

# Transforming Sellafield



# Introduction

Since April 2016 Sellafield Ltd has been a wholly-owned subsidiary of the Nuclear Decommissioning Authority (NDA) on behalf of the UK Government, led by a Chief Executive Officer and senior executive team, and governed by a Board of Directors.

We have made a commitment to the NDA and Government to reduce mission spend by at least £1.4bn by 2029 through cost efficiency and productivity gain. In fact, we aim to do this by 2020, and we are targeting a further £1.4bn savings by 2029 as we demonstrate progressively the value of our return to government ownership.

We will create the capability to flex by +/- £100m in any financial year, also by 2020, to accommodate potential funding changes.

We face a mission change as reprocessing operations end by 2020. We have set the direction for our future and defined the organisation we want to be in ten years' time – how we operate internally, our size and shape, and how we maximise wider opportunities. Our transformation plan sets out how we will achieve that future state, and it will be supported by a suite of detailed and regularly updated communication documents.



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# Foreword



**Tony Fountain**  
Chair  
Sellafield Ltd

Sellafield Ltd is here to safely and securely reduce the levels of risk associated with the legacy of the past. Now we are transforming, so that we can do this more quickly and at less cost to the taxpayer.

Transforming Sellafield responds to a number of drivers. Reprocessing ends on site by 2020 and around 25 per cent of our variable scope will disappear. In addition, we have made commitments to the NDA and Government on efficiency savings and financial agility.

In 2016 the NDA changed our governance model, an important first step in creating the conditions for making the Sellafield site safer sooner, while improving value for taxpayers' money. We have made good progress since then on accelerating the rate of hazard reduction and on preparing to transform.

We are going to create a simpler, more unified enterprise, supported by the systems and technology needed to run a high-performance organisation. Our transformation team is developing the details of how to achieve this. However, the complex nature of Sellafield's legacy projects means that there are still many known unknowns.

What we can say with certainty is that in everything we do, we will be guided by our three strategic themes of safe and secure stewardship, demonstrable progress and providing a strong return on investment. We will do all this while taking into account the immediate and longer-term interests of our communities.



**Paul Foster**  
Chief Executive Officer  
Sellafield Ltd

In the coming years, there will be choices to make about Sellafield. Reprocessing operations will end, we will focus on the safe and secure environmental clean-up and, as high hazards are removed, investment challenges will change.

We believe it is in our gift to influence those choices. Doing so, and meeting the stretching commitments we have made to the NDA and Government, depends on us making significant performance improvements – accelerating programmes, and working more effectively, efficiently and flexibly.

We need to respond to the operational change drivers facing us, but also we are on the cusp of a tremendous opportunity. Transforming our organisation and the way we work with our supply chain will help our communities build greater resilience, demonstrate the longer-term future of our nuclear capability, and attract inward investment and economic growth.

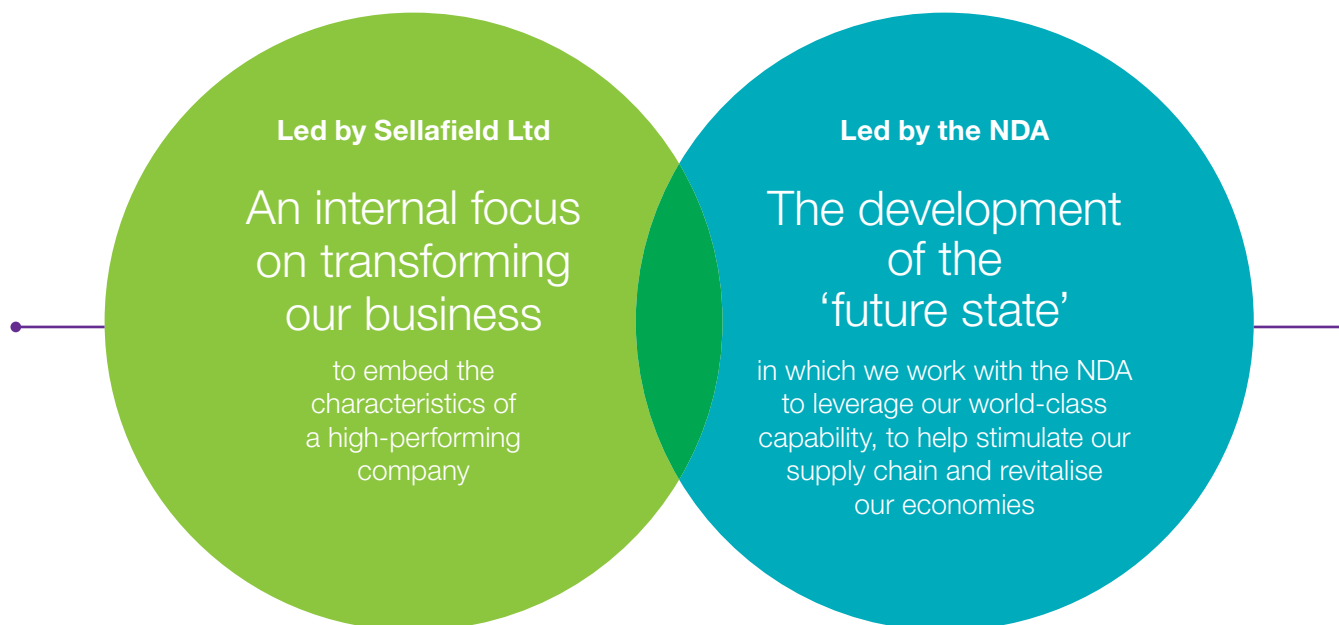
To achieve this, we need new ways of working, collaborative relationships with our supply chain and shared ambitions with our stakeholders.

As we transform Sellafield we are mindful of the change programmes that have preceded it, and appreciative of the efforts our people have made on those improvements. The change that lies ahead builds on this but is greater and wider-reaching; in the past, we have tried to do the same things better. Transforming Sellafield is about doing different things, and doing them differently. The prize – for our business, communities and stakeholders – is tremendous.

# Vision for transformation

## What we believe we can achieve

Sellafield is the UK's most complex nuclear site. Every day we face challenges, and draw upon our technical expertise and nuclear capabilities to address the legacy of the site's history (see page 22/23). Now we have the management model and enterprise approach to enable long-term and transformational change.



We remain a cornerstone in UK nuclear energy policy, with a part to play in improving skills and lifetime costs for the nuclear industry. Our performance in integrated waste management, disposal, asset management and project delivery are all factors in building confidence in the nuclear industry as a whole.

Safety and security remain our highest priorities, and we must deliver our mission to deliver a complex environmental clean-up.

In addition we are transforming our business to improve every aspect of our performance, so that Government can make the funding choices that we need in the coming years, secure in the belief that taxpayers will get a good return on their investment.

As a new enterprise, our unwavering focus will be on creating value. Value is the outcome our customer wants to see – for us, this is about accelerating hazard reduction and increasing value for taxpayers' money, through

improved efficiency. Everyone in the business has a part to play in this pursuit of value, in the value streams themselves (see page 12) and in the areas that help the value streams operate.

