Australian Government

National Emergency Management Agency

Technology Strategy

We acknowledge the Traditional Owners and Custodians throughout Australia and acknowledge their connection to land, waters and community.

We pay our respects to the people, the cultures and the Elders past, present and emerging.

We acknowledge those who have lost loved ones, homes, businesses and livelihoods in disasters across Australia.

We acknowledge the dedication of emergency workers, front line service providers and volunteers who work tirelessly to provide safety and relief.

We celebrate the strength and resilience of all of those who have been affected by disasters.

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Message from the Coordinator-General

I am pleased to release the National Emergency Management Agency's first ever Technology Strategy.

The 2024-2026 NEMA Technology Strategy forms an important part of the National Emergency Management Agency's (NEMA) vision, as it supports the Australian Government in leveraging contemporary technology to deliver cutting edge outcomes across every phase of the emergency management continuum.

The Strategy sets out NEMA's commitment to invest in fit-for-purpose technology solutions, which enable employees to deliver against the objectives outlined in the *Statement of Strategic Intent 2023*.

Technology is at the core of everything we do here at NEMA. When a disaster or emergency strikes, technology enables us to effectively and reliably develop, lead, and coordinate Australia's connected and national approach to emergency management.

The scale and complexity at which NEMA operates, requires solutions that are innovative, contemporary, simple, agile, and driven by business-outcomes.

This Strategy sets out a two-year vision, and guiding framework for NEMA's technology related decisions, investments, activities and outcomes. It has been designed to improve the employee experience, while delivering appropriately secure services across the agency.

The Strategy will uplift capabilities across the agency, so that NEMA can deliver on our commitments to the Australian Government, and ultimately, support Australian communities.

It will empower NEMA to maintain its position as the lead in emergency management at the national, jurisdictional and local, and international level, so we can influence and inform emergency management actions across the continuum.

This strategy is owned by NEMA's Chief Information Officer, with support from the Chief Technology Officer and their team of technology specialists.

I look forward to putting our 2024-2026 NEMA Technology Strategy into action.

Brendan Moon AM
Coordinator-General
National Emergency Management Agency

Technology Strategy on a Page

The 2024-2026 Technology Strategy sets out the two-year technology vision for the National Emergency Management Agency (NEMA). This strategy will serve as the guiding framework for all technology related decisions, investments, activities and outcomes.

2024-2026

Technology Vision
NEMA leverages fit-for-purpose technology and innovation that enables the delivery of efficient and effective business outcomes across the emergency management continuum and improves the NEMA employee experience.

Technology Strategy Purpose
To lay the foundation for NEMA's technology solutions and digital strategies. This will ensure the agency has fit-for-purpose digital tools, systems, processes, and infrastructure.

Where we want to be

- Contemporary and streamlined architecture that enables efficient and agile services within the Emergency Management Continuum (EMC)
- Technology investments deliver enduring value to NEMA and are driven by business needs, cognisant of the unique nature of emergency response requirements
- Enable a culture of innovation, continuous improvement and data-driven decision-making to enhance NEMA's services across the EMC
- Continuously enhance and streamline communication and information exchange across the EMC
- Rationalise infrastructure to deliver scalable and flexible solutions that can rapidly adapt to meet high demand and innovate quickly

How we get there

Strategic Priority 1: Simple, appropriately secure and reliable technology capabilities across the Emergency Management Continuum

Strategic Priority 2: Reusable, scalable and resilient technology solutions across our organisational framework and tools

Strategic Priority 3: Technology that enables collaborative partnerships to build capacity, enable disaster resilience and support delivery to our communities

Business	Technology
Guiding Principles **Resilient to Machinery of Government** (MoG) changes ICT investments are **aligned to Business needs** Ensure technology investments **deliver enduring value** Decisions **align with Whole-of-Government** Data and Technology policies, with considerations of NEMA's unique operating environment	**Reuse** – Where feasible and beneficial, opt for Whole-of-Government (WoG) technical solutions or re-use common and shared services **Buy** – If reusing is not optimal, then buy capabilities, services and products that are easy to use and are appropriately secure to advance NEMA's strategic objectives **Build** – If reusing and buying are not optimal, then use managed platforms to create unique solutions for NEMA as needed

