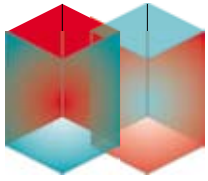


Helping to implement the ‘building smart’ approach...

Product and Process Rooms in Rhode Island



Representatives of the buildingSMART Product and Process Rooms, together with officers of buildingSMART International, met in Johnston, Providence County, Rhode Island in the US on 16 and 17 August to brainstorm future directions. There is an urgent need to expedite the development of process and product data standards, and the meetings explored areas for future projects to meet this need.

The urgency stems in part from the UK government’s programme to require integrated asset information in public sector projects by 2016. The first pilot projects in its five-year programme are already underway. If buildingSMART is to make a real impact on public projects – in the UK and around the world – it needs to accelerate standards development.

‘The meetings allowed us to explore the procedures we need to put in place, identify areas for immediate action and prioritise projects,’ said Roger Grant, who leads the Product Room. ‘The priority areas are the development of the bSDD [Data Dictionary], associated tools and pilot projects based on the most critical exchanges.’ Jan Karlshøj agrees with the importance of advancing prospective projects but emphasises the need to secure the right content and ensure its quality. ‘All along the value chain, we want the participants to have buildingSMART-compliant procedures supported by the tools they need for QA,

scheduling, estimating, procurement, installation and the crucial handover phase where high-quality asset information is required,’ he said.

Plans to set up groups and task forces were progressed at the meeting, with participants to be drawn from the membership of buildingSMART, partner organisations and specialist advisers.

Effective governance is essential, and much work has been done since the Oslo meetings of the two Rooms in March to put in place the right structures so that the sponsors and participants can have confidence that their projects will be well run. ‘We want to get the Rooms recognised internationally as *the* place to join with others in the topic area and to get your projects organised and executed,’ said Chris Groome, bSI business manager.

The next meetings of the Product and Process Rooms will be in Tokyo in October, planned to coincide with the meeting of ISO Technical Committee 59 (Buildings and civil




Tom Gay of FM Global hosted a meeting in Providence, Rhode Island, to develop plans for the Product and Process Rooms. Top, from left: Tom Gay, Jan Karlshøj, Roger Grant, Francois Grobler and Jøns Sjøgren. Below: urban regeneration in Providence Source: Bullshark44, 2009. CC-by-SA-3.0

engineering works). Last year, closer links were forged between bSI and ISO to bring about collaboration in developing standards. ‘Project proposals from the two Rooms will be developed with representatives from ISO TC59 to ensure a swift passage through to ISO approval,’ said Chris.

Present at the meeting were Jøns Sjøgren (acting IUG chair), Francois Grobler (ITM chair), Roger Grant and Jan Karlshøj. Tom Gay, chair of the US buildingSMART Alliance hosted the meeting.

‘Building live’ in London



A design competition requiring the use of open BIM took place in London in May, attracting participants from 37 different countries. The aim of the competition was to allow teams to experiment in creating multidisciplinary BIMs and develop an imaginary landmark project in London. The winning designs will never be built but the teams picked up valuable experience and had a lot of fun along the way.

The design contest required the teams to submit a set of BIM models in IFC – the Build London Live events provide a platform for both experienced practitioners and aspiring BIM users to gain hands-on experience in a stimulating environment, with the organisers on hand to give technical advice if it is needed. The event was organised by bS UK member companies Asite and AEC3, together with the UK chapter itself.

The competition is reported in full in a supplement that accompanies this newsletter.

BIM Academy design for Build London Live



See the buildingSMART supplement on Build London Live and visit www.buildlondonlive.com.

Provision for BIM training

Research into BIM education and training in buildingSMART countries has shown growing provision, notably in Norway and South Korea, with a preference for classroom training.

The research took the form of a questionnaire circulated to chapters and institutions to identify who is providing BIM education. Responses were received from organisations in four countries, and the picture to date is only partial.

