



UK Resilience Lessons Digest

Learning to Manage Lessons

Issue 5 | November 2024

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Foreword

From Matthew Clarke, Head of Resilience, Resilience Directorate

Welcome to the fifth edition of the UK Resilience Lessons Digest entitled "Learning to Manage Lessons."

This edition of the Digest accompanies the Lessons Management Best Practice Guidance (2024) recently published on GOV.UK. The guidance anchors lessons management into the three core principles of the Resilience Framework. It is an informed, practical step-change in the way lessons are managed, in concept and practice. It also sits alongside two further, recent UK Resilience Academy publications: **Organisational Resilience Guidance for UK Government Departments, Agencies and Arm's Length Bodies (ALBs)**; and **Exercising Best Practice Guidance**.

Each of the publications brings a significant contribution in the context of civil contingencies and resilience. All have been designed to support a range of stakeholders in the testing and development of their resilience functions, and in meeting the challenges set out in the Resilience Framework.

The Lessons Management Best Practice Guidance has been designed to complement existing learning activities, be used in conjunction with established lessons platforms, and to support continual improvement at national and local levels.

Thanks to our guest contributors, this edition includes articles on practical process aspects, from the United States Federal Emergency Management Agency (FEMA), sharing how they have matured their implementation, action-tracking, and evaluation capabilities as well as guest articles from the Independent Office of Police Conduct (IOPC), University of Liverpool, and Cheshire Constabulary. These insights offer valuable lessons and highlight the importance of continuous learning and practical tools for lesson validation.

I and Resilience Directorate colleagues look forward to hearing your reflections on Lessons Digest 5 and the published guidance. We hope these documents are a valuable resource in 'learning from lessons' and embedding lessons in practice. We thank the contributors and commend this edition to you.



Matthew Clarke, Head of Resilience Resilience Directorate, Cabinet Office

Introduction

From the Emergency Planning College

Since the last edition of the Digest a range of relevant publications have been released.

On 18th July 2024, the **UK Covid-19 Inquiry** published its first report from the investigation into the United Kingdom's Resilience and Preparedness. The **Module 1 report** highlighted a range of lessons across six thematic chapters, including one dedicated to the theme of 'Learning from Experience'. The inquiry Chair, Rt Hon Baroness Hallett DBE, set out 10 key recommendations in response to the findings.¹

Less than two months later, on 4th September 2024, the **Grenfell Tower Inquiry** published its **Phase 2 report**. Having investigated the circumstances leading up to and surrounding the fire at Grenfell Tower in the early hours of 14 June 2017, this was the final report from Chair of the Inquiry, Sir Martin Moore-Bick. Within it 58 recommendations were set out under a range of subject matter headings.²

In addition, the UK Government published three new guidance documents on GOV.UK between 1st August and 30th September 2024. All sit under the heading of Emergency Preparation Response and Recovery. These include Organisational Resilience Guidance for UK Government Departments, Agencies and Arm's Length Bodies (ALBs), updated Exercising Best Practice Guidance, and Lessons Management Best Practice Guidance.

Learning to manage lessons

All the above have relevance to the resilience community and the Digest's remit. Instead of attempting to review all in a single edition, Learning to Manage Lessons acknowledges the need to learn effectively from experience to be a common, cross-cutting denominator. It can underpin progress in prevention and preparedness across all risk scenarios, at all levels, and help foster resilience in any context.³

For this reason, this fifth Digest edition creates a space for findings from three recent public inquiry reports to be considered in tandem with content from the Lessons Management Best Practice Guidance. The rationale in doing so is to provide a practical, relevant analysis that leverages recent inquiry findings to support onward, post-publication learning, within and across varied sectors and stakeholders. As part of a shared commitment to continual improvement in the civil contingencies' resilience context, it is always pertinent to consider the challenges and opportunities that exist for identifying lessons more accurately, learning them consistently, and managing them more effectively.

¹ UK Covid-19 Inquiry

² Grenfell Tower Inquiry

³ Lessons Management Best Practice Guidance

We are also very pleased to supplement the analysis with some fantastic guest articles, exploring what has been learned in the process of managing lessons at national, and local levels.

An update from the EPC

Finally, we would like to share that since the last Digest edition, **Hamish Cormack** has joined us as the Head of the Emergency Planning College (EPC). Appointed by Serco, who operate the EPC on behalf of the Cabinet Office, the move comes as Deborah Higgins steps into a new role within Serco, where she will remain a key part of the resilience community.

Upon appointment into the role, Hamish said, "I am genuinely thrilled to be joining the EPC at such an exciting time and I am looking forward to working closely with my Cabinet Office colleagues, and wider stakeholders, as we continue to develop training and education collectively to make resilience a whole of society endeavour."

As always, we continue in our commitment to keep the Digest relevant to the resilience community. Please do share your thoughts, ideas, and feedback via the QR code to help inform our continual improvement processes.



We look forward to hearing from you.



Hamish Cormack Head of Emergency Planning College



Lianna Roast Head of Thought Leadership Emergency Planning College

Missed our last webinar, 'Learning to Adapt'?



No problem, the recording is now online and available for **catch up here**.

Executive Summary

Timely analysis. Transferable lessons. Transformative insights.

About the Digest

The publicly available UK Resilience Lessons Digest is part of the Government's commitment to strengthening whole-society resilience. It sits at the heart of a programme of work at the Cabinet Office Emergency Planning College (EPC) to synthesise lessons learned of all major exercises and emergencies.⁴ These summary pages provide an overview of content in this latest edition, which is tailored to achieve the Digest's three key objectives below.



To **Summarise** transferable lessons and themes from a wide range of relevant sources.

To **Share** lessons across responder organisations and wider resilience partners.

To **Coordinate** knowledge to drive continual improvements in doctrine, standards, good practice, training and exercising.

Each issue of the Digest provides an analysis of lessons arising from public facing reports, generated after exercises and/or incidents.

This provides an evidence base for **'learning themes'** (i.e., common areas or patterns of learning across reports) and **'transferable lessons'** (i.e., learning points with 'all-hazards' applicability, or 'risk agnostic' characteristics)⁵ that can be applied in practice to build resilience across the risk cycle.

Following publication of Cabinet Office's Lessons Management Best Practice Guidance in September 2024, this fifth edition of the UK Resilience Lessons Digest has a thematic focus on that same topic. It provides a brief overview of the processes and practices within the guidance. It also includes insightful articles on practical learning process aspects, from the United States Federal Emergency Management Agency (FEMA), the Independent Office of Police Conduct (IOPC), University of Liverpool, and Cheshire Constabulary.

Learning to manage lessons

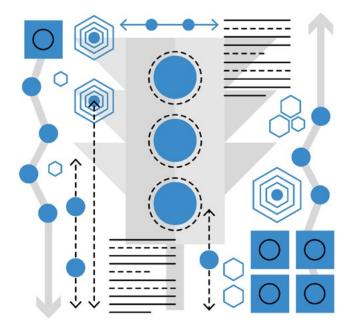
Lessons Management refers to 'a strategic, organised approach to, and oversight of, planned processes and procedures to achieve evidenced learning from experience, in a continual, consistent manner.'6 In the civil contingencies' resilience context, the purpose of learning lessons and capturing positive practices is to drive continual improvements in the way that individuals, teams, departments, organisations, and multi-agency partners anticipate, assess, prevent, prepare, respond to, and recover from emergencies. The effective management of successful lesson-learning activity offers a range of resilience benefits. Most notably it plays a vital role in directing work to prevent the repetition of past mistakes, driving preparedness activity, and reducing negative impacts in the event of disruption.

⁴ Lessons Digest | Knowledge Hub | EPC Resilience

⁵ National Resilience Framework: Glossary

⁶ Lessons Management Best Practice Guidance: Executive Summary

Despite these benefits, there are notable challenges in the ability of teams, organisations, and institutions to learn lessons from the past. This edition analyses reports from three recent public inquiries, to explore where specific challenges in lessons management processes can be evidenced. The findings are presented to support the resilience community in efforts to effectively manage lessons. They also support a developed, shared awareness of where public inquiries have found there to be key challenges and opportunities in lessons management processes.



Sidelights

As in previous editions, the Digest continues to use Sidelights to provide helpful definitions, insights and related knowledge.



Make it active

The 'Make it active icon' highlights opportunities and ideas for putting Digest content into action in your setting.

Resources

At the end of the Digest the resources section provides a summary of transferable lessons from the analysed reports, along with links for further reading.



Summarise:

Challenges in lessons management

The learning analysis reviewed selected reports from some of the most recent public inquiries. These included documents from the Manchester Arena Inquiry, the Grenfell Tower Inquiry, and the UK Covid-19 Inquiry. Across the inquiry reports, 62 references to challenges in lessons management processes were identified. These were reviewed and thematically organised, with a summary of findings for each key theme detailed below.

