern, Head of Train Service Delivery
	Will Etherington	Grand Central, Safety Systems and Security Manager

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Appendix E: Summary of reported practices (non-exhaustive)

The following table provides an overview of reported practices as provided by respondents in online survey and interview data. The table is broken down into three columns. The middle column describes the 'typical' or modal response provided as a whole. The right-hand column describes areas of stronger practice and the left-hand column describes the weaker practice as reported. NB: stronger practice is relative only to the general position provided by respondents, rather than benchmarked against external standards.

	Weaker practice response	Typical Response Received	Good practice example
Thematic Area 1: Foundations of Emergency Management			
Standards & Guidance	• No documented procedures	• RSSB Rail Industry Standards RIS 3118 TOM identified, but broadly documents by RSSB (the Rule book itself), RDG Guidance, Civil Contingency Act, Network Rail NEP, and internal company documents.	• One respondent reported ORR being helpful with industrial relations issues - having conducted an audit on how COVID-19 was/is managed. • Use of an organisational management system
Governance	• No common organisational structure: some combine safety, sustainability, security and or operations, and others are governed in their own right	• Inconsistency of roles (and therefore consistent responsibilities) across organisations; however, responsible managers were identifiable, with one or more role	• One respondent reported that they had an internal EPG in place with department stakeholders meeting every 4 weeks and as a result, emergency planners get support in decision-making
Managing & Measuring Performance	• No mechanism for measuring performance • No strategic direction to achieve targets e.g. "we can't judge because we don't have a standard for what good looks like"	• Use of qualitative assessment e.g. "we analyse what has been done - but no measurements"	• Tracking of risks in our safety committees • Use of an IT tool to track non-conformities
Regulation & Industry Oversight	• No common structure • One respondent commented that there was too much intrusion by owning group- with final approval needed before being 'able to get on with things'	• Influence of Regulator in their resilience activities was noted; in particular in areas such as safety and security, but less so for EM with that considered as potentially left behind.	• One organisation noted that ORR ad provided their staff with ROG training which was helpful and where organisations have had recent significant engagement, it has overall been positive and helped drive improvements in EM
Culture and Leadership Engagement / Support	• Culture of "it won't happen to us" • Organisational changes and changes in strategic leadership roles meaning EM never really gets bedded in.	• Several interviewees reported a tendency for those in leadership roles to have had a previous career in police/BTP and this leads to a directive style of leadership as opposed to participative style of leadership	• Top management visible welcomes escalation of all issues related to EM • Senior management provide support and advocacy for EM in their organisation

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Thematic Area 2: People & Resources			
Resources	• <1 FTE dedicated to EM. • All EM planning activity delivered by one individual • No succession planning in place • 'Doing the basics' 'one-man-band doing EP'	• Approx. 1 FTE dedicated to EM • Extensive task from company strategic level to station plans • Insufficient resources to undertake multi-agency emergency and events planning activities	• Dedicated EM team. • Focus on EM • Clarity on roles and responsibilities. • Time and resources available to make and effect change - to do the job needed.
Training & Competency Management	• Suspension of exercising during pandemic; an impact of reduced hours, furloughed staff, and postponing as much as possible • Little mention of JESIP or Resilience Direct • Common practice for people moving into EM roles with little prior knowledge or experience • Irregular training for on-call roles	• Majority of respondents stated they needed additional dedicated EM staff with the right experience and qualifications • Staff recruited to EM roles lacking in qualifications, provided with development opportunities e.g. Cabinet Office EPC training	• Confidence in capacity of control rooms to manage day-to-day incidents & localised major incidents • Overall Resilience as a concept is becoming better understood • Training and competence for roles such as RIO/SIO/TOLOs appear to be consistent
Thematic Area 3: Emergency Management (EM) Practice			
Anticipation, Assessment & Prevention	• One respondent reported there is no process in place [for assessing risks and hazards] • One respondent stated that risk is managed from a compliance angle being heavily driven by mitigations / controls required by legislation • Cyber resilience is not considered beyond an IT issue	• Most organisations stated they had a process for assessing risks and hazard which form resilience activities, such as plans, training and exercising; however, the process is not formally documented • Most respondents provided answers stating they undertake risk assessments that identify threats and hazards using tools such as UK National Risk Register • Several respondent's offered answers about their EM/BC plans and exercising	• One respondent reported that there is a strong process for assessing risk and hazards as part of their emergency planning activities; however, is limited for general organisational risk/ resilience • One respondent reported that they have a monthly forums where risk and hazards are identified (1x Safety Management Group and 1x Safety Review Panel)
Planning for Response & Recovery	• Checklists that exist are not being used and not knowing why this is the case • Only 20% respondents identified that they look towards learning from exercises or indeed incidents elsewhere in industry to change their plan(s)	• Most organisations reported reviewing of plans and arrangements following learning identified by incidents	• Plans linked in with all relevant parts of the organisation and other external agencies • Plans developed with key internal and external partners
Testing & Exercising	• Suspension of exercising during COVID-19 • Ad-hoc approach to exercising due to a lack of resource, immature	• Exercising once per annum • Attending exercises led by other rail or EM partners to satisfy the	• Exercising every 6-8 weeks • Reported leading practice whereby exercising is a systematic part of programmed activity, linking