Elements of Success

Agile and Enduring	Efficiency and collaboration	Data-driven decision-making	Business-led technology	Compliance

NEMA's Strategic Objectives

1. Leading and coordinating national action and assistance across the emergency management continuum	2. Building scalable, coordinated emergency management capability for national significant, cross-jurisdictional and international crisis	3. Building evidence, intelligence and insights to empower communities, leaders and stakeholders to make effective decisions	4. Contributing to saving lives, reducing harm, and maintaining public trust to mitigate the consequences of disasters and build back better through investment in people, capabilities and communities.

Strategic Context

NEMA was established on 1 September 2022 to create a single, enduring, end-to-end agency to better respond to emergencies, help communities recover, and prepare Australia for future disasters. Our broad role, spanning all-hazards and the full emergency management continuum – from prevention to reconstruction – strengthens the Australian Government's ability to provide end-to-end support in the face of disasters of all kinds.

NEMA's remit is to develop, lead and coordinate the Australian Government's approach to emergency management; while supporting preparedness, prevention, response, recovery and risk reduction for all hazards. Our mission is to empower communities to prepare for, respond to, and recover from emergencies effectively.

Framed by the impacts of climate change and the convergence of escalating hazards, NEMA has been implementing strategic initiatives such as the National Messaging System, Public Safety Mobile Broadband, National Disaster Mental Health and Wellbeing Framework, National Emergency Management Stockpile, and alternate crisis recovery and response capabilities among others.

On behalf of the Australia Government, NEMA administers more than $20 billion of funding arrangements supporting communities in need, and uplifting resilience measures.

NEMA requires a technology environment that can support the scale and complexity of its operations which is simple, agile and led by business need. This Technology Strategy lays the foundations for an eco-system that positions NEMA as a leading Technology-enabled agency.

NEMA's Strategic Objectives

NEMA's strategic objectives are defined in the *Statement of Strategic Intent 2023*. The Technology Strategy supports the delivery of NEMA's strategic objectives by providing an executable two-year guiding framework for future technology capabilities and related investments. This alignment to NEMA's strategic objectives is critical in enabling NEMA to successfully develop, lead and coordinate services across the emergency management continuum.

1. Leading and coordinating national action and assistance across the emergency management continuum
2. Building scalable, coordinated emergency management capability for national significant, cross-jurisdictional and international crisis
3. Building evidence, intelligence and insights to empower communities, leaders and stakeholders to make effective decisions
4. Contributing to saving lives, reducing harm, and maintaining public trust to mitigate the consequences of disasters and build back better through investment in people, capabilities and communities.

The Role of Technology

Technology is the enabler for NEMA and staff

This Technology Strategy will contribute to the Agency's purpose and strategic objectives by providing a guiding framework for delivering intuitive and contemporary technology solutions that meet the needs of NEMA's internal and external stakeholders. This will enable greater efficiencies and productivity across the full emergency management continuum to deliver better outcomes to Australian communities.

Critical to enabling the Agency's success is delivering technology solutions that continuously enhance our ability to collaborate, communicate, share and use information with all stakeholders within the emergency management continuum.

This means our technology must empower our people with innovative tools, data and insights. Our technology must be reliable, appropriately secure, enduring and interoperable; it must meet the unique needs of our agency; and it must enhance the employee experience

The Future Strategic Framework

There are four main artefacts that form the technology framework for NEMA.

