

PE T P 

PRISON ESTATE

**TRANSFORMATION PROGRAMME
DESIGN & CONSTRUCTION**

Introduction

Ministry of Justice

Prison Estate Transformation Programme - PETP

Prison Estate Transformation Programme:

Vision:

- *Prison Estate Transformation Programme: Transforming prisons, Changing lives for:*
- People in our care by holding them in decent conditions reflecting security, stage in their journey and with access to targeted services to give them the hope, help and skills needed to turn their lives around.
- **People who deliver our service (staff/contractors) by** creating better and safer working environments that allows people to rehabilitate and turn their lives around.
- **Families by** enabling greater family contact through friendly visitor facilities, virtual visits to maintain and build family relationships.
- **Victims by** reducing reoffending and enabling more hearings to be carried out via video links reducing the need for victims to come face to face with offenders.
- **UK Citizens by** reducing reoffending, increasing efficiency, improving the local economy, regenerating run-down sites and selling land for housing, helping to grow a skilled modern construction workforce and obtaining value for money for future prisons through competition.

We run a large and varied prison estate in England + Wales

This includes:

- 104 public sector prisons, 14 private prisons, 3 secure training centres and 2 immigration removal centres;
- Of these, 12 are women's prisons (2 of them privately run);

Youth provision is provided separately, in:

- 5 under-18 Young Offender Institutions (YOIs) (1 privately run) and;
- 3 Secure Training Centres (STCs), of which 2 are privately run.



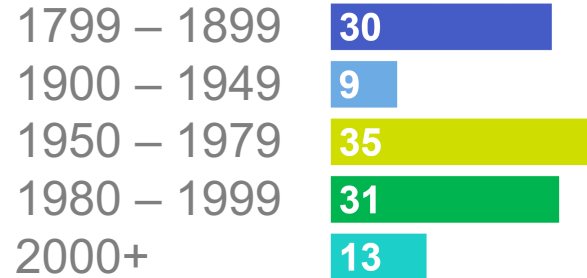
Key
 Foreign Nationals Prison (FNP)
 Immigration Removal Centre (IRC)
 Young Offenders Institution (YOI)
 * Temporarily closed

The prison estate is old – and we have a mismatch between the places we have and the places we need

- 25% of our prisons were built before 1900. They are inflexible and costly to maintain or modernise;
- HMP Berwyn (new prison) boasts a steady state cost of £14,400 per place, compared to an average cost of £22,600 for those prisons marked for closure;
- We have an oversupply of 10,000 reception places and under-supply of 14,000 training places;
- Little or no IT infrastructure. HMP Wayland is currently piloting a digital prison model and HMP Berwyn was built with the necessary infrastructure.



Prisons by year of construction



PETP – what we aim to achieve and how

Outcomes:

- Put safety, security and rehabilitation at the heart of prisons
- Rebalance the prison estate to better fit the risks and needs of the population, delivering greater value for money.
- Clarify prison functions for empowered Governors.
- Modernise the prison estate.
- More flexible space for educational, training and rehabilitation outcomes
- Use technology to support prison staff and to make our prisons more efficient and safer

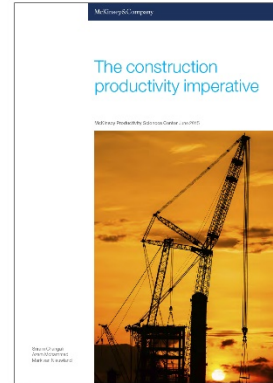
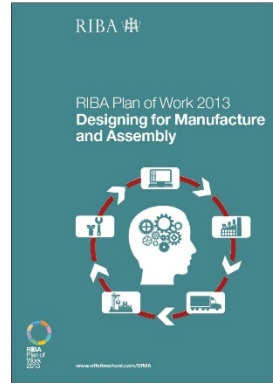
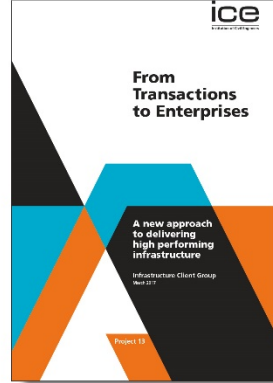
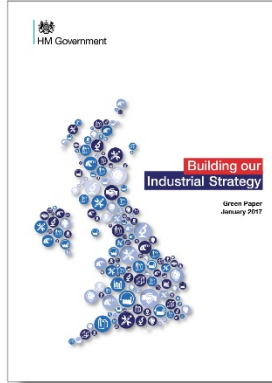
Approach:

Reconfigure the estate to match types of prison places available with the needs of prisoners (risk, safety, rehabilitation).

Redesign our prison operating models to ensure that our regimes meet prisoners' needs and provide better rehabilitative outcomes.

Replace old, ineffective & overcrowded prison places with modern ones by building:
Up to 6 new prisons
And new houseblocks on existing sites

Current context



Prison Estate Transformation Programme:

Transformation:

Three main strands of Transformation:

1. UK Construction Sector
2. Changing people's lives through rehabilitation
3. The way we work to achieve successful delivery of our projects

Transforming construction

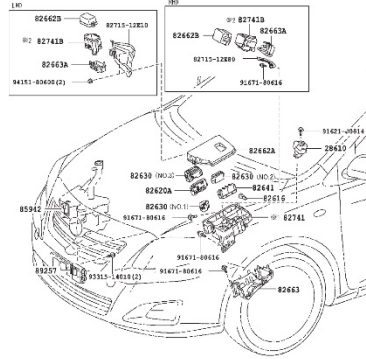
How PETP is driving the Government's
adoption of smart construction

