

## National Waste Programme

# Blueprint

NWP/ REP/045—Issue 2

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### Document History

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1	February 2015	Document created	H Cassidy	S McAvoy	H Kozich
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## Glossary

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ESC	Environmental Safety Case
HAW	Higher Activity Waste
ILW	Intermediate Level Waste
IWM	Integrated Waste Management
JWMP	Joint Waste Management Plan
KM	Knowledge Management
LFE	Learning from Experience
LLW	Low Level Waste
LLWR	Low Level Waste Repository
LTP	Lifetime Plan (NDA estate only)
NDA	Nuclear Decommissioning Authority
NWP	National Waste Programme
POTI	Processes, Organisation, Technology, Information
R&D	Research and development

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## What is a Blueprint?

A Blueprint is a document which provides a description (a model) of the different states of a programme over time as it transitions to achieve its vision and objectives. For the National Waste Programme, this Blueprint provides a description of the LLW management environment in the UK at three stages: now (2015), in the medium term (2020) and in the long term (2030).

The development of the Blueprint for the National Waste Programme enables all those involved in the programme to understand and implement the changes that need to be delivered to reach the 2030 end state.

## How is a Blueprint developed and structured?

A Blueprint contains three main sections:

- the start state of business operations
- intermediate state(s) to be delivered by different phases of the programme
- final state to be achieved at the end of the last phase of the programme

Blueprints utilise the Processes, Organisation, Technology and Information (POTI) model to define and describe the different states of the programme. The POTI model describes the scope of the programme and provides a description of the elements that form the programme’s scope for change.

Definitions for the elements of the POTI model are provided in Table 1.

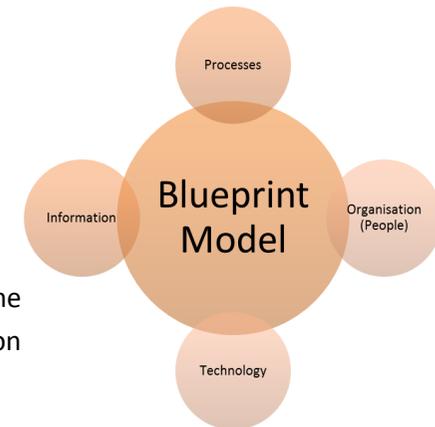


Figure 1—The POTI Model

Table 1—Elements of the Blueprint POTI Model

Element	Description
Processes	 The changes to processes and operational business models as a result of the work delivered by the programme (e.g. introduction of new ways of working).
Organisation	 The people changes that arise from the programme from organisational culture to specific roles / capability that an organisation may require.
Technology	 The technology requirements for the programme and includes systems, tools and infrastructure (e.g. new computer systems).
Information	 The information required at the different phases of the programme (e.g. changes to reports and data requirements).

### What is the National Waste Programme?

The National Waste Programme (NWP) has been established to implement the UK Strategy for the Management of Solid Low Level Waste (LLW) from the Nuclear Industry. LLW Repository Ltd leads the delivery of the NWP on behalf of the NDA, in collaboration with a wide range of stakeholders. The NWP supports LLW producers to optimise their waste management arrangements and shares information on best practice across the industry.

### What is the vision of the National Waste Programme?

Optimised LLW management across the UK that delivers value for money

### What is the mission of the National Waste Programme?

A National Programme that achieves a self-sustaining culture for optimised LLW management across the UK, delivered through:

- a governance framework that drives the implementation of the Strategy
- the sharing of best practice and learning from experience to support continuous improvement
- a sustainable infrastructure providing fit for purpose LLW management solutions that deliver value for money

### What will the National Waste Programme deliver?

The purpose of the National Waste Programme is to deliver a transformation in the way that LLW is managed in the UK, in accordance with the LLW Strategy. By 2030 the Programme will deliver a set of outcomes to achieve the strategic benefits shown in Figure 2.

