Introducing an Asset Management People Capability Model for the Nuclear Decommissioning Authority

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Introduction to the NDA

Our business model

The Nuclear Decommissioning Authority (NDA) is a non-departmental public body created through the Energy Act 2004.

Our business model:

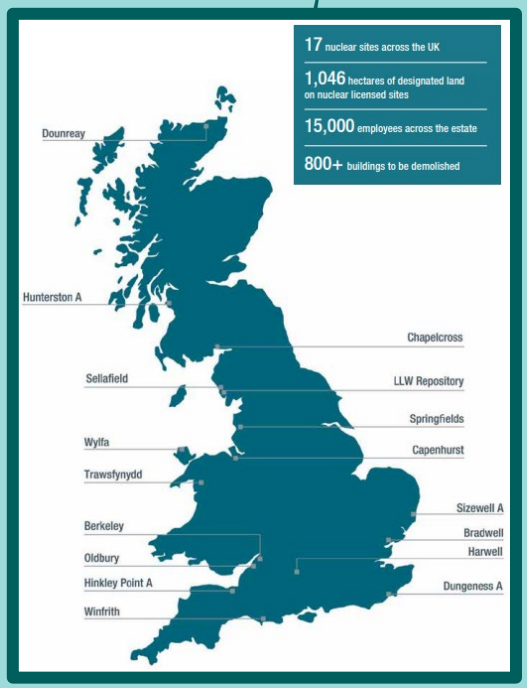
Government
Set Policy. Governance. Funding

NDA
Strategy and Planning, Governance and Assurance.
Delivery Optimisation, Manage and Report Performance

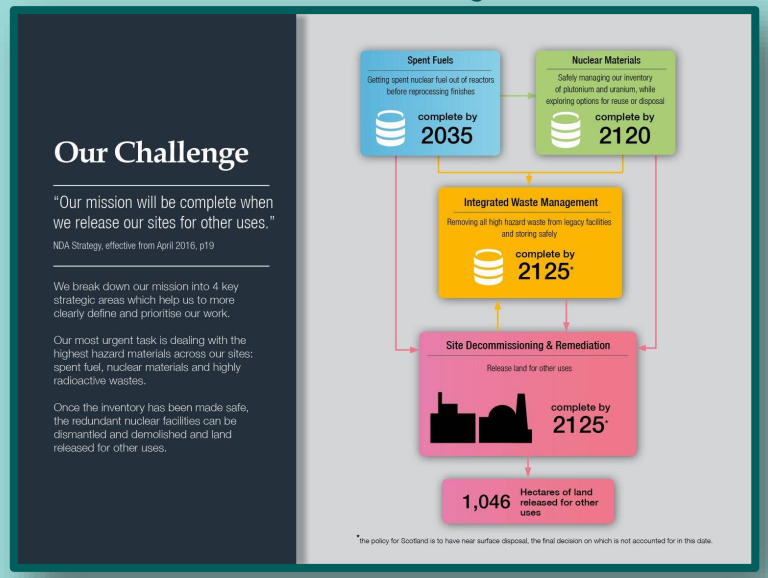
OUR BUSINESSES
Delivery

REGULATORS

Our scope



Our challenge

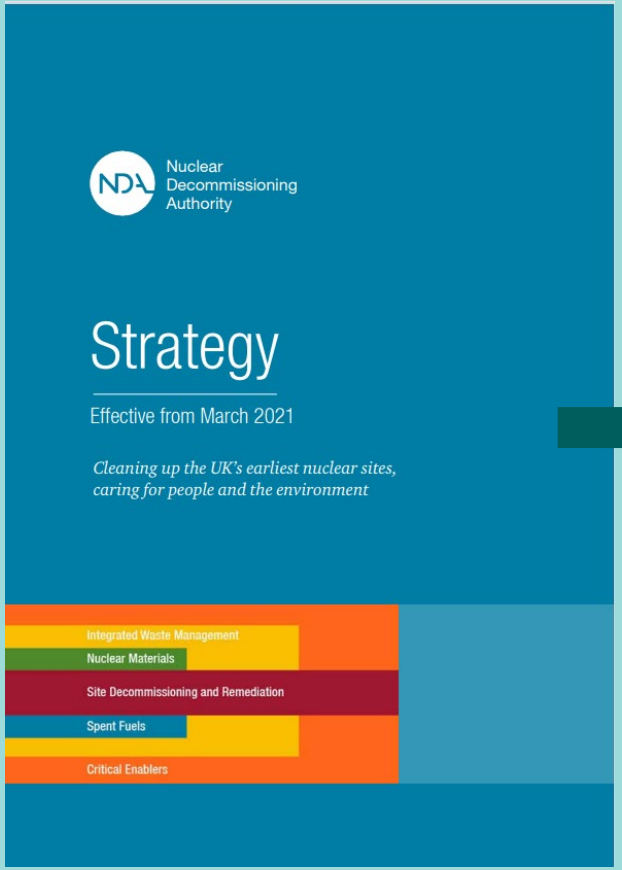


Visit https://www.gov.uk/government/organisations/nuclear-decommissioning-authority for more details

Note - the NDA is part of the Department for Energy Security & Net Zero (DESNZ)
Department for Energy Security and Net Zero - GOV.UK (www.gov.uk)

Introduction to the NDA – Our Strategy

Our Quinquennial Strategy



Asset Management is one of Our Critical Enablers

8.7 Asset Management

Objective: *To secure safe, reliable, available, maintainable and sustainable asset performance and optimise the through-life cost of assets.*

The Energy Act (2004) *(ref 1)* requires the NDA to secure safe, environmentally considerate and cost-effective good practice asset management across the NDA group. Securing sustainable good practice asset management enables the objective to be achieved by mitigating the risk of asset failures affecting mission delivery, ensuring compliance with regulation, improving asset reliability, delivering value for money performance, implementing group and industry learning and making best use of UK assets.