Platforms in manufacturing + software

Engine block



Chassis



Car



Component



Platform



Product



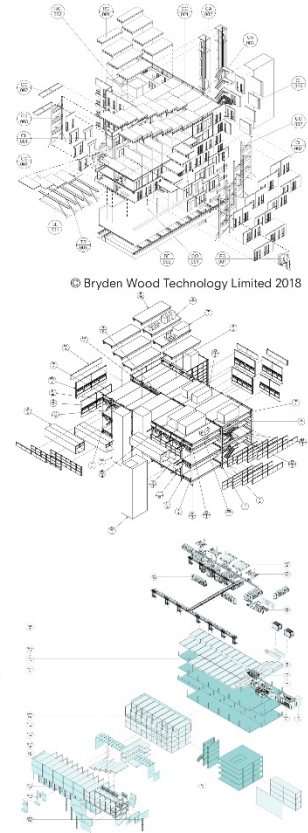
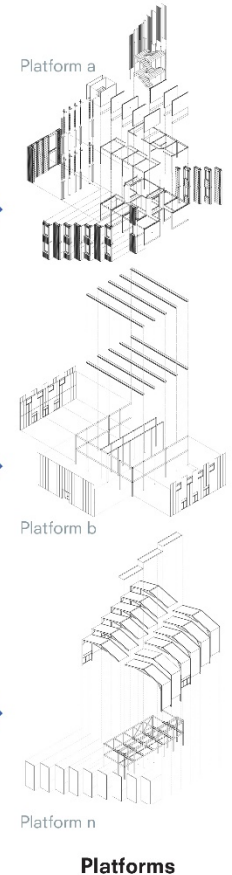
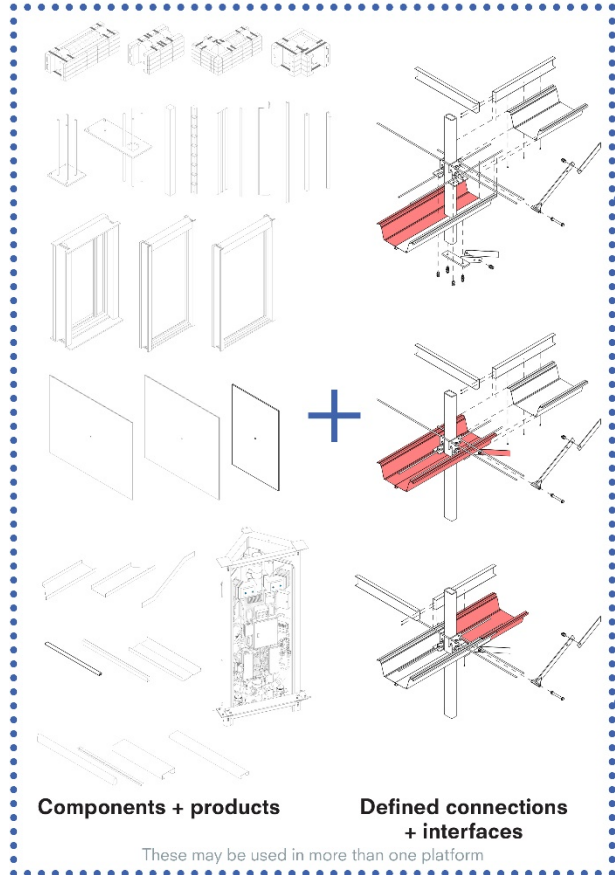
Uber