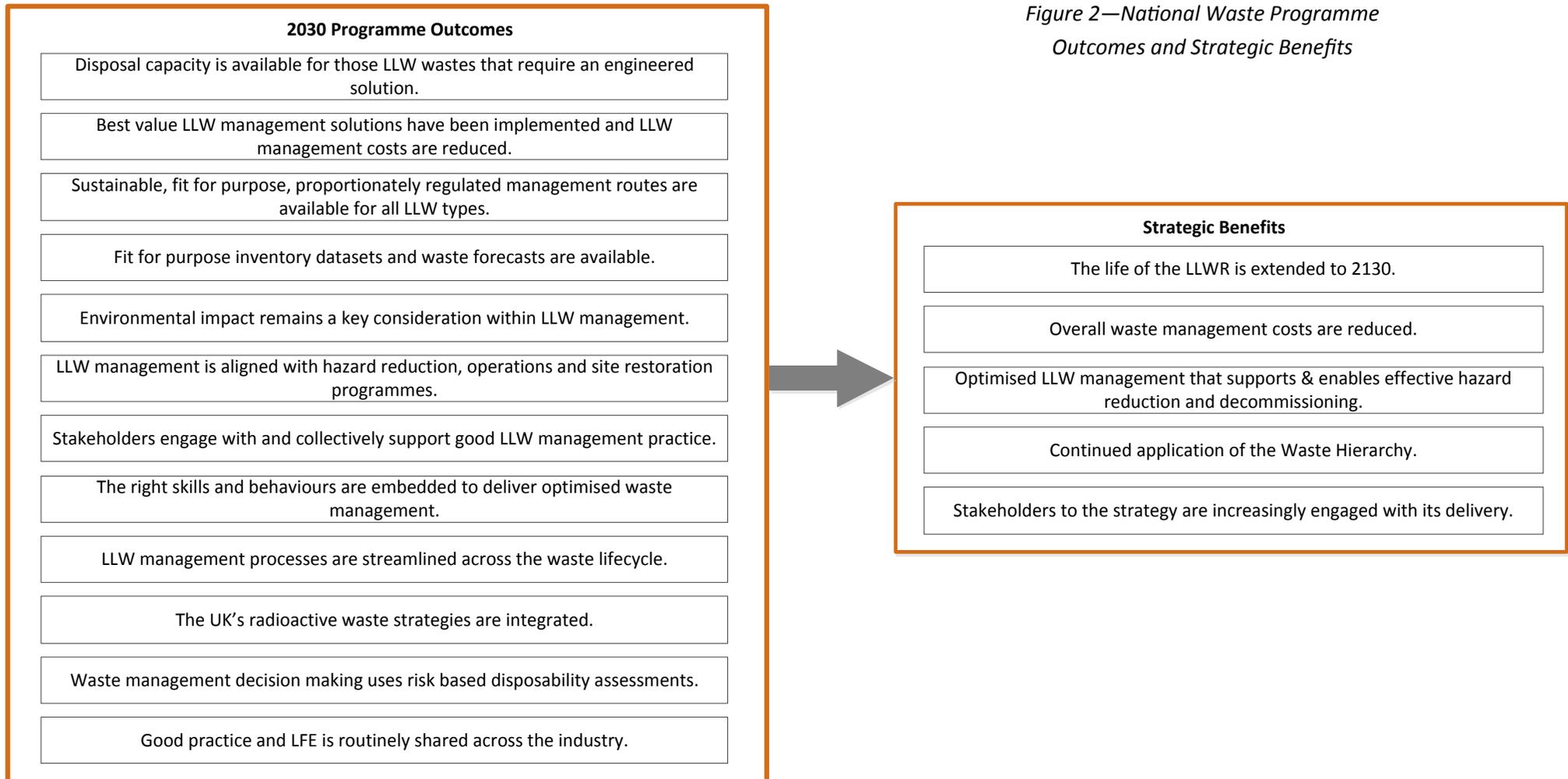


Figure 2—National Waste Programme Outcomes and Strategic Benefits

## National Waste Programme—Background

In 2008 the NDA and LLW Repository Ltd started the development of the first UK Strategy for the Management of Solid LLW from the Nuclear Industry, in response to the 2007 UK LLW Policy. At that time, the baseline strategy for LLW management was high-force compaction (where applicable), followed by disposal to the LLW Repository (LLWR); although some sites were using on-site infrastructure for alternate waste management. There was limited recognition of the Waste Hierarchy principles in LLW management due to the absence of alternative treatment and disposal routes.