We have developed a set of operating characteristics that describe how we will work in the future (see page 8/9). These will help us address our future challenges and achieve our agreed ambition:



*To transform Sellafield so that it is recognised both as a leading nuclear enterprise and as a national asset, which offers the UK Government value, opportunity and choices in support of the nuclear industry*

As we continue to retrieve legacy fuel, remove the high hazard and clean up the site, our vision is to:

- Reskill and redeploy resources to accelerate our high hazard mission, delivering one of the world's most crucial environmental clean-ups ahead of schedule and for lower cost
- Make sure everything we do adds value, increases productivity and embeds continuous improvement
- Get work done more easily and make the right decisions quickly, with simplified processes and systems, supported by fit-for-purpose governance
- Develop the values, behaviours and incentives that drive performance
- Protect and invest in our core capabilities, and work collaboratively with our supply chain
- Work as an 'extended enterprise', including our supply chain, with a culture that develops innovation, and new business models.

Overall, these are the improvements that will help us achieve the characteristics of a high-performing company. At the same time, we want to enhance our social impact by helping to create the right conditions in which the supply chain can diversify and, in turn, revitalise economies. For example:

- Work with our supply chain, local authorities and agencies to inject growth into UK and regional economies, within the framework of our broader legal procurement responsibilities
- Work with the NDA and Government to seek ways to stimulate and encourage investment and exports
- Support the development of the technologies, skills and knowledge that will contribute to economic prosperity.



Creating the right conditions for future prospects is a shared approach. We will continue to play our part in delivering our ambition and helping to improve social impact. The UK Government has a number of mechanisms available already to organisations to help grow and diversify their business, and the supply chain can play their role in drawing on these.

The need to transform Sellafield becomes all the more compelling in the context of the strategic funding choices facing Sellafield and Government in future years. If we act as a global demonstrator for nuclear capability, we will influence and promote positive investment choices.

Some choices are a little way off but if we don't prepare now, we may find critical choices are made for us. We have the chance to create the right conditions for future success – to benefit Sellafield, our supply chain, the UK economy and our communities.

This is why we have created an ambitious and dedicated approach to transformation. We will develop the high-performing organisation that can respond to the mission challenge, helping our people through every step of the change. By enhancing performance we can increase future prospects.



# Phases and benefits

As we transform Sellafield, we are doing two things: we are transforming the way we deliver our mission, and we are looking at transformative opportunities in the future (and how to prepare for them).

Our approach to transformation is based on a series of overlapping phases, to create structure and logical decision points. As we look further out, we have less detail and certainty but this phased approach gives us a framework in which to develop.



## PREPARE

### April 2016 - September 2017

This phase is about getting ready for transformation and setting our direction of travel.

#### What are we doing?

- This phase is almost complete, and we have:
  - Set our future direction, defining our strategy and the characteristics that describe our target future
  - Created a new structure to operate as a whole enterprise, rather than as a raft of programmes and projects: a Corporate Centre taking a central overview, supported by a Delivery Agenda and a Transformation Agenda
  - Clarified and established the scope and responsibilities for both the Delivery Agenda and the Transformation Agenda
  - Specified our proposition for working with major partners
- We continue to develop a new framework of success criteria and metrics, to improve our performance management arrangements with the NDA

## SIMPLIFY

### 2017 - 2020

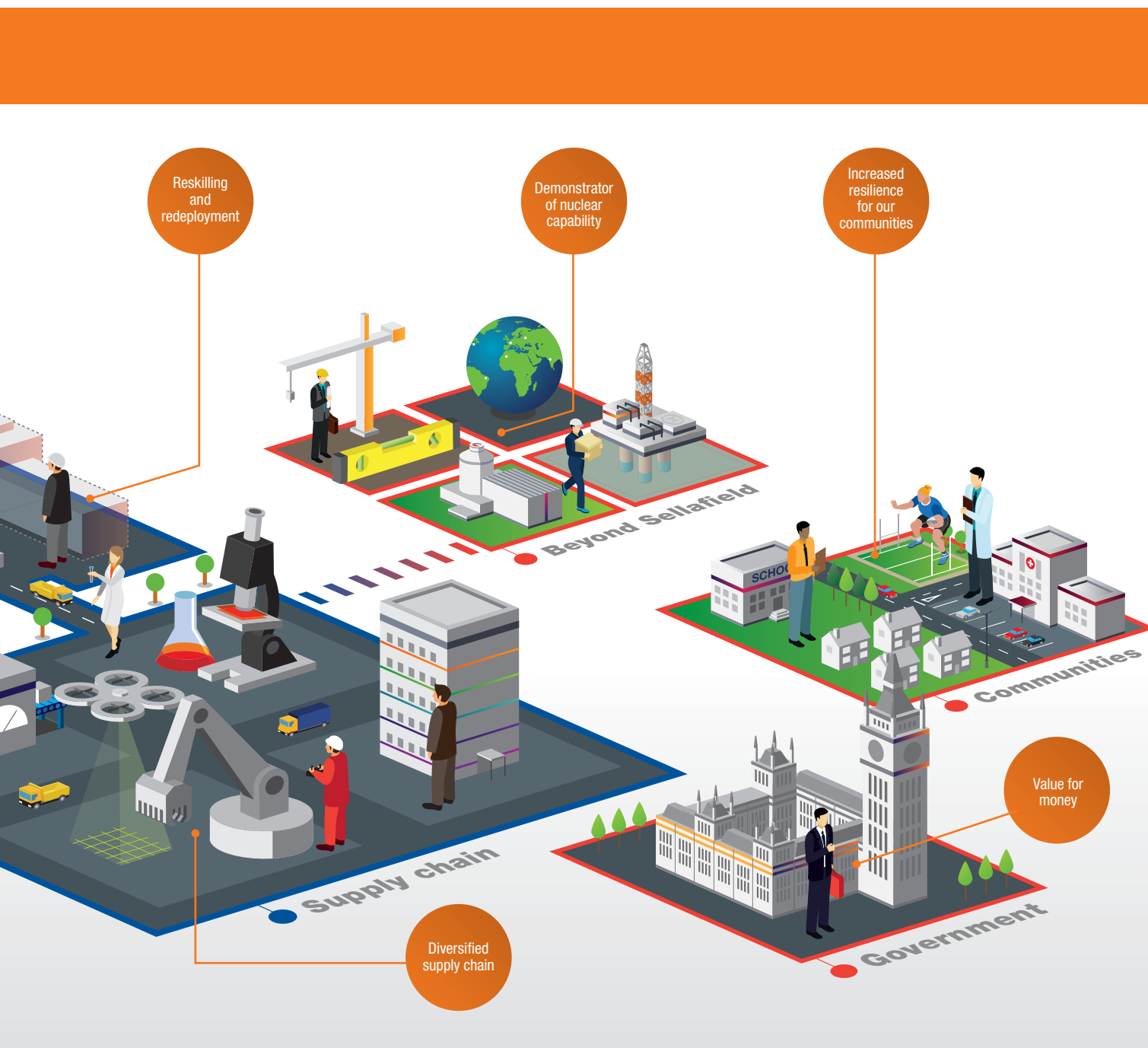
This phase is about making a step-change in the way we work, and building the foundations we will need for significant and sustainable transformation.

