



NFCC
National Fire
Chiefs Council

NFCC Digital Data and Technology Strategy 2024 – 2026

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Contents

Contents	2
Introduction	3
Where we are now	4
Our Key Themes.....	5
Digital and Data Literacy.....	5
Data Quality.....	5
Cyber and Digital Resilience	5
Productivity, Efficiency and Improvement	5
Digital and Data Landscape.....	6
Digital Transformation and Innovation.....	6
Strategic Alignment.....	7
Objectives and Milestones.....	8
Identified Priorities	8
Milestones	8
Success Measures	8
Outcomes.....	9
Where will we be by 2026?	10
What does this mean for the sector?	11
What does this mean for our partners and stakeholders?.....	12
What will it take to be successful?.....	12
Taking a User Centred Approach	13
Measuring Progress	14
Acknowledgements	14

Introduction

This strategy builds on the NFCC's Digital and Data Strategy of July 2020 and reflects the changes in both the function within the organisation and the technology landscape since then.

The Digital Data and Technology (DDaT) Team at the NFCC is a relatively new function but represents a drive to support fire and rescue services to enhance the services they deliver daily by embracing the opportunities and efficiencies that come from the effective planning and use of digital technologies.

This includes, but is not limited to:

- the collection, analysis and sharing of data and information to drive improvement and understanding of risks and opportunities,
- resilience to cyber threats which could impact operations,
- understanding the potential for ethical use of artificial intelligence (AI) within the sector,
- fostering innovation, sharing of practice and development across the sector.

The strategy sets out our high-level priorities for moving towards a digitally transformed fire and rescue sector, recognising the need for flexibility and innovation within those priorities in order to take advantage of new advances which may present themselves during this period.

This pace of change in the DDaT landscape reflects the short two-year period adopted for the strategy. We expect that the key themes will continue to be relevant in future years, but our means of achieving them may change.

The strategy is accompanied by a roadmap which sets out specific project and product development timelines over the next two years. Some projects will have a longer lifespan, and we acknowledge the significant differences in available resources and governance across the sector which will affect capacity to progress some of these items.

Horizon scanning and working in partnership with innovators and industry will be a significant thread. We will seek to leverage economies of scale and drive innovation with a combined voice from the sector. This work has already begun with our Memorandum of Understanding with TechUK, the technology industry's trade association. The partnership will open doors to discussion with industry partners in a way that the sector hasn't had access to before.

Key to our progress over the next two years will be exploring what we can adopt from other sectors and industries. We don't have to be the inventors, but we can benefit from having a clear understanding of our sector's needs so that we can spot parallels and potential use cases.

This strategy is not about massive shifts to the status quo for the sake of it, but it is ambitious. It represents the start of a journey which will move at a pace that allows the sector to design and effect change within their resources and capabilities but also pushes them to deliver the best possible outcomes for the communities they serve.

Where we are now

The 2020 Digital and Data Strategy set out some key points for a future vision and these hold true for this roadmap. They are:

- Fire and Rescue Services have a much better picture of underlying vulnerability and risk for individuals and communities.
- Fire and Rescue Services deliver earlier, more precise, proactive approaches through use of digital capabilities.
- Risk reduction activities are enhanced through evaluation of their effectiveness.
- Operational response and situational awareness will be improved by increased digital risk management capability.
- National procurement frameworks are established for digital and data capabilities to save money and provide a coherent and informed user requirement to industry.
- Local determination will continue but within a ‘collaborate first’ culture.
- Activity and workforce data can be better captured and appropriately shared with key partners and NFCC members for benchmarking and reporting purposes.
- Areas of best practice are identified and scaled to be made available to all.
- The capability of the UK Fire and Rescue sector is continually assessed and cultivated in step with the changing nature of demand and the operating environment.

We also recognise however, that new drivers, both policy and operational, have come to the fore, as is the ever-evolving nature of the digital, data and technology sphere and the sector generally.