NEMA Statement of Strategic Intent 2023

- NEMA Technology Strategy 2024 - 2026
- NEMA Data Strategy 2023 - 2025
- NEMA Blueprint and Technology Implementation Plans

Note: The *2024-2026 Technology Strategy (Technology Strategy) should be read in conjunction with the Statement of Strategic Intent 2023, NEMA Data Strategy 2023-2025, Data and Technology Blueprint, NEMA Blueprint and Technology Implementation Plans.*
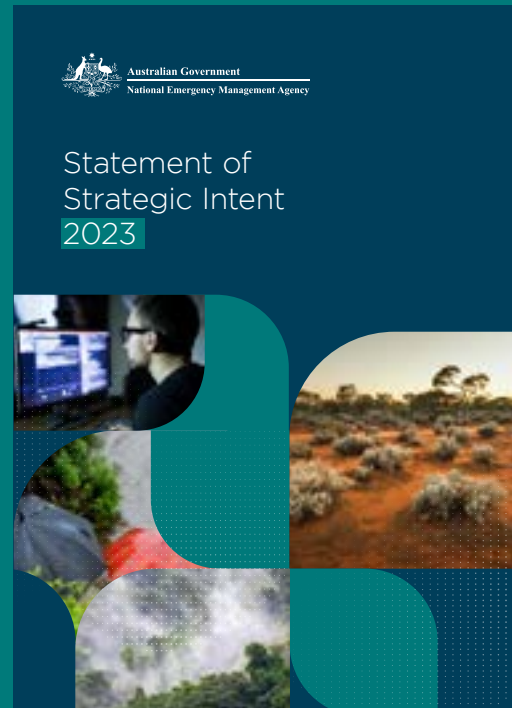
Guiding Future Activities

The Technology Strategy provides guidance for the design, delivery and sustainment of NEMA's technology capability to achieve strategic objectives and to address the challenges identified in the *Data and Technology Blueprint*. The strategy was developed with the objective of establishing a technology environment that has an enduring value beyond 2026.

Current State	Where we want to be	Why we need this	Supports by Strategic Priority
A complex and inconsistent application architecture	Contemporary and streamlined architecture that enables efficient and agile services within the Emergency Management Continuum (EMC)	• Streamlines technology services and processes for more efficient activity across the emergency management continuum • Reduces operational costs • Uplifts data sharing across NEMA • Responsive to emerging demands of government during emergencies	1. Simple 2. Scalable
Limitations in independent technology investment and decision making	Technology investments deliver enduring value to NEMA and are driven by business needs	• Provides greater control in ensuring technology investments and services support NEMA's strategic objectives • Enables efficiencies throughout the Agency as services consumed and produced align with demand	1. Simple 2. Scalable
Inconsistent data and technology understanding across NEMA	Enable a culture of innovation, continuous improvement and data-driven decision-making to enhance NEMA's services across the EMC	• Enables workforce to better utilise existing and new technology capabilities and assets • Empowers leadership to make informed decisions faster and with confidence	1. Simple 3. Collaborative
Inefficient digital communications for liaison	Continuously enhance and streamline communication and information exchange across the EMC	• Enables faster delivery of NEMA's services in developing, leading and coordinating emergency management nationally • Strengthens technical capabilities by enhancing communication and collaboration in emergency management	1. Simple 2. Scalable 3. Collaborative
Existing infrastructure unable to cope with increasing demand	Rationalise infrastructure to deliver scalable and flexible solutions that can rapidly adapt to meet high demand and innovate quickly	• Increases technology agility and adaptability to meet growing or changing emergency management requirements • Empowers NEMA to lead and coordinate with contemporary infrastructure in times of national emergencies	1. Simple 2. Scalable

Guiding Principles

This strategy comprises of two core pillars that will guide NEMA's future investment in technology.