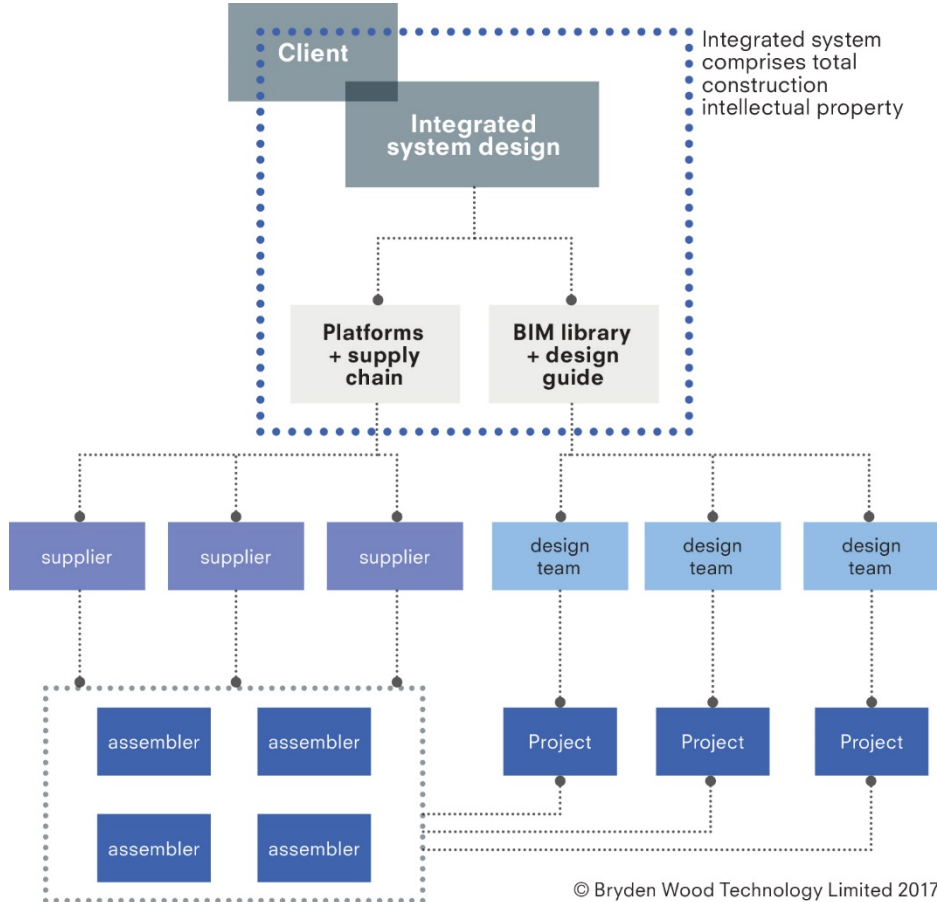
iPhone

Peer-to-peer ride sharing, food delivery and transportation network

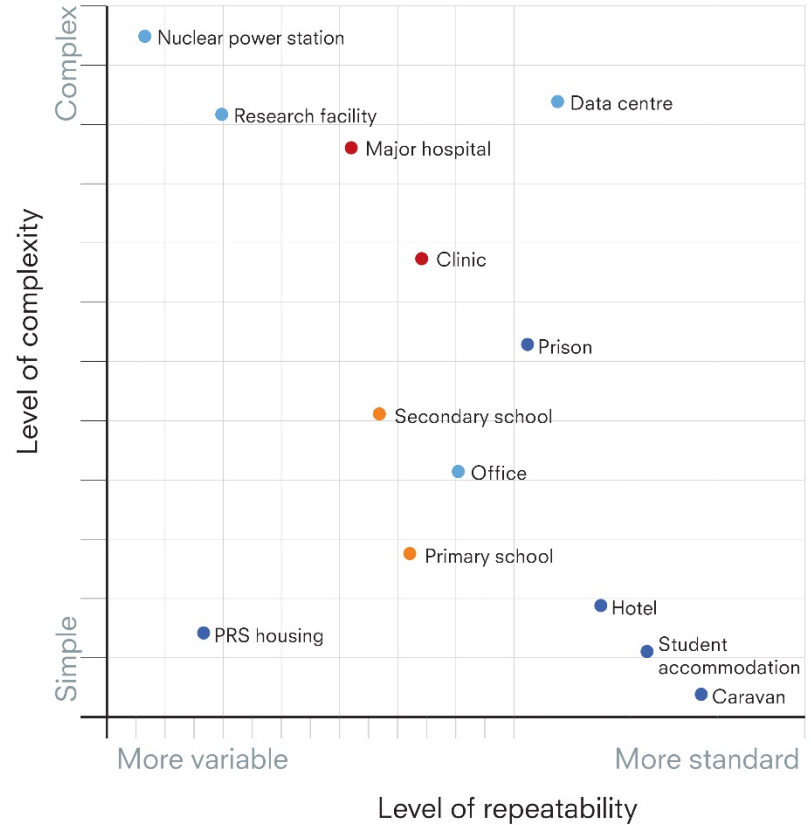
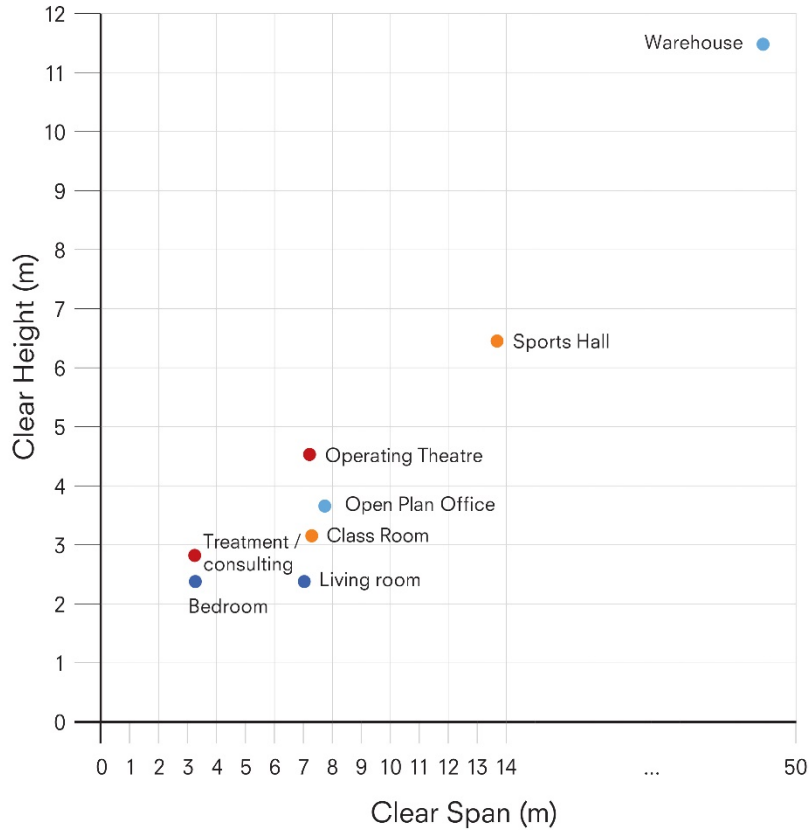
Construction platforms



The new paradigm – integrated solutions



Defining standard 'platforms'



