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**WATER HUB CLIENT PRODUCT GROUP QUARTERLY MEETING**

**Date**: Wednesday 29th November 2017

**Time:** 09:30 – 16:30

**Venue:** Scottish Water, Lomond Suite 4, Buchanan Gate Business Park, Cumbernauld Road, Stepps G33 6FB

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| **Invitees:** |  |  |  |
| **Jon Rains (Chair)**  | **(JR)** | **Buildoffsite (MottMacDonald)** |  |
| Mark Froggatt  | (MF) | Anglian Water |  |
| Jamie Mills | (JM) | BIM4Water |  |
| Ian Corder | (IC) | Environment Agency |  |
| Frederic Aujoux  | (FO) | Northumbrian Water |  |
| Charlotte Davidson | (SD) | Severn Trent |  |
| James Boyle | (JB) | Scottish Water |  |
| Sharon Hamilton | (SH) | Scottish Water |  |
| Iain MacDonald  | (IM) | Scottish Water |  |
| Derek Keeling  | (DK) | Welsh Water |  |
| Dan Jefferson | (DJ) | Yorkshire Water | Deputising for Stephen Wright |
| *John Browne*  | *(JAB)* | *United Utilities* | *Apologies* |
| *Martin Vickers* | *(MV)* | *South Staffs Water* | *Apologies* |
| *Jack McCarey* | *(JMc)* | *South West Water* | *Apologies* |
| Louise Smith (Notes & Actions) | (LS) | Buildoffsite  |  |

| **Agenda Item** |  | **Actions** |
| --- | --- | --- |
|  | **Welcome & Introductions**JR welcomed the group and thanked them for attending. Apologies were noted as above.Participants then introduced themselves and gave a brief overview of their roles and interests (see agenda item 4 – Front of Mind). |  |
|  | **Competition Acts Agreement**Competitions Act Agreement was explained and accepted by all. |  |
|  | **Minutes and Actions from Previous Meeting**The outstanding actions from the previous Client Product Group meetings were reviewed and agreed. The actions log was updated accordingly and is attached as a separate document. |  |
| **IM****SH** | **Scottish Water (SH, IM & JB):** IM is the Standard Product Technical Team Leader; SH is responsible for the overall team; JB is implementing BIM for Scottish Water.* Scottish Water have a number of standard products
* Now standard products are being used and tested on site they are finding some challenges and lessons learned
* Challenges are to take stock and look back
* Have a plan that mirrors the Water Hub projects roadmap
* Products are being used which is great
* SR21/AMP7 – going forward they will be doing a lot more capital maintenance. One of the challenges they have is to use the products they have and embed them before moving forward
* Looking at implementing a system to drive a proof of concept (Service Now IT software) and are hoping this will give more visibility of supply chain activities and the efficiencies
* Huge opportunity but the big issues are:
	+ Supply chain – capability and capacity
	+ Consumer service – the supply chain not geared up for service
* Need to focus on hearts and minds and involve the supply chain in what the benefits of off-site construction are for the clients and the customers of the clients
* It’s a big challenge to get right stories out there about the use and benefits of standard products; it’s frustrating that standard products get a bad press
* Scottish Water are already sharing details of standard products with Anglian and YW and want the standard products agenda to move forward at pace.

**Bim4Water:** JM is the Chair of BIM4Water Standard Libraries Group. He was pleased to be invited to the meeting and sees benefit in the BoS Water Hub and BIM4Water working together. He is at the meeting to listen and learn.**Northumbrian Water:** FO is responsible for Capital Investment, Offsite Construction and BIM* Northumbrian do not think they are at the forefront of developing products
* They have a few standard designs but do not have enough turnover to develop standard products themselves.
* Interested in using standard products developed by other water companies and collaborating
* Sharing innovations without money and contracts would provide good VfM for all water companies
* Why develop new products when there are loads out there?
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| 4.(Cont.) | **Welsh Water:** DK is responsible for standard products & innovation.* Starting to develop level 3 or 4 maturity products but they are not being used
* Have implemented a standard products checklist that assesses which products have potential and tracks what products were used on projects and what weren’t – Project Managers have to justify non-use of standard products
* Looking for £25 million in savings over the current AMP
* If framework for standard products is in place suppliers need to use them