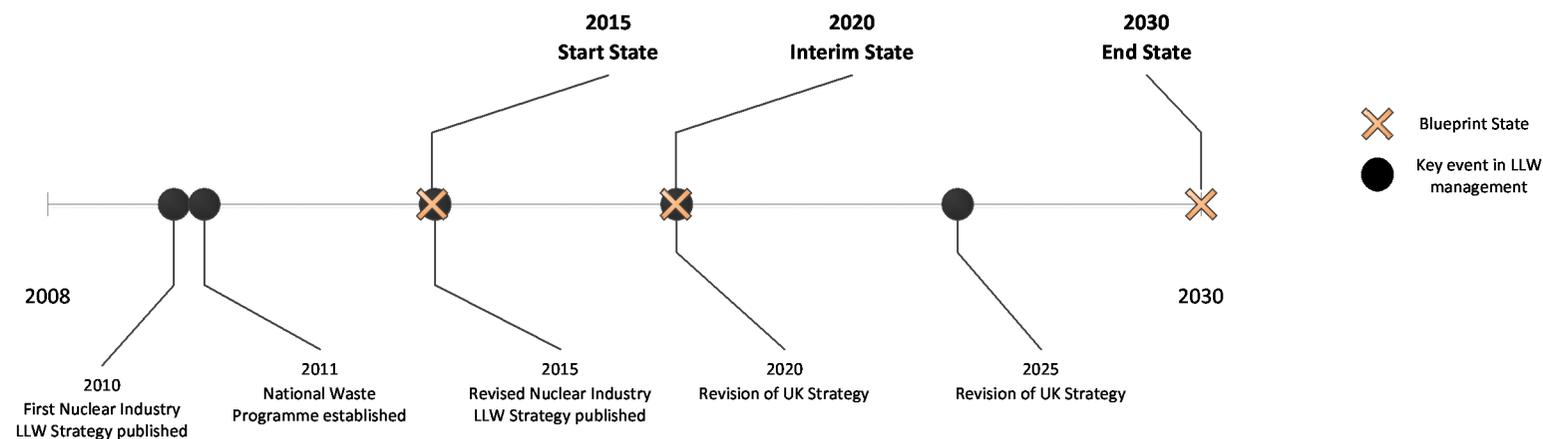
In 2010 the UK Strategy was published. By 2011 the National Waste Programme was established by the NDA to lead its implementation across the UK; LLW Repository Ltd had started to set up commercial frameworks to enable alternate LLW treatment and disposal routes for metallic, combustible and VLLW wastes; and waste producers had started to embed the application of the Waste Hierarchy into their LLW management arrangements.

By 2015 there had been significant change in the LLW management environment, including:

- the development and use of alternate treatment and disposal routes which had enabled the diversion of significant volumes of LLW from the LLWR
- the application of the Waste Hierarchy by waste producers when making waste management decisions
- the identification of opportunities for improvement and the sharing of good practice
- the engagement of a broad group of stakeholders within the National Waste Programme

In financial year 2014/15 87% of LLW arisings were diverted from the LLWR (almost 12,800 m<sup>3</sup>); and the number of containers being sent to the LLWR had reduced from 476 in financial year 2008/9 to just 193.

Figure 3—Timeline illustrating Blueprint states and key National Waste Programme events



The original version of this Blueprint defined the start state as 2008. This revised Blueprint for the National Waste Programme redefines the start state as 2015, recognising the revision of the UK LLW Strategy and the step change that has taken place in LLW management by the nuclear industry.

This document describes the Blueprint for the delivery of the National Waste Programme; defining the current state of LLW management in the UK and aspirational future states in 2020 and 2030.