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	capability in EM, and facilitation skills	organisation exercising undertaking	• with risk and planning activities • Continued exercising throughout COVID-19 using video conferencing and associated tooling
Embedding Learning & Improving	• Exercises postponed/ cancelled due to COVID-19 • No programme/ schedule or procedures under review • Exercising once per year • Exercises are not conducted jointly with relevant rail industry and/or EM stakeholders • No process in place to routinely capture key points and learning opportunities after any exercise, emergency or incident • General lack of subject matter expertise noted and lack of succession planning	• Consistent responses reported that plans and arrangements are subject to regular, periodic internal review • Significant number cited changes in externally originating guidance and legislation as a trigger for review. • Exercising 2-4 times per year • Debriefs conducted after most incident/ exercises • Post Incident/ exercise report produced • General lack of subject matter expertise noted	• Mandatory for staff on-call on those dates • Using exercising to help demonstrate expectations from external partners • Collaborating with rail & /or emergency service partners to share assets to enhance the quality of exercises e.g. rolling stock not in use or exercising suites • Observers at exercises • Use of both 'Hot' and 'Cold' debriefs as standard • Post exercise /incident report written using operational logs and incident logs • Post exercise/ incident report specifically records and manages learning outcomes • Eliciting learnings/ insights from secondary sources of learning such as RAIB publications and Outputs from ORR inspections • Actions shared with rail industry and EM partners • Sharing learning via REPACC/EPG meetings
Thematic Area 4: Partnership Working			
Interoperability - working with other EM partners	• One respondent reported issues in the past with other agencies not being fully inclusive towards rail and Cat 2 responders generally	• Notable respondents only reported engaging in one or two of these opportunities – it may be telling that they do not assert a presence at fuller range of activities	• Several respondents reported activities that support interoperability; such as RDG (Emergency Planning Group), LRFs and close working pan-industry exercising
Collaboration - working with industry partners	• Exercising objectives were not mentioned in any responses, suggesting this might be an area to focus	• Call for consistency in EM in terms of how individuals are trained, sharing of resources, information, methods, training materials, exercising materials etc.	• Exercising being a systematic part of a programmed activity; linked with risk and planning activities across organisation and industry stakeholders • Structure and requirement to exercise, including internal and multi-agency for incidents and major events.