The NDA group has assets in all stages of the asset management lifecycle. Some of our assets are not yet in use, whilst asset management has allowed some of our operational assets to safely exceed their original operational lifetimes. Serviceable and operable assets enable ***Spent Fuel, Nuclear Materials,*** *Integrated Waste Management* and ***Site Decommissioning and Remediation*** mission delivery to quality, time and cost.

To ensure our assets achieve the objective, we need a continually improving asset management approach informed by good practice that focusses on value for money mission delivery. Experience has demonstrated that we need to continue to improve the NDA group capability and develop integrated through-life asset management plans for all of the assets to enable optimised delivery of our mission.

Our Strategy

The NDA group will continue to apply the guidance and principles of ISO 55001: Asset Management *(ref 63)* to ensure our objective is achieved, and to enable transitioning towards our ambition of becoming world leaders in nuclear decommissioning enabled by good practice asset management.

We will improve our understanding of performance at all levels in order to gain a clear line of sight from mission delivery to operations, identifying and resolving gaps. This meets the regulatory desire for embedding good practice asset management not only in our own asset base but supporting advances across the nuclear industry.

We recognise that people and the supply chain are key to the successful delivery of asset management. We will work across the NDA group *(see* ***People*** *and* ***Supply Chain****)* to ensure that roles are clear, individuals are well trained in asset management principles and *continuous improvement* techniques and that the supply chain aligns with our policies and principles.

Strategy Development

Our strategy continues to address the enduring risk that poor asset performance adversely impacts our mission. However, there are many challenges to asset management performance. To improve mission delivery we will need to accelerate asset management performance guided by ISO 55001. As reliability improves, risk also reduces and we can reduce the cost of maintenance while maintaining or even accelerating throughput in mission delivery and retire assets earlier, thereby reducing overall asset lifetime costs.

We will further develop our strategy for new and existing assets and look to obtain through-life asset management plans that fully integrate new assets into current operations. We will focus on throughput, reliability, availability and maintainability of our assets both in design and operations and track through-life performance using key performance indicators.

We will continue to cooperate across the NDA group, wider industry and the supply chain to seek and develop good practice for asset use and monitoring of performance.

To ensure availability of skills, asset management and *continuous improvement* will be included in the syllabuses of the One NDA Leadership Academy being developed *(see* ***People****)*.

Our Asset Management Challenges

- Sellafield
- Nuclear Transportation Solutions
- Nuclear Restoration Services
- Nuclear Waste Services

Four separate Subsidiary Organisations each with their own context and approaches to asset management…

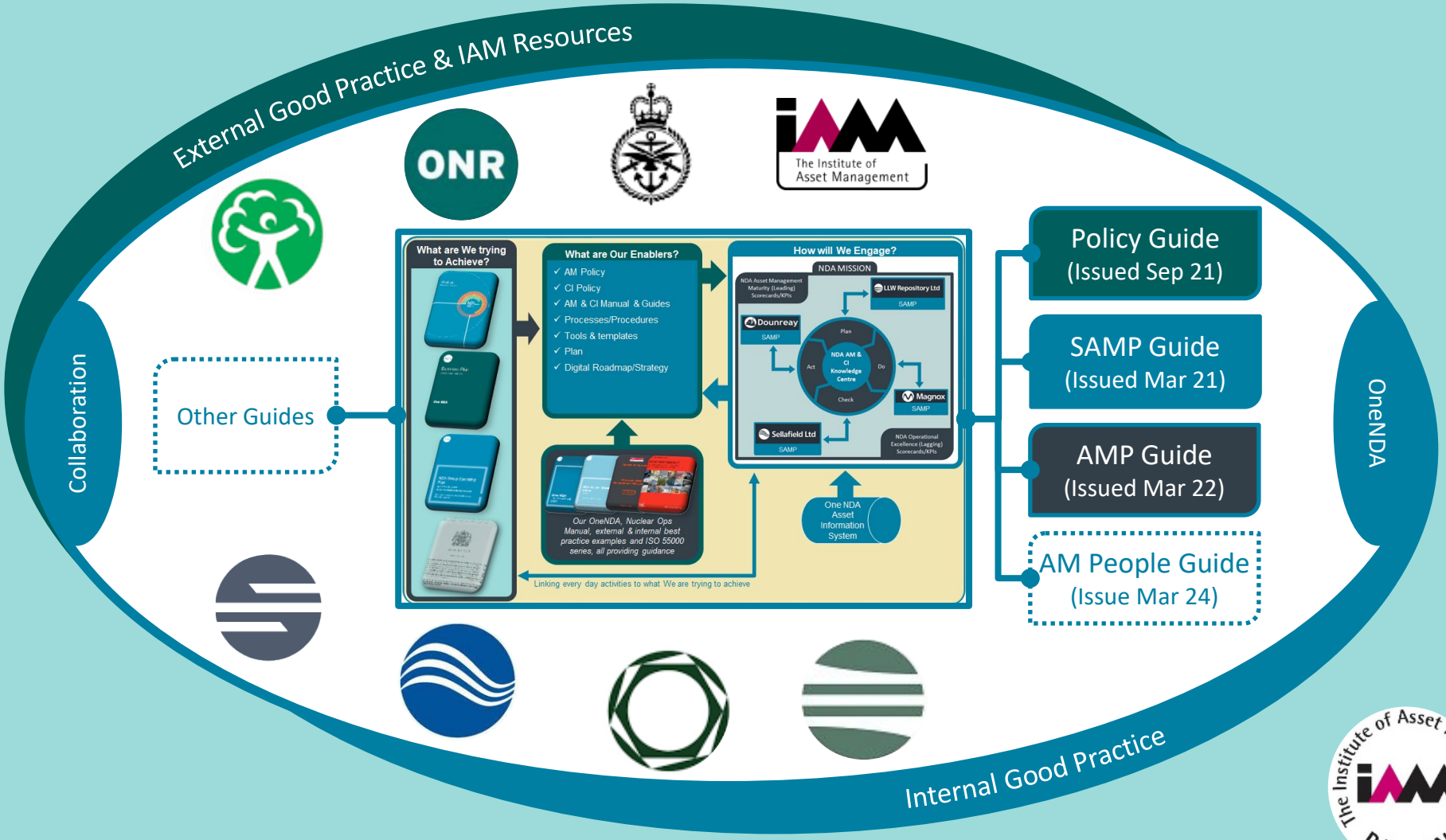
Our asset management challenges provide us with opportunities to work better together