We anticipate more to follow during the next two years, for example the

- “Reforming Our Fire and Rescue Service” White Paper,
- changes in statutory responsibilities,
- the analogue to digital phone line switch,
- evolution of emergency services communications
- electric vehicles and lithium-ion batteries,
- development of artificial intelligence,
- the impact of climate change including wildfires and flooding and net zero policies, and
- the consequences of a General Election.

Our key themes set out to build the foundations for a sector which is robust and resilient enough to deal with this constant change, while maintaining services’ ability to anticipate and respond to the needs of their communities.

Our Key Themes

These themes represent broad areas of work and will have individual projects within them over the course of our two-year plan. More detail will emerge as each project is fully scoped out, but we expect the themes to remain broadly the same.

Digital and Data Literacy

- We will identify a series of CPD opportunities for staff from across the sector focussing on digital and data literacy and upskilling.
- We will support the professional development of those working in technical roles.
- Strong digital leadership across the sector will be developed.
- An annual DDaT conference will bring together innovators, showcase good practice and highlight the art of the possible.

Data Quality

- We will produce a paper on best practice for assessing data quality across the data landscape.
- We will work with the sector to find ways of improving that quality where necessary.
- We will work with partners to help improve third party data quality.

Cyber and Digital Resilience

- We will understand the cyber threat faced by the sector and can mitigate and reduce it to the best of our ability and resources.
- Good practice will be regularly reviewed and shared with our community and trusted partners.
- We will have a framework which promotes excellence in cyber resilience.
- We will ensure that our supply chain and the services it provides is resilient.
- We will support review and upgrading of local technology standards across all aspects of the sector.

Productivity, Efficiency and Improvement

- We will negotiate and add value at a national level to leverage access to data and digital resources for the benefit of all.
- We will work with partners to deliver the best possible services to our communities.
- We will unlock the value of data across the sector by improving data infrastructure and championing the flow of data.
- Economies of scale and opportunities for partnership working across areas including procurement will be facilitated.
- We will lead and shape sector relationships with commercial partners to support more effective procurement of digital products and services.
- We will develop our partnerships to techUK and Blue Light Commercial to ensure that the sector becomes an effective and collaborative customer of technology suppliers.

Digital and Data Landscape

- We maintain a good knowledge of what systems and digital platforms are in use across the UK and their functions.
- We will seek to understand where there are opportunities for collaboration, or risks which can be addressed.
- We continue to develop our DDaT ecosystem.

Digital Transformation and Innovation

- Looking to the horizon to anticipate challenges and evaluating new ideas and new technologies as they develop.
- We understand and employ intelligent automation and digital assistants to drive productivity and added value.
- Innovation comes from the whole sector, not just those with digitally focussed roles.
- An innovation pipeline will develop and share ideas from proof of concept to business as usual across the sector.
- Frameworks for adoption of technologies like AI will support ethical and efficient development and adoption.
- We use digital, data and technology ethically to best serve all parts of our communities, including considering their environmental impact and the effects on our workforce.
- An NFCC garage of digital products and solutions will be available to the sector, promoting consistency, best practice and alignment with the Digital, Technology and Cyber Standard.
- We understand when to retire services and systems.
- Identifying opportunities and key drivers from national policy and strategies.

Strategic Alignment

The key themes align to the [NFCC 2023-2026 Member Strategy](#) principles to

- Advise and Influence,
- Develop Solutions and Tools,
- Provide Personal and Professional Development, and
- Provide a Co-ordinated Response.

They align to Improvement Objective 11 from Fit for the Future 2022, which states:

“All Fire and Rescue Services will develop the management of data and digital capabilities to ensure evidence-based decision-making. This will enable the measurement of benefits delivered through service activity, evaluation of the service and also support employee development.”

Additionally, they address some of the efficiency improvements required in the HMICFRS State of Fire and Rescue 2022, which highlights the inequality between services and their varying use of digital, data and technology to carry out both frontline and support functions.