#### What are we doing?

In this phase, we will:

- Align our organisation around value streams
- Simplify our processes and clarify our priorities
- Conclude reprocessing and manage the impacts
- Embed a value-led, high-performance culture
- Create the business environment we need for success
- Design new architecture for managing as an enterprise
- Engage partners





## BUILD

### 2019-2025

This phase is about establishing new ways of working, exploring potential opportunities and developing a high-performance culture.

#### What are we doing?

In this phase we will:

- Build capabilities and increase flexibility through new partnerships with the supply chain
- Implement the new information systems we need to develop a learning culture
- Build stakeholder confidence in our ability to deliver our long-term strategy
- Develop new and potential opportunities

## OPPORTUNITY

### 2021+

This phase is about identifying and realising possible new opportunities that enhance performance and prospects for us and our partners and communities. We do not yet have a detailed view of our priorities this far ahead.

# Future characteristics

In the 'prepare' phase of transformation (see page 6), we have listed the characteristics that best describe the organisation we want to be. These relate to four areas of our business – **performance, technology, structure and people.**



## Performance

How we manage the business, make decisions, measure and govern work

### Value streams used to set and measure the performance of the business

We will have a clear understanding of where value is created in our organisation – what we are here to do, and how we align everything we do to value. This will help us prioritise and manage our work across the whole organisation.

### Decisions made on accurate and consistent data and understanding of what is important

A shared understanding of value will help us make the right decisions to get best outcomes. Real-time information will help us make decisions more quickly, and advanced business analytics will help us manage the unpredictable.

### Clear view of personal contribution, how to get things done, and where to get help when needed and support for new ideas

We will have a clear and connected line of sight throughout the entire organisation, with everyone measured against a clear and consistent set of priorities aligned to the value streams.

### A suite of measures to monitor performance consistently across the business and supply chain

Improved metrics allow us to monitor performance across our organisation and the supply chain (the 'extended enterprise'). Everyone will be measured consistently and in line with value.

### Clear financial information that supports decision-making

We will have greater transparency of all our costs and in turn improve our forecasts, estimates and decision-making. A more standardised cost breakdown structure helps us better understand and challenge costs across our organisation and supply chain.

### Simplified and appropriate governance structures, processes and procedures

Simplified processes, tailored appropriately to levels of nuclear risk, give us clearer roles and accountabilities. Our governance structures will be streamlined and managed in line with the value streams.

### Process and assurance that are fit for purpose, based on levels of risk

We will treat risk appropriately across the whole enterprise. We will act faster in non-nuclear activities, and focus our compliance activities where they are most needed.



## Technology

Information and data, and how we will innovate

### Single source of management information that supports decision-making

A single source of information, provided in real-time, will give us faster and more up-to-date data. Improved information systems will minimise the need for manual creation of reports or data manipulation.

### Fewer, more 'joined-up' IT systems that support improved performance across the business

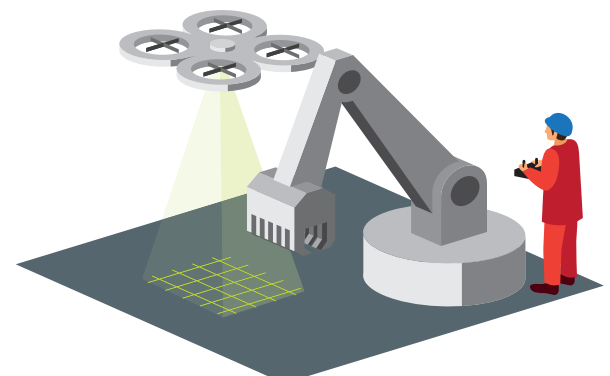
We will simplify, standardise and modernise our IT infrastructure. This will support flexible working arrangements, collaboration and communication, and improve service continuity and disaster recovery.

### Ability to model and analyse business information to offer options in decision-making

Improving the way we model and plan for future scenarios will help us reduce risk in complex decision-making. We will use real-time analytics to better plan for and respond to changing environments.

### Continual search for innovative ways to accelerate the mission and reduce costs

We will work with academia, international organisations, research funding bodies and other companies working in high hazard environments to share good practice and seek innovative solutions.





Transformation will drive the culture, behaviours and processes we need to close the gap between where we are now and where we want to be in each of these characteristics. Cumulatively, these will define us as a high-performing company.



## Structure

How we set up the organisation structurally and physically

### **Sellafield Ltd and supply chain skills, experience and capability used to deliver the mission in the most effective way**

We will invest in and protect our core capabilities, and collaborate with the supply chain on the capability we choose to buy. In all areas we will retain the right expertise to act as an 'intelligent customer' with both oversight and assurance.

### **Appropriate structure for operating in value streams**

We will optimise our structures – including costs and accountabilities – to support value streams and maximise value.

### **Prioritised, essential use of land within the site boundary**

We will integrate our land usage and logistics to make best possible use of NDA land. This will include the use of an off-site logistics hub, and effective decision-making on land-related project needs (such as construction laydowns and vehicle movements).

### **A range of types of contracts and relationships in place as needed to support the mission**

For both enterprise-wide and local commercial arrangements, we will collaborate with the supply chain to achieve best value for money and delivery. We will measure commercial performance on benefits and outcomes.

### **Proactive reskilling and redeploying of our people to meet business needs**

We are working already on innovative solutions to support the redeployments required by mission change and efficiency improvements. Our future culture will be based on high-performance behaviours such as accountability, collaboration, innovation and cost-consciousness.

### **Funding allocation and authority given to value streams**

We will allocate funding to the value streams, and their associated enablers. Greater visibility of what we are spending will make it easier for us to find and achieve economies of scale and value for money, internally and externally.



## People

What we will expect from our people

### **Improved capability to get the best out of our relationships with the supply chain**

We will have the skills and capabilities we need to work more collaboratively with the supply chain, with shared risks, values and ways of working.

### **A culture centred on driving performance**

Our leaders and managers will manage people and performance consistently, recognising excellence and having difficult conversations where they are needed.

### **Leaders developing people, and holding them to account, to deliver stretching performance**

Our leaders and managers will positively embrace and impact our transformation, actively supporting their people through business and personal change, and role-modelling the behaviours they expect to see in others.

### **An embedded mindset in the business in which everyone seeks constantly to improve performance**

Our thinking, language and behaviours will be driven by continuous improvement, and we will see the benefit of this in our nuclear professionalism, safety performance and the way we interact with each other every day.

### **Size, shape and working practices developed to meet the future needs of the business**

Workforce planning and forecasting will mean we have the right skills and resources where and when we need them, to deliver our mission and create value. We will continually improve our working practices.



# Objectives and principles

## Transformation objectives

Safety and security remain our first priorities, and we will keep an unwavering focus on delivering our mission. At the same time we will transform the way we work, so that we deliver one of the world's most crucial environmental clean-ups ahead of schedule and for lower cost.