Our ‘OneNDA’ Collaborative Approach

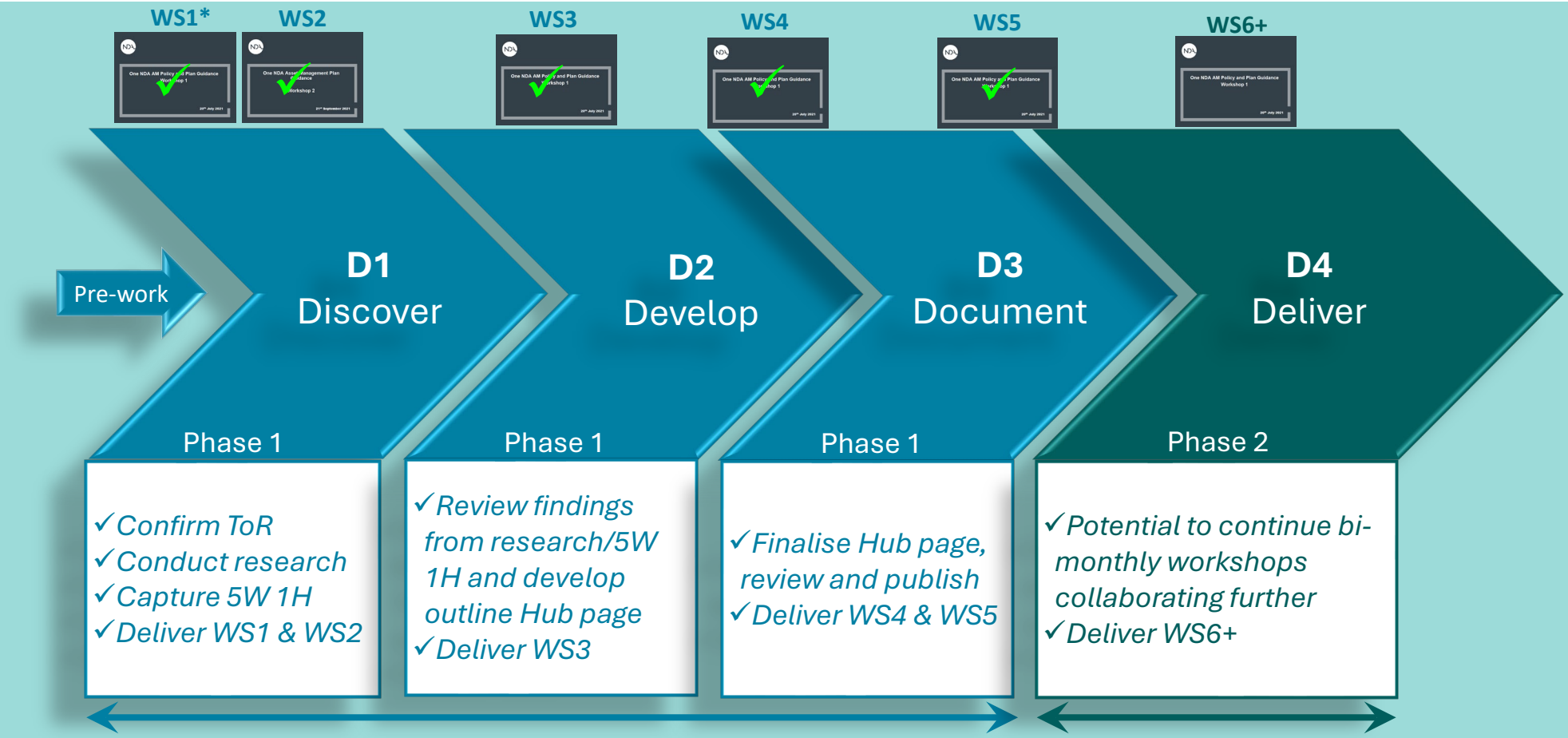
“One NDA has been created to maximise the opportunities that come from working more effectively as a group. The One NDA way of working is firmly based on the belief that operating in this way will deliver decommissioning safely and more quickly and efficiently for the taxpayer and be better for our people”

People Capability Project

We have collaborated with our Peers, Subsidiary Organisations, and Regulators to develop a series of good practice guides for the main products in the asset management system.



