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Taking leave

The STAND-INN project closes in October 2008, after two busy years of research, evaluation and activities to spread news of efficient, innovative practices. The project was set up in the context of the EU's recognition of standards and standardisation as a key instrument for fostering innovation. Standards give innovating companies a level playing field and assist the emergence of new markets.

As project manager of STAND-INN, I have welcomed the delivery of the research and guidance reports in the areas of housing, public procurement, business process and ICT. The central role of building information modelling (BIM) has emerged from our work: if we are to build more efficiently and sustainably in the future, BIM is an indispensable tool.

STAND-INN members have been highlighting our work at seminars and conferences across Europe and beyond over the past 18 months, but the culmination is our two-day conference in Brussels, 'Waking a Sleeping Giant: Innovation and Sustainability in Construction' (14 and 15 October).

And carrying forward our message is the STAND-INN Handbook (see page 2), which brings together our findings and the practical experience of members to guide the industry. The handbook speaks plainly about the problems of unsustainable building and how we can start to do better.

Although the project will be over soon, there will be no rest. The torch must be carried forward, using STAND-INN findings and BIM-IFC, so that we can move firmly towards achieving a sustainable, innovative and competitive European construction sector. The first stage is to approach all of the relevant calls of the Competitiveness and Innovation Framework Programme, the Seventh Framework Programme, and other relevant mechanisms to establish the necessary RDI (R&D/innovation) portfolio which will drive the market roll-out of 'building smart'. I urge members of the industry to put their support behind industry initiatives, such as those of the buildingSMART organisation.

And finally, to all those who have participated in the project or followed our work, a heartfelt thank you.

Svein Erik Haagenrud
Project manager

Policy recommendations

The STAND-INN report, *Policy Recommendations on Standards and Innovation* (Wix and Karud 2008), explores the business drivers for sustainable construction and offers recommendations to support the use of BIM and interoperability in public procurement. Recommendations cover, among other things, defining a coherent strategy to include sustainability analyses, using the open IFC standard and letting the market propose creative solutions.

Seeing is believing

The scope and versatility of the buildingSMART standards beggar belief. So 'seeing is believing' events are held regularly to allow the industry to see just where the software is at. In Stockholm in September, a group of software vendors took a real-life project, the Ørje Tollsted customs house on the Sweden-Norway border, and showed how information could be exchanged seamlessly between numerous software applications. 'Open standards will be a must for succeeding with BIM,' concludes one supplier.

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Build London Live

STAND-INN members participated in Build London Live in June – a two-day design fest to create a virtual scheme on a real-world site in London. Build London Live set out to show how 'building smart' – collaborative working using IFC BIM – can make international collaboration possible in real time. The event took the form of a competition and participating teams, working from their own offices or at the London HQ, were asked to design a mixed-use development on the Greenwich peninsula. All the teams created BIMs

and used them for downstream activities such as energy analysis and life-cycle costs. The overall winners were the BIM Vikings – the level of detail of their IFC BIM won praise – and the achievements of all ten teams were rated highly by the judges.



The STAND-INN Handbook

Standards for innovation and sustainability in construction and facilities management

The STAND-INN Handbook is a guide for anyone in construction and FM who is looking to work in more efficient and sustainable ways. It has its source in the work of the EU STAND-INN project which explored how innovation, standards and ICT have combined to provide better approaches.

The building information model – or BIM – allows the parties in a construction project to share information using interoperable software. The best results are achieved by choosing software that complies with the open IFC standard which many software vendors are already using. The combination of a building information model and IFC-compliant software offers fantastic possibilities for greater accuracy, time saving and energy efficiency in design, construction and operation – something the STAND-INN project strongly supported.

Accessibly written, with case studies, action points, explanatory diagrams and ‘how to get started’ advice, the STAND-INN Handbook is an essential tool for companies and clients who want to reap the benefits of ‘building smart’.

“BIM offers a more collaborative way of working. Processes become more transparent and communal ... change brings opportunities.”

A primer for practitioners and clients

The STAND-INN

Handbook can be downloaded from the

Europe INNOVA website (europe-innova.org) and the

buildingSMART international website (buildingsmart.com) from

1 November 2008.

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“The market for sustainable products and services is large ... providers of sustainable innovative products will be well placed for growth.”

Figure Intro.1 The central role of the building information model: how the participants contribute to the shared model.

Figure 6.1 Products are part of the complex supply chain in construction and make a crucial contribution to the sustainability of buildings

The product may be viewed on its own or as part of the bigger picture (system, building, neighbourhood or city)

Source: Simplified from Wolfram Trinius, *Guidance report on the information exchange* (2008)

Figure 2.1 International standards allow a consistent approach to construction and building products and raise the bar in sustainability

Source: Adapted from the BSI diagram in "Rethinking standards in construction: Can standards support industry performance improvement?" A report from Constructing Excellence in the Built Environment

CASE STUDY: TRIUMPH AT THE BIRD'S NEST STADIUM, BEIJING
IFC standard plays a little-known but vital part

The Bird's Nest Stadium was the scene of triumph and glory at the Beijing Olympic Games. It was the use of the open IFC standard and BIM that made the stadium construction possible. The stadium was designed by Swiss architects Herzog & De Meuron, Arup, and China Architecture Design & Research Group. The complex roof structure of the stadium the nickname of the 'Bird's Nest'.

STAND-INN is a two-year EU-funded project on standards and innovation (2006–2008)