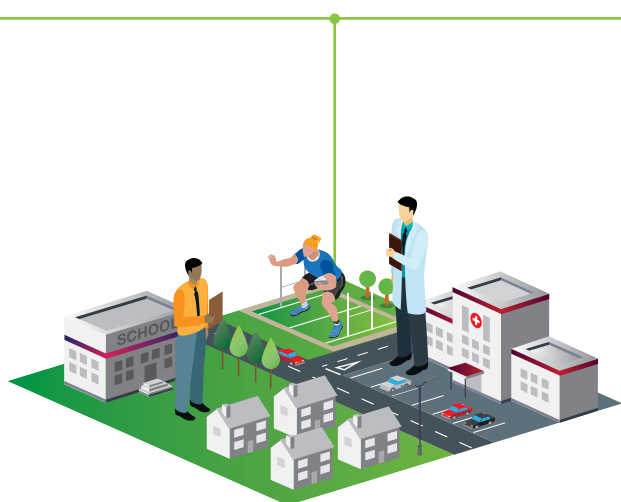
- We will deliver transformation that:
  - accelerates the high hazard mission
  - reduces mission cost
  - reshapes and reskills our workforce for the future
  - increases return on investment for the taxpayer
  - improves stakeholder confidence.
- We will develop a culture and the leadership behaviours that nurture people to:
  - focus on delivering value
  - hold each other to account
  - work collaboratively and innovatively
  - take ownership of and pride in their work.
- We will create an environment for making high-quality business decisions.
- We will provide Government with compelling choices for investment decisions, at the end of reprocessing and beyond hazard reduction.
- We will facilitate a long-term and positive impact that helps to ensure a resilient supply chain is in place and able to diversify.



How we will measure success:

- We will accelerate the high hazard mission by 25 per cent.
- We will reduce costs by £1.4bn by 2020 and a further £1-£1.4bn by 2029.
- We will be able to flex +/- £100m in any financial year, by 2020

As a consequence we expect that, taking attrition into account, we will need to manage the impact of 1,500 - 2,000 surplus roles over the next 4 - 5 years, which we seek to do through reskilling and redeployment (see page 14).



*Be mindful throughout of our social and economic impact on our communities, and consider the effect of transformation on them*

## Our guiding principles

Our work to transform Sellafield is guided by a set of principles. As we deliver transformation, we will:

- Maintain our focus on safety and security
- Deliver our mission without distraction
- Accept that detail will emerge and develop over time, and respond flexibly to wider influences
- Treat everyone with respect and develop our stakeholder relationships
- Be bold and ambitious, and brave enough to think differently
- Encourage innovation, developing future options that make the most of our capabilities and strengthen our supply chain
- Be mindful throughout of our social and economic impact on our communities, and consider the effect of transformation on them.

# Delivering a company-wide transformation

Transforming Sellafield is a company-wide portfolio of changes, not a series of separate improvements.

To deliver the characteristics of the high-performing company we want to be (see page 8/9), we are structuring our approach around the core programmes and the wider improvements that impact (or are impacted by) the transformation plan. This means we can build, support and co-ordinate all the significant change that makes up the transformation critical path. Together we will transform Sellafield most effectively.

This approach does not preclude our 'business as usual' drive for continuous improvement in local teams, and such programmes will remain in place.



## Value Streams

This workstream will develop and implement value-led propositions to enhance our operational delivery through value streams, to improve schedule and/or reduce costs.

*Our functional areas are setting out enabling plans to detail the transformational change they will make to support the value streams, as well as the changes they will need to develop as part of our whole-company transformation and as a function in a high-performing company.*

- See page 12 for more detail.



## Leadership and People

This workstream will determine and deliver the resource and capabilities change needed to respond to the end of reprocessing and to improved efficiencies, and support organisational transformation through value-driven behaviours, performance management, and developing tomorrow's leaders.

- See page 14 for more detail.



## Projects

Delivering projects on time, scope and budget is crucial to delivering our mission, and transformational change in this area will help to maximise value creation. This area is enhancing internal capability and our partnership approach to projects.

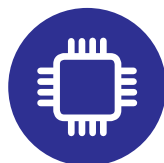
- See page 17 for more detail.



## Enterprise Management

This workstream will create our business environment for success, transforming our ability to make informed, timely and quality decisions, manage uncertainty and increase agility.

- See page 16 for more detail.



## Technology and Innovation

Our focus on technology and innovation will enable significant improvement, and drive value-led solutions across every area of the organisation. It will make sure we are ready and prepared to embrace new trends and technologies, to maximise performance and create new prospects.

- See page 18 for more detail.



## Supply Chain

This workstream will deliver opportunities and develop Sellafield Ltd's relationships and partnerships with the supply chain to provide sustainable value for money, and improve efficiency and resilience.

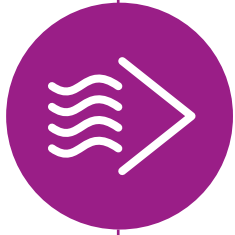
- See page 13 for more detail.



## Safety and Security

Driving transformational change in safety and security will help us reduce complexity, act more efficiently and flexibly without compromise or risk, and prepare for future threats in a changing world.

- See page 19 for more detail.



## Value Streams

Working in value streams means focusing on what we are really here to do, and prioritising what we do and how we do it to maximise value. By doing only what adds value for our customer, supported by the most efficient approach to compliance, we reduce waste and embed continuous improvement – unlocking more transformational opportunities.

This is a proven approach in business, and establishing this model in Sellafield Ltd is the backbone of our transformation. Initially, in a ‘discovery’ phase we have developed the high-level view of what we can do to grow value and what we can stop doing to reduce waste – based on operational information, formal analysis, and engagement with front-line teams.

This way of working begins currently with four streams of work and the value propositions that define their outcomes:

- **Retrievals** is about the reduction of high hazard risks from legacy facilities, and we add value by doing this as fast as possible. We believe a 25 per cent schedule improvement is achievable.
- **Remediation** is about the clean-up of the Sellafield site, and value is delivered through schedule effectiveness and cost efficiency. We are exploring several cost-saving opportunities, including work schedules, waste segregation, storage and process improvement, and we see potential savings of millions of pounds.
- **Spent Fuel Management** is about the receipt, reprocessing and storage of spent nuclear fuel, and value is achieved by doing this as cost-efficiently as possible.
- **Special Nuclear Material** is about safe, secure and appropriate storage of special nuclear materials, and value is achieved through cost efficiency.

The second phase of this work (the ‘maturity’ phase) will detail the value stream plans, deliver performance improvement quick-wins, and develop the long-term opportunities capabilities and operating principles we need in our business for a constant pursuit of value.

At the same time, we will develop and embed a series of enabling plans – the plans for how the business will help the value streams drive schedule and/or cost-efficiency – for example, functional expertise or technical compliance.