4D Approach

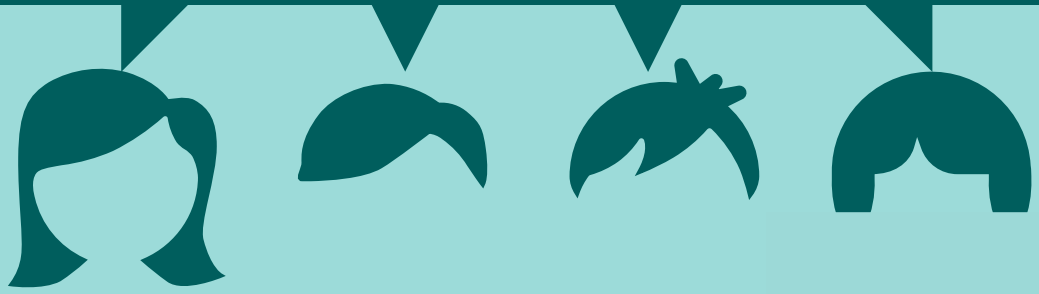


We have refined a 4D approach that has worked well and received positive feedback from all stakeholders

Terms of Reference Extract

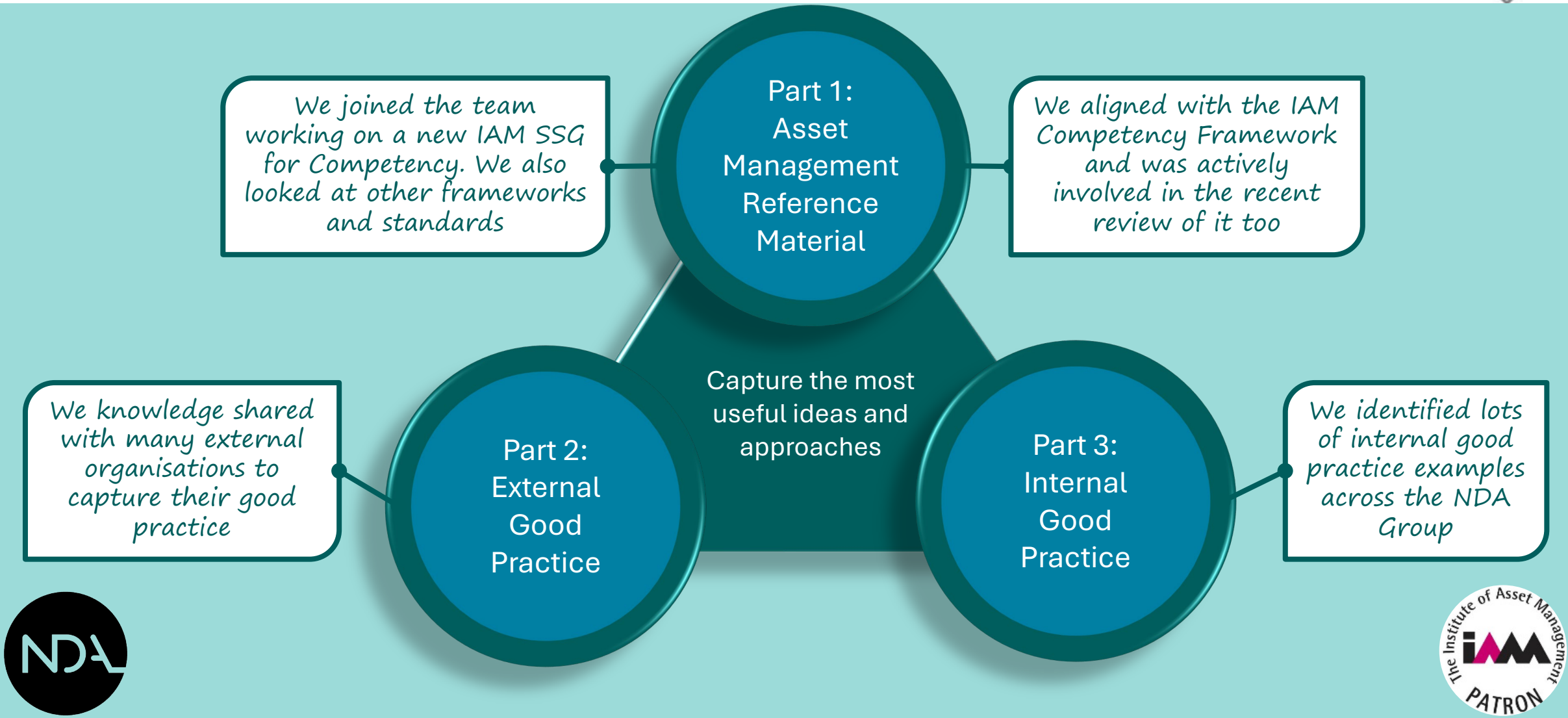
The asset management people capability guide is a critical enabler for ensuring the:
right number of people,
with the right skills,
and right experience,
are in the right role,
to deliver the current and future asset management needs for efficient and effective mission delivery across the asset lifecycle.

