



Buildoffsite WaterHUB

SUPPLY CHAIN WORKSTREAM

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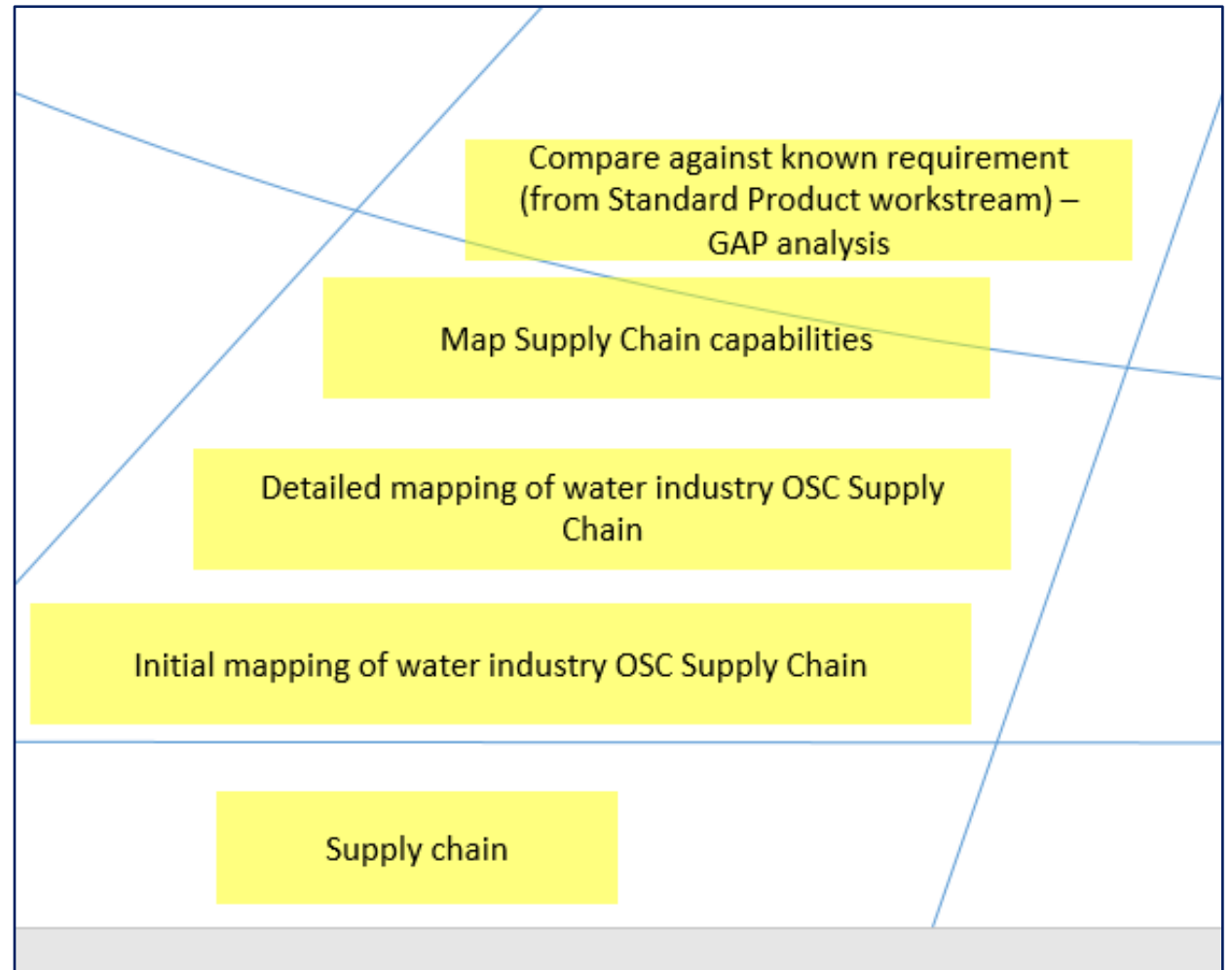


Today's Plan...