The roadmap which underpins this strategy will directly contribute to the achievement of the standards set out in by HMICFRS including identification and management of risk, increasing productivity and developing the capacity and capability to support change.

In Scotland our workstreams align to the Scottish Fire and Rescue Framework, used by the HM Fire Service Inspectorate (Scotland) as a guide to measure the effectiveness of the Service.

The Framework defines priorities for the Service covering the following specific areas.

1. Prevention
2. Response
3. Innovation and Modernisation
4. Climate Change
5. Effective Governance and Performance
6. People
7. Partnership

This strategy particularly supports the achievement of priorities 3 and 5 but will also impact on the others.

In Northern Ireland, the independent inspection published on 7th September 2023 by HM Fire Service Inspectorate (Scotland) made recommendations for appropriate investment in IT systems that will improve efficiency in relation to support staff functions. Our workstreams will support the implementation of this and the other recommendations made.

Consultation has taken place with each of the NFCC’s Committees and the cross-cutting nature of digital, data and technology in achieving their outcomes is acknowledged and will be supported by this strategy.

Objectives and Milestones

Key objective and milestones already identified for the DDaT Roadmap and included in NFCC's Corporate Plan and Business Plan for 2024/25 can be seen below. These are not exhaustive and will evolve as we take an agile approach to the fast-paced digital landscape.

Identified Priorities

- Implement an action plan that delivers on the Cyber Assessment Framework (CAF) report recommendations.
- Build and manage a repository of the digital products and services in use, and data collected across the sector to better understand the associated risks and opportunities across digital and data.
- Carry out a baseline study of digital and data maturity and literacy for the sector which will form the basis for a gap analysis and identification of support needs.
- Establish a DDaT ecosystem and innovation pipeline.
- Integrate data and digital literacy and technology awareness into leadership development programme(s).
- Collaborate with FSB to develop the Digital and Cyber Fire Standard.
- Improve procurement of digital products and services across the sector.
- Increase the cyber resilience of the sector.
- Increase the sector's ability to evaluate and adopt new and existing technologies.

Milestones

Delivery of a DDaT Conference including tracks for digital innovation, data and cyber	Q1
Data Masterclasses Programme launched	Q1
Digital Leadership Programme launched	Q1
Establishment of fire sector commercial forum with techUK	Q1
Digital and Cyber Fire Standard Guidance and Tools Published	Q2
FRS Representation on NCSC/s Cyber Information Sharing Partnership (CISP)	Q2
Development of cyber guidance and products, implementing the Cyber Action Plan (CAP)	Q2
Launch of a Digital Resource Library	Q4
Establishment of a national AI working group	Q1

Success Measures

- 80% of fire and rescue services respond to landscape consultation.
- Positive response to scope and content of Digital and Cyber Fire Standard in peer review and consultation.
- 80% Cyber Leads join the CISP network.
- 50% of fire and rescue services implement an NCSC "Exercise in a Box" cyber resilience activity within one year.
- Sector and Home Office endorsement of identified outputs in Cyber Action Plan.

- Publishing of a co-produced “AI Framework for Fire”, outlining our stance and approach to the adoption of the differing types of artificial intelligence.
- 80% sector representation in AI working group.
- 80% engagement from sector with scoping of digital and data products and services
- 80% of fire and rescue services engage with maturity assessment
- Mapping of sector-specific, digital procurement opportunities.
- Analysis and insights from digital and data landscape reported to sector and DDaT Committee, and associated actions added to Roadmap.
- Gap analysis of digital and data literacy produced and shared with sector and DDaT Committee

Outcomes

- National Digital and ICT Fire Standard, leading to a shared framework, supported by guidance and toolkits. FRS are data/digital-efficient, and better able to move forward with digital transformation.
- More cyber resilient sector that is better prepared to prevent and mitigate growing cyber threats.
- Increased data and digital literacy levels, supporting a confident FRS community, using digital to improve efficiencies and ways of working.
- Ecosystem of data and technology partners, who collaboratively support the sector, inc. sharing invaluable knowledge, experience and insights.
- Digital and data literacy and leadership embedded into NFCC leadership development programmes, broadening the professional support provided to FRS personnel.
- Pipeline of external funding opportunities and partnerships, allowing FRS to be part of leading the way with all things data and digital.
- Understanding of data collection and usage, improved ability to share data, reducing duplication and providing early insights into patterns.
- The sector is confident in its approach to the adoption of AI, including LLMs, GenAI and ML.
- The sector is able to leverage economies of scale, improve relationships with suppliers and effectively procure digital products and services to support the delivery of their activities.

