

## **Buildoffsite Water Hub Workshop hosted by Anglian Water, 31<sup>st</sup> January 2019**

### **Notes from Presentations**

#### **People/Communications Workstream - Iain MacDonald**

- Vital that we get input from members
- Use Buildoffsite comms channels to get company messages out to wider audience
- Establish communications calendar
- Provide positive case studies – IM has 2 or 3 that can be shared
- Build relationships and coverage with external publications - <https://www.instituteofwater.org.uk/magazine/> & <https://wwtonline.co.uk/info/WWTMagazine> for example
- Survey water hub members regarding their journey in the water industry

#### **Information Management - Fred Aujoux**

- Working on BIM4Water roadmap
- Looking at asset management systems, Product data templates (PDT) and creation of a digital twin
- Mini projects - creation of business plan & definition of standard modelling software

#### **Standard Products - Mark Froggatt**

- Need to understand what is a standard product? Repeatable/always the same. At present, needs to be bespoke due to client specification.
- Organisations believe their standard is better, that's not how it should be.
- Standard products integrate learning, which is where the gain is.
- How can we measure standard products/procedures?
- Standard products should be configurable – including transportation, tracking etc.
- Could the regulators have an influence?

#### **Supply Chain & Efficiencies – Steve Wright**

- Technical barriers can be overcome but a big barrier is cultural attitudes. i.e. How confident that the manufacturer has built to the required standard? A project manager will never want to take that risk. Nor, engineers would not want the reputational risk.
- Is there a lead role for the suppliers to lead the clients? The supply chain has to do things in a different way.

#### **Supply Chain Case Study – Steve Weston**

- Agile product designs - fitting a number of applications
- Industrial design and manufacture
- Develop client technology
- Benefit from manufacturing stock processes and built in a controlled environment
- Centralised QHSE (Quality Health Safety and Environment)
- Integrated facility with all of the engineering disciplines available during the build
- BIM and BOM drives procurement
- Optimised supplier attendance - they only need to support the one site
- Reduced effect on the environment as on site for less time
- The whole supply chain needs to invest in this method, saving time, cost and environmentally better

#### **Supply Chain Presentation – Phil Goddard**

- Offer a service to connect with the supply chain
- Host a number of supplier engagement events
- Need frameworks from the client, within local environment to agree specifications

- Undertake and ensure pre-qualification, public sector and offsite assessments e.g. BOPAS
- Is there a difference and a benefit from using Achilles?

**Notes from Workshops**

Supply Chain Mapping

- Everything can be offsite so could be massive
- Need solutions rather than products
- Many organisations across multiple areas - where do the tier 1 contractors sit?
- Skills to manufacture and assemble are cross-over
- Look at it from best process rather than organisation

National Initiatives	Clients	R&D Specialists	Offsite Designer	Offsite Manufacturer	Logistical Support	Onsite Assembler/Integrator
i3P	Anglian Water	MTC	NMCN	NMCN	Laing O'Rourke	NMCN
Project 13	Scottish Water	AMRC	Ross-Shire Engineering	Ross-Shire Engineering	Powerrun	Ross-Shire Engineering
Construction 2025	Welsh Water	Georg Fischer	IDS	IDS	Asset International	MWH
Construction Excellence	Northumbrian Water	Grundfos	Richard Allen	Richard Allen	NMCN	Laing O'Rourke
CDBB	Yorkshire Water	Veolia	Laing O'Rourke	Laing O'Rourke	ACWA	Skanska
	Environment Agency	Construction Scotland Innovation Centre	NPS	NPS	Kyles Transport	Costain
	Wessex Water		Lintotts Control Systems	Lintotts Control Systems		MMB
	Thames Water		Mott MacDonald	EPS		Balfour Beatty
	Severn Trent Water		NG Bailey	NG Bailey		JN Bentley
	Affinity		Grundfos	Grundfos		Integrated Water Services
	Southern Water		Stantex	WES		Wood/Interserve
	Essex & Suffolk Water		MWH	Asset International		Powerrun
			Waverly Pumps	Waverly Pumps		ACWA
			Pipex	Pipex		Bridges
			Asset International	Powerrun		
			EPS	Georg Fischer		
			Georg Fischer	ACWA		
			ACWA	Veolia		
			Veolia	Bridges		
			Bridges	Cobra		
			Cobra	Steelway		
			Steelway	FSD		
			FSD	CEMA		
			CEMA			

### Supply Chain Definitions

- Designer – Capable of BIM/Digital, Capable of providing one solution, Trained & aware of latest standards, note the role of designer in CDM2015
- Manufacturer – should take role of fabricator, perhaps really only required for final solution assembly
- Logistics – Production management, and includes plant businesses

### Supply Chain Capability

- Shop floor skills
- Design skills
- Offsite skills development or developing a new range of skills
- Modular training and BOPAS accreditation
- Qualifications of people onsite aren't adequate
- Construction reaching into manufacture and vice versa

### Offsite Skills & Training

- Offsite School provided funding by CITB to set up a range of modules/workshops/FE qualification/practical skills and training. Require experts to overlook and support the work, and trainers to provide guidance. To discuss more, contact Charles Naud on [charles.naud@actionsustainability.com](mailto:charles.naud@actionsustainability.com).

### Supply Chain Capacity

- Decision makers need to be influenced - not 100% behind offsite. Tend to go with low risk, traditional methods
- Use down time in other sectors to support offsite construction
- Car industry – industry can learn from that approach and process. But, also the workers, car factories closing down, use these workers used to production line assembly
- Programme visibility and commitment - not a lot of joined up thinking - lobby for investment, enabler to allow it to happen. Same suppliers, supplying same things. Detail around modular construction.
- Integrate offsite into traditional
- Devise a supply chain around offsite delivery

### Next Steps

- Better view of the build programme - 4 or 5 of the water companies to create pipeline
- Water industry uses Achilles – create an influencing and modelling type piece to convince them
- Client questions for Achilles - what level of accreditation do they expect etc.
- What is the PQQ for offsite?