Residential



Health

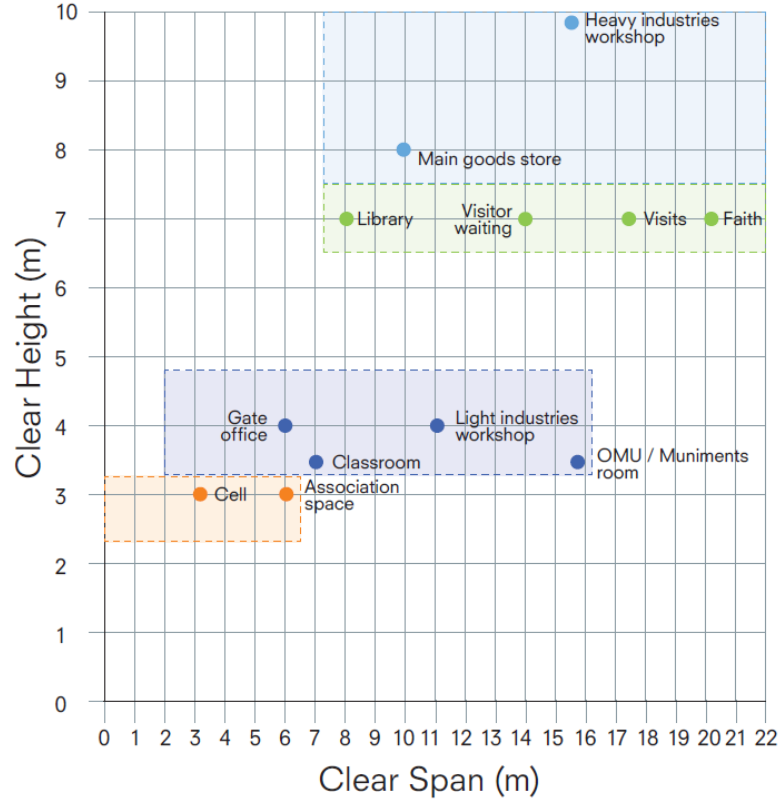


School

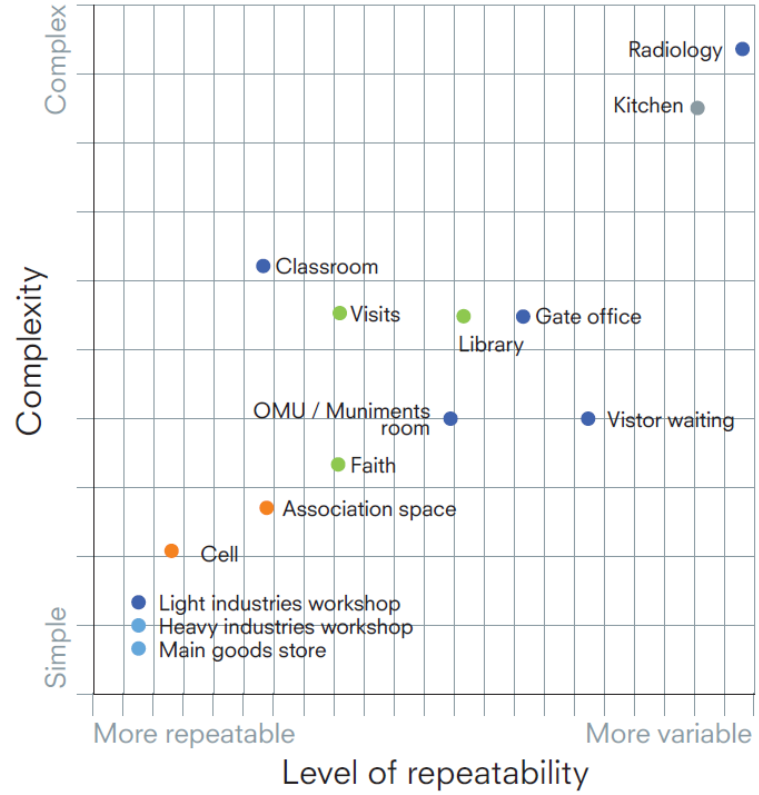


Offices

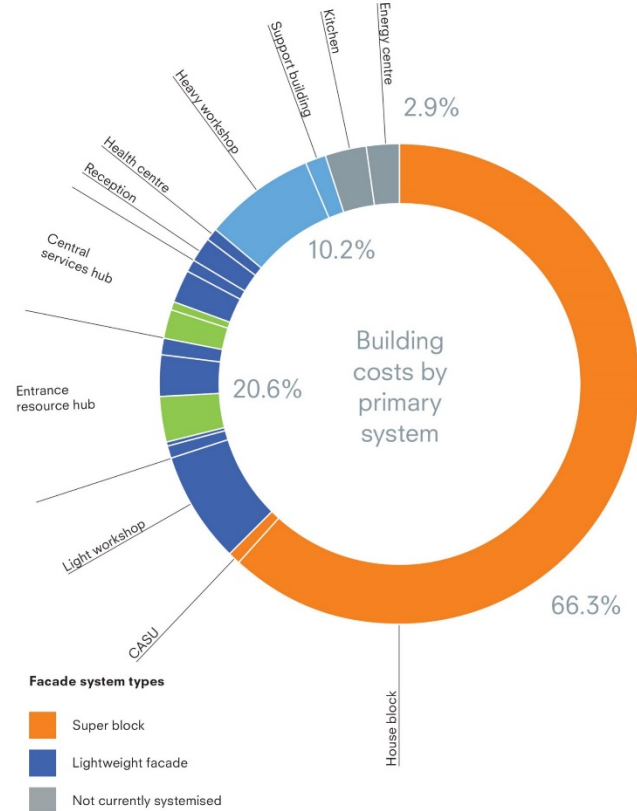
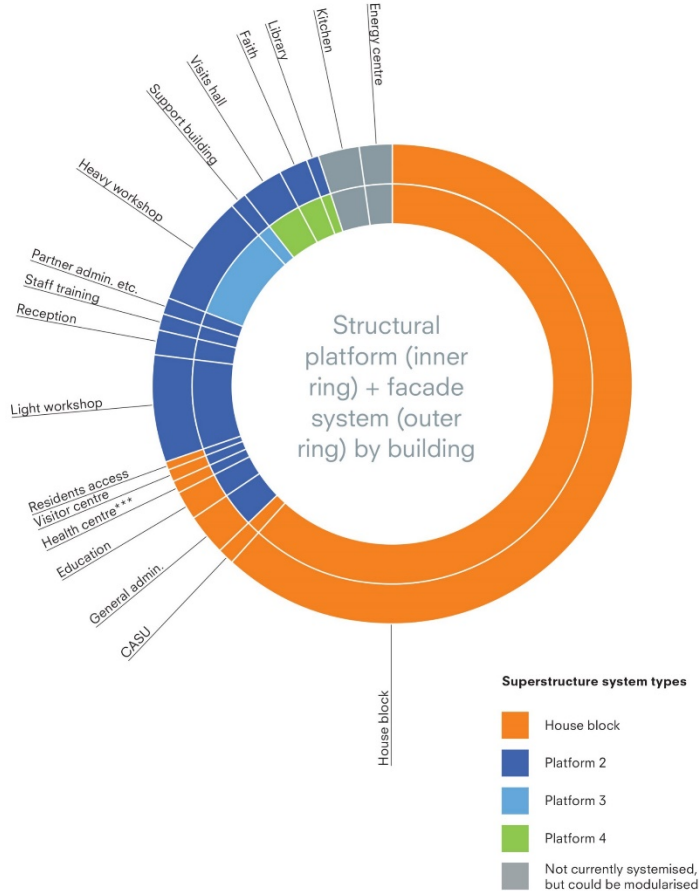
MOJ platforms – proving the hypothesis



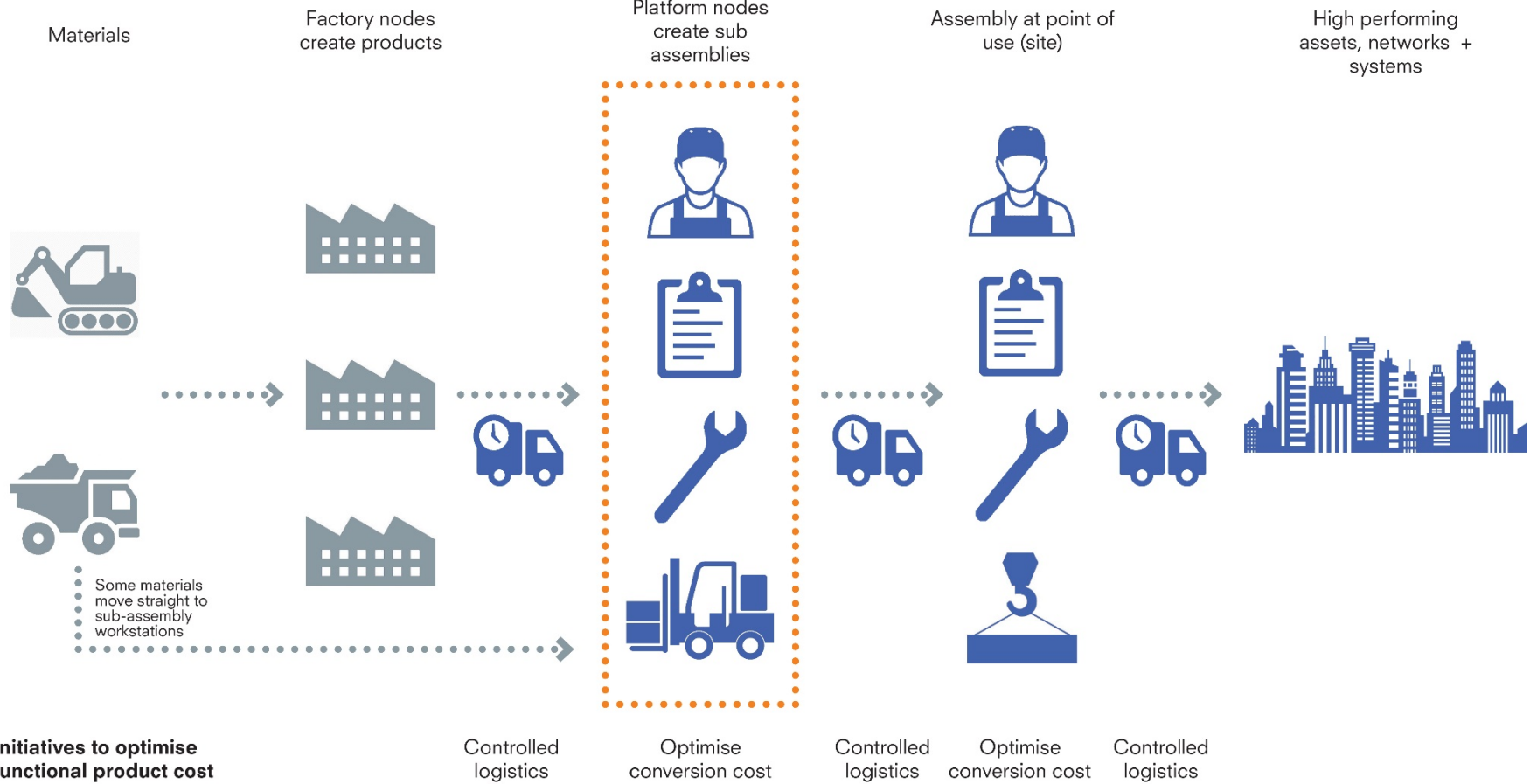
- House block
- Platform 2
- Platform 3
- Platform 4
- Not currently systemised