**Yorkshire Water:**  DJ deputising for Steve Wright and is responsible for Standard Product Development* ***Suggested IM liaise with Steve W***
* Difficulty getting supply partners to use standard products even though it is embedded into specs that they must use products where they exist
* Cultural issue:
	+ contractors are unused to the risks in off-site build and see problems around things like widening or opening access roads to get standard products in
	+ Designers want to churn out things that they know work
* How do we get all stakeholders to see the benefits/share in the efficiencies of offsite construction?
* Need to align risk and reward

**Anglian Water:** MF is Engineering Manager at One Alliance-Anglian Water* Anglian have been using standard products for 10 years but are still encountering the same problems as everyone else
* Anglian have governance and are trying to embed standardisation
* Anglian have integrated design/consultant/contractor/client – so do not the same issues with designers but they still have to go out to the supply chain and encounter the same problems there
* There is a need for smart products and the supply chain is not able to join in with aspiration for these
* Anglian are looking at sharing their standard products catalogue with Yorkshire Water
* We need to share info and products not be possessive
* There is a need to work with supply chain to see how they can help
	+ Gave examples of efficiencies on standardised MCC Kiosks
* “*Culture eats strategy for breakfast……..*” A lot of this is about changing behaviours
 | **IM** |
| 4.(Cont.)4.(Cont.) | **Severn Trent:** CD is Senior Category Manager and is responsible for procurement.* Severn Trent were previously involved with standard products but have had a change of management and CD needs to re-sell standard products to them to get support going forward
* There is a need for long term visibility to help supply chain
* Visibility is an issue because suppliers (SME’s) have no visibility at present
* How can we help supply chain? We need to work together with them and enable them to deliver and not penalise them.
* There is a need to raise awareness and understanding of standard products– need to educate people
* Tier 1 contractors have been involved in the development of standard products but are not using them, even though they are mandated
* Needs to understand how other organisations approached this; there may be a better way to do things
* There is a need for commonality and standardisation across supply chain

There was a discussion around sharing business cases to strengthen CD’s case for off-site construction. Customer engagement is a very powerful business case and using real examples to demonstrate real-time savings in cost and time and down time for customers works extremely well. **All agreed to share business cases with CD, where possible.****Environment Agency (EA):** IC is responsible for Cost and Carbon Forecasting on Capital Programme* The EA is not on the standardisation journey at present
* Aiming for ISO 100 accreditation in 2018 but standardisation is not a large part of that
* Currently EA schemes are funded individually based on an individual business case with individual PM’s; this effects visibility. Standardisation could possibly be a route to having a clearer idea on cost earlier in the process
* Standardisation can give baseline for costs for proposed projects
* IC would welcome further contact with water companies

**Standard Products:**  There was a discussion around standard products; the group were very interested in Anglian Water’s experience in this field. Key points: * If standard products are used then the bespoke element of design becomes about the interface between those products
* How can Offsite Construction and BIM work together? *If standard products are used, getting the information for BIM should be easy*

**Supply Chain:** There was a discussion around the risk of moving to single suppliers and whether they have capacity to supply the client group if there is a move to standard products by a group of clients.Key points: * Most suppliers with specialist products are SME’s, which presents a risk
* There may be a need for a supply chain capacity assessment
* Value base pricing may require a new business model
* Geographical clusters - Regional procurement is already done by other sectors e.g. the NHS
* Suggestion of a possible digital app to suggest use of product by region – possibly a BIM development.
 | **ALL** |
| 5.(Cont.) | **Roadmap and Projects: Client Ownership**JR – talked through roadmap and explained the vision that the Client Group would act as the Steering Group for the roadmap and that each workstream would have client, consultant, contractor, and supply chain representation. It was noted that, in the future, it may be possible to combine overlapping workstreams.There was a discussion around integrating the client/contractor group. Key points were:* Roadmap projects would be integrated, but not the client group meeting
* Integration makes for a richer conversation
* The supply chain frustrated that they are not being involved in discussions
* Important not to silo the supply chain reps into one particular workstream

