International Construction Information Society - Projects

41: BIM Object Library
42: BIM Object Standard

Paul Swaddle
Head of Business Solutions, NBS
• Redefined projects in 2016 (original discussion in 2015) to look at ICIS involvement in and recommendations about object creation and management for BIM object libraries

• General topic
  ICIS will deliver a set of recommendations and supporting information about best-practice development of BIM object libraries in an internationally consistent way
The only collection of high quality BIM objects certified to meet the NBS BIM Object Standard.

Contains the latest generic and manufacturer objects - all free to download.

Find BIM objects

What is NBS National BIM Library?

The fastest-growing BIM library in the UK, with an extensive collection of both generic and manufacturer BIM objects ranging from building fabric systems to mechanical and electrical objects. All our objects meet the requirements of the internationally recognised NBS BIM Object Standard.
Section 2: Information requirements

2.1 General
2.2 Values
2.3 Property groups and usage
2.4 Property naming
2.5 ODFs
2.6 Type Properties
2.7 Component Properties
2.8 NBS General
2.9 Supplementary

This section defines the requirements for the information contained within a BIM object. The purpose of this section is to describe the format, structure and content of the information, as well as the information that is required for each property.

Example of required properties:
- Name
- Description
- Type
- Value
- Unit

Example of optional properties:
- Notes
- Additional information

For more information, please refer to the NBS BIM Object Standard.
• Recognition that many ICIS members were encountering similar issues or exploring similar themes with national efforts
  • Collaboration = reduction of individual resource requirements
  • Lessons learned from other member countries’ experiences

• Can ICIS members collaborate to develop recommendations for application by national governments or agencies creating BIM objects and national BIM libraries (without encountering conflict of interest)?

• No budget attached – just circulating information and draft proposals
  • Virtual meetings / Skype etc.
  • Email/Dropbox
• Two sub-projects around BIM object development
  • 41: Lessons learned from the commercial development of an international BIM object standard could become an opportunity for ICIS guidance on international working around BIM object standards
  • 42: What are the key questions to promote best practice and standardisation in the development of national BIM Object Libraries?
Objectives (long-term):

1. Sharing information to ensure that individual member nations can avoid duplicating issues or obstacles encountered during the development of object libraries
2. Produce an internal report for ICIS members including advisory considerations (commercial)
   - Benefit of membership
3. Produce a public report for circulation to national governments, professional organisations and press etc.
   - Opportunity for ICIS
Objectives (short-term):

1. Discuss best-practice requirements for the development of national BIM object libraries
2. Work collaboratively with all interested member organisations to develop those recommendations in answer to a set of key FAQ questions
Progress has been slower than intended
  • Prioritisation
  • Changing involvement
  • Maintaining momentum
  • Commercial aspects

“BIM object libraries are often a commercial venture by an ICIS member group, or are funded/supported by national governments and their agencies. This report needs to consider this and avoid conflicts of interest or risk to IP/commercial intelligence; or for individual commercial goals to be contradicted by international / standardized recommendations.”
2016 project work developed a draft set of questions and a brief report of existing national BIM libraries, which are still valid and could form foundations for an ICIS report or public recommendations (article?).

Development of a list of FAQ (frequently asked questions) for organisations creating or developing “BIM object libraries” including platforms, websites or software and object content.

1. Will the library be a commercial venture or a free/funded initiative?
   a. What are the potential revenue-generating streams?

2. Will the library include platform-agnostic content?
   a. Will content for one platform be prioritised?
   b. Will IFC content and open schemas for interoperability be advocated?
   c. How will content remain current with annually-updating software?

3. Is the library discipline-specific (e.g. architecture, MEP, structural/civil, landscape, transport...)

4. What core functionality will the library need for users?

5. How will the library be structured?

6. Will the library contain generic object content or proprietary/manufacturer content?
• Recommend discussion on future of project:
  • Commercial and non-commercial considerations (complex)
  • Recent related issues around purpose of projects in ICIS
  • BIM vs. specification-focus – competing market
  • Other interest: Japan BIM Library Consortium
  • Access and requirements of information

• Proposal to adapt scope or focus of projects – discussion