Date: Tuesday 11th September 2018 – 09:30am – 12:30pm



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Where: Costain's offices, London

Attendees: Graham Edgell (Chair, Morgan Sindall), Helen Carter (Action Sustainability) Shaun McCarthy (Action Sustainability), Cathy Berry (Action Sustainability), Sarah Jolliffe (BAM Nuttall), Sara Tome (Bouygues), Chris Broadbent (Ceequal), Sarah – Jane Waith (Costain), Gareth Evans (Costain), Alex Mcfie – Hyland (Elliott Group), Martin Crow (Hanson), David Ferroussat (Heathrow) Ciaran Alstone (Hercules), Dean Chrisp (Highways England), Scott Dutton (Hochtief), Karen Mcwalter (Hochtief), Rebecca Oxley (HRS services), Andy Lusher (Jackson Civils), Tom Finnegan (Kilnbridge), Tom Bardwell (Laing O'Rourke), Janet Hector (McGinley Support Services), Gareth Morris (Morson Group), Tracey Fogg (Murphy Group), Amy Nicholls (Network Rail), John Robeson (Osborne), Randal Ffrench (Sir Robert McAlpine), Graham Arden (Skanska), Luc Riera (Tarmac) Dominic Sidoli (Tarmac), James Callaghan (VGC Group), Swai Patel (VGC Group), Emma Ward (Volker Wessels), Phil Wright (WP Group)

Welcome and introductions:

- Janet Hector from McGinley Group was introduced to the group as a new Partner of the Supply Chain School
- Tom Finnegan from Kilnbridge and Rebecca Oxley from HRSS was introduced to the group as observers for the session.

Outstanding actions:

- Group to clarify and agree a definition for a 'Strategic Supplier'
- Email communications to infrastructure members to encourage re-assessments and engagement within the School
- The need for a suit of sustainable product e-learning modules such as Sustainable concrete –
- Local authority discuss the route for waste within their geographical area -

Strategic Suppliers:

At the previous leadership group meeting it was discussed that there needs to be a definition in place for a 'strategic supplier'. This would help the group to ensure they have got the correct suppliers that want to engage with, in their dashboard. It would also help create more of a common approach when getting/pulling together lists, which will be beneficial for new partners of the group

Email Communications:

The Infrastructure School has targets for the end of March 2018 which are revolved around active members, members at training sessions, assessments and re-assessments. Below is the Infrastructure School's current progress against this target. It was agreed by the group that more needs to be done to achieve these targets.

Deliverables Actual/Target	Infra
Active companies	417 /(750)
Supplier days	0/1
Sub-contractor events	1/3
Learners @ training	169 /500

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Training Workshops	2 /10
FIR Ambassadors	
E-learning downloads	
E-learning (new)	n/a
Assessments	186 /(375)
Re-assessments	44 /(174)
Bronze/Silver/ Gold	138 /(100)

Actions:

- Graham Edgell to send drafted marketing communication for members out to the rest of the group. The group is to come back to Graham, Helen and Rosie with comments. Once the copy is agreed it is to be sent out to the suppliers. Helen to explain this to new partners of the leadership group.
- Partners who have not provided a Partner priority supplier list to provide a list. All the school requires is an excel sheet with company name and email domain.
- Rosie to resend the meeting minutes from the last meeting to ensure everyone has the previous meeting notes.

Meeting Notes

Operational Update:

The Infrastructure School has delivered 2/10 workshops so far. There are still 8 workshops available, 10 workshops need to be delivered to meet the target. The workshops can be public (open to anyone within the School) or internal (for your colleagues or supply chain). The infrastructure school also has 5 key objectives that need to be achieved by 2019.