The group discussed the definition of “product” and JR explained the Hierarchy & Asset Maturity (HAM) diagram that had been worked out at the client group meeting on 30th August.Anglian have standard designs which act as standard products; it is important not to exclude those.IC & JM both referenced the International Construction Measurements (ICM) document.**JR suggested the information sharing could be included in the Comms plan****ACTIONS:** **JR to work with JB to convert Water Hub hierarchy definitions to definitions used by BIM4Water****JM to send ICM document to LS for circulation to the client group.**JR asked for volunteers from the Client Group to lead on each of the workstreams on the roadmap. The following leads were agreed.1. **People:** IM/SH (ScW)
2. **Information Management:** IC volunteered to assist with this workstream**. FA agreed to liaise with his BIM Manager to see if he could lead on this.**
3. **Standard Products:** MF (Anglian)
4. **Processes**: This workstream was left open. The possibility of UU leading on this was discussed. **JR to discuss with JAB.**
5. **Supply Chain:** DJ nominated SW (YWS) to lead on this. CD offered to assist. **DJ to advise SW**
6. **Efficiencies:** DK (DCWW)

**LS to set up individual meetings/calls with JR and workstream leads to discuss scope of projects****JR to remind Gavin Stoddard of the National Infrastructure Pipeline for visibility of future standard products****All to submit business cases for both individual products and BoS to LS for use by the client group. These can be anonymised, if necessary.****DK to request Southern efficiencies baseline from James Ogden at Southern Water.****It was suggested that we could develop an App to suggest UK Water Standard Products based on the scope of a project – JR to scope** | **IM/SH****JR/JB****JM****FA****JR****DJ****LS/JR****JR****ALL****DK****JR** |
|  | **Anglian Water Time Lapse Video**MF showed a time-lapse video of AWG site showing installation of products and lower than usual site activity; this was well received.The group thanked MF for an interesting and stimulating presentation. |  |
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7.(Cont.) | **BIM4Water**Jamie Mills gave a presentation on BIM4Water Data Templates (attached), which led to a discussion around hierarchy & Asset Maturity diagram and definitions.Key Points:* Water companies standards are tweaked locally
* There is a need for a common information standard for offsite water products as it is not possible to be Level 2 BIM compliant without this kind of structure
* MF happy to contribute information standards to BIM4Water.
* At present BIM4Water are just looking at what information they need to collect
* Discussion around WIMS and overlap with BIM4Water datasheet – the main difference is that WIMS is not digital

JB gave examples of various hierarchies used by water companies in the UK. The Group discussed how easy it is to map individual water company hierarchies with the 5 level BoS Water Hub Hierarchy & Asset Maturity (HAM) diagram.The group discussed who owns which parts of the asset hierarchy and also whether “product” should be added to the HAM diagram – BIM were strongly in favour of a 6 level hierarchy which includes a “product” level.* Suppliers own asset hierarchy levels 1 – 3 (Part – sub-assembly) and the asset owner or supply chain own asset hierarchy 3 – 5 (sub-assembly – asset)
* It was agreed that there is a need for definitions and examples of the various hierarchy stages. It was noted that Anglian may already have these. **JR to lead on classifying existing standard products.**

**ACTIONS:** **LS/JR to Add responsibility for BIM4Water Data Information Template to HAM diagram** **LS to send HAM diagram to JM****JR to liaise with JM to change definition of standard product to incorporate Digital BIM4Water information****LS to delete component and part from the standard product definition****JM to take the BoS Water Hub HAM diagram back to BIM4Water Standard Libraries Group for input and feed back to the Water Hub Client Group at the next meeting** **JM to look at the possibility of adding an additional field on standard product asset hierarchy mapping to the BIM4Water Data Sheet****JM to look into alternatives to the HAM diagram.****JB to simplify to a high level diagram to aid comms.**  | **JR****LS/JR****LS****JR/JM****LS****JM****JM****JM****JB** |
|  | **Water Company Standards**JR asked if water companies would be open to working together to look at standards?Scottish Water want to be involved and are happy to share their data.It was noted that MF from Anglian Water is leading the standard products workstream on the roadmap.It was suggested that we look at future AMP/SR21 requirements and look at selecting a small number of products to demonstrate the value of standardising engineering products (WIMS)**FA to lead a group to find out where other water companies and organisations are with standards.****All members to send details of any project relating to Water Company standards to FA.** There was a discussion around funding for projects. There is a possibility of funding from Buildoffsite which could be matched with funding from the Innovation Fund.**JR to speak to MF to ask him to liaise with Aimee Ladyman re. finishing her water company standards project.** | **FA****ALL****JR** |  | **Asset Hierarchy** |  |
|  | **Communication & Terminology** |  |
| 9.1 | **Communication** |  |
|  | SH to take forward communications as part of the “People” workstreamThere was a discussion around comms:* How do we actually communicate within organisations to get buy in to drive cultural change?
* Supply chain – how do we get them on board?
* Make it real – communicate benefits to customers and organisations
* All attendees were asked to communicate the benefits of off-site construction within their own organisations
* Communicate with Trade Associations to reach the supply chain
* Promote key messages around standard products and BIM at yearly supply chain conferences