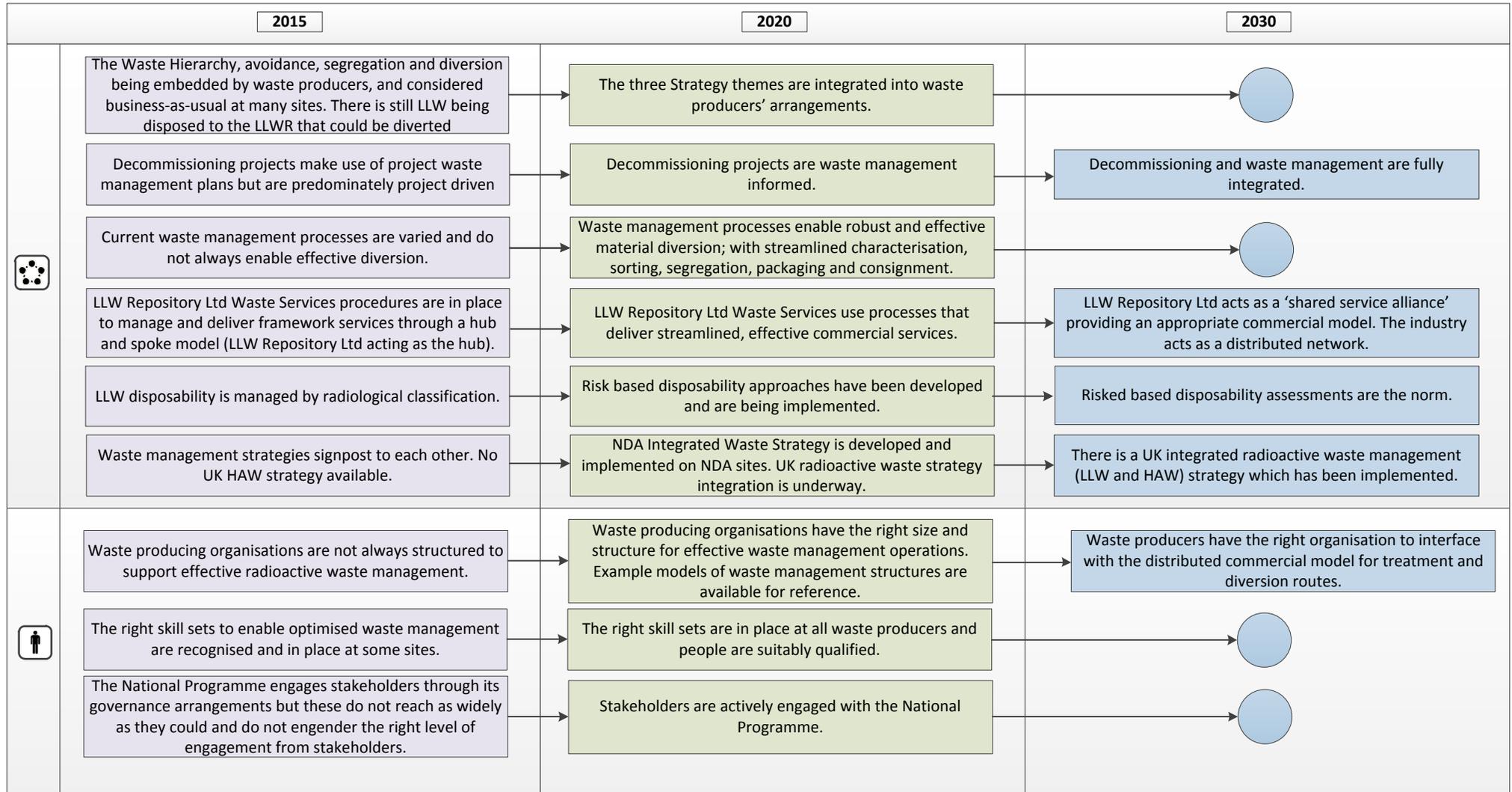


This Blueprint has been developed in collaboration with waste producers and other programme stakeholders. The future states described in this Blueprint will be achieved through the delivery of specific projects and activities through the Programme. It is a live document and will continue to evolve through the programme lifecycle.