Understanding that success is not achieved in isolation, the enabling functions and the value streams will work together collaboratively, along with colleagues in Projects and Supply Chain, to find the shared outcomes that deliver value, and to prioritise what we will do to deliver most benefit.

For the same reason, this workstream considers engineering and maintenance, as well as the overall design, development and implementation of the value streams model. Keeping the assets going, most appropriately and safely, is crucial to delivering value, so this area will consider the changes needed to keep work flowing.

In the next financial year at least, we will operate in our existing structures but use value stream metrics to drive, monitor and review progress. This allows us to develop those longer-term capabilities most appropriately and make sure this fundamental change is managed well.







## Supply Chain

Our focus on transforming the way we work with the supply chain is wide-ranging, from enhancing our internal capability through to developing new and innovative arrangements and new business models for working with the supply chain in the future.

Internally, our significant improvements include building our intelligent client capability. This is about ensuring the most effective management of contracts and supplier relationships throughout the whole contract lifecycle.

Acting as an intelligent client is essential if we are to get the best possible mutual value out of our supply chain contracts and partnerships, especially where we can share risk and outcomes.

Other functional improvements, such as simplified processes for routine purchasing, more efficient delivery of goods, works and services, and stronger governance and assurance will help us maximise productivity and value in all our supply chain arrangements.

Transformational change in our supply chain function will help us manage the best balance between 'make' and 'buy'. We need to protect our core business activities but also build a more resilient supply chain, where sustainable long-term employment opportunities are available.

The Supply Chain workstream is considering options, risks and benefits of alternative financing, which might potentially allow us to bring work forward, saving money later on care and maintenance and so reducing our lifetime costs.

For the longer-term, we are looking also at potential commercial arrangements and business models with the supply chain, acting as a catalyst for business and people development. We are 'exploring the art of the possible' in this area. It is possible that we can develop a commercial offering that could create employment options beyond Sellafield, in turn helping to manage the longer-term impact of a smaller Sellafield Ltd on our employees and communities.

Initially we will identify and test a number of opportunities in the areas of standardised support services, customised nuclear services, new asset services, value stream operations, and new missions.

We are undertaking extensive research and analysis, such as market research in comparable environments, to understand potential ways to develop.

build a  
more resilient  
supply chain





## Leadership and People

This workstream supports the various transformational changes needed to build a positive 'employee experience'. This describes our leadership values and behaviours, the ways we attract and retain talent, reward and recognition, performance culture, and training and development.

A priority for this workstream is managing the resourcing changes that will result from the end of reprocessing and the efficiencies driven by working in value streams.

Overall, we expect this to be in the order of 3,000 roles. Our expectation is that, taking attrition into account, we will need to manage the impact of 1,500 - 2,000 surplus roles over the next 4-5 years.

We believe that redeploying people, both to new and existing opportunities, is the right way to support surplus roles. Reskilling and redeployment helps make sure our skills and experience are not lost and maximises a positive economic impact.

We will provide a dedicated function for managing these transitions constructively. This will create the physical space, tools and leadership support needed to find and then help support people in their moves to new and appropriate opportunities, retraining and reskilling where necessary.

There may be opportunities within the supply chain and our communities, or in new partnership models with new small businesses – which would support our vision to help the supply chain diversify and develop.

In addition to resource planning, reskilling and redeployment, this workstream will consider options for organisation design already under review. Our objective is to develop a modern framework that reflects our change in mission, rewards performance and skills consistently, and supports career progression and pathways.

This workstream looks at incentives and rewards, creating clear links between performance and compensation.

We will build a performance culture in which our people are valued and recognised for their contribution.

people are  
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This performance culture in which we will focus on value and effective leadership, at every level. In this culture, we will place as much emphasis on delivering change as on delivering technical operations.

An important focus for this workstream will be an enhanced approach to performance management, which will be evidence-based and focused on outcomes. This will help everyone prioritise what they do, and provide a line of sight between their personal contribution and their reward and recognition – an important factor in both pride and job satisfaction.

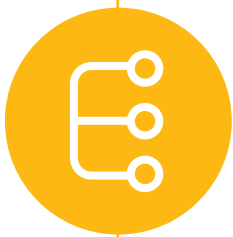
In this workstream, we will develop the frameworks and processes we need to:

- Embed the leadership values and behaviours we need to develop to lead and deliver change
- Develop our leaders to support a high-performance culture – with everyone encouraged and helped to act as a leader
- Assess our people on what they deliver and how they deliver it, aligned both to value and productivity
- Help our leaders communicate and engage effectively, with our people and with our stakeholders
- Manage performance with stronger and simplified tools and processes, a greater focus on personal accountabilities, and links to compensation.



we will focus  
on value  
and effective  
leadership, at  
every level





## Enterprise Management

This workstream creates the business environment and platforms we need to deliver the pace, performance and characteristics of a transformed organisation. This includes the systems and management information we will need to support the value streams and enabling functions, as the way we run our business (see page 12).

This new business environment will achieve or improve several management capabilities, which in turn will affect all delivery and enabling teams.

These new or improved capabilities include:

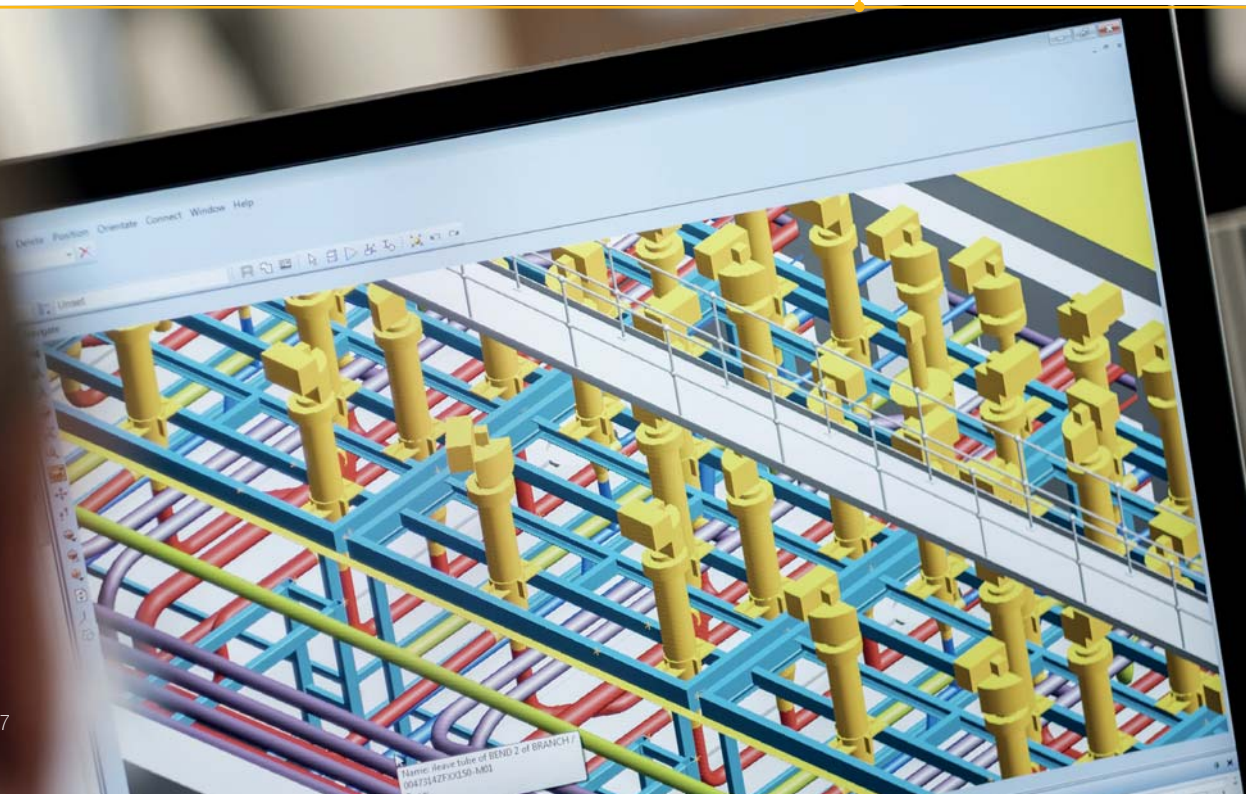
- Strategic choices and decisions, with a clear line of sight to strategy
- Performance visualisation and balanced reporting
- Information and knowledge management
- Business analysis and decision-making
- Portfolio, programme and project management
- Integrated and business-wide IT systems, platforms and tools
- Supporting processes, standards, procedures and systems.