Time	Activity
am	Charlton Water Recycling Plant site visit
1100	Welcome and Introduction
1110 - 1200	Workstream updates
1200 - 1230	Case Study Steve Weston (Ross-Shire Engineering)
1230 - 1315	Lunch
1315 - 1345	Phil Goddard – Construction Line
1345 – 1530	Workshop – Supply Chain Mapping Group 1 – Supply Chain Mapping and Definitions Group 2 – Supply Chain capability, skills and training Group 3 – Supply chain capacity and development
1530 - 1600	Key learning Next Steps Next WaterHUB meeting
1600	Close

Workstream Update...

The Proposed Plan...



UK Water Supply Chain

Offsite Clients

e.g.

Anglian Water
Severn Trent
United Utilities
Yorkshire Water

DfMA Consultants

e.g.

MWH
Mott MacDonald

Offsite Suppliers

e.g.

RSE
NPS
Nomenca

Offsite Contractors

e.g.

Nomenca
MMB

Offsite Support

e.g.

AMRC
Twenty65
Project 13
i3P
BIM4Water

Buildoffsite WaterHUB Supply Chain Workshop

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Planned Workshop

Supply Chain
Mapping

Supply Chain
Definitions

GROUP 1

Offsite Skills and
training

Supply Chain
capability

GROUP 2

Engaging the
supply chain

Building the
supply chain
capacity

GROUP 3

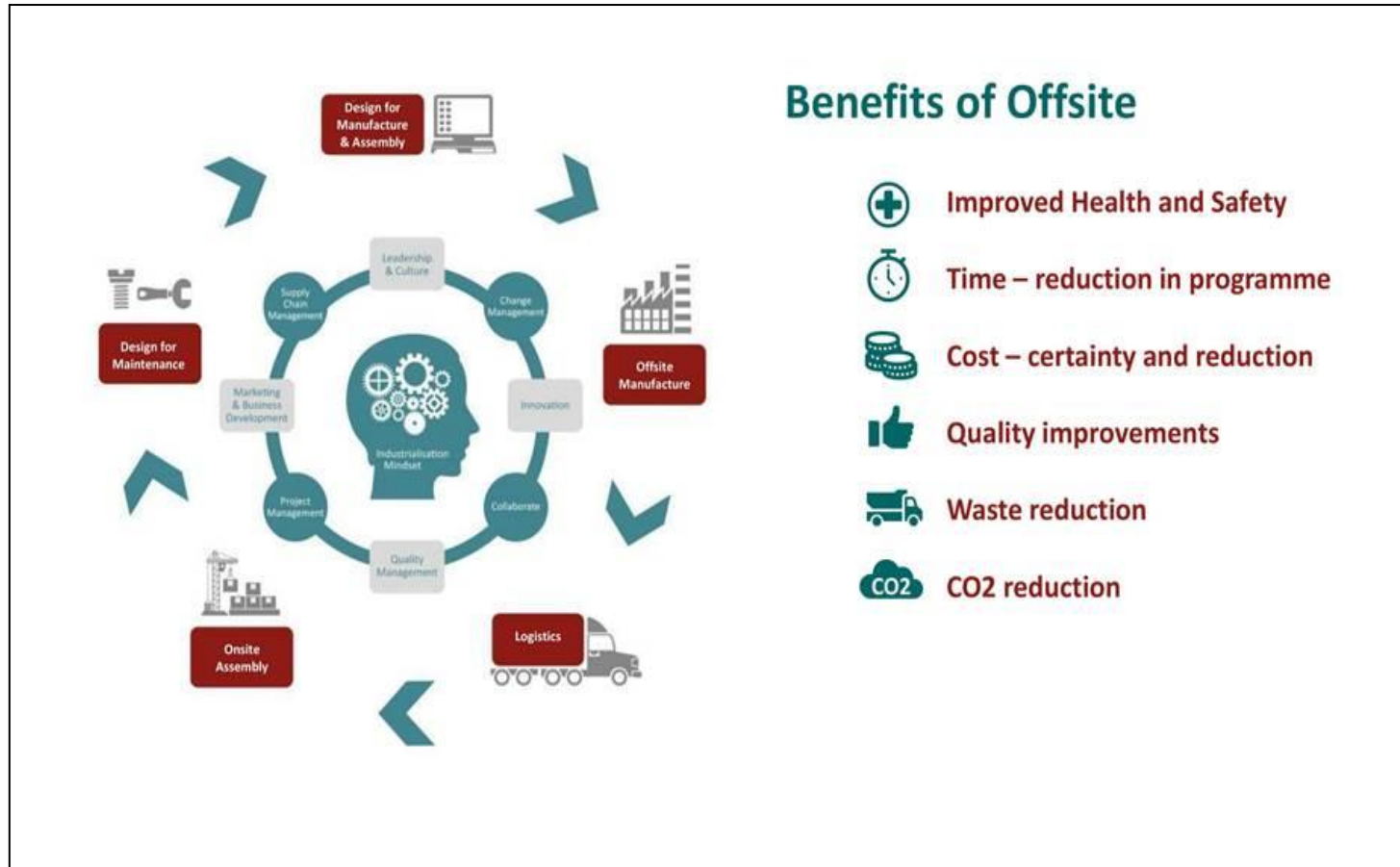
Workstream Vision

“To develop a sustainable supply chain capable of delivering offsite construction for the UK water industry with the capacity to meet the demands of the AMP cycle”

Group 1: Supply Chain Mapping

National Initiatives / Thought Leadership	Clients	R&D Specialists	Offsite Designer	Offsite Manufacturer	Logistical Support	Onsite Assembler / Integrator
i3P	Anglian Water	Manufacturing Technology Centre (MTC)	NMCN	NMCN		
Project 13	Scottish Water	Advanced Manufacturing Research Centre (AMRC)	Ross-Shire Engineering	Ross-Shire Engineering		
Construction 2025	Welsh Water		IDS	IDS		
Constructing Excellence	Northumbrian Water		Richard Allen	Richard Allen		
	Yorkshire Water		Laing O'Rourke	Laing O'Rourke		Laing O'Rourke
	Environment Agency		NPS	NPS		Skanska
			Lintotts Control Systems	Lintotts Control Systems		Costain