Where will we be by 2026?

Our vision is that by 2026, the UK Fire and Rescue Sector will be a demonstrably more digitally capable, inclusive and informed sector that provides better outcomes for all its stakeholders.

This means we will:

- Equip our staff and volunteers for a digital future by upskilling them and providing them with the correct tools and access to the data and information they need to be effective in their roles.
- Enhance the resilience of the sector and provide guidance and support to reduce the risk of cyber threat with the implications that brings.
- Re-use common building blocks and encourage joined up working and economies of scale to deliver innovation efficiently and effectively.
- Encourage and enable digital innovation across the sector.
- Actively engage with our partners techUK and Blue Light Commercial to map and develop combined procurement opportunities across services, and with other blue light organisations where appropriate.
- Support the sector to become better customers and develop productive, co-operative relationships with commercial organisations by developing agreed shared specifications and working with procurement colleagues to develop appropriate terms and conditions for digital products and services.

What does this mean for the sector?

Achieving our goals across the six key themes will mean that our sector will be confident in the use, development, and implementation of digital technologies across all aspects of service delivery, from operational staff to internal systems.

We will have a greater understanding of the risks and vulnerabilities for the communities we serve and will have formed insights which will allow us to serve them more effectively.

We will be looking forward and will anticipate and solve challenges with partners from other emergency services but also across health and care.

Our staff will benefit from having access to the most effective tools to do their jobs and the data they need to make decisions and will spend less time on workarounds with outdated systems.

We will understand if there are opportunities to do things differently based on the insights and experiences gathered and will be seeking to continuously improve.

Strategic Planning Covers Three Horizons



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Gartner.

What does this mean for our partners and stakeholders?

Harnessing the power of digital, data and technology will make the fire and rescue sector more effective and efficient, with less duplication, waste.

We will be in a better position to partner with other organisations to fully serve our communities, sharing data to offer a holistic view on risk and vulnerability with other blue light services, local and national Government departments and third sector organisations.

We will be able to benefit from the insights that they can provide in return and that will support us to achieve our own outcomes, targeting services based on good quality data, insights and effective use of technology to reach all sectors of our communities, from people living with dementia to building contractors or electric vehicle designers.

What will it take to be successful?