All functions involved understand how their roles and activities feed into the delivery of asset management excellence.



Our people are our most important asset!

Triangulated Discovery Phase



Collaborative Workshop Delivery

Start

Workshop 1
Sep 23
Confirm Terms of Reference

Title	One NDA Asset Management Plan Guidance Document
Background	Asset Management (AM) is one of our critical enablers for mission delivery and is a key activity for ensuring our assets are fully optimised throughout their lifecycle using intelligent decision making considering the costs, risks, capability, and performance. The outcomes of good AM will significantly increase the efficiency and effectiveness of our mission delivery at minimum total cost to the taxpayer, we will do more with less! As part of developing our AM capability, the AM function was established in 2019 with a mission to bring best practice AM to the estate. Recruiting leading practitioners into the NDA corporate centre, the team established a best practice AM framework incorporating the role of the SLCs. The framework includes a suite of guidance documents used to create a standardised approach to AM across the estate. The focus of this ToR is to create a guidance document for Asset Management Plans (AMPLs). AMPLs are key documents for detailing the current and future needs and expectations of a specific portfolio of assets.
Objectives	✓ We will create a guidance document for the NDA Group that can be used to produce consistent and proportionate AMPLs across the NDA Estate ✓ The guidance document will be owned and used by AM practitioners across the NDA Group
Remit, Scope & Plan	✓ Share existing AMPLs and how they are used within each organisation ✓ Critique existing documents to gain a common agreement on the core content of an AMPL ✓ Carry-out benchmarking of other industry sectors within and external to the nuclear industry ✓ Work together to define a guidance document for creating or updating existing AMPLs that meets the needs of the NDA group ✓ If possible, test the guide by creating/updating at least one SLC AMPL (subject to document review periods) ✓ If possible, validate the guide with independent experts ✓ The AMPL is a significant piece of work estimated at 12-18 months
Inputs	✓ Existing SLC AMPLs ✓ ISO55000 Series ✓ Other business AMPLs ✓ IAM AM Anatomy ✓ IAM SSG Policy, Strategy & Plans ✓ Regulator requirements (RASCAR) ✓ Other key stakeholder requirements ✓ Benchmarking from others ✓ SAMP guidance approach as an exemplar
Outputs	✓ Record of decisions & actions ✓ Progress updates to NDA Sponsor and AM Summit ✓ Main output will be a guidance document for creating or updating SLC AMPLs ✓ Training pack on how to use the guide ✓ Offer option for a regulatory review ✓ Feed into AM & CI communications plan (internal and external)
Membership	✓ Sponsor: John Chappell (NDA AM & CI Director) ✓ NDA CC: Paul Gibbons (lead) ✓ SL: Chris Pickford (deputy is Lee Carr) ✓ Magnox: Leigh Hammond (deputy is Phil Jones) ✓ DSRL: Andrew Dunnett (deputy is Mick Jones) ✓ LLWR: David Burton (deputy is Dave Clark) ✓ Regulator EA: Tracy Braithwaite (deputy is Karl Littlewood) ✓ Regulator ONR: Matthew Dingsdale (deputy is Douglas Styles) ✓ Submarine Delivery Agency: Ben Mogridge
Frequency & Duration	✓ Bi-monthly for twelve months by Telephone/Video Conference for 2 hours ✓ Possible face-to-face workshops at some point in the future subject to travel restrictions being lifted ✓ AM Summit as required
Completion	✓ 1st pass document created no later than 31st March 2022

Workshop 2
Nov 23
Present examples from inside and outside the NDA to identify areas of good practice

Examples and reference material

5W 1H of good AM Capability captured

Workshop 3
Dec 23
Develop Hub page specification & outline of Guidance Document

One NDA AMPC Guide (Structure)

Functional specification and guide outline updated

Workshop 4
Feb 24
Finalise Guidance Hub page and time permitting, trial with an OpCo

One NDA AMPC Guide (1st Draft)