Business Principles

Our overarching approach and considerations in solution choices:

Resilient to Machinery of Government (MoG) changes

ICT investments **aligned to Business needs**

Ensure technology investments **deliver enduring value**

Decisions **align with Whole-of-Government** (WoG) Data and Technology policies, with considerations of NEMA's unique operating environment
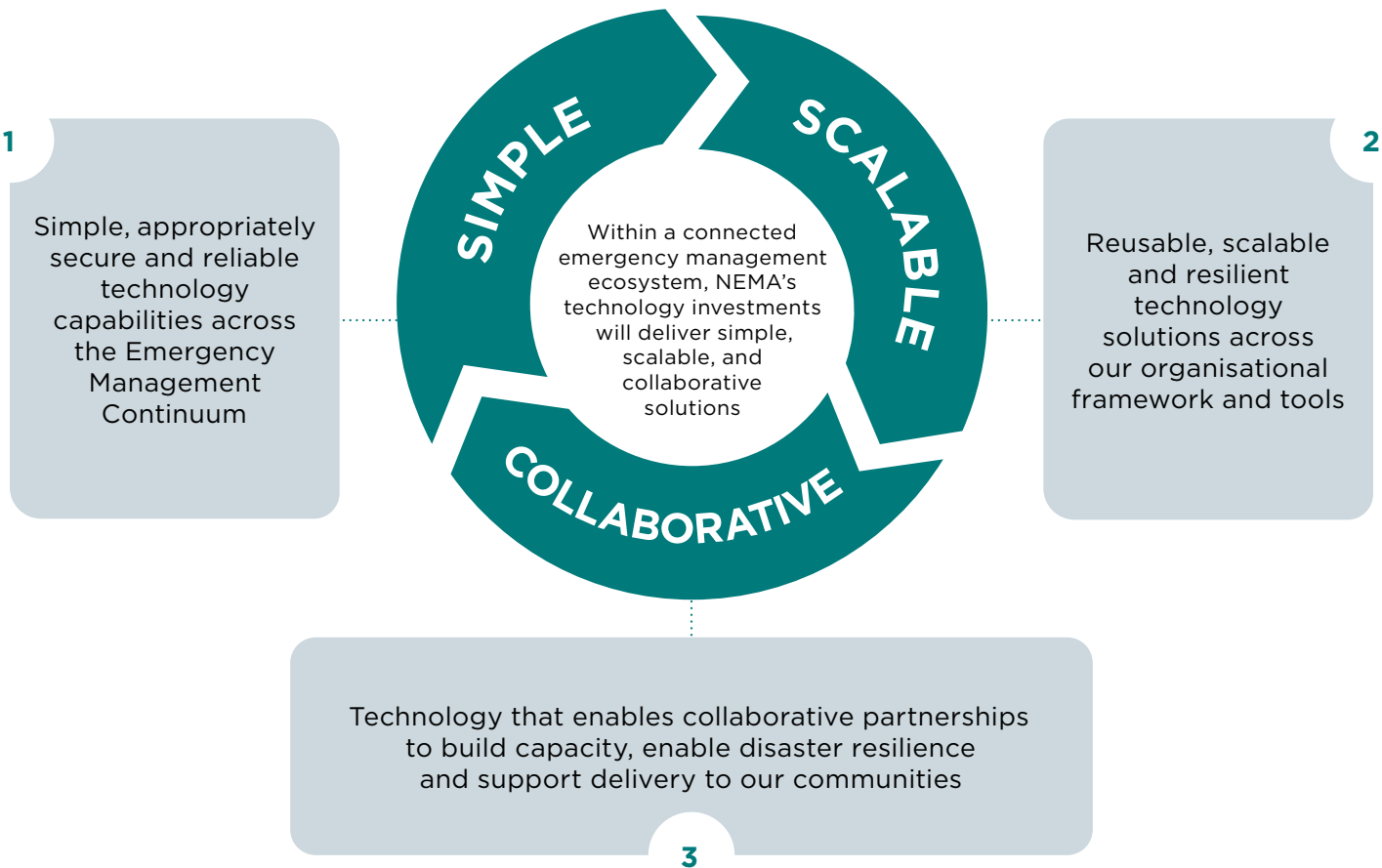
Technology Principles

Our operations and architecture are steered by three guiding principles:

Reuse – Where feasible and beneficial, opt for WoG technical solutions or re-use common and shared services

Buy – If reusing is not optimal, then buy capabilities, services and products that are easy to use and are appropriately secure to advance NEMA's strategic objectives