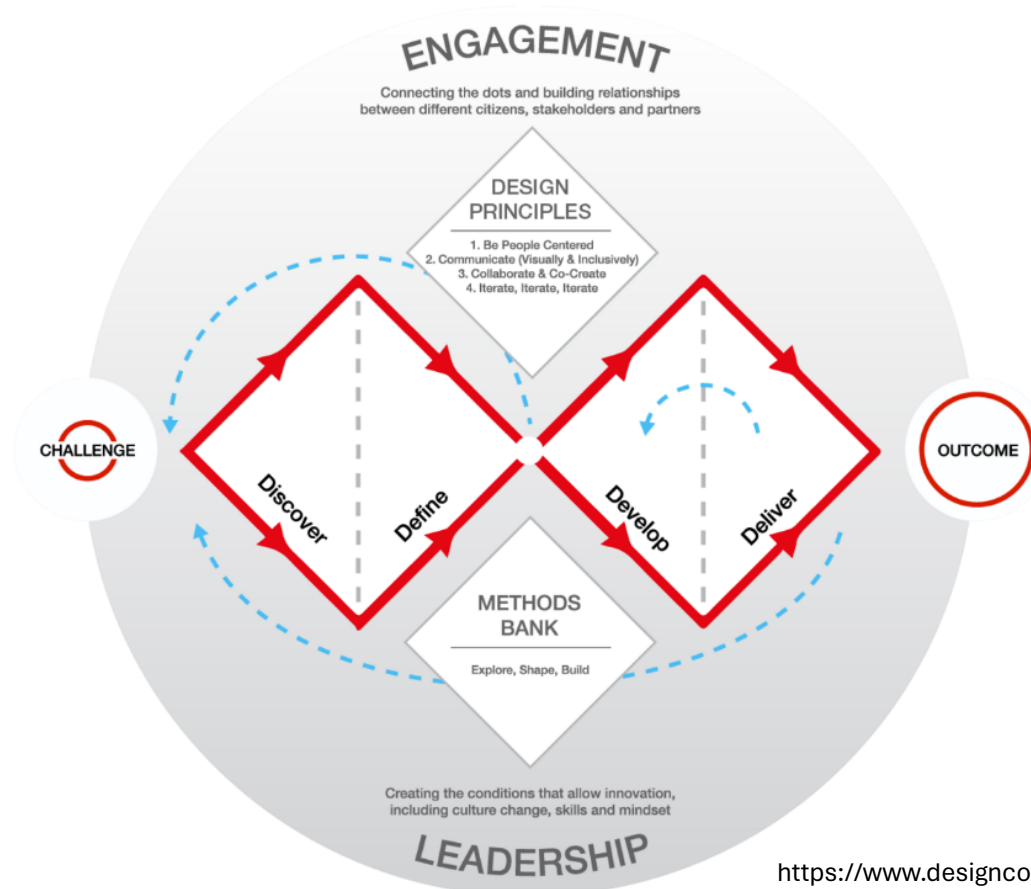
To achieve our aims for this strategy, we must deliver across the six identified themes and the projects which will lie under them.

It will require the support of the Fire and Rescue Sector and our stakeholders, including but not limited to:

- Home Office,
- National Cyber Security Centre,
- HMICFRS,
- Police Digital Service,
- Blue Light Commercial,
- techUK,
- The Academic Collaboration Evaluation and Research (ACER) Group.

Some areas of work will require additional resource and longer-term investment. This may be sought from existing sources or may be applied for via trust and research funders either by NFCC or by consortiums formed for the purpose.

Taking a User Centred Approach



<https://www.designcouncil.org.uk/our-resources/framework-for-innovation/>

We will always take a user-centred, service design approach to development of services, ensuring that all stakeholders are involved at the earliest opportunity, and thus reducing the chance of creating products which do not work effectively for them.

Digitising flawed processes is a pointless exercise, so we will understand the desired outcomes and fully explore the problem space using techniques including process mapping, user journeys, personas and success criteria before defining, testing and delivering solutions.

The ICT, Cyber, Data and Digital SPOC networks will play key roles in providing both subject matter expertise and guidance on how best to position solutions for optimum impact.

Development of an innovation pipeline will encourage the ethos that digital is part of everyone's role and underpins every aspect of service delivery for fire and rescue services.

Measuring Progress

This roadmap has been developed by the NFCC DDaT Team, the Digital, Data and Technology Committee, the Digital, Technology and Cyber Board and the Data Board.

The Digital Technology and Cyber, and Data Boards will provide overall governance for the roadmap review and will report on progress to the Digital, Data and Technology Committee. Where necessary, in line with the Committee Terms of Reference, updates will be given, and approval sought from the full NFCC Committee.

The respective Boards will oversee the work of any sub-groups or forums and receive regular reporting and updates from them relating to the roadmap themes.

Each theme will develop into projects which will have quantifiable budgets and outcomes. These projects will be co-ordinated by the NFCC DDaT team.

The roadmap which sits alongside this document details the timelines and overview of each of these individual pieces of work.

Acknowledgements

We would like to acknowledge the time and expertise from members of the Fire and Rescue Sector, and our partners which contributed to the development of this strategy.