Theme 1: Implementation

Across reports, findings revealed cases of inaction, incomplete or insufficient action, and interrupted implementation. Examples were most salient when an exercise predating the incident had led to the identification of a vulnerability that was documented as a lesson, but then went inadequately or entirely unaddressed. In some cases, that known issue recurred when the real-world response was required, with negative impacts for those involved.⁷

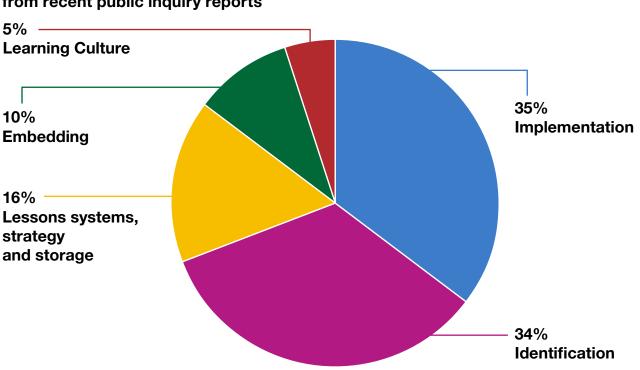


Figure 1: Thematic challenges in the management of lessons from recent public inquiry reports

7 Grenfell Tower Inquiry: Volume 7, p.47

Theme 2: Identification

Challenges in the identification process fell broadly into the three sub-themes.

- Unidentified lessons: due to a lack of planning and oversight, lessons capture processes were not always in place. In some cases, lessons may have been missed due to issues with the quality and structure of lesson collection tools, such as debriefs.⁸
- Misidentified lessons: reports highlighted issues with identification processes that lacked rigour or did not conduct a searching analysis of captured learning.⁹
- Undistributed lessons: due to real, perceived, or cultural constraints on information sharing, lessons were not always shared in a consistent or timely manner, allowing identified areas of risk to go unaddressed.¹⁰

Theme 3: Systems, strategy, and storage

Some inquiries found there to be 'no comprehensive system' or standing arrangements for managing end-to-end lesson learning processes. In others, systems were in place but inadequate, in that they were unable to read across multiple learning events and reports to spot common threads or flag the repetition of similar issues in different places.¹¹

- 8 Manchester Arena Inquiry: Volume 2-I, p.295
- 9 UK Covid-19 Inquiry: Module 1, p.129
- 10 Grenfell Tower Inquiry: Volume 7, p.241
- 11 Manchester Arena Inquiry: Volume 2-I, p.262
- 12 UK Covid-19 Inquiry: Module 1, p.109
- 13 Grenfell Tower Inquiry: Volume 7, p.241

Theme 4: Embedding

Challenges with the embedding process were not the most frequently cited issue but did provide some useful insights. First, the act of 'embedding' was made distinct from implementation activity, as two separate but related processes. This theme was also linked to the important role of corporate or institutional memory in the embedding process.¹²

Theme 5: Culture

The influence and impact of cultural aspects on the management of lessons were evident in all reports, despite being less frequently cited than other issues. Two of the references made similar points about the negative impacts that an insular culture, including a lack of openness or reluctance to learn from others, can have on both lesson sharing and practical implementation efforts.¹³





Share:

Managing recommendations and implementation action

IOPC: Making Effective Recommendations

In this interview article Megan Oliver, Learning and Improvement Lead at the Independent Office for Police Conduct (IOPC), explains what the creation of meaningful, evidence-based recommendations involves in the Office's statutory context. This includes engagement with wider stakeholders, and the use of a consistent wording structure for recommendations.

FEMA: Lesson Implementation and Action Tracking

In the United States (U.S.), the Federal Emergency Management Agency (FEMA) leads national disaster response and efforts to increase disaster resilience, helping people before, during and after disasters. In this article, Mike Icardi, Director of FEMA's Continuous Improvement Program (CIP), shares how they have developed and matured their implementation, action-tracking, and evaluation capabilities.





Coordinate:

Applied academic insights and practical tools for lesson validation

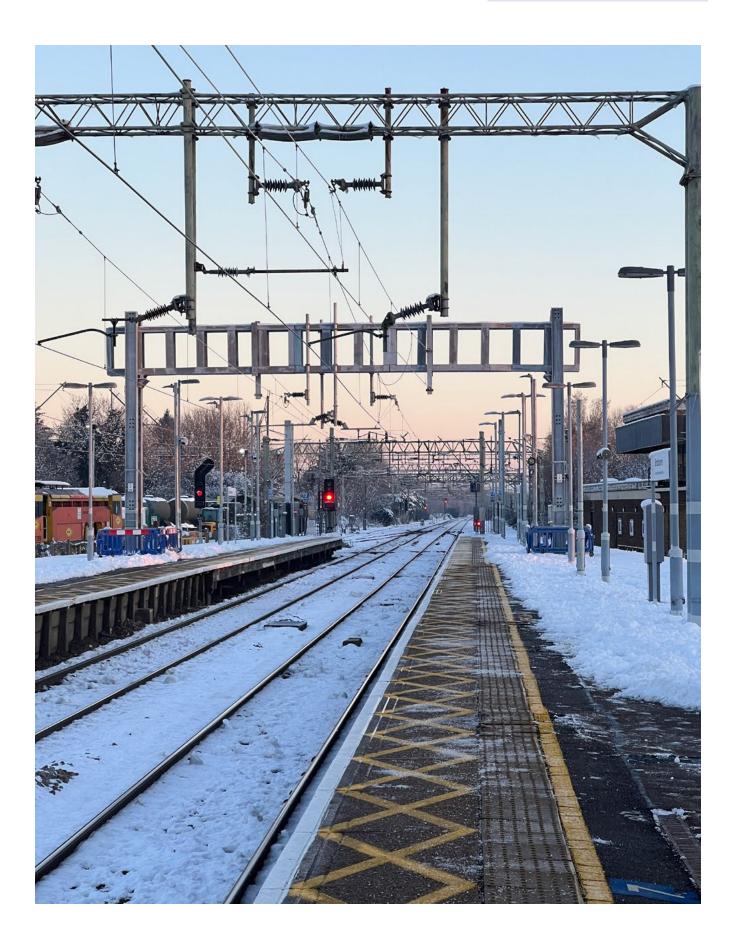
Winter Storm: Exercising the Response to Authenticate Learning

In this article Sergeant Rob Simpson from Cheshire Constabulary shares his experiences of the design, development, and delivery of exercises in extremely cold conditions. Exercise Winter Storm first ran in 2023, and then ran again earlier this year in 2024. This enabled the team to actively track and validate learning from the previous year, as part of an expanded multi-stakeholder programme.

Extreme Team Interoperability: Lessons from the Emergency Services

In this article, Dr Nikki Power, from the University of Liverpool, presents findings from her collaborative research with JESIP. This explored the social and psychological aspects of multi-agency working. Findings revealed that psychological components including trust, identity, and goals were crucial elements in effective interoperability.

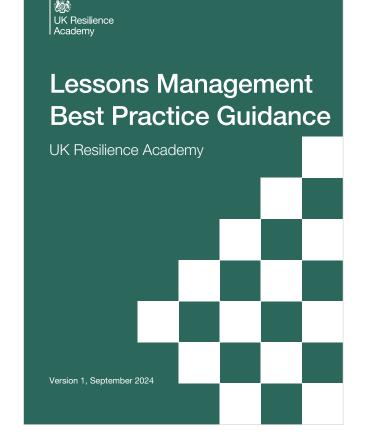




Lessons Management

An overview

This opening article draws on the newly published Lessons Management Best Practice Guidance to provide an overview of what lessons management is, why it matters, and what it involves. It can be read as a helpful primer for the second article, which presents an analysis of thematic learning challenges in recent public inquiry reports.



Learning to adjust in a changing environment is essential for survival. This takes place naturally throughout the day as people adapt in response to new and updated knowledge from their interactions with others, and the world around them.

Learning also plays a vital role in the development of resilience at individual and collective levels, which is often fostered through experiences of adversity.

In the civil contingencies' resilience context, learning requires a much more deliberate and directed approach. It is here that learning from both successes and failures plays a vital role in continually improving the emergency response, preventing the repetition of past mistakes, and reducing negative impact in the event of disruption. It also serves to strengthen organisational resilience.¹⁴

To achieve this, a range of experiences, including real and rehearsed responses to emergency events, are used to capture learning as 'lessons' that identify issues, and can direct work to resolve them. In national, local, and organisational settings learning is therefore integral to a shared understanding of risk, the prevention of the negative impacts associated with those risks, and development of whole-society resilience.

14 Organisational Resilience Guidance for UK Government Departments, Agencies and Arm's Length Bodies (ALBs)

What is a 'lesson'?

In the resilience context, the terms 'lesson', 'lesson identified' and 'lesson learned' can be used interchangeably, and sometimes incorrectly. Key definitions for each term are provided below.



Definitions

A **'lesson'** articulates an update in knowledge or understanding that has been gained through experience.

A 'lesson identified' is a

documented, evidenced conclusion based on analysis of observations and insights from a learning experience (e.g., an emergency exercise or incident). It describes a problem or issue, details a root cause, and succinctly sets out a course of corrective action to achieve positive improvements in practice.