Highlights of the research include the open BIM educational programme that buildingSMART Norway is launching in 2012, with four pilots. There will be a general module on multidisciplinary working with open BIM (a one-day class) and role-specific modules for clients, consultants and contractors (each two-day classes). Other training in Norway is given by software suppliers, with Graphisoft offering training in the use of open BIM.

In Korea, the buildingSMART chapter (bSK) has set up a BIM academy, with a course targeted



Training session in Korea

at employees, rather than full-time students, with programmes run at weekends or in the evening. Trainees give presentations to an evaluation committee who grade the work. The course – known as the BIM Professional training course – includes space planning and 3D design, with the 4D and 5D elements also covered. The chapter believes that BIM education is critical to the development of the construction industry in Korea and supports the Korea BIM Standards (KBIMS).

Course participants are highly motivated.

In the UK, Salford University stands out for its MSc in BIM and integrated design. The course, targeted at both graduates and practitioners, covers, among other topics, integrated processes, design co-ordination, scheduling and sustainability – it is far more than a software training course. Three other MSc programmes at Salford have some BIM content. Separately, a BIM academy was set up by Northumbria University and Ryder Architecture in 2011, to combine industry experience and academic knowledge.

In the US, Stanford University (in conjunction with a consultancy, Strategic Project Solutions) offers a certificate in virtual design and construction, aimed at professionals.

Professor Arto Kiviniemi from Salford University will chair a working group to explore the development of bSI-certified learning materials and qualifications.

For a copy of the report, contact Mike Cannell, bSI's training adviser (michael.cannell@mypostoffice.co.uk) or see the bSI website. If you missed out on the questionnaire survey, please make contact with Mike.

BIM uptake in Canada – survey results

In 2011, the Institute for BIM in Canada (IBC), which is home to buildingSMART Canada, did a survey on BIM use in the industry. There were 212 respondents, mainly architects, engineers, private owners and specification writers who were engaged in commercial or institutional projects. The aim of the survey was to collect data on the use of BIM in the Canadian construction sector, identify bottlenecks in the adoption process and flag any issues arising.

The survey findings were released in early 2012. On the plus side, around 70% of the organisations using BIM had realised benefits in the form of better end-products, enhanced productivity, competitive advantage and improved documentation. Interoperability was not generally a problem, but this might have been due to the use of a single shared platform. Some 80% believed that model ownership should be vested primarily with the architect, while more than 50% said that sharing BIM models might cause legal issues – reason enough to start an industry dialogue in this area.

But the survey showed that BIM implementation is a slow process, with many users still seeing BIM predominantly as a 3D modelling system. The survey suggested that one way to speed up adoption would be to make BIM a mandatory requirement for public projects. Many of the survey respondents did not have access to a best practice guide, and the survey results will feed into the process of developing one (IBC is working toward that end).

An executive summary of the survey is available at www.ibt-bim.ca

- From the survey:
- BIM is often interpreted as 3D modelling alone
 - User understanding of BIM is vendor-conditioned
 - Interest in BIM is high but true BIM projects are rare
 - Perceived BIM benefits are common
 - BIM is rarely a contract requirement

BIM guidelines in Finland

In March 2012, the Finnish property services agency, Senate Properties, published new BIM guidelines, updating and extending an existing version (see Issue 7 of this newsletter). BuildingSMART Finland helped to fund the project, and an English translation, called the Common BIM Requirement or COBIM 2012, is now available on the website of the Finnish chapter.

Visit buildingsmart.fi – click on the English flag and then on COBIM2012



New faces

The Korea chapter has a new chair, JinGu Kim. In the UK, Nick Tune of BRE takes over as business manager of the chapter (tunen@bre.co.uk).



Pushing for progress in France

The French chapter of buildingSMART, part of the Mediaconstruct organisation, has gained momentum over the past year. It leads the international openINFRA project and has succeeded in collaborating closely with product manufacturers. What lies behind the French achievements? Alain Maury, vice-chairman of the chapter, provides some answers.

What factors have led to this increased momentum in the French chapter?