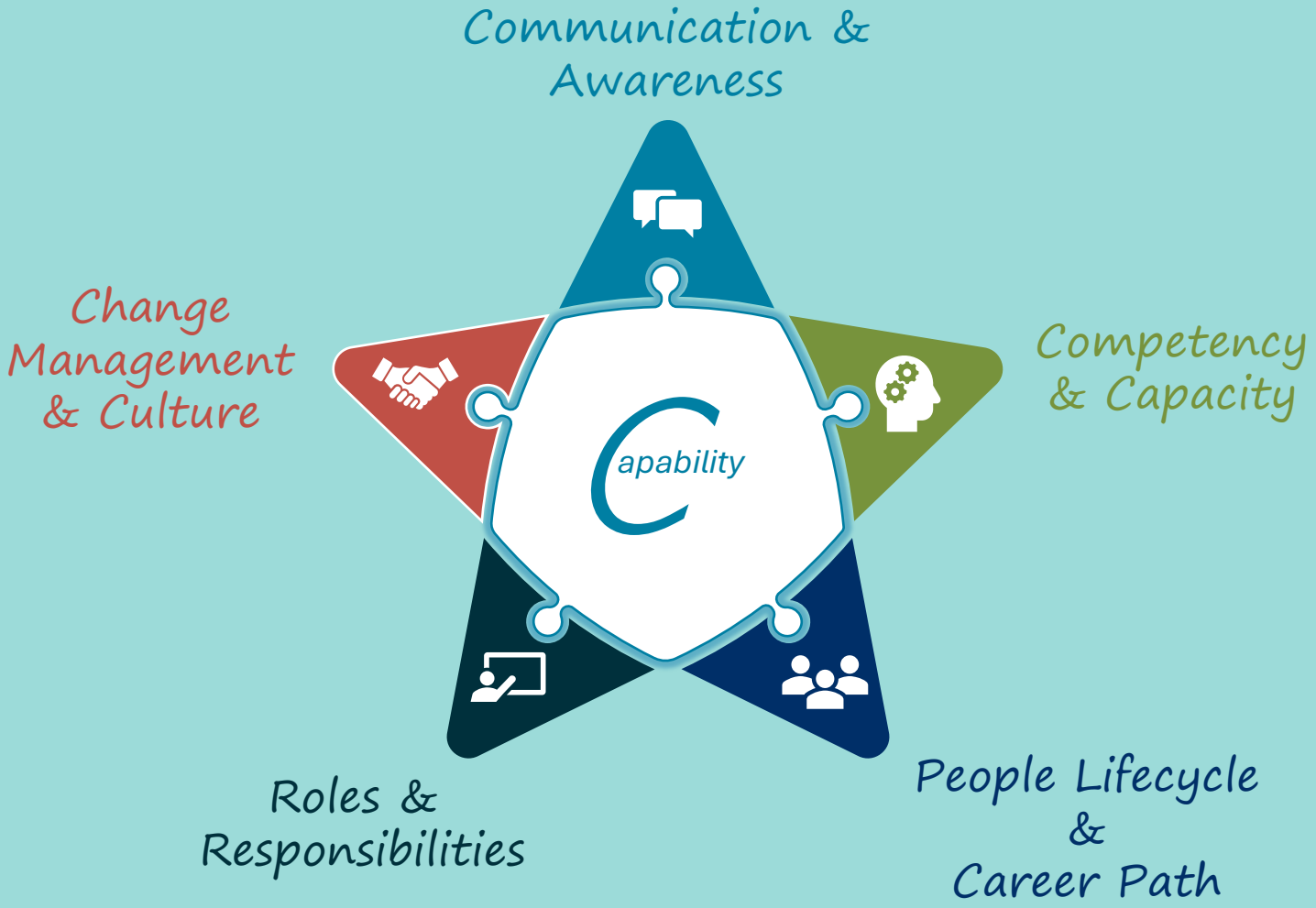
Final draft created

Workshop 5
Mar 24
Review final Guidance Hub page and conduct lessons learnt

End

Representatives from the NDA, Subsidiaries and Regulators were involved in all workshops

AM ‘Star’ People Capability Model



Eight ‘Rights’ of AM People Capability

Communication & Awareness

1. Ensuring the right AM communications are made at the right time, in the right format to the right person
2. Ensuring all people directly and indirectly involved in AM have the right level of awareness for their role

Competency & Capacity

3. Ensuring the right number of people with the right competencies are in place for the right AM activities

People Lifecycle & Career Path

4. Ensuring the right people are in place throughout the obtain, train and retain elements of the AM people lifecycle
5. Ensuring people have the right AM career path