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Appendix F: Relevant Legislation and Guidance

Source	Reference	Link/Access (at time of writing)
UK Legislation	Civil Contingencies Act 2004	https://www.legislation.gov.uk/ukpga/2004/36/contents
	Railways Act 1993 and 2005	https://www.legislation.gov.uk/ukpga/2005/14/contents
	Railways (Accident Investigation and Reporting) Regulations 2005 (and amendment)	https://www.legislation.gov.uk/uksi/2005/1992/contents
	Control of Major Accident Hazard (COMAH) Regulations 2015	https://www.legislation.gov.uk/uksi/2015/483/contents and https://www.hse.gov.uk/comah/index.htm
	Corporate Manslaughter and Corporate Homicide Act 2007	https://www.legislation.gov.uk/ukpga/2007/19/contents
ORR Guidance	Strategy for regulation of health and safety risks - chapter 1: Health & Safety Management Systems Strategy for regulation of health and safety risks - chapter 5: Interface system safety – Emergency preparedness.	https://www.orr.gov.uk/guidance-compliance/rail/health-safety/strategy/our-strategic-risk-chapters
Key RDG Guidance Notes and ACOPs	ACOP011 - Joint Industry Provision of Humanitarian Response Following a Major Passenger Rail Incident	Available via RDG
	ACOP016 - Incident Response - Duties of Primary Support Operator	
	FLU/GN001 - Incident Response - Duties of Primary Support Operators	
	GN011 - Emergency Planning – Knowledge, Understanding and Responsibilities	
	GN012 - Planning for and Responding to National Fuel Shortages	
	GN014 - Major Incidents – Preparation of Aide-Mémoires for Senior Managers	
	GN015 - Extreme Weather Arrangements including Failure or Non-Availability of On-Train Environment Control Systems	
	GN017 - Competence of Station Incident Officers (SIOs)	
	GN023 - Checklist for Major Incident Response	
	GN025 - Post Incident Management of Personal Property	
	GN034 - Logging and Loggists	
	GN037 - Contingency Planning for Power Outages	
	GN039 - Social Media Response to Major Incidents and Disruptive Events	
	RDG-OPS-GN-049 - Meeting the Needs of Passengers Stranded on Trains	
Industry Plans	RDG Cross-Industry Crisis Command Framework	Available via RDG
	NR/L2/OPS/250 - National Emergency Plan (Network Rail Standard)	Available via NR
Other Government Guidance and Documents	Cabinet Office - Expectations and Indicators of Good Practice Set for Category 1 and 2 Responders (2013)	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/252341/Expectation_and_Indicators_of_Good_Practice_Set_for_category_1_2_Responders.pdf
	Emergency Response and Recovery - Non-statutory guidance accompanying the CCA 2004	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/253488/Emergency_Response_and_Recovery_5th_edition_October_2013.pdf
	Cabinet Office - National Resilience Standards for LRFs (2020)	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/913502/NRS_for_LRFs_V3.0__Aug2020.pdf
	UK National Risk Register (2020)	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/952959/6.6920_CO_CCS_s_National_Risk_Register_2020_11-1-21-FINAL.pdf
Other	National Occupational Standards for Civil Contingencies	https://www.ukstandards.org.uk/
	RSSB - RIS-3119-TOM Railway Industry Standards for Accident and Incident Investigation	Available via RSSB
	JESIP Joint Emergency Services Interoperability Principles	https://www.jesip.org.uk/home

Appendix G: Glossary of Terms Used

ACOP	Associated Code of Practice
BCI	Business Continuity Institute
Cat 1	A Category 1 Responder under the CCA 2004 (the emergency services or similar primary responding agencies)
Cat 2	A Category 2 Responder under the CCA 2004 (organisations that support the Category 1 Responders in planning for and responding to emergencies)
CCA	Civil Contingencies Act 2004
CCIL	Control Centre Incident Log (Network Rail incident management and logging tool)
COMAH	Control of Major Accident Hazards
DfT	Department for Transport
EM	Emergency Management
EPS	Emergency Planning Society
ERMA	Emergency Recovery Measures Agreement
FTE	Full Time Equivalent
GN	Guidance Note
ICPEM	Institute of Civil Protection and Emergency Management
IEM	Integrated Emergency Management
JESIP	Joint Emergency Services Interoperability Programme
KPI	Key Performance Indicator
KRI	Key Risk Indicator
LOM	Local Operations Manager
LRF	Local Resilience Forum (or Local Resilience Partnerships in Scotland)
METHANE	Major Incident declaration message - abbreviation for 'Major Incident Declared/Standby, Exact location, Type of incident, Hazards, Number and type of casualties, Emergency Services present or required.
MOM	Mobile Operations Manager
NDFU	National Disruption Fusion Unit
NEP	National Emergency Plan (Network Rail Standard NR/L2/OPS/250)
NOC	National Operations Centre (Network Rail)
NOP	National Operating Procedures (Network Rail)
NR	Network Rail
NRNEP	Network Rail National Emergency Plan
NSAR	National Skills Academy for Rail
NSRA	National Security Risk Assessment
ORR	Office of Road and Rail
PIDD	Passenger Information During Disruption
RD	Resilience Direct
RDG	Rail Delivery Group
REPACC	Route Emergency Planning & Coordination Committee
RIC	Rail Incident Commander
RIO	Rail Incident Officer
RM3	ORR's Risk Management Maturity Model
ROGs	Railways and Other Guided Transport Systems (Safety) Regulations
RSSB	Rail Safety and Standards Board
SIO	Station Incident Officer
SPoC	Single Point of Contact
SQEP	Suitably qualified and experienced person
TfW	Transport for Wales
TOLO	Train Operator Liaison Officer