A **'lesson implemented'** refers to an identified lesson that has become 'learned' (lesson learned) after being actively addressed through a lesson implementation process. This results in measurable changes in behaviour, and positive, evidenced improvements in practice.

What is lessons management?

Lessons Management refers to 'a strategic, organised approach to, and oversight of, planned processes and procedures to achieve evidenced learning from experience, in a continual, consistent manner.'15 The 2024 Lessons Management Best Practice Guidance has been produced to inform, encourage, and equip senior leaders, central government departments, agencies, arm's length bodies, and wider resilience professionals in doing this effectively. It anchors lessons management into the core principles of the UK's Resilience Framework.¹⁶ It is also specifically linked to the updated Exercise Best Practice Guidance¹⁷, as emergency preparedness exercises provide a unique opportunity to identify lessons before a real-world incident response is required.

What does lessons management practically involve?

Practical aspects of resilience-based learning have been conceptually visualised in the Lessons Management Framework (Figure 2). The framework comprises four key processes that are involved in the end-to-end management of lessons. Using the framework as a guide, lesson learning can follow a practical pathway from the point of a learning experience, right the way through to the longer-term work of embedding any positive changes or improvements required in response to it.

¹⁵ Lessons Management Best Practice Guidance: Executive Summary (publishing.service.gov.uk)

¹⁶ UK Government Resilience Framework

¹⁷ Exercising Best Practice Guidance

Each of the four key processes (i.e. lesson identification, lesson prioritisation, lesson implementation and the embedding of learning and change) can sequentially and successfully help to close the loop between identifying a problem, and achieving lasting, practical improvements in response. The framework and its process aspects can be adapted in various settings, as part of integrated wider continual improvement efforts. For further information, please refer to the full guidance and annexes, available from the Lessons Management Best Practice Guidance page on www.gov.uk

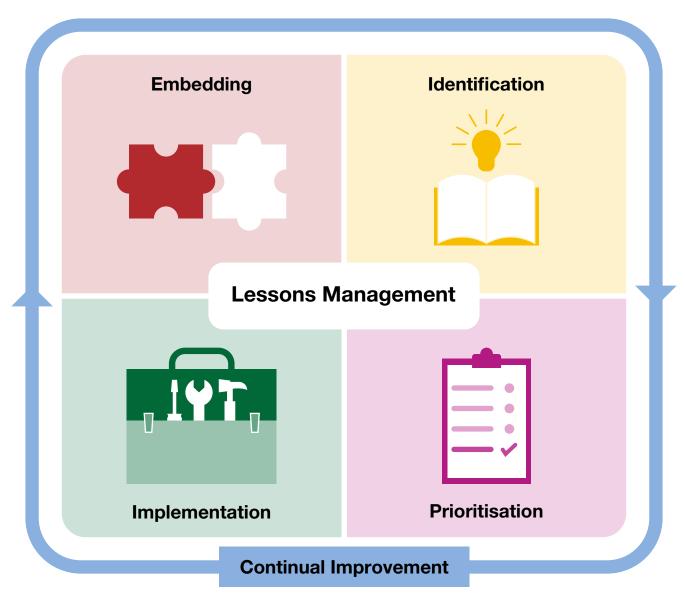


Figure 2: The Lessons Management Framework

Learning Analysis

Challenges and Opportunities in the Management of Lessons

Introduction

The purpose of a public inquiry is to investigate an issue of public concern.¹⁸ Within that scope, one of the inquiry's core functions is usually to identify key points of learning and make recommendations for the future.¹⁹

To identify key areas of learning, public inquiries commonly investigate events leading up to the relevant incident or issue of concern. From a lessons management perspective, these lines of enquiry can:

- 1. establish whether there were any relevant lessons identified prior to the incident, indicating a need to address an issue or area for improvement.
- 2. examine whether effective action had been taken to address identified lessons and implement change before the response in question was required.

Sometimes evidence may clearly indicate that inaction on already identified issues leads to a risk, which later manifests with negative impacts in the response. Where this has been so, the loss associated with absent or insufficient learning is wholeheartedly acknowledged.

The research

Deferring to the scope and prerogative of the inquiries themselves to consider parties involved and with 'whom' responsibility may lie, the Digest turns to the 'what' and the 'so what?' of findings relating to the management of those lessons.

In this research the 'what?' specifically referred to a search of inquiry report content, to examine whether certain lessons management processes were evidenced as more frequently problematic than others. The 'so what?' then extended the analysis to explore whether any causal or contributory factors were associated with those problematic areas. Finally, the findings from the analysis were reviewed considering processes and practices in the Lessons Management Best Practice Guidance. The purpose in doing so was to see where applied insights could support and advance increasingly effective lessons management practices in the civil contingencies' resilience context.



- 18 Statutory public inquiries: the Inquiries Act 2005 House of Commons Library (parliament.uk) and Non-statutory public inquiries House of Commons Library (parliament.uk)
- 19 Inquiries | Institute for Government

Methodology

To explore the research questions, the Digest applied its usual methodology for synthesising findings, drawing on key words and terms within the wider document context.²⁰

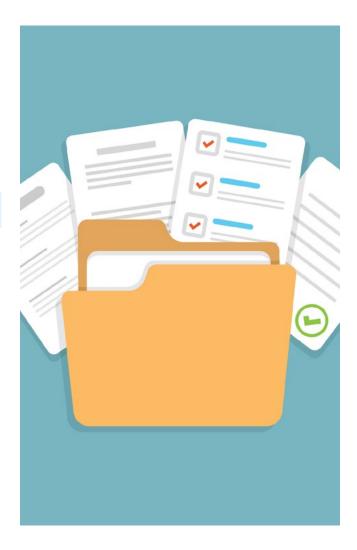
Conceptually the research drew on the Lessons Management Framework (see Figure 2) to understand where any problematic areas aligned with key processes, i.e., lesson identification, lesson prioritisation, lesson implementation, and the embedding of learning and change. However, an openness was maintained to allow inquiry findings to influence themes beyond those four processes. This approach ensured that connections between inquiry findings and the guidance could be made, without a requirement to manipulate findings into predefined categories.

The reports

The analysis focused on statutory public inquiries that have published reports in the last 24 months. This was further refined to selected inquiries relating to incidents that required acute, large-scale multi-agency emergency responses at local and/or national levels. The selected inquiries were:

• Grenfell Tower Inquiry A statutory public inquiry, formally established in August 2017, to examine the circumstances leading up to and surrounding the fire at Grenfell Tower on the night of 14 June 2017. The inquiry was Chaired by Sir Martin Moore-Bick.

- Manchester Arena Inquiry A statutory public inquiry established in October 2019, to investigate the deaths of the victims of the attack on the Arena on 22 May 2017. The inquiry was chaired by the Hon Sir John Saunders.
- UK Covid-19 Inquiry A statutory public inquiry established in 2022, to examine the UK's response to and impact of the COVID-19 pandemic and learn lessons for the future. The inquiry is Chaired by The Rt Hon Baroness Heather Hallett DBE.



20 EPC UK Resilience Lessons Digest 1: About the Digest

The documents brought forward for analysis were streamlined to report volumes or chapters, with specific (but not exclusive) relevance to lessons, learning and recommendations. Condensing the search space allowed for a closer look at related content in context. Documents included in the analysis are listed below in Table 1.

Public inquiry	Year	Chapter or Volume	Risk
Manchester Arena Inquiry (MAI v2-I)	2022	Volume 2-I: Emergency Response	(3) Terrorist attacks in venues and public spaces
Manchester Arena Inquiry (MAI v2-I)	2022	Volume 2-II: Emergency Response	(3) Terrorist attacks in venues and public spaces
UK Covid-19 Inquiry (C19 M1 ch.5)	2024	Chapter 5: Learning from Experience	(54) Pandemic
Grenfell Tower Inquiry (GTI v7)	2024	Phase 2: Volume 7	(41) Major fire

Table 1: List of reviewed documents

Resources

The formal recommendations from each of these inquiries have specific (but not exclusive) relevance for the resilience community at national and local levels, including Category 1 and 2 responder organisations as defined by the Civil Contingencies Act 2004.²¹ The Digest does not directly reference the recommendations in this edition, but reports have been made publicly available at the links above. Reports are also hyperlinked in the resources section.

Findings

Across the reviewed documents there were 62 references to challenges in the management of lessons. Across those references thematic challenges could be categorised under the following headings:

- Implementation
- Identification
- Systems, Strategy and Storage
- Embedding
- Culture

Details on each of these thematic areas are expanded below. The value share of the 62 references is visualised in Figure 3. Examples of transferable learning are provided in the analysis section.