For some years now, the French chapter has brought together a wide-ranging panel of professional organisations. And all the major construction companies have now joined the movement. The chapter is recognised as an independent body and welcomed as a 'trusted third party' in national research programmes.

What are the key areas for progress over the next two years?

First, IFC-BIM implementation in practice: it is our priority to push again and again, year after year, more and more private and public building owners, architects and engineers to move forward and adopt IFC-BIM. At the same time, all those implementations help the software industry to improve the quality of their products.

Secondly, manufacturers. Despite the commitment of major companies like Saint-Gobain, a large part of the French manufacturing sector is still observing (and mostly approving) what is going on rather than taking action. Big efforts have been made to get the whole industry more pro-active.

Thirdly, research. A constant level of research has to be maintained, since BIM technology is not in its final stage yet, and further model extensions and software components still have to be developed. The French chapter's efforts will form part of international work.

How have you built up a relationship with product manufacturers?

The French manufacturers' association, AIMCC, is a long-time supporter of buildingSMART. Saint-Gobain and a number of other manufacturers – who are global companies – are also long-term members of the chapter. And developing an electronic catalogue was one of the very first projects of Mediaconstruct, which began back in 1989, well before the launch of buildingSMART. This is a complex field and improvements are slow.

The French chapter leads the international openINFRA project. What are your aspirations for the project?

At this stage, the main aspiration of the project is to secure an achievable step-by-step strategy. Funding for the project is another key issue to be resolved.

Has the French government had any involvement in encouraging the use of BIM?

Two French ministries (construction and industry) have been on our side for many years – and the Construction Ministry has been close to the chapter since the very beginning of this crusade, constantly encouraging the use of BIM. They support our activities through the funding of projects, whenever possible. Government representatives proposed the concept of the 'trusted third party' to describe the role of the chapter in public or private-sector programmes.

How do you reach out to the wider community?



For four years we have run an annual event in Paris in June: BIM's Day. This event is an opportunity for professionals to see the advances in technology, implementation, education and so on. This year we developed the idea of regional 'BIM days', which have been held in Strasbourg and Clermont-Ferrand – and the result is impressive, revealing local initiatives and potential partners we would have never met by staying in Paris. We also publish a monthly electronic newsletter, eXpertise, to show implementations, success stories and the real-world difficulties.

For four years we have run an annual event in Paris in June: BIM's Day. This event is an opportunity for professionals to see the advances in technology,



Source: Frank Gehry Partners

Case study

A sailing ship in the trees: Louis Vuitton Foundation

The Louis Vuitton Foundation is a new cultural centre in the Bois de Boulogne in Paris, due to open in 2013. The client is the luxury goods group, LVMH (whose businesses include Moët Hennessy and Dior perfumes as well as Louis Vuitton), headed up by chairman Bernard Arnault, the seventh richest person on the planet. The project cost is €100 million [£70 million] and the architect is Frank Gehry. All in all, a recipe for an exciting project.

And it doesn't disappoint. Described by Frank Gehry as a vessel within the trees, and also likened to a cloud, the centre uses glass as its primary exterior material. A rippling glass carapace encloses the museum, allowing views over the park, with the 'sails' parting at certain points to reveal concrete 'icebergs' that form the core of the building. There are 3,500 unique curved glass panels and 19,000 moulded glass-reinforced concrete panels. Inside there are art galleries, an auditorium, social spaces and educational facilities, and the museum will house a collection of modern art.

Construction company Petit (a subsidiary of VINCI Construction France) is one of the parties involved in building the project. This could have been a nightmare of buildability. But the development of a BIM offered a solution to the technical difficulties of the project. The physical model was scanned and used as the basis for the BIM, which covered all the disciplines and allowed collaboration between the 15 plus design teams.

The Petit team integrated files from the individual disciplines: where files were not in the Catia format, IFC was used as an enabler. Members of the Petit team praised multiple benefits in the BIM: it offered essential visualisations, revealed problems which could be swiftly resolved upstream, provided an effective way of dealing with bills of quantities and optimised off-site manufacturing.