Actions:

- Group to contact Helen and Rosie if they would like to run a workshop- Rosie to send round workshop brief which contains a list of workshops that the School can run.
- Rosie and Helen to contact new Partners to explain workshop process and workshop brief
- Group to contact Helen if there are any external events they believe will be beneficial for the Infrastructure leadership group
- Helen to invite Emily McBride, marketing manager of the Supply Chain School to the next leadership group meeting to present on marketing within the School and upcoming marketing
- Group to inform Helen and Rosie if they have any strategic targets in regard to the School e.g. % of suppliers have to achieve Bronze, Silver or Gold membership this could help to
 achieve the re-assessment target
- Group to contact Helen if they are interested of presenting on how they are implementing the School within their business
- Group to provide Helen with any suggestions they have for other collaborative key objectives

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Master Focus – exercise

The group was informed of a Master focus exercise by Cathy Berry from Action Sustainability. The exercise involves collaboration between the industry and academia which meets industry practice needs as well as scholarly needs. The research consists of a master's student investigating an issue or project within the industry.

The research is being considered to help identify knowledge gaps and possible future research topics within the industry as well as providing targeted insight at company or a project specific level. There are currently 7 proposals that have been submitted within the School from Partner organisations.

Please see below an example of a master proposal document:

Supply Chain Sustainability School -Horizon Group Masters Level Project Proposal

Project no: 1

Title of project: How is big data being integrated into building information modeling (BIM) to improve building design and optimise building performance/flexibility: A review of current progress and challenges with the UK construction sector. (or sub-sector or project?).

Industry/academic(s) sponsor/co-supervisor: TBD.

Analytical: Yes Computational: No Experimental: No Theoretical: Yes

Background (brief context):

Retailers, airlines, banks and almost all other services industry have all started to leverage their big data to make more accurate predictions to give a boost to sales and also expand operations. Whereas, the construction industry is in its infancy in analysing its databases to gain insight to boost performance.

A growing number of contractors and construction companies are working to find ways to make their existing software more useful by incorporating additional analytics, to help them better estimate projects, manage finances and seek out future market opportunities. The concept of Building Information Modeling (BIM) involves using 3D virtual models to help a team better plan, design, construct, and manage building structures. Even though BIM has been around for decades, it's only now that many have started to call for the integration of big data into the process. By adding data, these programs could also allow designers to more easily spot trends or make predictions on a project.

Scope/objectives:
The objective of the project is to analyze the extent to which the UK construction sector (or a sub sector) is integrating big data with BIM to improve building design and performance. The project will also look at understanding the success factors and barriers to integration and make recommendations on how organizations can better harness big data and adopt a more data driven approach to improve project outcomes and lifecycle performance.

The project can be shaped around a particular sector or even single project (ideally we can offer a scope here based on School Partner input so we can offer access to contacts, data and insights related to a project or multiple projects)

Analysis and summary of existing research and identification and review of best practice in this

area will also be required Required resources/skills

PC, software to do quantitative analysis (such as excel). Research on the experience of contractors use of BIM and its current and planned integration with wider data sets is key. Learnings and best practice from other sectors would also be helpful, this will require desk-based research, and interviews. The co-supervisors can facilitate references or introductions to

The student should have a strong interest in linking research with industry case studies, be self-motivated, driven and a self-starter.

There have also been 3 proposals from Grown in Britain which consists of:

- Sustainable timber in aquatic scenarios
- Identification markers for timber provenance
- U.K. Ash timber as a source raw material for 3D printing

Actions:

- Group to contact Cathy Berry Cathy@actionsustainability.com if they are interested in getting involved in any of the Grown in Britain Proposals
- Group to contact Cathy if they are interested in the master research programme
- Cathy to contact Gareth Evans from Costain in regard to the master research programme

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The group was split into groups and was asked to work together to answer the following questions:

- What research is currently being sponsored/undertaken in your organisation?
- Are there any issues or hot topics that you or your organisation would like to understand more about?
- What are your biggest anticipated challenges in the next 2-5 years?
- How do you think disruptive technologies will impact your business in the near future and what are the implications?

Feedback from Group:

Research being undertaken on/ hot topics:

- Concrete
- Cement
- Technology
- Carbon Whole life carbon and cost
- Social Value

Biggest Challenges:

- Future Proofing new infrastructure projects to be prepared for climate change and the cost for this
- Changing culture

Disruptive technologies:

- Realising the benefits of AI and the disruption that will evolve from AI being more active and better on planning
- The use of BIM to have efficient material use

The next element of the group discussion was to identify one or more draft proposals. This involved the group discussing a title, scope and objectives, possible industry sponsor and next steps. Please see below for the group's proposals.