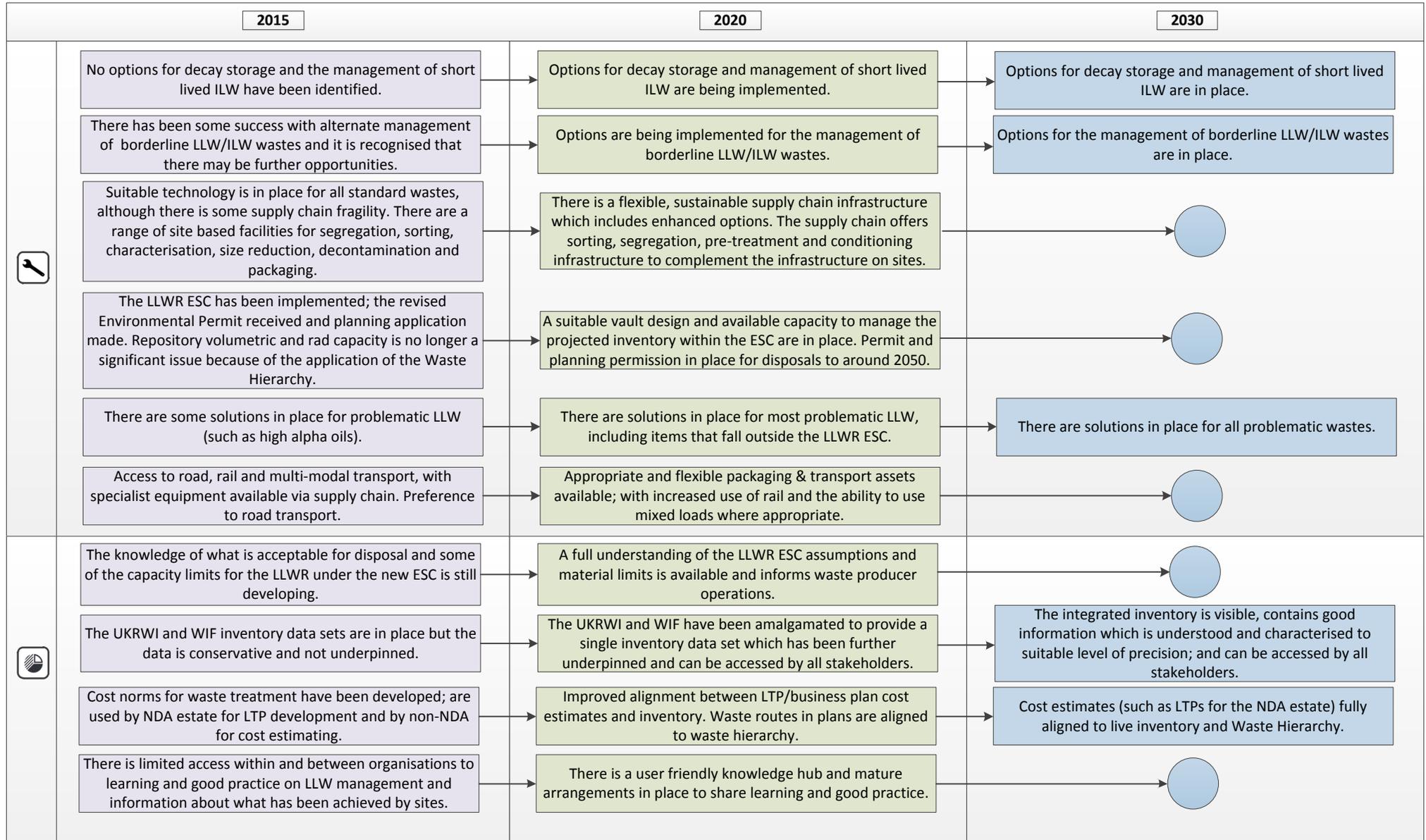
The remainder of this Blueprint document is structured to provide:

