

# Offsite Management School Partners Meeting

Wednesday 19<sup>th</sup> September, Action Sustainability's premises



**Attendees:** Alan Clucas (Laing O'Rourke), Andrew Day (Telford Homes), Charles Naud (Action Sustainability), Ian Heptonstall (Action Sustainability), Jim Taylor-Rose (VINCI), John Browne (Balfour Beatty), John Handscomb (Kier), Paul Cleminson (BAM), Steve Fozard (Costain)

**Apologies:** Alfie Gilbert (Action Sustainability), Ben Lever (CITB), Colin Sargeant (Elliott), Dave Merchant (NG Bailey), Geoff Fawkes (McAvoy), Kieran Brocklebank (United Utilities), Nathan Lutz (Wates - SES), Nick Bromell (Lendlease), Steve Cook (Wilmott Dixon), Steve Hough (Balfour Beatty), Stuart Whiting (Prater), Tim Hall (Buildoffsite)

## 1. Introductions – 5 minutes

Steve Fozard circulated the Innovation in Construction Report 2018 (digital version available to [download here](#)) considers legal and commercial perspectives of offsite manufacturing in construction, and refers to the skills gap and labour shortage in the industry.

## 2. Board elections - 5 minutes

Ian Heptonstall provided an update on the School board elections. From the six initial candidates, four have been shortlisted (Andrew Day from Telford Homes, Julia Barrett from Willmott Dixon, Martin Gettings from Canary Wharf Group and Victoria Hughes from VINCI Facilities). An online voting process is on-going until the 5<sup>th</sup> October to elect three new board members. Results will be published on 12<sup>th</sup> October.

Andrew Day presented his case for board election: *“As a client, developer and contractor of mixed-use schemes working with a diverse supply chain, I believe I can complement the current Board composition, strengthen the voice of the homes sector and support the schools next period of growth and development.”*

## 3. School & offsite group updates - 15 minutes

The School currently has 78 partners - up from six since launching in 2012. New joiners include McGinley, Menfor Group and Transport for London. We are on track to meet our targets of 82 partners by the end of the year and 100 by 2021.

The 2018/2019 objectives of the offsite group were reviewed. Collectively, we are achieving the following: inspiring and educating the supply chain, building the network of main contractor partners, re-thinking and understanding what success looks like, bringing offsite thinking into the mainstream and collaborating closer with Buildoffsite. This is proven by our performance in the key KPIs and deliverables (latest targets to be achieved by March 2019).

Note: we are collaborating successfully with Buildoffsite, with whom we are due to sign a memorandum of understanding. There is a clear understanding of our different roles: the School's is to educate and enable the supply chain, whilst Buildoffsite's is to lobby and influence.

The objective to influence others in the value chain has been partially achieved. We have created a designer's group. The CITB bid to develop training capability and capacity presents an opportunity to engage with build services engineers and cost consultants.

#### 4. DfMA training events - 10 minutes

Planning for DfMA workshops is in progress but dates have not been set. The workshops will be designed to allow members to openly share their experiences and lessons learned. The list of workshop subjects was presented. Jim Taylor-Rose believes there should be a workshop focusing on DfMA within the highways market.

##### Actions:

- ✓ Consider workshop on DfMA within highways market @IanH
- ✓ Provide dates of workshops @IanH
- ✓ Share case studies of best practice @ALL
- ✓ Confirm appetite to participate in the workshops @ALL

#### 5. Discussion on the barriers to the uptake of offsite in construction - 30 minutes

A major barrier to offsite is the capability for suppliers to work digitally but this is becoming an industry requirement. For example, Costain and Laing O'Rourke only contract suppliers able to work with BIM. The consensus was that others should follow suite and not accept the status quo (i.e. traditional methods of construction) because this is hindering innovation across the industry. Main contractors should impose modern methods of construction and provide the tools and resources for the supply chain to deliver. There is also a strong business case, even for smaller companies, to adopt digital workflows as they enable to reduce costs. The conclusion was that the industry needs strong leadership to inspire and enable the widespread adoption of BIM so that everyone is BIM-articulate, not just the BIM engineers.

Interest in offsite construction is gaining momentum, particularly in housebuilding because the private rented sector is driving market demand. For example, Barratt Developments has committed to produce at least 20 per cent of its new homes using offsite construction methods by 2020. Berkeley Group, through Berkeley Modular, are building an offsite factory in Kent to produce up to 1,000 homes a year. The factory will run on robotics and only require £2,000-£3,000 of manual labour per home. However, there is still a general lack of understanding of the benefits of offsite. The attendees discussed visibility and perceived risks as factors contributing to this. Modular facades have been widely adopted because the improved quality and time savings advantages they provide are obvious to end clients. Public records or league tables of construction projects delivered on time and on budget could help highlight the benefits of offsite.

##### Actions:

- ✓ Circulate Thames Tideway case study @SteveF

#### 6. Trailblazer apprenticeships update by Laing O'Rourke - 5 minutes

The Trailblazer apprenticeship scheme developed by Laing O'Rourke has attained limited traction so far because, admittedly, it is very specific to their organisation. A new version, due to be ready in November, builds a core set of skills that are suitable across the industry. In conjunction with other Trailblazer apprenticeships, there will be options to specialise in certain types of offsite construction (e.g. modular, timber frame, etc.). This will help develop offsite skills throughout the industry.