Title	Coope	Objectives
Title	Scope	Objectives
How will digitally enabled	Trying to attract more people	-Understanding barriers
Millilumens transform the	into the industry and engage a	-Solution to barriers
infrastructure sector	more diverse workforce	-Using alternative communication channels
Addressing the skills shortage in UK infrastructure	Trying to engage more people into the industry	-Early engagement with clients -Visiting schools to encourage the interests of young people -Changing attitudes and perspectives — particularly of Women - Master student could investigate other industries to see what they offer young people - Flexibility- if clients to do not accept flexibility
		how do contractors move on?
The road of regulation of	Changing the culture of Waste	-How has the culture changed within in Health
Waste		and Safety could this be parallel?

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Tangible benefits and risks of AI	Where is AI going to have significance?	
Barriers to non-traditional workforce in Construction/ Infrastructure	Focusing on carers, other family members who are responsible for the care of children	
Culture to support whole life decision making to develop a Circular Economy		-Best practice and sharing knowledge of Circular Economy - Whole process from design to delivery

Action: Group to provide feedback on proposals suggested.

Carbon supply chain engagement:

It was suggested to the Infrastructure group, that a combined Partner event on Carbon should take place in January/ February 2019. The event would involve delegates assessing their current Carbon knowledge level and providing ideas and suggestions in relation to Carbon.

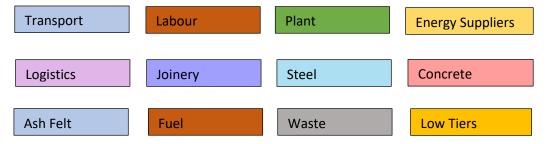
The group was split into smaller groups and was asked to:

- Discuss key carbon requirements
- Identify key supply chain trades
- Volunteer to host carbon workshops
- What outcomes do we want from the supplier day?

Carbon Requirements:

- Carbon Management and Measurement, focusing on consistency how are we measuring?
- Understanding data what do we want out of the data?
- Unified Carbon portal which is crunches data
- Embodied Carbon
- Defining Carbon into Material supply and life efficiency
- How to involve lower tier contractors they do not want to get involved until they have an order

Trades:



Outcomes:

- Understanding Carbon
- Common measurement
- Examples of where Carbon is the easiest business case to sell sustainability and financial benefit

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Gaining an understanding of science based Carbon

It was suggested whether the group should be focusing on Carbon or energy efficiency

Actions:

- Helen & James to put together a program for partners focusing on areas pf carbon discussed in the meeting
- Helen and Graham to come to back to the group with definitions of Scope 1, 2 and 3 for Carbon
- Members of the Group to contact Helen if they would be interested in join hosting a Carbon focused event in January/ February 2019
- Rosie to follow up with Costain and Hanson in regard to interests of hosting a Carbon workshop.
- Rosie to set up a workshop on Carbon Measurement within infrastructure

Social Value:

At previous meetings the group discussed creating a red and green list for social value. Red will be the things that companies will do not regarding social value and green will be the things that companies will do. The concept of the list is to get an indication of what social value means to the supply chain and the elements of social value that easier/harder to achieve.

Following on from this Helen discussed running a social value workshop where the initial discussion would be undertaken on what should be contained on a green and red list

Actions:

- Group to contact Helen and Rosie if they would like to be involved in progressing the red and green list and if they would like to be involved in a social value event in November.
- VGC Group is interested at potentially leading the project

AOB

- Phil Wright discussed a fuel report which was sent round to the group prior to the meeting. The report explained how new fuel can help the industry. Group to contact Phil.Wright@thewp-group.co.uk if they would like further information or if they have any questions.
- ✓ In October a meeting is to be set up to discuss how the group can get more value out of the sessions. Group to contact Helen if interested in taking part Murphy Group are interested in being involved.
- ✓ Sarah Jolliffe from BAM Nuttall is interested in doing a piece at leadership group meeting on a scope 3 journey
- ✓ The next leadership group meeting is taking place on the 13th November at Morson's offices
 Morson International, Adamson House, Centenary Way, Manchester M50 1RD.
- ✓ Group to let Rosie know if they are travelling to Morson's offices by car to ensure that a parking space is reserved.