As a result of these new or improved capabilities, we will be better able to make informed, timely and better-quality decisions. In turn, these will play a fundamental part in improving performance, reducing costs, and increasing our agility as an organisation.

Improving the quality and timeliness of our decisions will support and potentially accelerate our hazard reduction programmes.

Decision-making will be underpinned by more effective information, thanks to improved core tools and processes that make sure we have a single source of reality. This aspect of transformation will deliver more up-to-date and consistent data, and the analytic tools to understand what the information means – addressing uncertainty, building confidence and helping us respond more quickly to changing or emerging needs.

make  
informed,  
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decisions







## Projects

Our blueprint for future projects delivery recognises the crucial role of projects in accelerating schedule and in maximising value creation in our value streams, by demolishing and building the infrastructure needed to deliver our mission, on time, scope and budget.

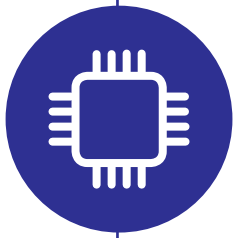
This area of the business is demonstrating measurable success in reskilling and redeployment too, moving hundreds of people from operational roles into projects via our Project Academy – itself a feature of the workstream's improvements.

Also in Projects we are embedding project disciplines, improving the logistics we will need for construction projects, developing project leadership behaviours and skills, and enhancing our working arrangements to align with value streams. We are transforming the value we get from design engineering (including safety cases), project systems and tools (working with the Enterprise Management workstream) and our intelligent client capability (working with the Supply Chain workstream).

Developing this intelligent project and client capability is especially important given our transformative approach to working with partners. Our Programme and Project Partners (PPP) approach will transform Sellafield through carefully-managed market enhancement, integrating and improving the major projects that are crucial to delivering our mission.

This approach will achieve faster and more effective project delivery, more opportunities for 'learning from experience', and stronger links with our supply chain – which itself will transform prospects for ongoing employment and financial stability.





## Technology and Innovation

Achieving our strategic objectives will depend on our short to long-term technical capability and innovation. New solutions will be key to accelerating hazard reduction, and we need to plan and prepare, and implement effectively, future technical service requirements, and consider the impact of new trends and technology such as robotics, for example.

This workstream will review and bring on board new ideas and business models, using an 'adopt, adapt and develop' approach that builds on experiences elsewhere and tailors them to maximise their benefits in a nuclear regime.

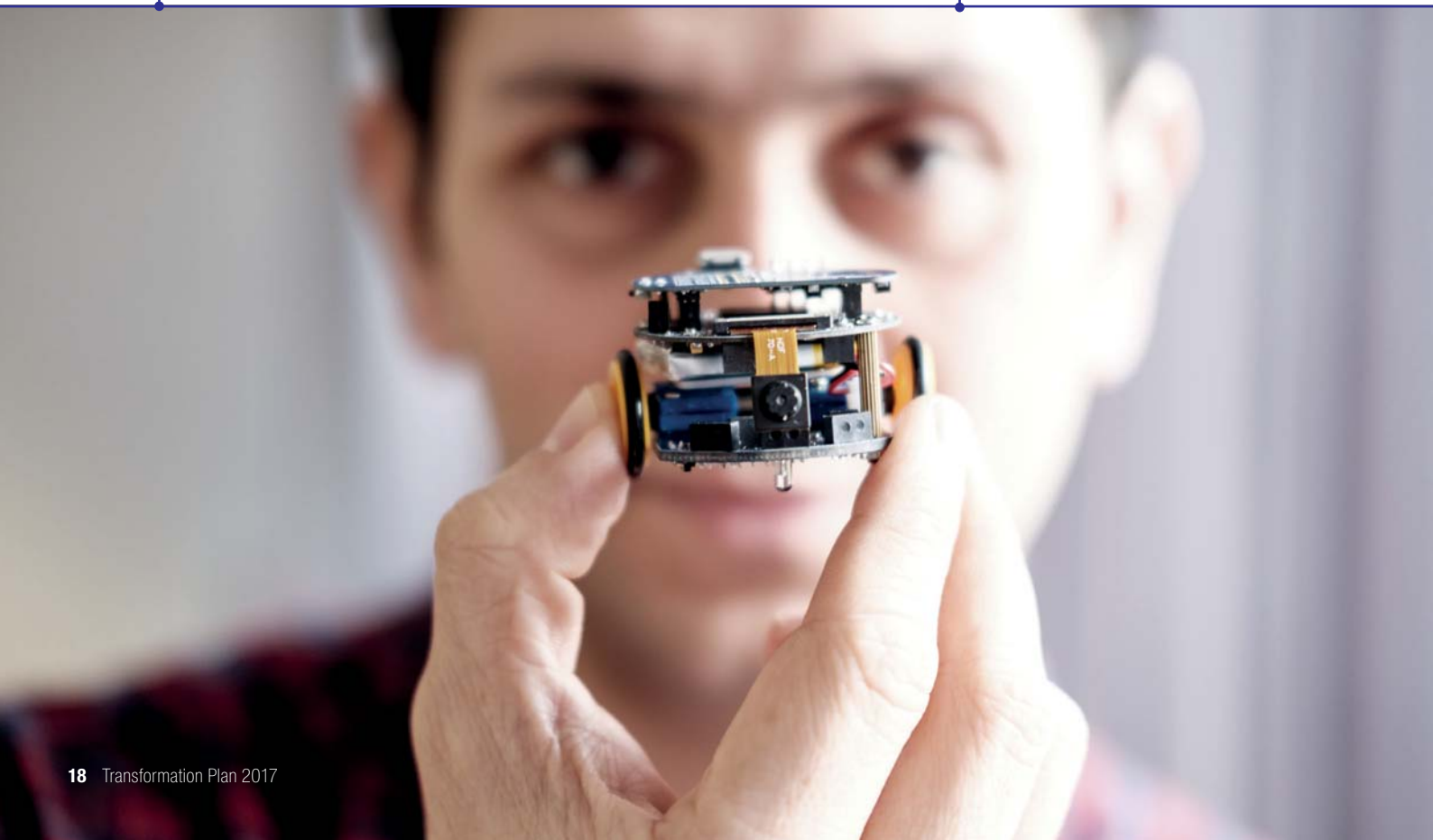
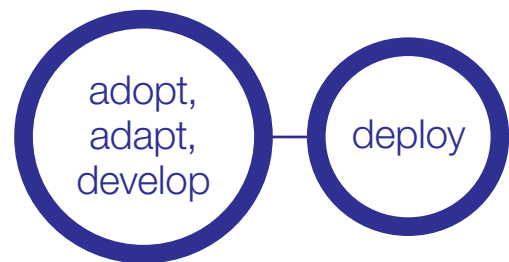
Making sure that the end-state options, described in our Corporate Strategy, are factored into transformation plans is essential in building a sustainable future.