Build – If reusing and buying are not optimal, then use managed platforms to create unique solutions for NEMA as needed

Strategic Priorities

The strategic priorities for 2024-2026 are:

SIMPLE · **SCALABLE** · **COLLABORATIVE**

Within a connected emergency management ecosystem, NEMA's technology investments will deliver simple, scalable, and collaborative solutions

1 Simple, appropriately secure and reliable technology capabilities across the Emergency Management Continuum

2 Reusable, scalable and resilient technology solutions across our organisational framework and tools

3 Technology that enables collaborative partnerships to build capacity, enable disaster resilience and support delivery to our communities

Strategic Priority 1

Simple, appropriately secure and reliable technology capabilities across the Emergency Management Continuum.

Goal: To provide simple, appropriately secure and reliable services to agency, staff and government, and ensure everything we do delivers a valuable outcome while preparing Australia for future disasters.

How will we get there

A: Simplify and govern technology offerings to enable structure and discipline through the technology lifecycle

Why? To ensure we have standardised ICT policies and procedures in place to improve the quality of technologies and services.

What success looks like:

- Technology service offerings and capabilities have been defined, endorsed and are visible to all business areas.
- A governance body or structure exists that oversees technology service offerings.
- An endorsed set of standardised technology policies and procedures are in place that can adapt to changes on demand.

B: IT service delivery is of an exceptional standard

Why? To ensure managed IT services deliver on NEMA's business needs.

What success looks like:

- An endorsed set of technology service level agreements are in place that ensure minimum technological disruptions.
- Appropriate client/service provider governance arrangements are in place
- Service levels are monitored, issues and trends are identified and addressed early.

C: Support interoperability with state and territory emergency management capabilities

Why? To support collective decision makings in the national interest.

What success looks like:

- Data held by NEMA and the broader ecosystem is available and shareable in an appropriately secure manner to approved stakeholders.
- Demonstrate strong connections across the continuum that help to facilitate seamless integration, leverage strengths and share capabilities.
- Tailored technology is delivered on unique EM requirements.

Strategic Priority 2

Reusable, scalable and resilient technology solutions across our organisational framework and tools.

Goal: The technology environment in which NEMA operates focuses on capabilities and investments that provide reusable, scalable, adaptable and agile solutions which are efficient and cyber resilient.

How will we get there

A: Enabling service delivery and optimal usage of available technology tools, templates and standards

Why? To enable a technology delivery service or capability that supports all of NEMA by providing reusable technology patterns, standards, templates, shared outcomes and knowledge assets to support faster delivery.

What success looks like:

- A standardised suite of technology patterns, standards, and any other useful knowledge assets are available.
- The technology delivery service or capability includes advisory and technical assurance.
- The processes for advisory and technical assurance are defined and visible to all business areas.

B: Scale up or down services and adjust capabilities to rapidly and efficiently meet demand

Why? To enable technology services and capabilities to rapidly respond and adapt to changing emergency management requirements.

What success looks like:

- Any technology solution (e.g. infrastructure, etc.) underpinning a service or capability is contemporary, scalable, agile and aligns to the requirements specified in the Architecture Vision and Technology Strategy.
- Technology solutions leverage industry and Whole of Government best practices and design.
- Ability to standup technology offerings and solutions in an agile manner

C: Enabling seamless and appropriately secure technology services and capabilities

Why? To continuously mature current services and capabilities while increasing confidence in the integrity, confidentiality and availability of NEMA's technology environment.

What success looks like:

- Technology services and capabilities are designed to deliver end-to-end support to the key activities in the emergency management continuum.
- The services and capabilities are designed to provide seamless, appropriately secure access and sharing of high-fidelity data between NEMA business areas and external stakeholders.
- Adopting and educating staff on security best practices.

D: Collaborate with NEMA internal and external stakeholders to foster innovation and exchange knowledge

Why? To leverage knowledge, services and capabilities across Australia by forming collaborative partnerships with all NEMA stakeholders to better respond and prepare for future disasters.