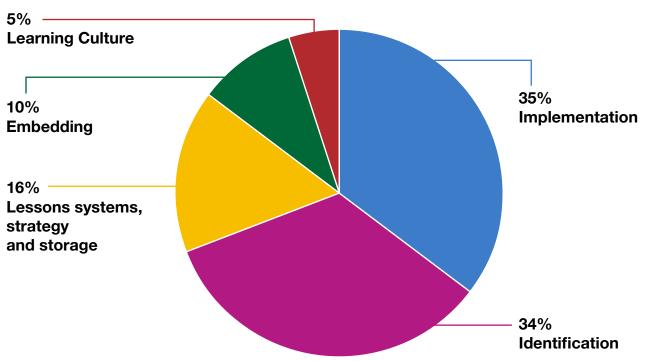


Figure 3: Thematic challenges in the management of lessons from recent public inquiry reports

Theme 1: Implementation

The leading challenge across reports centred on issues of practically implementing change in response to an identified lesson. Whether referenced as a failure to 'learn' the lessons, 'address' an issue, to 'act upon' knowledge or 'heed' the learning of others, the theme concerned scrutiny of whether practical actions, material changes and delivered improvements had been realised.

Across reports, findings revealed cases of inaction, incomplete or insufficient action, and interrupted implementation. Examples were most salient when an exercise predating the incident had led to the identification of a vulnerability that was documented as a lesson, but then went inadequately or entirely unaddressed. In some such cases, that known issue recurred when the real-world response was required, with negative impacts for those involved.²² This underscores the relationship between lessons and risk.²³ It can be argued that wherever a lesson is identified, a vulnerability is identified also. Therefore, where a requirement to manage risk exists, so too does a requirement to manage lessons, integrating known vulnerabilities within or between organisations into the assessment hazards and threats.

Reasons for issues in lesson implementation are not consistently explicit, but a range of cultural and contextual factors can influence how or if identified lessons are actioned. However, based on the reports reviewed, there were two areas where the implementation process appeared especially vulnerable. These included **implementation inertia and implementation insufficiencies**. Each is briefly discussed below, with supporting evidence in the table of transferable learning that follows.

Transferrable learning of leasen implementation		
Source	Detail	
GTI (7) 101.58, p.47	lessons were not implemented, and the problems appeared again during the response	
MAI (2-I) 12.497, p.214	training and exercising generated the opportunity to learn lessons, but there was a significant failure to implement changes in accordance with those lessons.	
UKC19 M1 (5) 5.93, p.125	Had the actions, recommendations and learning been properly implemented [the UK] would have been far better prepared	

Transferable learning on lesson implementation

22 Grenfell Tower Inquiry: Volume 7, p.45-47

23 Lessons Management Best Practice Guidance (publishing.service.gov.uk)

Implementation inaction

This theme highlighted situations where lessons or vulnerabilities had been correctly identified, but not subsequently acted upon. Not all cases of inaction were due to a lack of will or interest. On the contrary, the reports referenced resource, competing priorities, a lack of authority for change as barriers to the initiation of action. In other cases, excessive organisational bureaucracy, or the overwhelming scale and complexity of the problem identified also appeared to de-motivate action.

Implementation Insufficiencies

Not all implementation issues were due to inaction. The reports refer to examples where plans to address an issue did exist, governance mechanisms had been installed, and practical actions commenced. However, issues with the implementation process stymied progress. This led to examples of insufficient implementation, resulting in incomplete projects or actions, interrupted processes, and inconsistent oversight of progress.



Make it active

Countering implementation inaction

The following areas can be key enablers in gaining traction for change:

- **1. Leadership:** Implementation action is significantly influenced by leadership engagement. Top-down accountability and oversight, with visible, senior leadership engagement is vital if measurable improvements in practice are to be realised and retained.
- **2. Lesson prioritisation:** A lesson prioritisation system that considers the likelihood and varied impacts that an identified issue could have if it recurred, can provide help to spur traction in the areas where change is needed most.²⁴
- **3. Collaborate and integrate:** Complex and/or cross-cutting recommendations may require more than one action owner to achieve change. Deliverable actions on a single implementation plan can be broken down into clearly owned 'chunks' of work that contribute to a shared goal.²⁵

24 Lessons Management Best Practice Guidance (publishing.service.gov.uk) p.15

25 Lessons Management Best Practice Guidance (publishing.service.gov.uk) p.22



Across reports, there appear to be some inconsistencies, or perhaps a lack of shared understanding within and across organisations/departments, about what an implementation process practically involves. In some cases, implementation efforts were described in terms of how the knowledge of an identified lesson or issue was managed, shared, and stored. Other instances placed greater emphasis on practical project management actions. This spoke to more tangible deliverables, corrective actions, or achievement of improvements and efficiencies required to resolve an identified issue. The objectives, outputs and outcomes of an implementation project clearly require contextual consideration, to determine and articulate the difference between managing the knowledge and implementing measurable, practical change.

Theme 2: Identification

Given the quantity of lessons generated in the civil contingencies' resilience context, it would have been reasonable to assume that the identification of lessons might be a less problematic area. This, however, was clearly not always the case. Issues with identification were present in each inquiry report, with absent, inadequate, or inaccurate lessons and learning cited at both local and national levels. While thematic challenges with implementation provided examples of lessons that were (in hindsight) accurately identified, but not always acted upon, this theme demonstrated that not all lessons identified are the 'right' ones in the first place.

Challenges in the identification process fell broadly into the three sub-themes. These are listed below, with supporting evidence from the analysis detailed in the table of transferable learning that follows.

- Unidentified lessons: Some lessons went unidentified due to a lack of lessons capture process, planning and oversight. Others went unidentified, or at least insufficiently identified, due to issues with the quality and structure of the debrief. The ability to identify high-quality, evidenced based lessons was influenced by the method used to collect learning, and in the case of exercises, the scale and scope of their objectives.
- 2. Misidentified lessons: Some reports highlighted that the identification process demonstrated a lack of rigour, searching analysis, and the ability to cross reference new and existing learning for trending issues.
- 3. Undistributed lessons: Due to real, perceived, or cultural constraints on information sharing, lessons were not always shared in a consistent or timely manner. For example, lessons identified from exercises did not always reach relevant stakeholders in time, or in some cases at all.

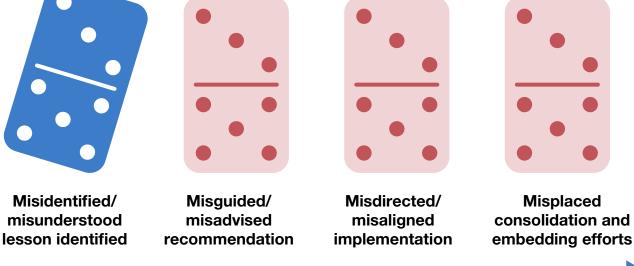
Transferable learning on lesson identification

Source	Detail
MAI (2-I) 12.754, p.262	a failure to capture lessons learned accurately, or sometimes at all, from multi-agency exercises.
UKC19 M1 (5) 5.112, p.129	There was a failureto identify and accurately describe the underlying problems
GTI (7) 101.70, p.49	there had been no exercise to test the plan for identifying vulnerable persons and [the report] did not show that any lessons had been learnt from training or exercises.
MAI (2-I) 12.856, p.286	[there was a]failure to conduct a more critical and searching analysis of the lessons from [the] exercise
MAI (2-I) 12.886, p.292 12.898, p.295	[learning points were]not reflected in the structured debriefs. This reinforces the concern about the quality and consistency of the debrief process and learning lessonsThe process of structured debriefs was therefore not robust and did not offer a forum to identify the systemic problems which were repeated12 months later.
MAI (2-I) 12.758, p.262	A candid approach to learning is vital to ensure agencies can work together effectively.



These findings emphasise that the identification process has some inherent risks. For example, a misidentified lesson based on assumption rather than evidence and analysis, could lead to a misguided recommendation. Similarly, a lesson that attributes an issue to individual error when in fact underlying systems and cultural factors were key environmental enablers, may well go misunderstood. In either case, the risk is that inconsistent, low-quality lesson identification drives a costly domino effect of well-meaning change, in the wrong direction (see Figure 4). While it is not necessarily the case that improvement efforts based on misidentified or misunderstood lessons would generate negative outcomes, it could allow an underlying issue to remain quietly unaddressed, only to be encountered again in a future response.

Figure 4: The domino effect – potential impact of misidentified lessons



Theme 3: Systems, strategy, and storage

The third learning theme spoke to three interconnected issues: the absence or inadequacy of overarching systems, strategy, and storage to support lessons management processes. In some cases, there appeared to be 'no comprehensive system' for managing end-to-end lesson learning processes. In others, systems were in place but inadequate in that they were unable to read across multiple learning events and reports to spot common threads or flag the repetition of similar issues in different places.²⁶ Examples of transferable learning are provided in the table below.

26 MAI 19.78, p.86-87

Transferable learning	a on lessons	s systems, s	strategy.	and storage
	9 011 10000110	, Systems , 5	maicgy,	and storage

Source	Detail
MAI (2-I) 12.754, p.262	as there was no comprehensive system for monitoring exercises, it was difficult to understand how organisations could be sure that lessons were learned.
UKC19 M1 (5) 5.37, p.111	Although there was some variation in the subjects and precise scope of each exercise, there was significant overlap in the issues that were identified. A system that was geared towards acting upon its findings would have done something about this.
GTI (7) 113.51, p.242	We therefore recommend [establishment of] effective standing arrangements for collecting, considering, and effectively implementing lessons learned from previous incidents, inquests and investigations. Those arrangements should be as simple as possible, flexible and of a kind that will ensure that any appropriate changes in practice or procedure are implemented speedily.
UKC19 M1 (5) 5.115, p.130	It is crucial that there is a simple and accessible system for knowledge to be captured and shared An effective system of institutional memory requires a means of storing and accessing exercise reports, action plans, emergency planning and guidance



Reflecting on these findings, effective systems, strategy, and storage are clearly core components of a lessons management capability.