						MMB
						Balfour Beatty

Group 1: Offsite Management School model



Group 1: Supply Chain Definitions

Offsite Designer

An organisation with the ability to provide design for offsite manufacture and onsite assembly

Offsite Manufacture

An organisation with the manufacturing capacity and capability to provide value adding assemblies and assets

Logistics

An organisation with the ability to plan and execute delivery and placement of offsite manufactured assemblies and assets

Onsite Assemblers / Integrators

An organisation with the ability to plan and deliver onsite assembly

Group 2: Supply Chain Capability

Workshop capabilities

- Offsite requires space
- Where and with who
- Emerging manufacturing technology

Low volume batch production

- Water industry will generally have low batch volume
- How to move towards “batch of 1”

Offsite Skills Development

- How do we develop skills in Design, Build, Logistics and Integration
- What needs to happen / change

Group 2: Supply Chain Capability

Digital adoption

- BIM
- CAD / CAM / Integrated and Efficient processes

Group 3: Supply Chain Capacity

“Known” capacity

3-5 organisations with approx. £100 million turnover each ~ £500 million

“Known” requirement

5 – 7 water companies with AMP7 capital programmes of £2 billion each ~ £14 billion over 5 years

Therefore, assuming “50%” of programme could be delivered offsite in AMP7, requirement is for supply chain capable of delivering ~ £7 billion over 5 years at £1.4 billion a year.

“Known” Shortfall

Shortfall in supply chain is ~ £900 million or 7-9 organisations

Group 3: Supply Chain Capacity

Building Capacity

- How?
- Bring across from other sectors
- Grow existing suppliers
- New market entrants
- Partnering / thinking outside the box?

The Workstream Leaders

- Steve Wright (YW) – Client Lead
- Charlotte Davidson (Severn Trent) – Support
- Dan Jefferson – Contractor Lead

Client lead will move to Aidan Raynor, Yorkshire Water