What success looks like:

- A design is endorsed for an innovation hub that fosters innovation and exchange of knowledge, services and capabilities across the emergency management continuum for all internal and external NEMA stakeholders to supply and consume.

Strategic Priority 3

Technology that enables collaborative partnerships
to build capacity, enable disaster resilience
and support delivery to our communities.

Goal: Supporting a collaborative, partnership-focused culture,
that fosters innovation and invests their workforce to optimally
coordinate, collaborate, and utilise available technology services
and capabilities in the emergency management continuum.

How will we get there

**A: Supporting frequent communications with stakeholders across
government, through technology services and capabilities**

Why? Why? Strengthening collaboration with internal and external stakeholders to build
trust and confidence in NEMA's ability to rapidly respond and share valuable information.

What success looks like:

- Continuous collaboration and exchange of information, including emergency management
  best practices, in an appropriately secure and timely manner with relevant stakeholders.

**B: Enabling government innovation, efficiency and effectiveness
through the provision of the latest digital collaboration tools**

Why? Facilitate ongoing need for government to leverage Whole of Government
capabilities, identify new and emerging technological solutions and demands.

What success looks like:

- Consolidation and rationalisation of the collaboration tools available in the operating
  environment. Design and delivery of collaborative solutions is guided by business users' needs.
- Contribute to Whole of Government policies on emerging technologies

C: Developing multi-disciplinary and agile delivery teams

Why? To enable cross-functional capabilities, putting the right people
to deliver the service and increase the speed of delivery

What success looks like:

- A technology operating model has been endorsed, which incorporates the human-centred
  design processes mandated by the Digital Transformation Agency.
- Provisioning of tailored training on data, technology, and other relevant topics (e.g. agile, etc.)
  to staff to enable effective and efficient delivery of NEMA's services.

**D: Assist business areas in optimising their processes using
available technology service offerings**

Why? Enabling the optimisation of business outcomes via better utilisation
of existing technology services and capabilities. Enabling the identification of
opportunities for technology enhancements based on business-driven needs.

What success looks like:

- Processes have been established to assist business areas in optimally utilising
  technology services and offerings to better deliver business outcomes.
- Technology user needs are collected and analysed to inform
  technology investments and solution design.
- Technology services and capabilities are continuously improved to
  meet evolving business needs and market innovations.

Elements of Success

The key criteria for measuring the success of the future technology state of NEMA.

	Agile and Enduring	Establishing technologies and processes that are agile and deliver enduring value to NEMA
	Efficiency and collaboration	Coordinating and prioritising technological investment in ICT capabilities across NEMA with greater efficiency and collaboration
	Data-driven decision-making	Supporting technology investment choices to facilitate greater situational awareness and data-driven decision-making
	Business-led technology	Ensuring technology investments are business-driven and improve the employee experience
	Compliance	Ensuring technology system compliance with government standards and legislation

Alignment to NEMA's Strategic Intent

The *Statement of Strategic Intent 2023* defines NEMA's purpose and strategic objectives in the emergency management continuum. To show how the Technology Strategy is aligned to meet those needs, the following table maps NEMA's strategic objectives and key organisational activities against the strategic priorities outlined in this document.

NEMA Statement of Strategic Intent 2023	1. Simple	2. Scalable	3. Collaborative
1. Leading and coordinating national action and assistance across the emergency management continuum	✓		
2. Building scalable, coordinated emergency management capability for national significant, cross-jurisdictional and international crisis		✓	
3. Building evidence, intelligence and insights to empower communities, leaders and stakeholders to make effective decisions			✓
4. Contributing to saving lives, reducing harm, and maintaining public trust to mitigate the consequences of disasters and build back better through investment in people, capabilities and communities.	✓	✓	✓

Note: The strategic priorities apply to all criteria specified above. However, for visualisation purpose, the ticks have been marked against the criteria that the strategic priorities satisfy the most.