In different areas of the resilience community, these components do already exist with positive multiagency outputs.²⁷ However, what perhaps lacks clarity from these findings is precisely the nature of the system required. For example, some findings appear to call for something akin to a Knowledge Management (KM) system, with the ability to collect, store, maintain and share records of identified lessons. Others would seem to be expressing a slightly different need, perhaps for a dynamic Project Management (PM) platform or similar, that can track implementation actions or delivery of Learning and Development (L&D) training programmes. In some cases, it appears a mix between the two, with the overarching functional requirement to interrogate large quantities of (what can sometimes be low-quality) data or 'lessons identified', and flag high frequency issues. It is a lot to ask of a single system, but given the present rate of technological advance, perhaps no longer out of scope or reach.



Make it active

Starting out with systems

Lessons Management systems benefit from applied technology solutions but can certainly begin without them, or indeed while waiting for them. Here are some simple, strategic tips for managing lessons in the meantime.

- **1. Something is better than nothing.** Sometimes the perfect can be the enemy of the good. Start small, with something that works for you and your team or organisation. Example templates for maintaining a Lessons Management Register and initiating an Implementation Action Tracker can be found in the Annexes of the Lessons Management Guidance.
- **2. Encourage consistency.** Consistently formatted lessons are easier to crossreference, and support more coherent learning records. Note the date, the learning event and context, a root cause (if known) and the proposed action to resolve the issue. It will be difficult to get meaningful, high-quality insights from inconsistent, low-quality learning records.
- **3. Maintain a birds-eye view:** Link your identified lessons to the risks on you risks register and consider assigning identified lessons an organisationally relevant theme (e.g., in line with functional workstreams or core capabilities). Simple highlighting or filter functions can be applied to cross-reference findings and inform an understanding of any high frequency issues.

27 JOL

Theme 4: Embedding Change

Challenges with the embedding process were not the most frequently cited issue but did provide some useful insights. First, the act of 'embedding' was made distinct from implementation activity. For example, the Manchester Arena Inquiry cited a failure to 'learn and embed' lessons from exercises, and the UK Covid 19 Inquiry noted that practical improvements made in response to learning had not been 'embedded within the system'. The difference between implementing change and embedding it is not always well described in practice. Essentially the former is about making a required change or improvement, and the latter about pushing it into practice across individuals, teams, organisations, and agencies.

While the final example in the table below does not directly refer to embedding, the role of corporate or institutional memory were contextually linked to it. This link was made on the basis that both embedding, and the formation of memory speak to something that leaves an impression and instils a sense of longevity. Pragmatic lessons management systems will likely be better suited to the management of explicit knowledge than tacit experience. Arguably, it is the capture of stories, compilation of case studies, and sharing within others in communities of practice, that can help to bank experience.

Sidelight

The embedding process focuses on the retention of learning and making positive changes 'stick' after they have been successfully implemented. This is practically achieved through continued efforts to press updated ways of working into common organisational practice, after initial implementation efforts have finished. Without active embedding it is possible to revert to old ways of doing things, for learning to erode, and the quality and consistency of updates in practice to be compromised.²⁸

Source	Detail
MAI (2-I)	There had been a failure to learn and embed key lessons from
12.499 p.214	exercises. This was most relevant in the areas of shared situational awareness, joint understanding of risk and co-location.
UKC19 M1 (5) 5.26 p.109	It was observed that, while what had been learned had improved infection control, this was still not embedded within the system.
UKC19 M1 (5) 5.114 p.130	A third cause of inaction was the lack of institutional memory . This is often caused by frequent and rapid changes in personnel and, as a consequence, a loss of experience and knowledge .

Transferable learning on embedding change in response to lessons

28 Lessons Management Best Practice Guidance (publishing.service.gov.uk) p.24

Theme 5: Learning culture

Explicit references to the impact of 'culture' on lessons management processes were few. However, cultural aspects were evident in all reports when reading references to 'lessons' or 'implementation' in their wider contexts. It could also be argued that the challenges from all other themes thus far could be indicative of, or at least impacted by, various attributes of organisational culture.

Three examples of transferable learning points relating to the impact of culture amongst individuals and within the environment they operate in are provided below. Two of these referenced similar points regarding the negative impacts that a more insular culture, including a lack of openness or reluctance to learn from others, can have on both lesson sharing and practical implementation efforts.

The final learning point goes on to distinguish between 'knowledge, culture and attitude'. This is a pertinent reminder that lesson-learning processes are not just about what is known and remembered. Both the quality of the knowledge itself, and the continual improvement posture that an organisation adopts in relation to that knowledge, can influence collective learning outcomes.

Source	Detail
GTI (7) 113.50 p.241	it has tended to adopt an insular approach and to be reluctant to learn from others there is scope for all fire and rescue services to learn from each other's experience and thereby to promote best practice across the board, whether in relation to rearritment training, arganization
or management.	
UKC19 M1 (5) 5.118 p.131	Finally, a possible cause of inaction was a lack of openness . Exercises were not conducted in a sufficiently open manner and therefore were not subject to the level of independent scrutiny required (institutional level)
MAI (2-I)	those recommendations did not result in JESIP being sufficiently well embedded before the Attack.
11.26 p.88	If unnecessary loss of life is to be avoided in the future, it is important that a change in knowledge, culture and attitude takes place.

Transferable learning on Learning Culture

Conclusion

Returning to the initial aim of this analysis and the research questions posed, it can be concluded that findings across the three public inquiry reports reviewed do highlight problematic areas in the process of managing lessons. It is also clear that some processes are more frequently problematic than others. Challenges in lesson implementation and identification were most frequently cited and salient, in terms of the associated impacts when one or both failed, in full or in part.

Three of the four key processes from the recently published Lessons Management Framework were identified as discrete themes, each with their own challenges. Lesson prioritisation was not something that any of the reviewed documents particularly mentioned, but the retrospective risk of lessons being deprioritised certainly was.

While references to issues of embedding and culture were infrequent and less explicit, it is possible that other factors influenced these results. In terms of culture, existing literature and wider incident inquiry reports would tend to support an assumption that uncited cultural aspects likely contributed to, or potentially underpinned, thematic challenges across the piece.

Regarding embedding, reduced references may simply reflect that a lower frequency of lessons make it to longer term embedding and consolidation efforts. Alternatively, acknowledgement of embedding issues could be a function of time, given that the related challenges detailed in Manchester Arena Inquiry were cited more than a decade after initial implementation of JESIP principles began. The transferable learning presented in the analysis offers the resilience community an opportunity to reflect on findings and leverage the analysis, to inform increasingly effective lessons management processes in context. It also underscores the relevance of recently released and updated guidance documents, reinforcing their publication as a positive step in responding to the challenges associated with learning from a range of experiences and events.

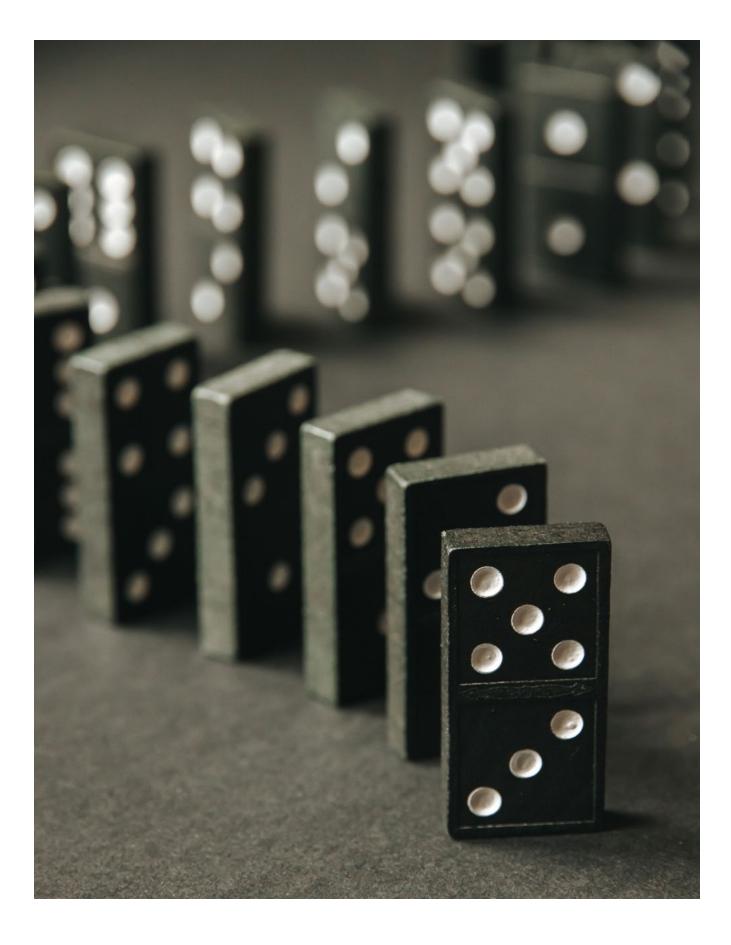


Make it active

Was this analysis helpful? Please do provide your feedback on Digest 5 'Learning to Manage Lessons' using the QR code.