**ACTIONS:****SH/IM to summarise this meeting in a 1 pager for the group to circulate both internally within their own organisations and externally****JM to provide a list of Trade Associations with whom the group need to communicate.****DJ to liaise with SW. Yorkshire Water to send out a list of suppliers and what they produce, including lessons from other industries.****All to Promote key messages around standard products and BIM at yearly supply chain conferences**There was a discussion around a possible maturity assessment for supply chain (manufacturers, contractors and designers) and also, possibly a questionnaire for the clients.**DK to circulate Welsh Water DfMA Survey****CD to use Welsh Water assessment to build a questionnaire****All water companies to send their assessments to CD to enable her to look at setting up a standard assessment.**The group discussed the idea of a conference on off-site within the water industry. It was agreed that a regional approach was better than a national approach and that we should look to partner with other organisations e.g. BIM4Water, British Water. We should also aim to have sessions to communicate internally within our own companies. We ned to check what has been done previously in order to avoid duplication. | **SH/IM****JM****DJ****ALL****DK****CD****ALL** |
| 9.2 | **Terminology** |  |
|  | The group looked at the list of terms that had been brainstormed at the meeting on 30th August and agreed the following definitions:**Component:** An item that can be assembled and dis-assembled It was noted that there is a need to define interfaces- rest, glue, twist etc. etc. Who owns it – is it connected to something that moves? **It was agreed that this would be discussed at the next meeting.****Standard design** : A design that must be followed**Reference design:** A design that can be tweaked/amended**Signature design:** A design that is owned by a company**Productisation:** Standard product development**Configuration:** Design standard products into a full solution for assembly **LS to add to the glossary of terms being compiled by the Water Hub** | **LS/JR****LS** |
|  | **Wrap Up and AOB****IC:** Suggested an agenda item for the next meeting – it would be good to see how people are applying or mapping ideas.**SH:** Group feels different; it feels like we have a purpose lots. There is lots of sharing and commonalities – we are all facing the same challengesWould like to see more on successes and good practice in the Front of Mind item.**CD:** Found the common voice within the room very valuable. Would like to bring a technical colleague to the next meeting and is looking forward to seeing where the workstreams are going**JB:**  Really good meeting. Need to make sure that BIM4 Water Group and BoS Water Hub Client Group continue to communicate (JM to raise at BIM4 Water Steering Group meeting). BIM4Water to come to all meetings. Found the Anglian presentation very good.**DJ:** Good meeting. It was good to get back up to speed with the water hub progress**DK:** Positive meeting. Good to discuss hierarchy and maturity. It would be good to bring successes to the next meeting.**FA:** Good meeting. He came to find out what was going on and is now an expert in information management. Would like more videos and examples of off-site construction. Would also like good news stories from the workstreams.**JM:**  Likes the vision. There could be further opportunities e.g. ICMS. It will be good to work together on classification.**JR:** Good meeting and excellent progress. Suggested rotating the Chair of the meeting going forward.**IM**: Found it useful to get updates and see that we are all on the same page. Workstreams are moving forward and making really good progress.Agenda for next meeting agreed as:* Presentation from external people
* Front of mind
* Competitions act
* Actions
* Report on roadmap projects
* Water company standards (to be put under standard products workstream of roadmap)

**LS to set up meetings for 2018.**SH suggested a local presentation by the group to organisation hosting meeting. All agreed that this was an excellent idea. | **LS** |

LS

05/12/17

**Circulation:**

Invitees

Tim Hall Buildoffsite

Nathalie Quinn Buildoffsite

Buildoffsite Website

**Encs:**  BIM4Water Presentation

**2018 Client Product Group Meetings**

Dates to be confirmed but venues to include Welsh Water