UK Atomic Energy Authority

A STEP towards commercial fusion

Chris Waldon – STEP Deputy Director

8th Supplier Event

Department for Business, Energy & Industrial Strategy

Towards Fusion Energy

The UK Government's Fusion Strategy

October 2021

REGULATORY HORIZONS COUNCIL

UK Atomic Energy Authority

Regulatory Horizons Council

Report on Fusion Energy

31st May 2021

Department for Business, Energy & Industrial Strategy

Towards Fusion Energy

The UK Government's proposals for a regulatory framework for fusion energy

Closing date: 24 December 2021

October 2021

UK Atomic Energy Authority

Deliver a UK prototype fusion energy plant, targeting 2040, and a path to commercial viability of fusion.

STEP mission

A major infrastructure programme

STEP high-level schedule

UK Atomic Energy Authority

Concept (till 3/24)

- Concept / Reference Plant Design
- Programme Development
- Site selection
- Transition to Target Operating Model

Detailed Design and Mobilisation

- Engineering Design
- Long lead procurement
- Early Manufacture
- Site development

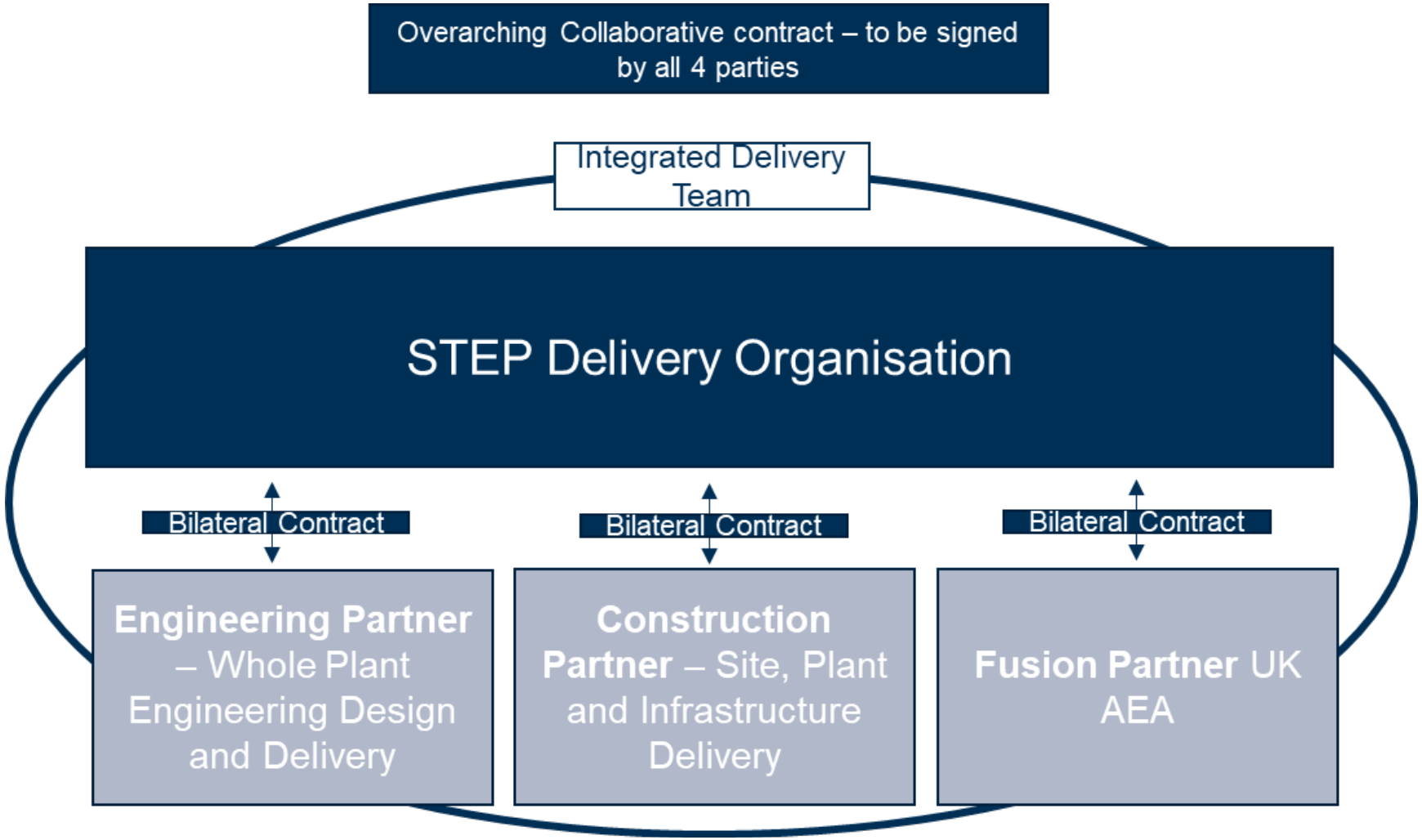
Main Construction

- Full plant manufacture and assembly
- Full site development
- Equipment and system testing