Issue 47 of eXpertise has an article on the use of BIM in the project. See www.mediaconstruct.fr, under the tab Accueil (in French only).

BIM Hub opens for business

Middle East chapter partnering with new BIM Hub

If you google 'building information model', you will get over 140 million results. And the term generates around 2.5 million internet searches a month. That's a lot of people looking for information – and a massive amount of information is out there.

To help users who are looking for training, networking and BIM research, a new portal, The BIM Hub, goes live on 25 September 2012. The aim of the website is to bring together a large BIM community in one place. The BIM Hub has been equipped with a social networking module that enables users to create their own BIM profile, network and socialise with other BIMMERS around the world.

The Middle East chapter has formed an alliance with The BIM Hub. Nadia Wallett, operations manager for the chapter, explains. 'A BIM portal is a much-needed resource for the industry,' she says. 'We believe that by engaging in this alliance, we will be promoting buildingSMART as an important organisation committed to the development of international BIM standards as well as offering consultancy and training services that will help companies to implement BIM.'

Every user will have their own personal dashboard, with the ability to personalise BIM news and job alerts and access a rich resource centre containing technical information, case studies, BIM online courses and much more. The website is intended both for BIM 'newbies' and for the more experienced. It has five main sections: network, promote, train, research and share.

The portal will cut through the clutter of excessive information and, through the collaboration with the local chapter, will help professionals in the Middle East know what resources, including training, are available. 'Our members will perceive great value from accessing a portal that is rich in BIM information,' concludes Nadia.

Visit: www.thebimhub.com

A word from the editor

With Issue 9, the bSI newsletter enters its third year. In the first two years of its existence, the newsletter has reflected the scope of activities that buildingSMART is involved in all around the world. Progress has been forged on various fronts simultaneously. Two centres of work have been formed – the Product and Process Rooms – grouping activities in a way that will generate momentum. We have set up closer collaboration with ISO to develop future standards in a streamlined way. The movement for openBIM was set up earlier this year to encourage the use of open – as opposed to proprietary – BIM. And the first steps are being taken in a project called openINFRA, to extend IFC to infrastructure, which could have massive repercussions.

The newsletter has reported on research and implementation projects in individual countries. Some of the stories published here have stimulated wide interest: the IFC database that has become a buildingSMART resource, the use of BIM at Olympic Stadium in London, Danish research on the financial benefits of BIM... And since the start of the newsletter, a new chapter has been formed in Canada, the fledging Middle East chapter has grown in stature and further chapters are in formation.

With this issue comes a four-page supplement covering an event called Build London Live – a design competition which attracted participants from several continents. 'Build Live' events allow industry professionals to test their skills and build experience, helping to further collaborative approaches.

Do you have any projects or activities that would make a good story or even a supplement? I would love to hear from you. Please make contact.

Betsy Dinesen

Betsy Dinesen, editor
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Annual Report – highlights of 2011/12

The bSI Annual Report & Accounts were presented to the International Council in London in May. In his foreword to the report, Patrick MacLeamy, bSI chairman, selects his highlights of the year. They include the close link that has been forged with ISO to develop future standards jointly, the Roadmap 2020 strategy, the creation of the Process and Product Rooms, and the steps taken to integrate the IFD Library Group into buildingSMART to form the core of the Data Dictionary. Patrick is optimistic about the increasing uptake of BIM. 'The prospects of success have never been higher,' he says. 'We must make sure it happens.'

The Annual Report covers the activities of the International User Group and the International Technical Management Committee, Information Delivery Manuals, certification, Model View Definitions, and matters of finance and administration. See www.buildingsmart.com.

Conference in Qatar

A two-day conference on BIM will be held in Qatar on 24 and 25 September 2012, when buildingSMART Middle East joins forces with conference and training provider IQPC to host the event. The Qatar BIM summit will cover both BIM use in the region and the wider issues of adoption.

Contact enquiry@iqpc.ae or visit www.bimsummitqatar.com

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