Making Effective Recommendations

The Independent Office for Police Conduct (IOPC)

The Independent Office for Police Conduct (IOPC): Making Effective Recommendations

Once lessons have been accurately identified and validated, the focus can swiftly shift from problem to solution. This typically involves the creation of a documented recommendation, stating a proposed, practical action to be taken in response to the problem. In this interview article Megan Oliver, Learning and Improvement Lead at the Independent Office for Police Conduct (IOPC), explains what the creation of meaningful, evidence-based recommendations involves in the Office's statutory context.

Who are the IOPC?



Independent Office for Police Conduct

The IOPC is responsible for overseeing the police complaints system in England and Wales. We set the standards by which the police should handle complaints and we investigate the most serious matters relating to police conduct.

What role does the IOPC have in the management of lessons?

We have powers to make learning recommendations to the police and other bodies under the Police Reform Act 2002. Our recommendations are focused on improving policing policy and practice, protecting officers and the public from harm, and improving public confidence in policing and the police complaints system. They help make sure lessons are learned from incidents we investigate.

How does IOPC ensure that recommendations are practical, meaningful, and evidence-based?

- Our investigation or casework teams identify the need for a change to local or national policy or practice through our operational work.
- 2. The recommendation creator checks our systems to identify recommendations considered or issued previously, and to look for evidence of local or national trends that may indicate a need for wider change.
- **3.** Our Policy and Legal teams provide advice and support on developing and refining the draft recommendation.
- 4. The recommendation creator invites feedback from the proposed recipient before the recommendation is issued. Discussions with subject matter experts and leads working in these organisations help us to consider the practicality of the recommendation, barriers to implementation, the implications of any other work already in progress, and any alternative solutions.

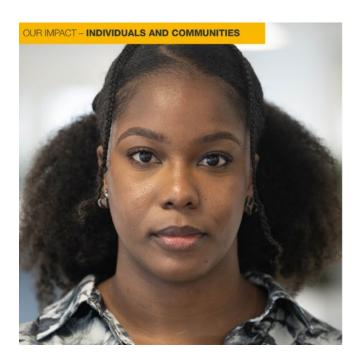
- 5. We often engage with organisations like the National Police Chiefs' Council, the College of Policing and the Home Office when developing recommendations, particularly those aimed at shaping practice nationally. In some cases, we might also speak to coroners, complainants, community members or others.
- 6. Our recommendations follow a consistent wording structure, setting out who the recipient is, what change is needed, and why. Most learning recommendations we make are published on our website.

What happens to the recommendations once issued?

For some recommendations, recipients are required to tell us what action they have taken or intend to take in response, or why they plan to take no action. We will often publish this information online so stakeholders can see the impact of our work.

How do you support wider learning across policing?

- We regularly produce Learning the Lessons magazines with support from stakeholders and experts working across policing, the voluntary and community sector (VCS) and academia. Each issue is focused on a thematic area – for example mental health or corruption. The magazines feature case studies which highlight learning recommendations we have made, and share insights on national initiatives, good practice, and more. Email learning@policeconduct.gov.uk to join our mailing list or to find out how you can get involved in its development.
- We work closely with the College of Policing, His Majesty's Inspectorate of Constabulary and Fire and Rescue Services, the Home Office and others to share learning from our work. This can





Feedback from service user

include feeding into consultations on national policy, practice or legislation, or sharing insights to inform inspection activity.

• We also produce annual **Impact Reports**, which tell real stories about the impact of our work on the public and policing.



Make it active

When creating recommendations, it may be helpful to consider the following questions:

- Have different options to address the problem been proposed and appraised?
- Could the recommendation be improved by consulting with key stakeholders, policy leads, and/ or wider subject matter experts?
- How will practical progress and improvements be measured and evaluated?



Megan Oliver is the Learning and Improvement Lead at the Independent Office for Police Conduct. Copies of their publication Learning the Lessons, which cover a range of topics including mental health, call handling, and custody, are available to download via the **IOPC website**.

Implementation and Action Tracking

The Federal Emergency Management Agency (FEMA)

FEMA: Learning from Disasters

Lesson Implementation and Action Tracking

In the United States (U.S.), the Federal Emergency Management Agency (FEMA) leads national disaster response and efforts to increase disaster resilience, with the mission of helping people before, during and after disasters. In this article, Mike Icardi, Director of FEMA's Continuous Improvement Program (CIP), shares how they have matured their implementation, action-tracking and evaluation capabilities in recent years.

The delivery of lifesaving and life-sustaining operations, and the successful pursuit of mitigating risk and rebuilding resiliently after disasters requires an organisation to be honest and accountable. The FEMA's Continuous Improvement Program (CIP) has a vision and mission of pursuing a culture of learning that leads to deliberate change and improvement that empowers FEMA programs and people to be better able to help people before, during, and after disasters.

While CIP has over a decade of history at FEMA, the Program's action tracking and evaluation capabilities have matured over the last four years through the launch of an enterprise-wide system, finalised policy instructions for action and evaluation, and the process of migrating data from historical systems and all the 10 FEMA Regions into a single system of record.

Figure 5: FEMA's Continuous Improvement Phases





As CIP progresses in capability, two key aspects of our approach have emerged: **influence** and **change management**. Our program effectiveness requires us to bring data and analysis to programs that effectively persuades them that a finding has significant enough consequences to their mission that they should undertake a project to address the effects. As we develop findings, we emphasise including the financial cost, specific time delays, or measurable effect an area for improvement might have to quantify the consequence, which also conveys what could be avoided in the future if the issue was fixed. **Successfully influencing change** requires us to prioritize elevating actions with the greatest potential effect on the mission. CIP seeks incremental progress and learning, with an understanding that no organization should expect perfection, or the ability to act on every finding.

Change management is a critical discipline to the adoption of any action or evaluation effort. Our new system development and deployment has required identifying and regularly revisiting our goals and objectives, and identifying the users and their needs, requirements, and the effects it will have on them. We have focused our recent assessments on the priorities set forth in the 2022-2026 FEMA Strategic Plan and leadership direction at each disaster. Our team also looks to integrate the actions taken by program offices to meet requirements from other assessments, like the U.S. Government Accountability Office. The likelihood of a program acting, and our influence on bringing about improvement, rises when it relates to an agency priority or when it addresses multiple audit findings.

Our team worked with each of the 10 FEMA regions to identify how they were conducting their action tracking processes to inform our governing doctrine. This new policy and process was informed by a collaborative approach with the goal of increasing the rate of system adoption.

We chose to develop the system in a technical environment that has a familiar look and feel to applications used every day by staff and has low licensing costs. We wanted to limit the amount of new application orientation a user had to experience. These lessons on influence and change management represent some of our own learning as we look to build a culture of continuous improvement.

Recently, we learned that the data from disaster assessments CIP conducted helped validate and inform recent reforms to FEMA's Individual Assistance (IA). These updates will provide quicker access to needed funds, expand eligibility for property and home repairs, and provide an easier application process for survivors to jumpstart their recovery from disasters. These reforms can lead to better outcomes for survivors and communities.



Using these findings to inform a new policy that directly benefits survivors is a success that represents CIP's vision and reinforces the importance of the action and evaluation process.

Mike Icardi is the Director of FEMA's Continuous Improvement Program (CIP). He is an experienced Emergency Manager and has worked at all levels of US government, leading projects across Homeland Security to address prevention, protection, mitigation, response and recovery.

Contact details: Michael.Icardi@fema.dhs.gov

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Resources

For more information on FEMA's Continuous Improvement Programme (CIP), including guidance, tools, and templates from their Continuous Improvement Technical Assistance Program (CITAP), visit FEMAs CIP/CITAP webpages.

Winter Storm: Exercising the Response to Authenticate Learning

Cheshire Constabulary

Practical Validation: Exercising the Response to Authenticate Learning – 'Winter Storm'

Exercises provide an important opportunity to simulate emergency response scenarios. In most cases learning from that experience will be captured and lessons, including areas for improvement, will be documented. Assuming those lessons do go on to drive updates and improvements in practice, how can learning progress be validated in practice, especially when the real-world scenario tends to occur infrequently? In this article, Sergeant Rob Simpson explains how he and his team used exercising to do just that.

Exercising at the extremes

"We have a plan for that, and we would do A, B and C..."

This was the line I would hear at multi-agency tabletop exercises looking at our response to incidents in extreme weather. However, my team had experienced time and time again, that when policing remote locations in deep snow, the tabletop plans didn't really fit the conditions we were experiencing.