Platforms by relative occurrence

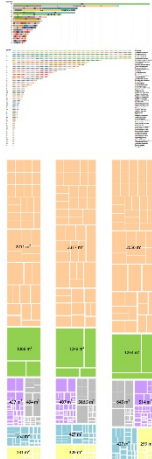


Creating manufacturing centres for Platforms

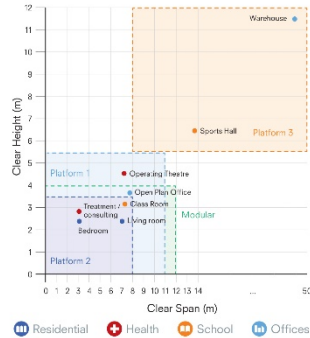


Sub Assembly Workstations (SAWs)

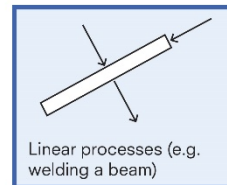
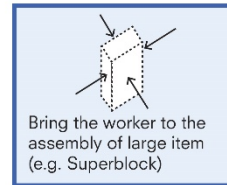
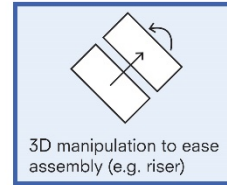
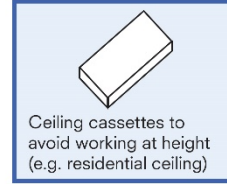
Analysis, integration, rationalisation, optimisation



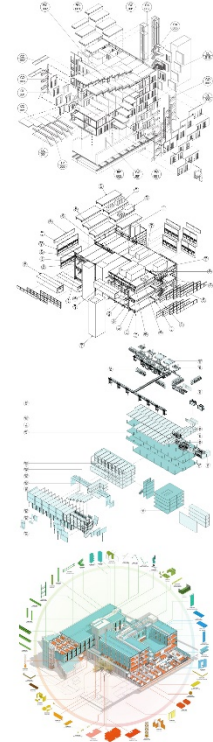
Platform selection or creation
 First level of abstraction



SAWs selection (or creation)
 Second level of abstraction



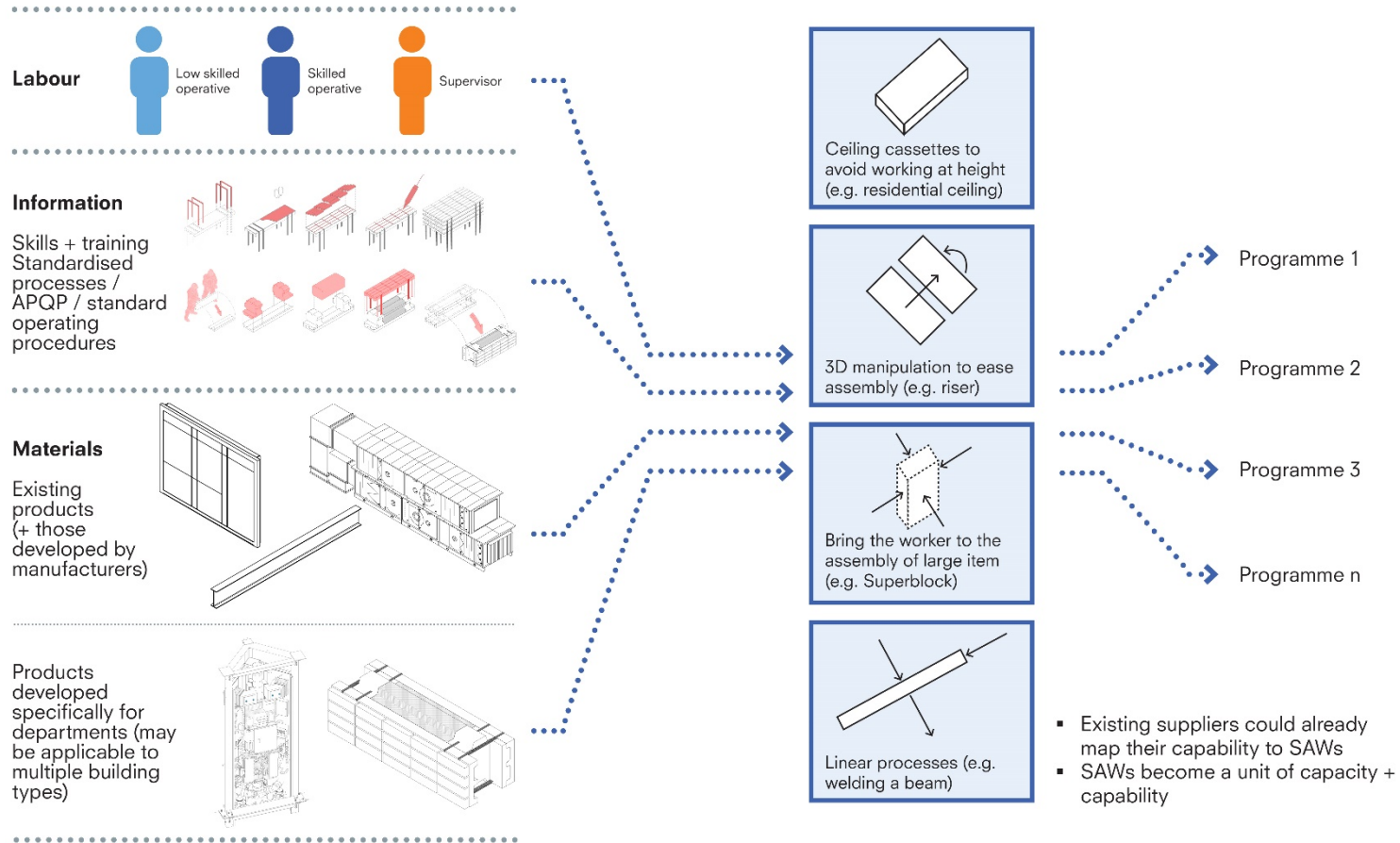
Optimised final design, supply chain, sequence etc.