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Appendix H: Summary of Lewisham Self-Evacuation

Occasion / Event: Severe Weather 24 Feb - 4 Mar 2018 ('Beast from the East')

Late in the evening on Friday 2 March 2018, just outside Lewisham Station, South East London and with the country experiencing severe weather (significant freezing rain and snowfall), what was initially one failed train, became several stranded trains and multiple passengers self-evacuating onto the infrastructure. In the end nine trains were evacuated with the assistance of the emergency services. The multi-agency rescue ensued drew significant media and social media attention, compounded by wider disruption on the network and stretched resources able to assist.

On Friday 2nd March 2018, heavy snow showers across many parts of the country as winter weather moved towards the UK from the east; significantly affecting the rail network including the South East Route as well as other transport infrastructure such as the road network. The Met Office issued Red, Amber and Yellow warnings in areas across the country and the period of bad weather was widely covered in media and is known as the 'Beast from the East' with cold weather, disruptive snowfalls and bitterly cold winds.

By late afternoon Southeastern were working to a revised timetable, using their Key Route Strategy taking into account the severe weather and had actively messaged for passengers to not travel unless the journey was absolutely essential. However, thousands of passengers had already made a journey into London already by this stage and at risk of not being able to return home.

Just outside Lewisham Station on the evening of Friday 2nd March 2018, multiple trains were stranded as they were unable to draw power from the third rail due to icy rail conditions. With on train conditions being very cold, crowded and with limited toilet facilities, several passengers took the decision to 'self-evacuate' onto the track, with Lewisham Station in sight. Track conditions were hazardous, with snow covering ballast and significantly the third rail still being live until an emergency isolation was requested. This led to a multi-agency rescue of several hundred passengers by rail staff (possibly up to 1000) from the track infrastructure.

Although not formally declared; this was a Major Incident for the rail industry. During the debrief is became clear that the full scale of the operation / rescue site was unknown to the fire commanders at the scene on the night (unaware that nine trains were involved) and suggests poorly communicated situational awareness and may have influenced joint decision making.

The rail industry with all best intentions initially attempted to dissuade passengers from evacuating trains in an uncontrolled manger (pre arrival of the emergency services) by use of threats to prosecute 'trespassers'; however, in hindsight this may not have been the best use of language given the exceptional circumstances and conditions onboard.

Rail staff (including the LUL ERU, RIO, P-way and station staff) along with the emergency services demonstrated a joint energy and dedication at the scene to help passengers to a place of safety once it was clear that the incident had become a rescue operation.

Debrief

Network Rail conducted a multi-agency debrief was for responders from across the South East Route within Network Rail and Southeastern, HQ functions and invited attendees from London Fire Brigade, London Ambulance, British Transport Police and London Resilience Group. The debrief highlighted issues including but not limited to multi-agency communications and combined situational awareness, diverging strategic objectives (keeping people onboard vs rescuing them) and a lack of declaring the incident a major incident. The Debrief Report makes various recommendations to address these where possible.