We will review trends in other sectors and across other Government departments, capitalising on best practice and benchmarking. For example, we will look at relevant industries such as robotics and autonomous systems in hazardous environments, as well as technologies and trends in areas such as digital, automation and new materials.

We will make smart investment choices that provide pace-setting solutions and deliver both immediate value and a longer-term return.

Innovation is not just a technical opportunity; finding new ways to address challenges will increase value and effectiveness in every part of our organisation as we embrace commercial and operational solutions.

What's more, everyone has a part to play in driving innovation, and this workstream will actively encourage and capture ideas and potential new approaches from around our workforce and our wider stakeholders.







## Safety and Security

Our first priorities for both mission delivery and transformation are safety and security, particularly during a period of significant change.

We recognise also that a transformed organisation will require significant changes in these enabling areas, to support the new ways of working we will need in value streams and functions. Driving transformational change in safety and security will reduce complexity, and help us act more efficiently and flexibly without compromise or risk, and prepare for future threats in a changing world. This keeps everyone safe and secure, especially during change.

In Environment, Health, Safety and Quality (EHS&Q), we will define the management systems, quality assurance and safety processes we need to work in value streams, and protect our international environmental and standards accreditations. For example, we will look at how we manage risk most appropriately, and the most efficient and safe way to monitor safety in both human performance and the environment.

In Security and Resilience, we are improving and monitoring our strengths and opportunities constantly. In particular we are strengthening our response to the growing threat of cyber-crime, and we continue to enhance our physical resilience.



# Enabling the enterprise

## Building a high-performance culture

Transforming our culture will prove as important as transforming our ways of working, as success depends on the actions people choose to take every day. Enhanced tools and systems will deliver greatest benefits when they are actively used by high-performing people.

What's more, our wish to become a world-class demonstrator of nuclear capability will be built largely on the talent, mindsets and behaviours of our people.

This is a two-way street. Our expectations of our people will be high, and reward will reflect performance. However, our people can expect much in return in our transformed organisation.

We are developing an agile and flexible culture in which we maximise performance and prospects for our people and partners, and where we value, respect and reward people for their highly-productive performance.

We believe that innovation is driven not so much by process but rather by people who instinctively and habitually look for better ways of doing things.

That's why ideas, options and contributions are encouraged and welcomed as we transform. We will coach and motivate our people to develop our drive for continuous improvement, offering them routine opportunities to share and solve problems and develop new ideas. This will significantly enhance personal leadership and performance.

We will nurture and manage culture change as proactively as we manage transactional change.

We will do this to be sure of attracting, retaining and rewarding talent. We will do this to increase job satisfaction and pride for everyone. We will do this because we know that delivering on our promise as a business depends on every one of us playing our individual part.



this is a  
two-way  
street

## Communications and Engagement

Successful transformation requires us to win 'hearts and minds' across our many stakeholders, such as our organisation and employee representatives, government, supply chain and local communities.

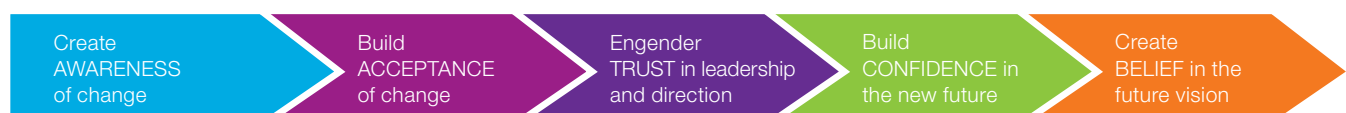
Regular and interactive communications will help everyone better understand the changes ahead, and what these mean for them. We will focus largely on evidence of change, sharing case studies, learnings and experiences from our transforming organisation.

We will seek input, experiences and involvement from our stakeholders,

and prioritise communications to make sure our audiences hear from us in a co-ordinated way.

In addition, we will define and support the communications and engagement approach, tools and skills we will need in the future, operating as a high-performing company.

Our communications and engagement approach is based on the five strategic steps shown below, influencing over time how stakeholders feel about our transformation.





# Corporate Centre and Portfolio Management Office

We are taking an innovative approach to building the Corporate Centre and developing transformation. We have a dedicated portfolio management office (PMO), which will work closely with the Corporate Centre to integrate and support the many programmes and projects that will transform Sellafield.

This will give us discipline, focus and overview, from planning and prioritisation to review and reporting. The PMO will make sure everything is co-ordinated and cohesive. This helps us achieve 'economies of scale', and create a whole that is greater than the sum of its parts.

This alignment is important when it comes to prioritising and sequencing. The PMO understands where changes need to happen in a certain order, or where one change depends on another benefit being realised, and it schedules work accordingly.

Therefore, we will run an integrated plan with a clearly-defined set of transformation deliverables, making sure the effort is properly resourced and focused on mission-critical priorities. This will pull together transformation workstreams and significant change in the functional enablers, building a single picture of

all transformational change across the business. This single picture will help the PMO consider the operating model and systems needed to support our transformed organisation.

Our transformation approach is ambitious, and the PMO makes sure it is supported by appropriate and robust governance, with clear accountabilities. This makes sure the teams involved are empowered to develop opportunities, and that help is always at hand to maximise the probability of success.