- a high level summary of the start, interim and end states
- a detailed roadmap, providing the POTI analysis for the three states

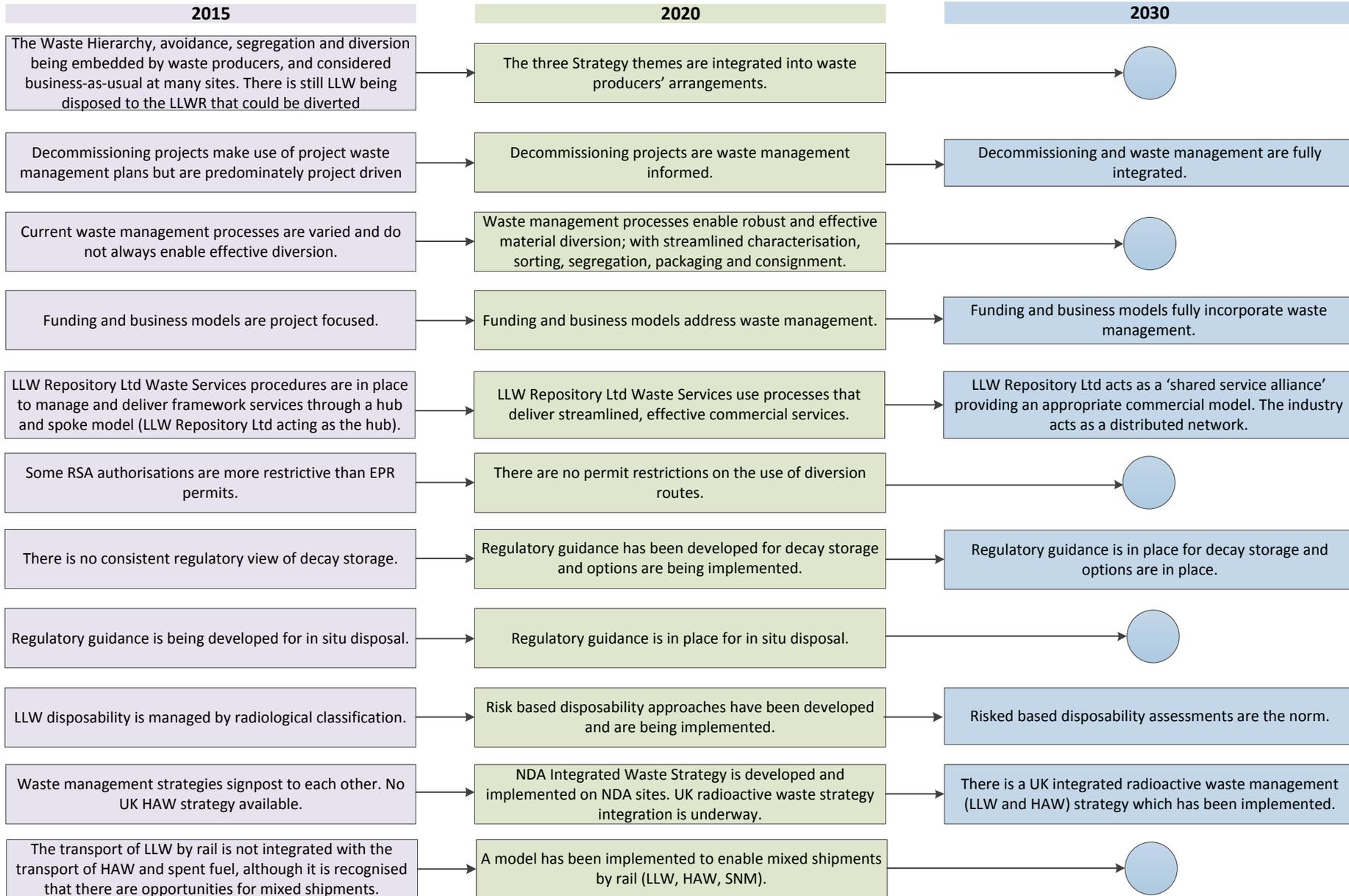
High Level Summary - Start, Interim and End States