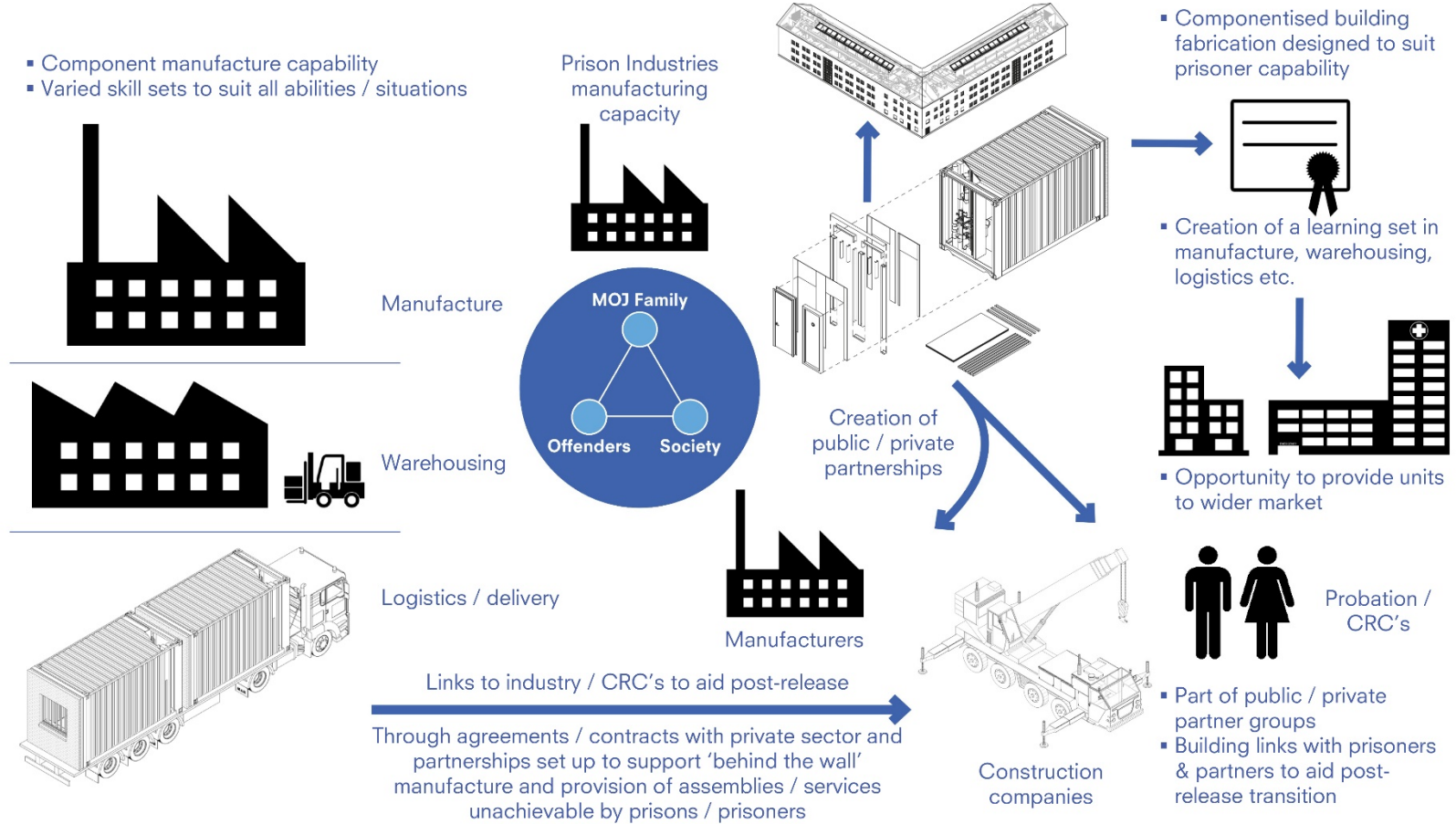
- Full list of SAWs would expand over time to include robots / cobots / additive manufacture



SAWs are the meeting point of several elements



Transforming lives by upskilling the workforce



Transforming lives

How PETP is rehabilitating prisoners by
creating a productive work force

Potential areas Prison Industries can contribute

- Superblock assembly
- Cell doors
- Signage
- Cell windows
- External landscaping
- Association space furniture
- Pre-cast concrete components
- Injection moulding
- Steel work
- Cell furniture

Vision :

- Prisoners are upskilled
- Some prisoners are hired by contractors or their supply chain

So far we have:

- Created and proved the Virtual Prototype
- Sourced the components/prospective supply chain
- Built a superblock
- Built a megablock
- Completed a 3-panel megablock cell wall
- Built a service riser
- Initiated discussion with Prison Industries around prisoner training and construction of the blocks, windows, etc
- Started construction of the prototype at HMP Lindholme

HMP Lindholme

Separate gate

Huge facility needs
~£1m for refurbish

40 acres available
(owned by MOJ)

Flat slab
here

Platform 2 here
(outside fence line)

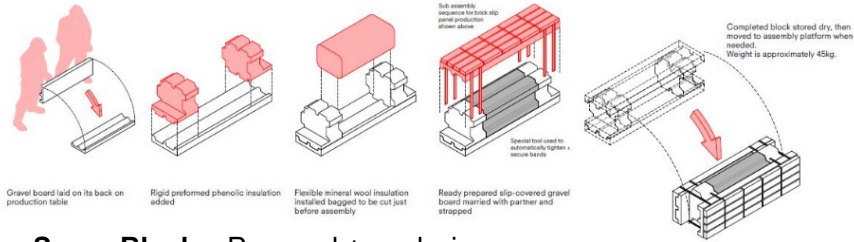
Platform 1 here



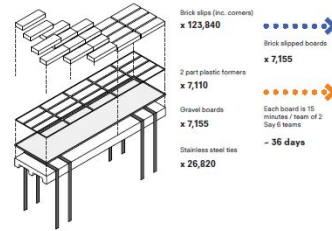
Prototyping – Super Block current state

Prototyping drives supply chain mapping, i.e.