Exercise Winter Storm 2023

In 2023, I organised the first **Winter Storm Exercise** at the indoor ski slope in Manchester to test the multi-agency emergency response to a night time collision in extreme winter conditions. There was a crashed car at the bottom of the slope and a number of casualties. Tasked with rescuing them were a mix of voluntary and emergency services. It was a great success highlighting some new and existing issues, such as police uniform absorbing the elements, and a lack of head torches available to the Ambulance Service, thus restricting the volume of equipment that could be carried. Importantly it started a conversation which has developed into a much wider piece of work. We captured our findings, but then faced the challenge of securing funding for events that may only take place infrequently or may even skip a year. During the interim, lessons identified were also taken forward by those who had been involved.

"Being in the simulated conditions helped us to understand what challenges we face and how to get around them. We certainly came away with a lot of learning which will help us, and you, when winter comes around."

Winter Storm 2024: Practical validation of learning

On Monday 10 June, an even bigger and more ambitious Operation Winter Storm was organised and run by Cheshire Constabulary's Rural Crime Team. This year's exercise expanded to include a host of mini scenarios, subject matter expert speakers and private industry. Dr Amanda Farrell from Liverpool John Moores University and her team set about capturing what we were learning and turning it into an evidence-based product, that will be of benefit to all of us across the UK.



Through Winter Storm 2024, we were also able to validate learning based on lessons identified during the first exercise in 2023. The police deployed in their new winter kit, and their focus and comfort clearly improved. We also recorded the exercise in Virtual Reality which made the recent operational debrief quite something and a VR first for Cheshire.

Initial findings

The initial findings show the difference between how prepared the different services are, and the access they have to specialist clothing. Our voluntary services have access to better equipment, and they themselves feel better trained and prepared to operate in challenging weather. For our emergency services, there remains a gap in training, a need for better clothing, and a fascinating cold weather impact on decision making, to be increasingly explored and understood for everyone working in that environment. The final report was presented at this year's Emergency Services Show, and will be published in due course. We are excited to share the findings and looking forward to engaging with others on this excellent project.







Make it active

As winter approaches, now can be a good time to ask "Am I prepared?"

For guidance on personal and household preparedness for winter, visit: **10 things you should do now to prepare for winter – Met Office**

For an overview of the Weather-Health Alerting System, including specific impacts and thresholds for Cold-Health Alerts (which operate from 1 November to 30 March) see the **Weather-Health Alerting System User Guide** from UK Health Security Agency and the MET Office



About the author: Rob Simpson is the Rural Crime Team Supervisor in **Cheshire Constabulary**, with the additional role of Extreme Weather Sergeant. Rob has 22 years' experience in policing and has been involved in countless rescues in the Peak District. He is the creator of Exercise Winter Storm.

Extreme Team Interoperability: Lessons from the Emergency Services

University of Liverpool

Introduction

JESIP is an acronym that stands for Joint Emergency Services Interoperability Principles. Tasked with improving emergency interoperability in the UK, the JESIP team have developed five 'Principles for Joint working'. The purpose of the principles is to promote better teamwork, through the development of a structured, interoperable, multi-agency response to all incidents. The five principles are to:

- Co-locate
- Communicate
- Co-ordinate
- Jointly understand risk
- Share situational awareness

However, the effectiveness of JESIP has been questioned, notably during the **Manchester Arena Inquiry** where it was highlighted how "JESIP [was not] sufficiently well embedded before the Attack", despite Sir John Saunders stating that "there was sufficient time for [JESIP] to be fully embedded". In response, my research has explored why interoperability is so difficult to achieve, arguing that a deeper understanding of the psychological processes involved in emergency teamwork is necessary. After all teamwork is a fundamentally human challenge.



A Brief History of JESIP

The origins of JESIP are rooted in lessons identified in Lady Justice Hallett's **Rule 43 Report** (now called **Prevention of Future Deaths Reports**) in her role as Coroner at the Inquest into the 2005 London Bombings. In the report she made a series of recommendations to increase, and thereafter normalise, the level of interoperability between the emergency services at the scene of a multi-agency response.

JESIP subsequently launched in 2012 with the longstanding aim of: 'working together, saving lives and reducing harm'. The **Joint Doctrine: The Interoperability Framework** (the 'Joint Doctrine') became JESIP's cornerstone document. The five '**Principles for Joint Working'** are a key component of the Joint Doctrine, which has been updated (Edition 3.1) in response to the Manchester Area Inquiry.

The Psychology of Interoperability

Over the past two years, my research team and I, in collaboration with JESIP, have conducted studies to understand the psychology of interoperability in emergency teams.

Defining Interoperability

One of our research goals was to refine the definition of interoperability to make it more precise. We reviewed existing literature and defined interoperability as "a shared system of technology and teamwork built upon trust, identification, goals, communication, and flexibility."

Effective Teamwork

Effective teamwork is crucial for emergency responding, especially when different agencies must work together to tackle complex situations. However, multi-agency teamwork can be challenged by issues including role conflict, miscommunication, and a lack of shared goals.

Components of Interoperability



We identified communication and flexibility as the structural components of interoperability, emphasising the need for timely, clear, and relevant communication practices, as well as decentralised, adaptive team structures.

The psychological components – trust, identity, and goals – are equally crucial.

• **Trust** involves team members' willingness to be vulnerable to one another's words, actions and decisions.

- Identity refers to a shared sense of purpose among team members: a feeling of being "one team".
- Having a clear understanding of **goals**, both collective and agency-specific, is crucial for motivating coordinated action.

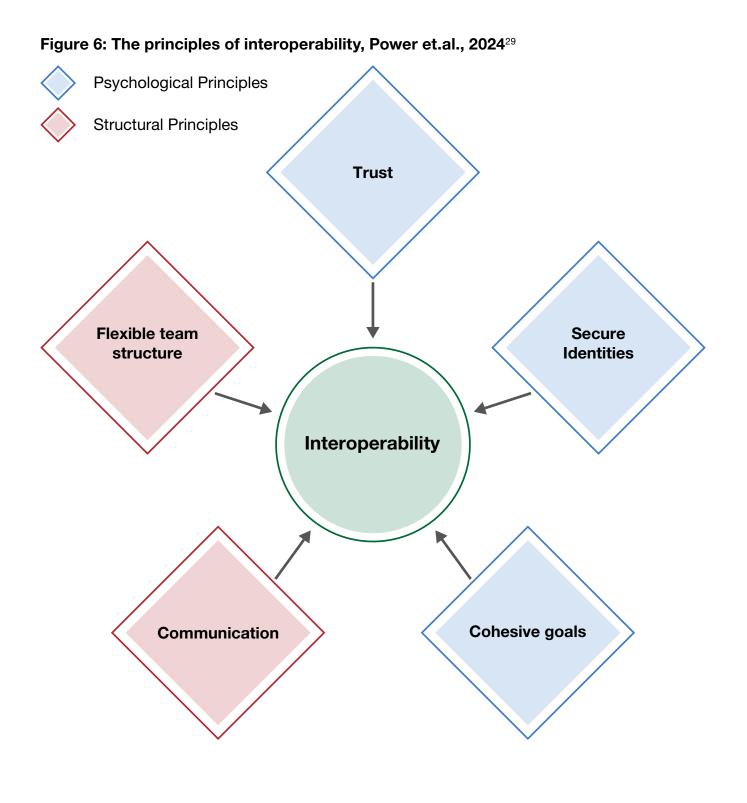
To embed interoperability, we argue for explicit focus on these psychological components in policy and training (see Figure 6).

The Challenge of Embedding

Our second research goal was to identify the challenges of embedding JESIP, evaluating JESIP as a programme of organisational change. A decade after JESIP's launch, we interviewed experienced commanders and identified a **principle-implementation gap.** Although commanders supported JESIP's principles, implementation was hindered at three levels:

- 1. macro-systemic issues linked to a lack of funding and resources
- 2. meso-organisational issues such as incompatible command structures
- **3. micro-psychological challenges** related to stress and pressure inhibiting implementation

Despite these challenges, JESIP was perceived to have worked well in some areas, with participants describing improvements in communication, and feeling more connected with multi-agency colleagues.



29 Power, N., Alcock, J., Philpot, R., & Levine, M. (2024). The psychology of interoperability: A systematic review of joint working between the UK emergency services. Journal of Occupational and Organizational Psychology, 97(1), 233-252

What next?

Adapting change to align with the beliefs of employees is key to successful organisational change.

While the challenges of embedding interoperability remain, research can inform an evidence-based approach for future developments.

These insights offer valuable lessons in managing complex, multi-agency teamwork, highlighting the importance of continuous learning and adaptation in crisis management.



About the author: Dr Nikki Power is Senior Lecturer / Associate Professor in Psychology at University of Liverpool. Her research explores the social and cognitive processes involved in extreme teamwork and decision-making.



Make it active

To explore how these research findings can be made active to support improved interoperability in your organisational context, look for opportunities to focus on people, not just processes. Organisations may also wish to consider investing in training that emphasises the human side of teamwork, helping responders to build the skills needed to rapidly foster psychological connections in an emergency. To see more outputs from this research, visit the **CREST Research website**.