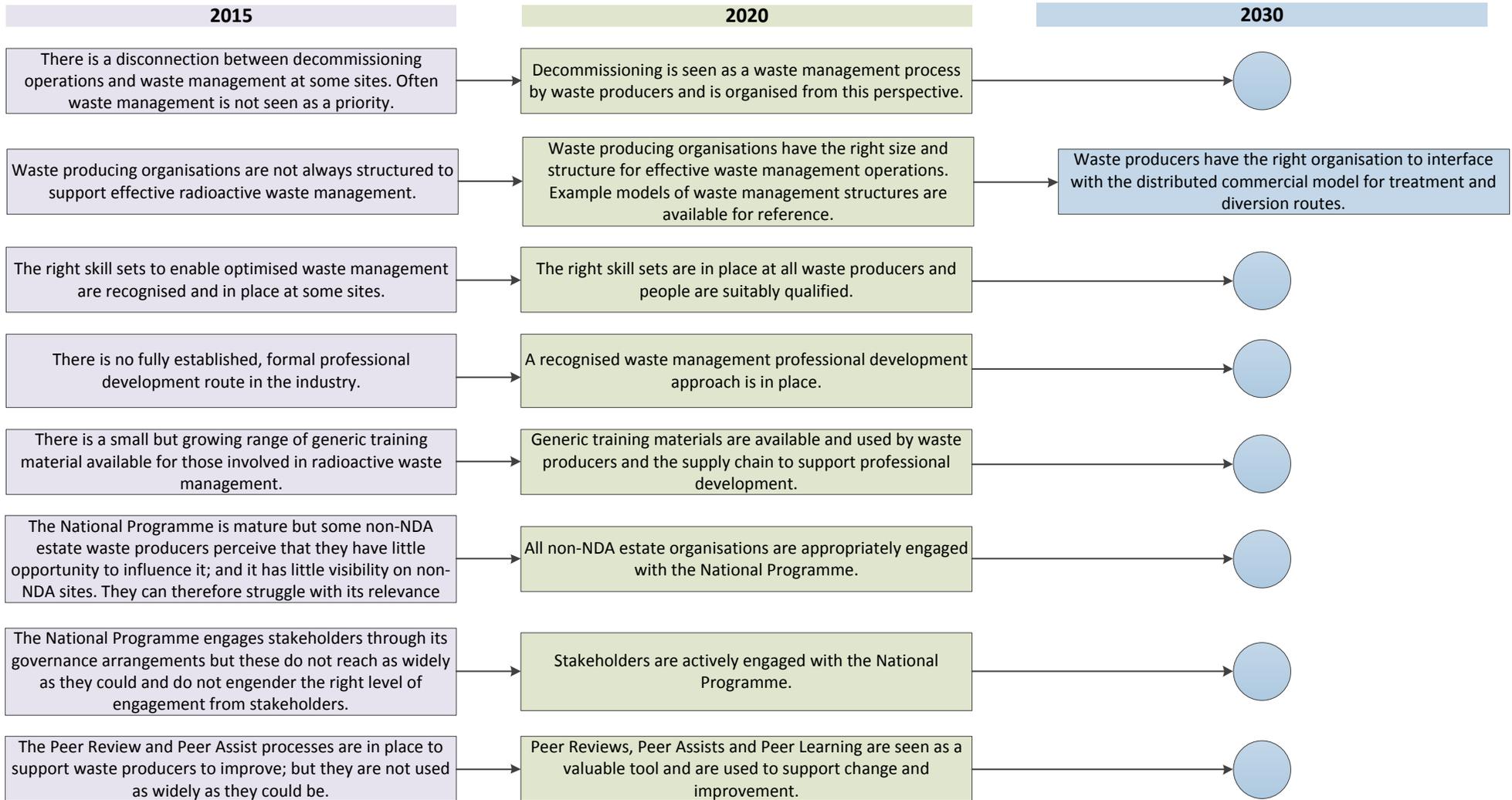
High Level Summary - Start, Interim and End States continued