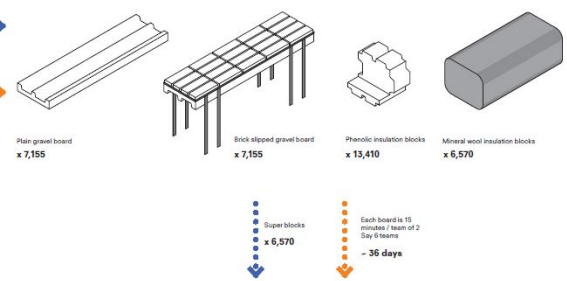
- What, who, where, when, how = cost



Productive Routine 1 - Slip assembly



Productive Routine 2 - Super block assembly



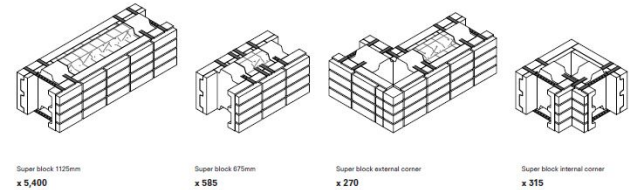
Super Block – Proposal + analysis



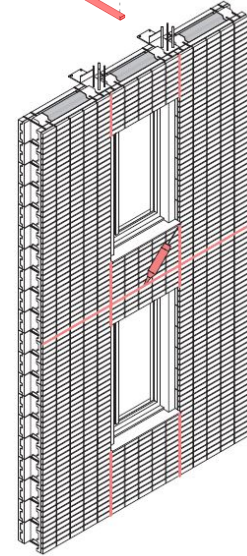
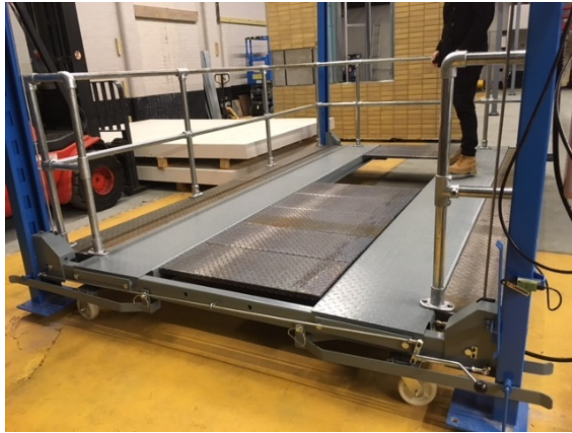
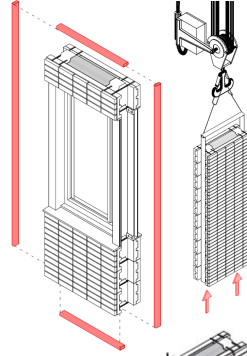
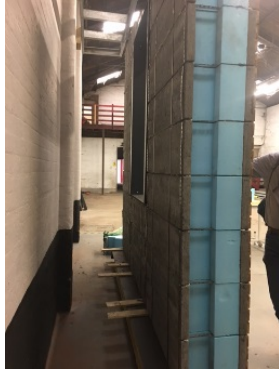
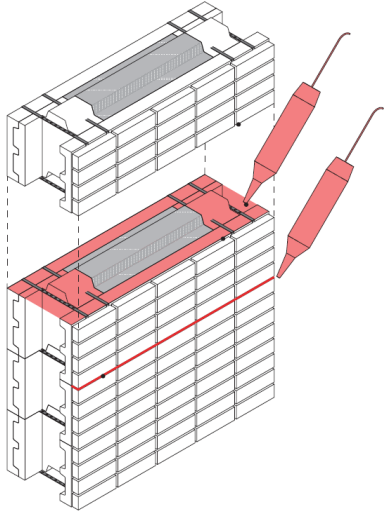
Super Block – Parts