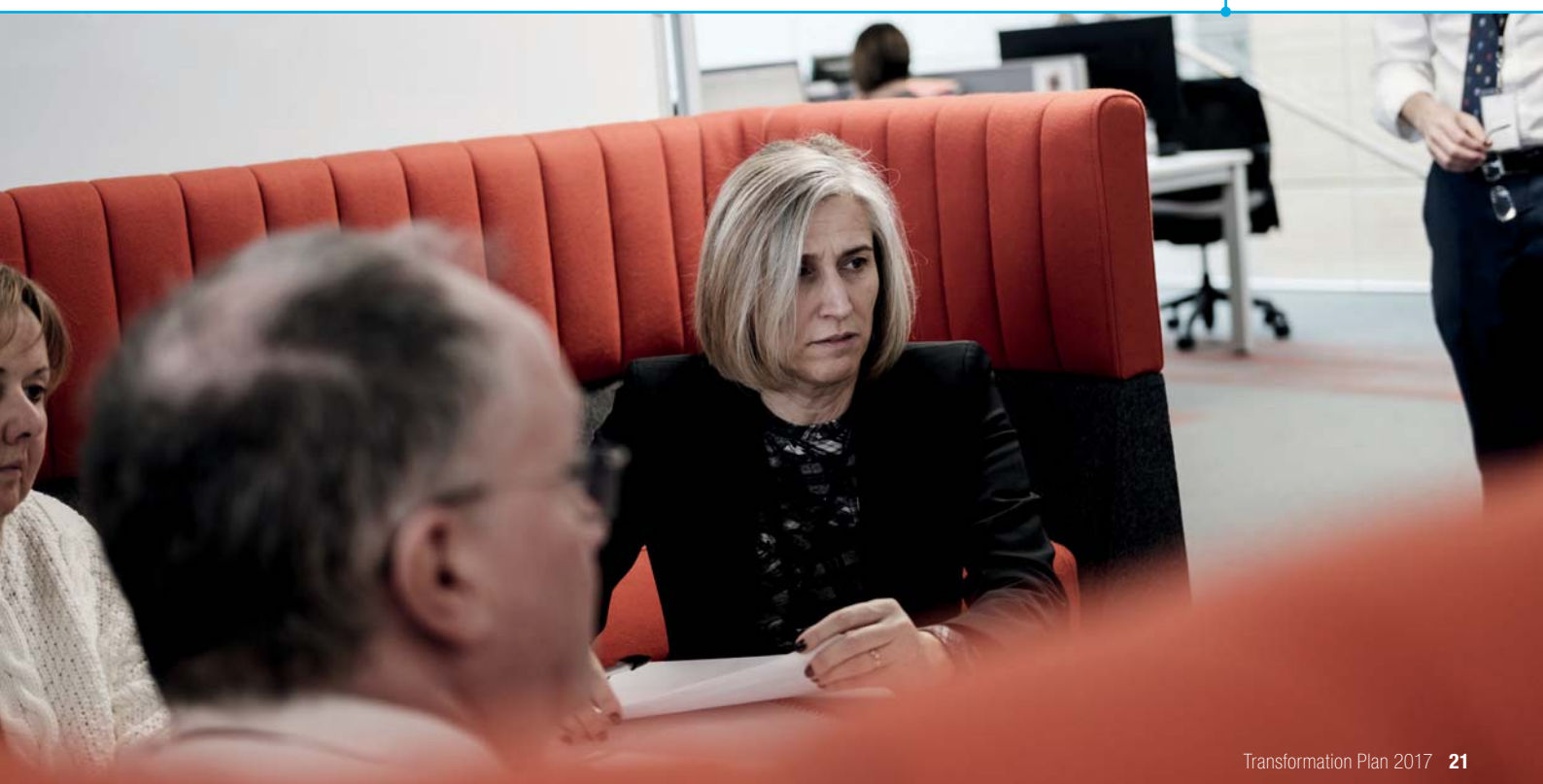
The PMO will define measurable deliverables, manage schedules, develop and track cost benefit analysis, identify and review risk, support formal reporting, and track metrics.

The PMO will use a common set of business and economic assumptions, data and tools, based on core business analysis. These,

coupled with a central focus on transformation, will mean we always have a 'single source of reality' about our progress and priorities, as well as about costs and benefits.

We will work with the NDA and with government parties such as the Infrastructure and Projects Authority, to make sure our ambitious approach is also measured and robust enough to deliver maximum return on investment.

ensure  
everything is  
co-ordinated  
and cohesive



# History of Sellafield

Sellafield has been nearly 80 years in the making. A pioneer for the UK's nuclear industry, it supported national defence, generated electricity for nearly half a century, and developed the ability to safely manage nuclear waste.

Each chapter of Sellafield's history delivered great benefit for the country while creating a complex nuclear clean-up challenge for which there are no blueprints.



1940s

## Munitions:

At Sellafield, TNT was made and munitions shells filled.

## Nuclear deterrent:

The remote nature of the site, along with its industrial workforce and experience in working for the Ministry of Supply, makes it the ideal location to produce plutonium for the country's atomic weapons programme.



1950s

## Reactor construction and operation:

The United Kingdom Atomic Energy Authority is formed. The world's first commercial nuclear power station, Calder Hall, and the Windscale Advanced Gas-cooled Reactor are developed – both are forerunners of a fleet of nuclear power stations across the country.

1960s



1970s

## Commercial reprocessing:

Plans are developed to commercialise reprocessing at Sellafield. The site also comes under the ownership of British Nuclear Fuels Ltd. The United Kingdom Atomic Energy Authority retains ownership of the Windscale site.

Transforming Sellafield will increase the speed, effectiveness, cost-efficiency and innovation with which we address these legacy issues

### Legacy:

Redundant munitions structures and facilities buried underneath the site.

### Legacy:

First generation reactors requiring decommissioning.

### Legacy:

High level nuclear waste requiring treatment, storage and, in the case of foreign owned waste, shipment back to the country of origin.

Decommissioning the site will take us more than 100 years and there is much still that we don't know. Every day we are building greater certainty and we will be the generation that makes demonstrable progress in cleaning up Sellafield.

That will be our legacy.



1980s

1990s

### Waste management:

Construction commences on a new facility called the Thermal Oxide Reprocessing Plant (Thorp). The site is now the only nuclear site in the country that can safely manage all three forms of radioactive waste: low, intermediate and high.

Transforming Sellafield will demonstrate our nuclear capability, to improve prospects for our supply chain and stakeholders

#### Legacy:

Pilot plants, Thorp and Magnox reprocessing facilities requiring decommissioning.



2000s

### Multiple missions:

Thorp and Magnox are established as key international players in the fuel cycle, and reprocessing helps meet the requirements of domestic power generation and overseas customers. First generation reactor decommissioning gets underway, and preparation for wider decommissioning activities starts. Ownership of the site moves to the newly-created Nuclear Decommissioning Authority. Sellafield Ltd becomes the nuclear site licensee.

#### Legacy:

Aged pond and silo facilities remain with no waste removal capability. Investment in the assets is required to enable decommissioning.



2010s

### Risk and hazard reduction:

Access to the waste and fuel stored in our sixty-year-old fuels storage ponds and waste silos starts, retrieving it and moving it to modern storage. In 2016 Sellafield Ltd becomes a subsidiary of the NDA.

In 2016 Sellafield Ltd becomes a subsidiary of the NDA and an operator, accountable for performance and creating a new enterprise.

#### Legacy:

Pond and silo waste storage facilities with large inventories, which do not meet modern standards.



**Sellafield Ltd**

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