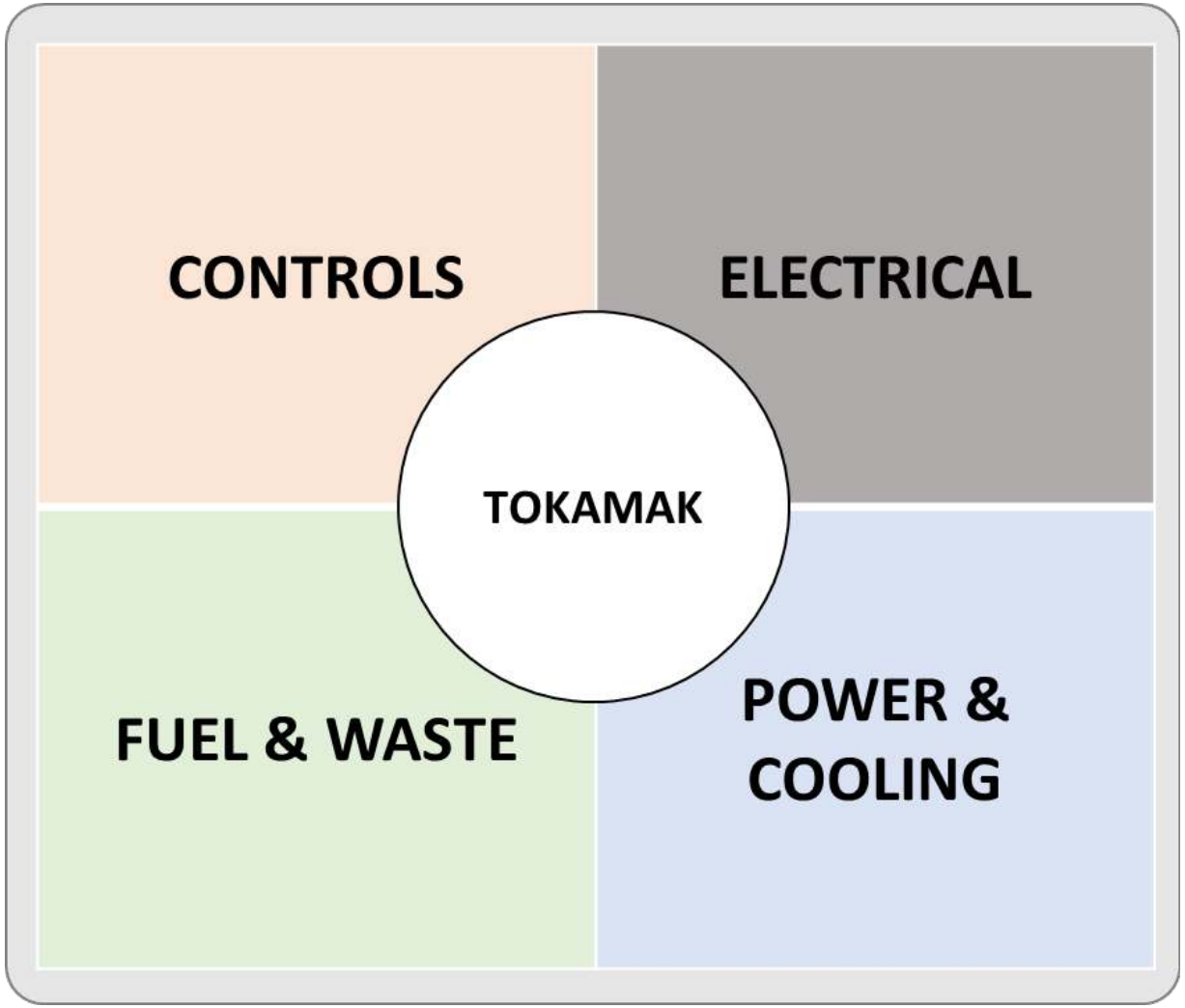
Commissioning and Operations

- Non-active and active commissioning
- Prototype ops

How STEP will be delivered

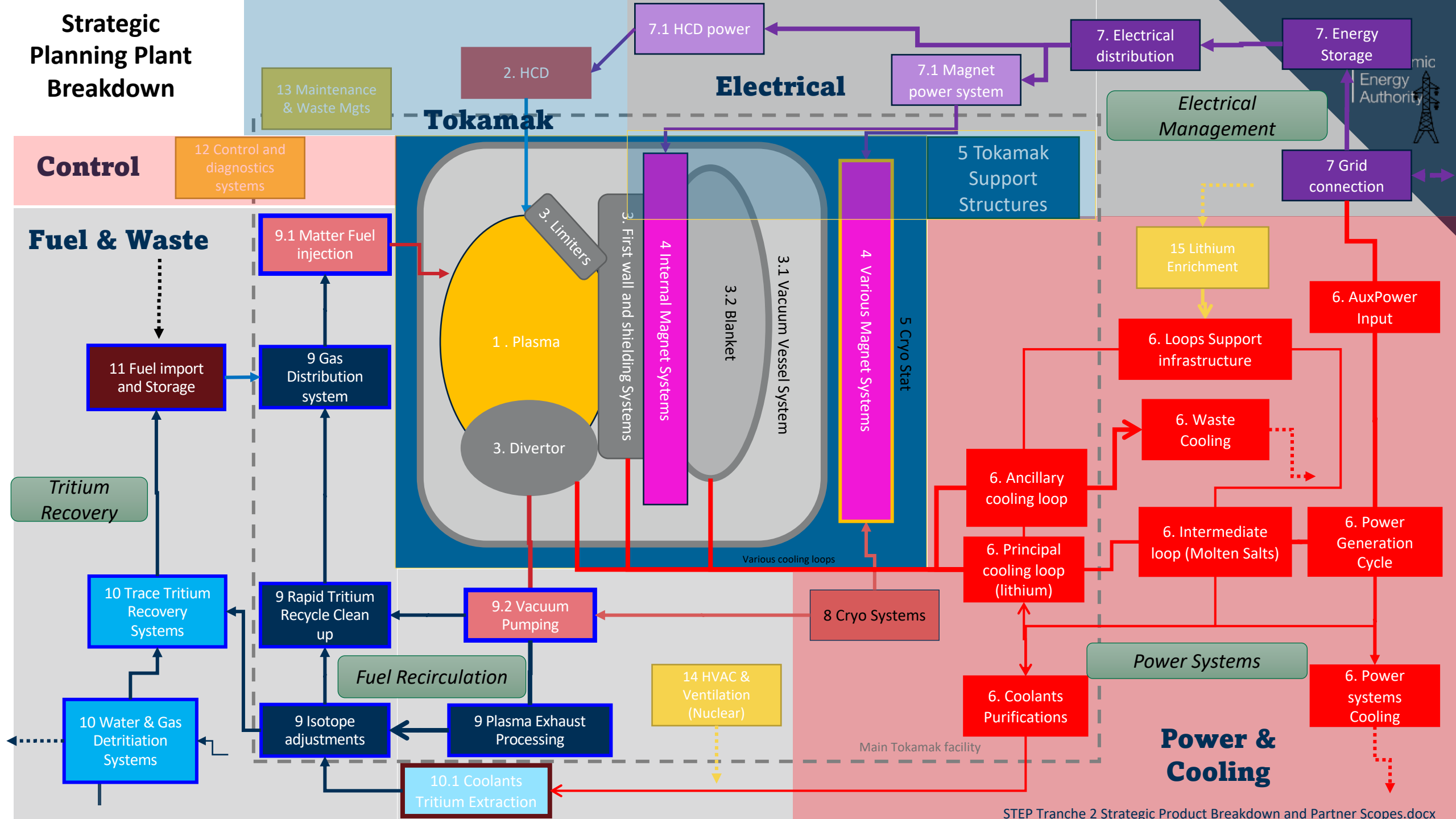


Super Groups Systems



Grouping is to aid organisational structure and combine common skillsets and systems with high level of interfaces. The grouping will never be perfect but aligns key design developments to common objectives.

Strategic Planning Plant Breakdown



A future home for STEP

- Site selected – by end 2022
- Establish local presence
- Site development
- Consenting and permissioning
- Manufacturing and construction begins

More information

- We've updated our web portal – www.step.ukaea.uk
- Visit the portal for information about the programme
- Sign up to our mailing list for regular updates
- Email us – communications@step.ukaea.uk