Super Block – full sample

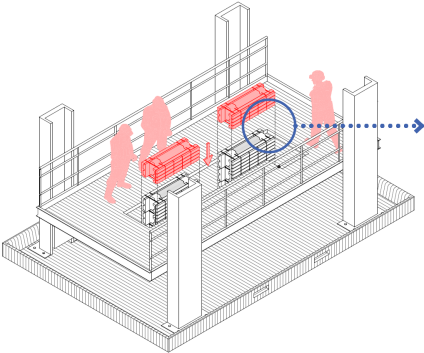
Completed super blocks



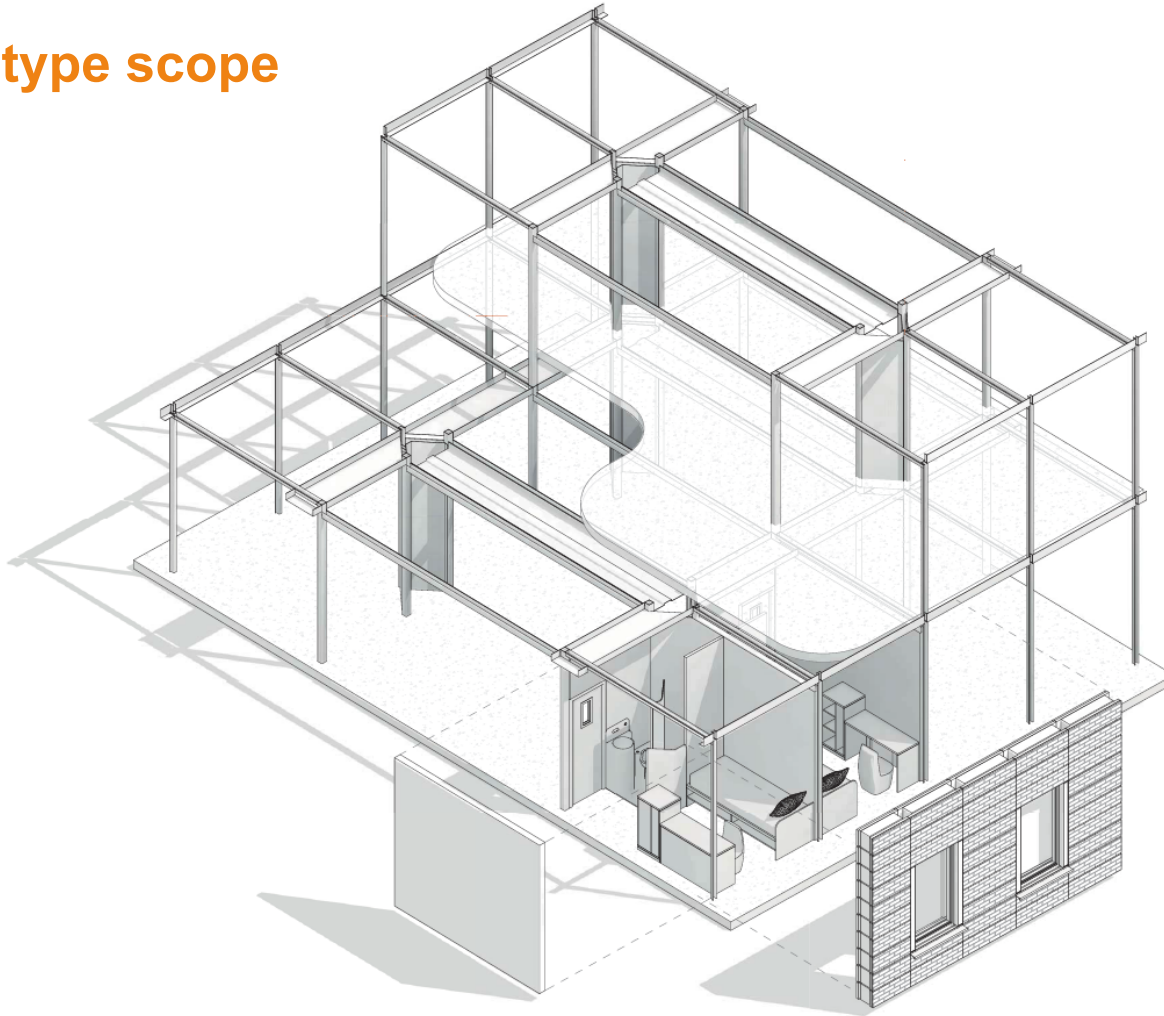
Super block façade assembly



Super Block – Heavyweight prototype



Full prototype scope



Latest prototype Progress



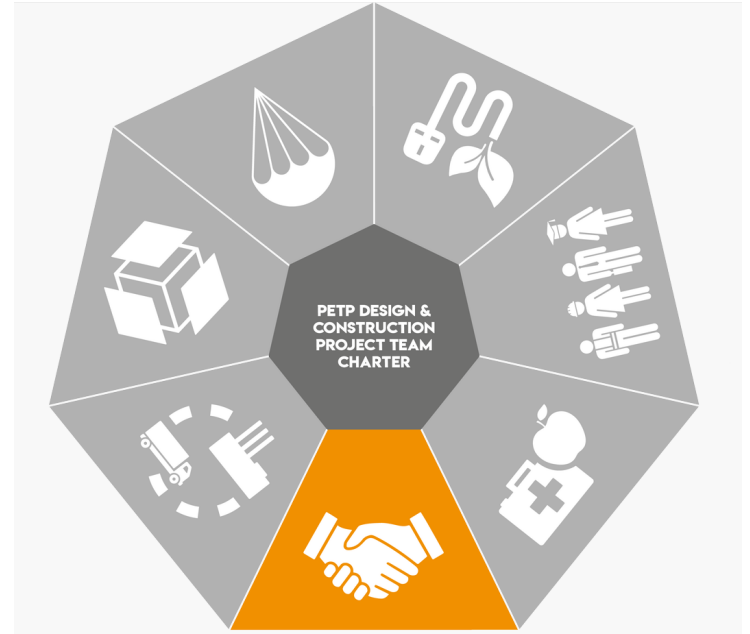
Collaborative transformation

**Why collaboration is crucial to achieving
transformational objectives**

Collaboration Priority Theme

Why Prioritise Collaboration?

- Create an environment that engenders trust
- Trust enhances transparency and openness, strengthens ability to challenge and innovate
- Deliver joint efficiency improvements, challenge traditional working practices and explore new ways of working
- Understand and overlay each party's governance and assurance processes



ISO 44001 Operational Stages & Measurement



Working Together stage is where the wider team agree how they will integrate the individual organisations' approaches into a joint collaborative team approach

- Governance
- Roles, responsibilities and joint processes
- Joint objectives and framework to measure progress
- Behaviours and issues resolution

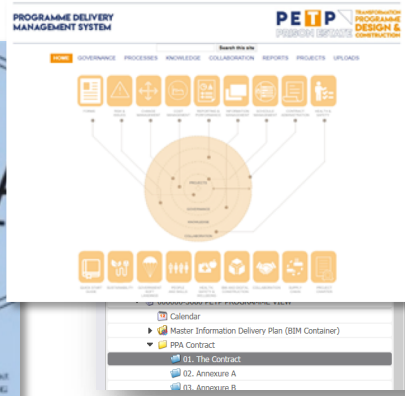
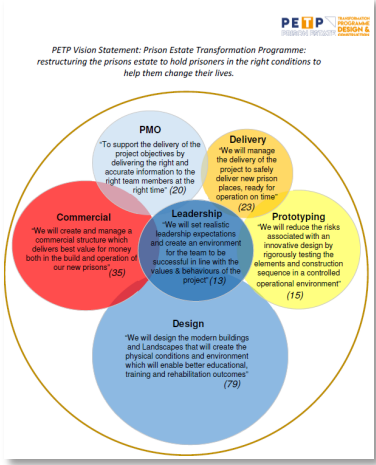


PETP Collaboration Enablers



Technique	Priority	Internal PETP	Supply Chain	3 rd Sector Groups	Stakeholders (Wider)
Logos	A				
Email Signature	B				
Posters	A				
Newsletters	A				
Town Hall Meeting	A				
Meet the Buyer					
Quarterly Group Communications	C				
Videos	B				
Charity					

Use Consider **Not Use**



PE T P 

PRISON ESTATE

**TRANSFORMATION PROGRAMME
DESIGN & CONSTRUCTION**