

# BIM, bam, boom

**Recent research has shown that there are almost 100 initiatives underway concerned with the digitalisation of information for construction products, with related software systems and with either an international or national focus**

*B*uilding Information Modelling (BIM) is a common theme of these initiatives. Of course, BIM is not a new concept. A paper in the 1980s predicted that model objects would connect to relational databases containing product data. Architects have long used software tools to design, plan and analyse buildings. While most have focused on the visual 3D aspects of modelling historically, the importance of data (the “I” of BIM) is rightly coming to the fore. BIM can be also traced to developments in the engineering world for the exchange of product data, including the *Initial Graphics Exchange Specification* (IGES) in the 1970s and 1980s, and in the 1990s ISO 10303, known informally as STEP (Standard for the Exchange of Product model data). For the automotive and aerospace sectors, the benefits of such standards are clear and widely adopted.

## Initiative in action

Hence, there is an urgent need for recognised international standards for BIM, particularly with respect to construction product data. In 2018, two ‘foundation’ European standards are scheduled to be published: EN ISO 19650-1 (Organisation of information about construction works – Information management using building information modelling – Part 1: Concepts and principles) and EN ISO 19650-2 (Part 2: Delivery phase of the assets). This should be followed in 2020 by parts three (Operational phase of assets) and five (Specification for security-minded building information modelling, digital built environments and smart asset management). These will have an impact on the BS/PAS 1192 standards. However, 2020 is also likely to be the earliest that any European standards for managing construction product data will be published.

## Changing tactics

There are several challenges for facade-related products with respect to product data. They are usually bespoke, particularly in a commercial construction context, and their performance will depend on the design details as well as their interaction with the rest of the building. Any product data will therefore need to highlight this interdependency, and the supply chain will need to maintain and update the product data as each design develops. This is also closely linked with the ‘Smart CE marking’ initiative. For SME fabricators and installers, this could require dedicated resource and a change in working practices.

## Choose your champion

Such a change should not be implemented by first adopting a software platform and changing business processes to suit. It has long been recognised that in any



**Dr Justin Furness – presenting a technical update to members at the Regional Members' March meeting in Leeds**

change programme, first address the ‘people’ aspects, then the ‘process’ and then finally the ‘technology’; the required data should be the result. Step one is changing the culture. Therefore, we need to continue explaining the benefits of BIM to all decision makers and ensure that each organisation that will need to implement BIM has its own ‘BIM Champion’ in place now. □

“This could require dedicated resource and a change in working practices”

**Justin Furness**