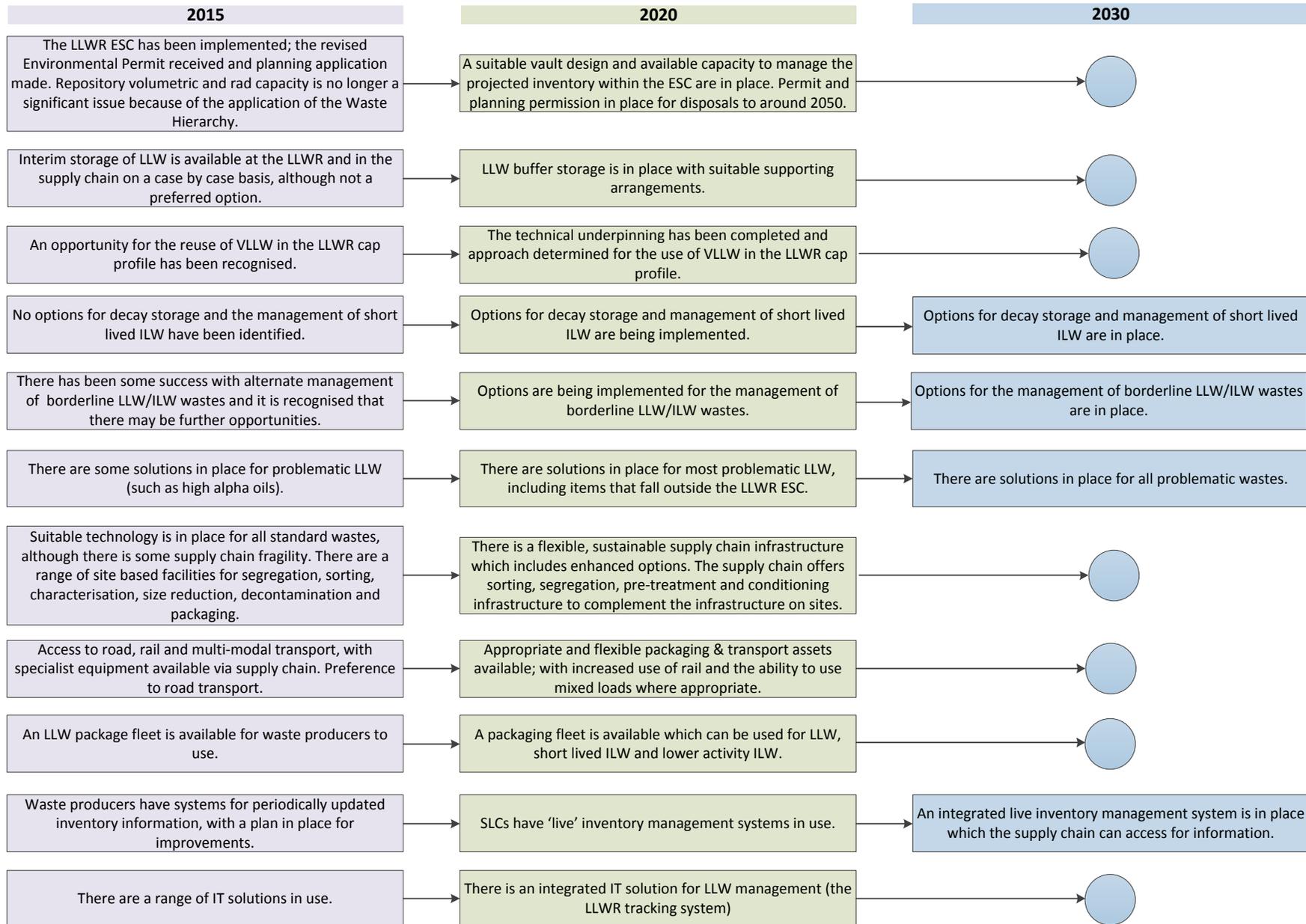
## Process



Organisation (People)



Technology



Information