CENTRE FOR RESEARCH AND EVIDENCE ON SECURITY THREATS



Resources



Transferable learning on lesson implementation

Transferable learning on lesson identification

Source	Detail
GTI (7) 101.58, p.47	lessons were not implemented, and the problems appeared again during the response
MAI (2-I) 12.497, p.214	training and exercising generated the opportunity to learn lessons, but there was a significant failure to implement changes in accordance with those lessons.
UKC19 M1 (5) 5.93, p.125	Had the actions, recommendations and learning been properly implemented [the UK] would have been far better prepared

Transferable learning on	
Source	Detail
MAI (2-I) 12.754, p.262	a failure to capture lessons learned accurately, or sometimes at all, from multi-agency exercises.
UKC19 M1 (5) 5.112, p.129	There was a failureto identify and accurately describe the underlying problems
GTI (7) 101.70, p.49	there had been no exercise to test the plan for identifying vulnerable persons and [the report] did not show that any lessons had been learnt from training or exercises.
MAI (2-I) 12.856, p.286	[there was a] 'failure to conduct a more critical and searching analysis of the lessons from [the] exercise' MAI
MAI (2-I) 12.886, p.292 12.898, p.295	[learning points were]not reflected in the structured debriefs. This reinforces the concern about the quality and consistency of the debrief process and learning lessonsThe process of structured debriefs was therefore not robust and did not offer a forum to identify the systemic problems which were repeated12 months later.
MAI (2-I) 12.758, p.262	A candid approach to learning is vital to ensure agencies can work together effectively.

Transferable learning on lessons systems, strategy, and storage

Source	Detail
MAI (2-I) 12.754, p.262	as there was no comprehensive system for monitoring exercises, it was difficult to understand how organisations could be sure that lessons were learned.
UKC19 M1 (5) 5.37, p.111	Although there was some variation in the subjects and precise scope of each exercise, there was significant overlap in the issues that were identified. A system that was geared towards acting upon its findings would have done something about this.
GTI (7) 113.51, p.242	We therefore recommend [establishment of] effective standing arrangements for collecting, considering, and effectively implementing lessons learned from previous incidents, inquests and investigations. Those arrangements should be as simple as possible, flexible and of a kind that will ensure that any appropriate changes in practice or procedure are implemented speedily.
UKC19 M1 (5) 5.115, p.130	It is crucial that there is a simple and accessible system for knowledge to be captured and shared An effective system of institutional memory requires a means of storing and accessing exercise reports, action plans, emergency planning and guidance

Transferable learning on embedding change in response to lessons

Source	Detail
MAI (2-I) 12.499 p.241	There had been a failure to learn and embed key lessons from exercises. This was most relevant in the areas of shared situational awareness, joint understanding of risk and co-location.
UKC19 M1 (5) 5.26 p.109	It was observed that, while what had been learned had improved infection control, this was still not embedded within the system.
UKC19 M1 (5) 5.114 p.130	A third cause of inaction was the lack of institutional memory . This is often caused by frequent and rapid changes in personnel and, as a consequence, a loss of experience and knowledge .

Source	Detail
GTI (7) 113.50 241	it has tended to adopt an insular approach and to be reluctant to learn from others there is scope for all fire and rescue services to learn from each other's experience and thereby to promote best practice across the board, whether in relation to recruitment, training, organisation, or management. (organisational level)
UKC19 M1 (5) 5.118 p.131	Finally, a possible cause of inaction was a lack of openness . Exercises were not conducted in a sufficiently open manner and therefore were not subject to the level of independent scrutiny required (institutional level)
MAI (2-I) 11.26 p.88	those recommendations did not result in JESIP being sufficiently well embedded before the Attack. If unnecessary loss of life is to be avoided in the future, it is important that a change in knowledge, culture and attitude takes place.

Transferable learning on learning culture

Wider learning and reports

Grenfell Tower Inquiry A statutory public inquiry, formally established in August 2017, to examine the circumstances leading up to and surrounding the fire at Grenfell Tower on the night of 14 June 2017. The inquiry published its second and final Phase 2 report on 4 September 2024. Recommendations put forward by the Inquiry panel are detailed on the inquiry website. The eighth thematic update on the progress that has been made to implement the recommendations from the Grenfell Tower Public Inquiry Phase 1 report was also published in September 2024.

The Infected Blood Inquiry This

independent public statutory Inquiry was established to examine the circumstances in which men, women and children treated by national Health Services in the United Kingdom were given infected blood and infected blood products. A **report from the inquiry** was published on 20th May 2024. It has been split into seven volumes, all of which can be viewed and downloaded from the inquiry's website.

UK Covid 19 Inquiry An Inquiry to examine the UK's response to and impact of the COVID-19 pandemic and learn lessons for the future. On 18th July 2024 the Inquiry published its first report, **Module 1** – on the United Kingdom's 'Resilience and Preparedness'. The report identifies a range of lessons and makes **10 key recommendations** in response.

Accident Investigation Branches

The Rail Accident Investigation Branch (RAIB) is the independent railway accident investigation organisation for the UK. Amongst other publications, RAIB has produced, and continues to update, a series of summaries of the learning that has come out of our investigations into accidents and incidents in nine topic areas.

The Air Accident Investigation Branch (AAIB) provides assistance and expertise to international air accident investigations and organisations. Their purpose is to improve aviation safety by determining the circumstances and causes of air accidents and serious incidents and promoting action to prevent reoccurrence. AAIB monthly bulletins and investigation reports are available **online**.

The Marine Accident Investigation Branch (MAIB) investigates marine accidents involving UK vessels worldwide and all vessels in UK territorial waters. This is to help prevent further avoidable accidents from occurring, not to establish blame or liability. MAIB recently published their Annual Report 2023. This includes recommendations issued in 2023 and an update on their status.

Related reports

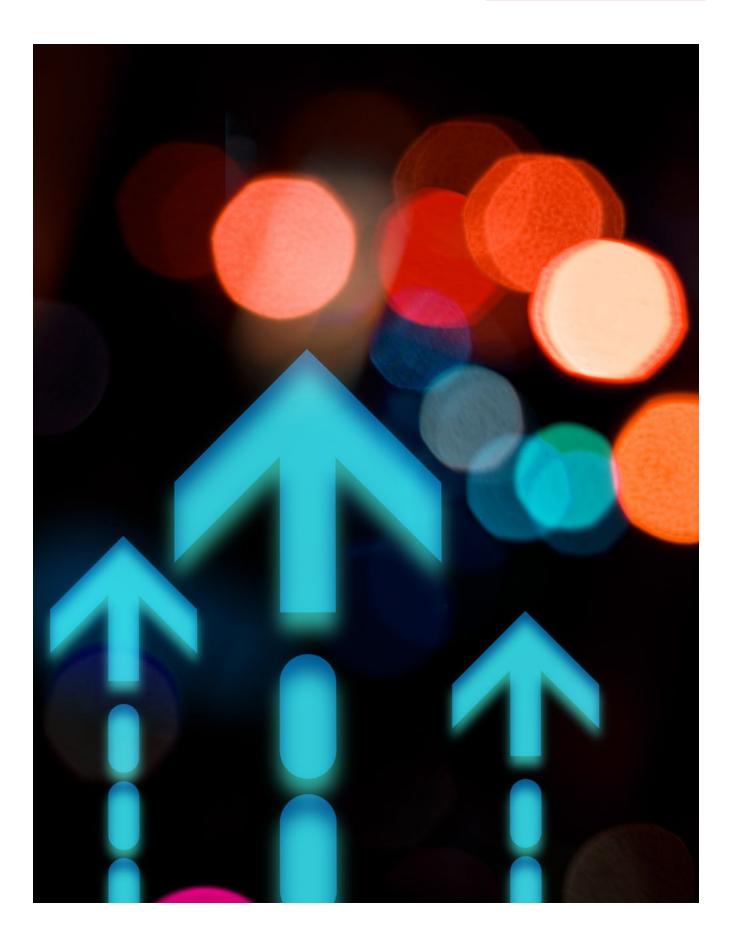
UNDRR – GAR Special Report 2024 Forensic Insights for Future Resilience: Learning from Past Disasters

The UN Global Assessment Report on Disaster Risk Reduction (GAR 2024) looks at present and future trends, showing how forensic analysis can enable more targeted and more effective risk reduction. Highlights, infographics and recommendations from the 2024 GAR are available from the UNDRR website.

Reports to Prevent Future Deaths

Paragraph 7 of Schedule 5, Coroners and Justice Act 2009, provides coroners with the duty to make reports to a person, organisation, local authority or government department or agency where the coroner believes that action should be taken to prevent future deaths. Published reports can be accessed via the **Courts and Tribunals Judiciary website**.

Public inquires: Enhancing public trust: In January 2024, the House of Lords Statutory Inquiries Committee was appointed 'to consider whether the Inquiries Act 2005 provides an effective framework for public inquiries'. They found that public inquiries can indeed deliver change for victims, survivors and the public, but that the 2005 Act and the wider governance structure of public inquiries required improvement. Their report, Public inquires: enhancing public trust, was published on 16 September 2024.



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