Roles & Responsibilities

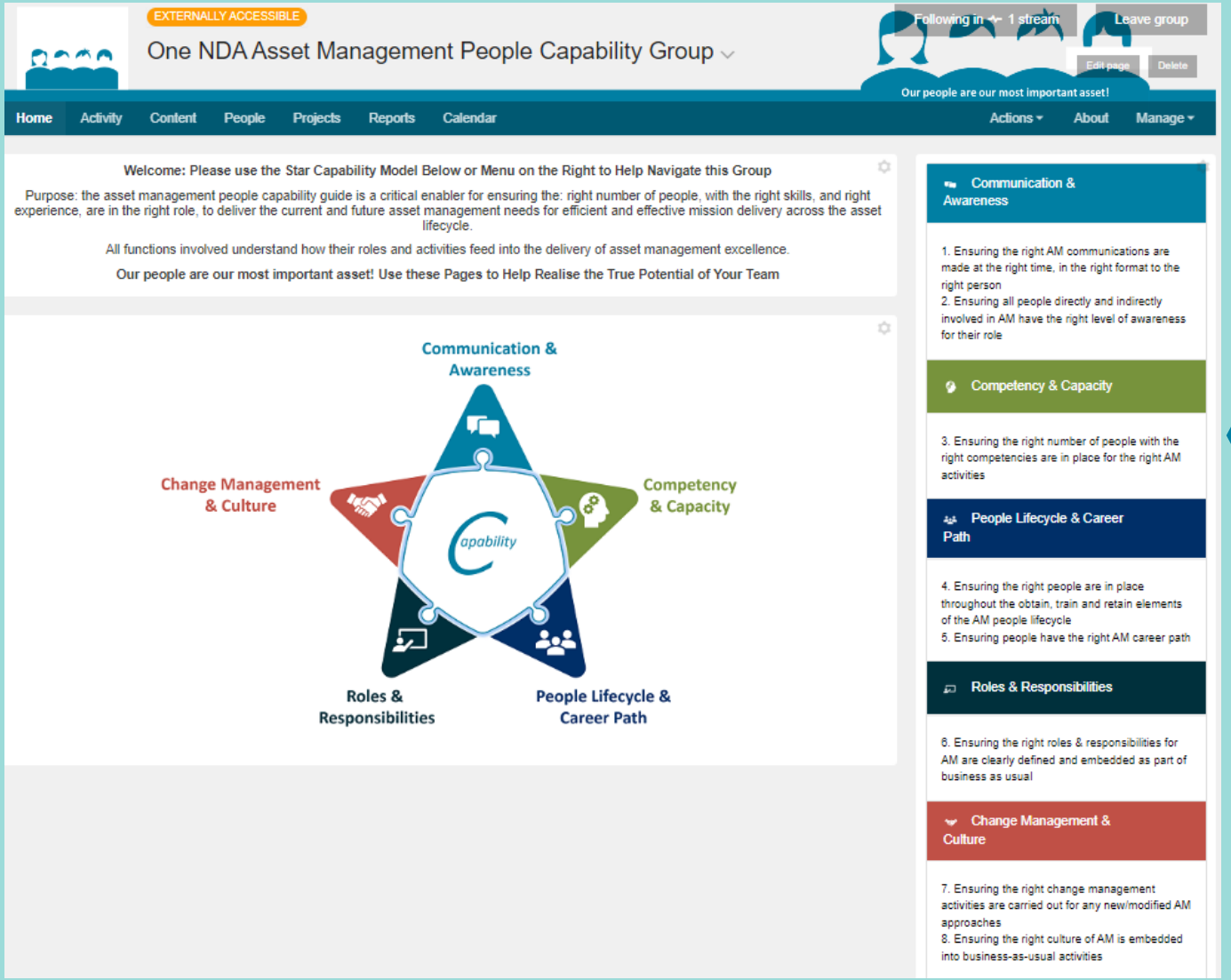
6. Ensuring the right roles & responsibilities for AM are clearly defined and embedded as part of business as usual

Change Management & Culture

7. Ensuring the right change management activities are carried out for any new/modified AM approaches
8. Ensuring the right culture of AM is embedded into business-as-usual activities

Bringing the Model to Life Part 1

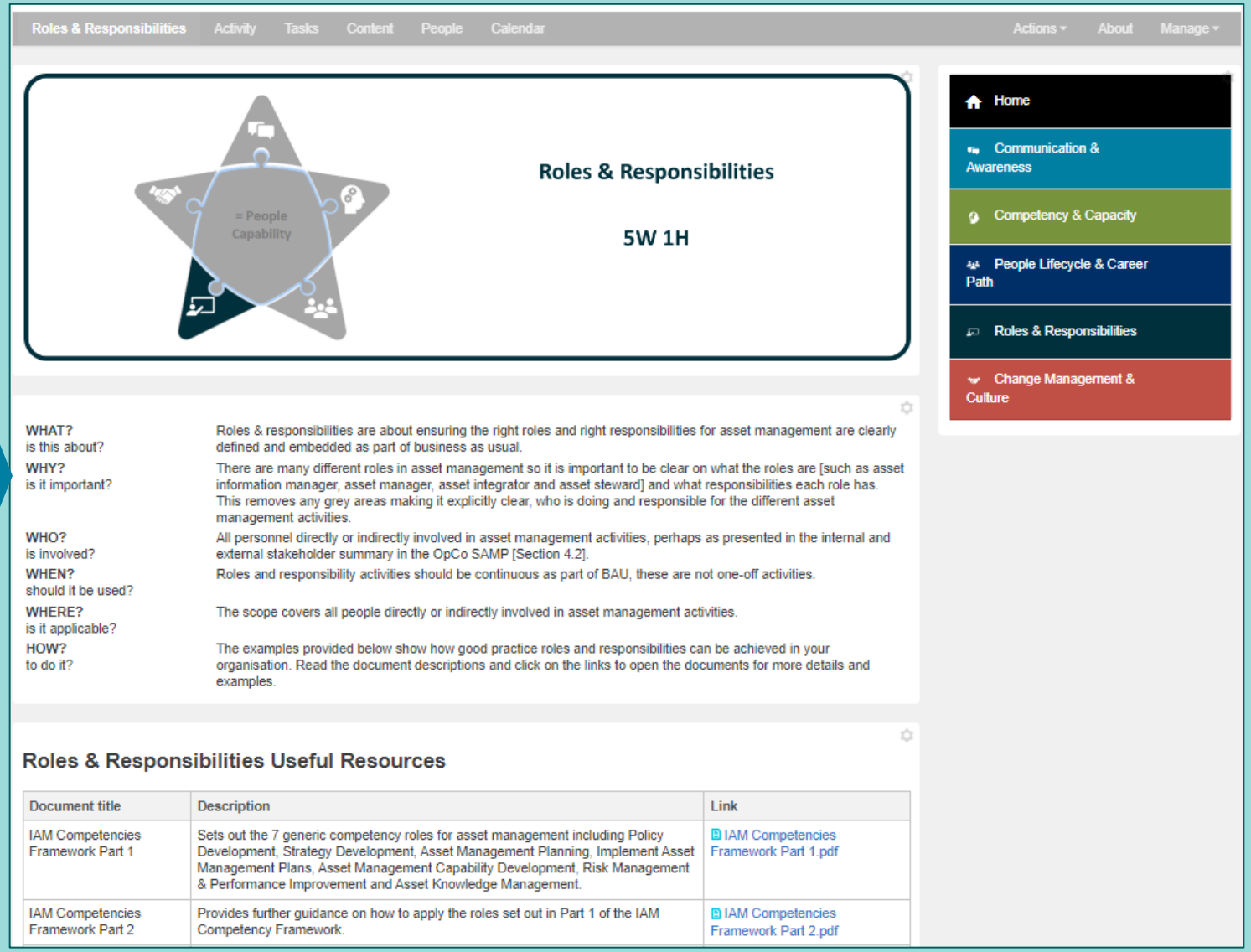
We use a 'Hub' page so that all internal and external stakeholders can access the information