##### Actions:

- ✓ Circulate colleges and training providers interested in delivering the new offsite apprenticeship @Aclucas

### 7. CITB bid – developing training capability and capacity - 50 minutes

The main purpose of the CITB bid is to upskill offsite trainers and their capacity to deliver training. We propose to provide trainers that upskill professionals in the supply chain via short-duration courses and to support them by developing the tools and materials they will require. In an effort to create consistent training across the industry, it is apparent there is a preference for bids that cover all the project requirements. We may therefore need to liaise with bodies and colleges, particularly those that provide vocational qualifications and apprenticeships. This will likely generate management costs and may be beyond the scope of what we are trying to achieve. There was strong criticism of CITB's stance on this point and the value they provide as an association.

Overall, there is support for submitting a bid although it was observed that the CITB bid and research paper are broad in scope. This may lead to risks in the delivery of the overall project. It was therefore advised to submit a bid with the support of the School partners but without other organisations. We should work closely, but not with, organisations that provide vocational qualifications and apprenticeships.

Specific feedback provided during a brainstorming session on the CITB research paper outcomes are summarised in Appendix A.

#### **Actions:**

- ✓ Confirm in writing your support of the bid @ALL
- ✓ Notify interest in becoming a trainer @ALL
- ✓ Share known training resources @ALL

### 8. AOB

None was reported.

#### **Next meeting**

To be held at:

Balfour Beatty, 5 Churchill Place, Canary Wharf, London E14 5HU

On:

20<sup>th</sup> November 2pm to 4pm in room 8.05.

**(Note this is same day as Build Offsite Show, so enjoy the show in the morning and come to the meeting in the afternoon)**

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### Appendix A: outcomes of CITB bid brainstorm session

	3 learning priorities	Comments on CITB learning outcomes	Target audience	What's missing?
<b>Design</b>	<ul style="list-style-type: none"> <li>- consider offsite early in the process and design freeze</li> <li>- ability to DfMA (particularly transport, lifting and handling) and integrate considerations of trades e.g. architectural, structural, M&amp;E, etc.</li> <li>- knowledge of (digital) tools and systems</li> </ul>	Include RIBA Plan stage (focus on stage 2)	<ul style="list-style-type: none"> <li>- BIM leads</li> <li>- Design managers/consultants and engineers</li> <li>- Project managers</li> <li>- Supply chain</li> <li>- Clients</li> </ul>	<ul style="list-style-type: none"> <li>- Emphasis on collaboration ISO 44001</li> <li>- How to design solutions that can be fabricated</li> <li>- Design for logistics</li> <li>- DfMA strategy</li> <li>- Managing integration of new products</li> </ul>
<b>Cost</b>	<ul style="list-style-type: none"> <li>- How to cost and compare with traditional plan</li> <li>- Calculate value</li> <li>- Understand the programme</li> </ul>		<ul style="list-style-type: none"> <li>- Costs consultants</li> <li>- Quantity surveyors</li> <li>- Chartered surveyors</li> </ul>	
<b>Logistics</b>	<ul style="list-style-type: none"> <li>- Planning and programme impact risks</li> <li>- automatic expediting</li> </ul>	They are too broad		<ul style="list-style-type: none"> <li>- Haulage of abnormal loads</li> <li>- BIM</li> <li>- Plant capabilities and considerations</li> </ul>
<b>Procurement</b>	<ul style="list-style-type: none"> <li>- Value-based procurement, including choice of different technologies and suppliers</li> <li>- Strategy linked to RIBA plan of work</li> <li>- Continuous loop improvements and circular economy models</li> </ul>	Include vision and employer's requirements at the front-end to inform design and procurement	<ul style="list-style-type: none"> <li>- Procurement</li> <li>- Construction</li> <li>- Estate and asset managers</li> <li>- Quantity surveyors</li> </ul>	Well-developed case studies
<b>Onsite assembly</b>	<ul style="list-style-type: none"> <li>- Managing assembly operations vs onsite construction</li> <li>- Readiness for assembly</li> <li>- Understanding different methods of offsite construction</li> </ul>	<ul style="list-style-type: none"> <li>- Consider sector-specific technical skills and wider requirements</li> <li>- Develop business model</li> <li>- Consider risk priorities</li> </ul>	<ul style="list-style-type: none"> <li>- Procurement</li> <li>- Construction</li> <li>- Estate and asset managers</li> </ul>	<ul style="list-style-type: none"> <li>- Post occupancy</li> <li>- Continuous improvement model</li> <li>- Roles and functions</li> </ul>

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<b>Site management &amp; integration</b>	<ul style="list-style-type: none"><li>- Quality management and performance, including KPIs, economic value, social value, environmental benefits, etc</li><li>- Resource use</li><li>- Health &amp; safety considerations</li></ul>		Design managers	Training managers who can develop business case to show benefits are larger than costs
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