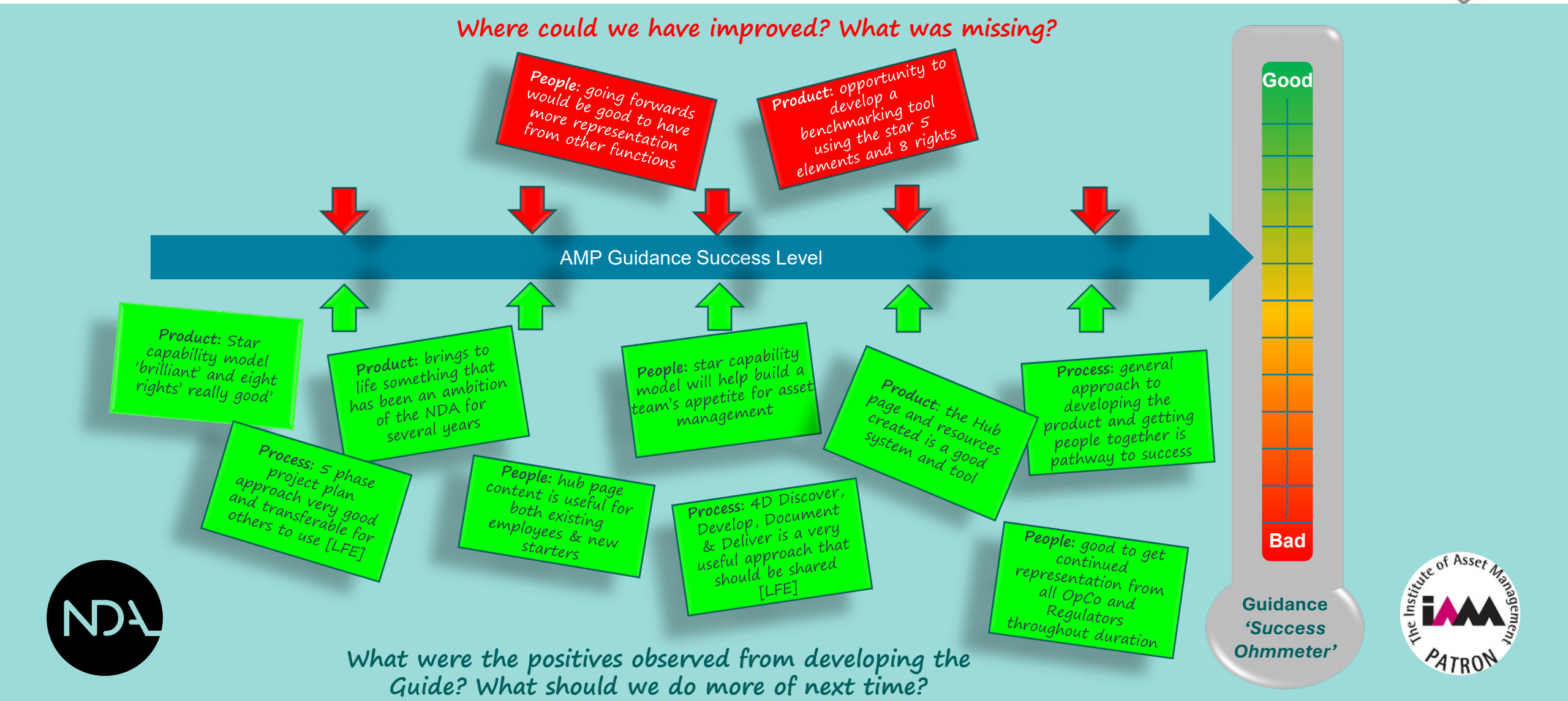
The home page shows main purpose and the star capability model which is interactive including hyperlinks to each of the five elements

Bringing the Model to Life Part 2

For each spoke, there is a dedicated page covering the 5W 1H + supporting resources such as examples.



Lessons Identified



Next Stages

- Develop programme and implement Phase 2
- Areas of particular focus include:
  - NDA career path for Asset Management professionals
  - NDA competency and capacity framework
  - Bespoke Certificate/Diploma Training courses for Nuclear Asset Management
  - Roles and Responsibilities procedure for key roles
  - Create a self-assessment and/or benchmarking tool for people capability

Summary & Questions

- Thank you for listening
- We are happy to network and knowledge with other asset owning organisations
- We can also provide a demonstration of the interactive hub page we have created as part of Phase 1
- Questions?