**Activities related to Infrastructure Data Models**

This document is a slightly edited and updated version of the email I sent to the bSA BIM-GIS Committee members on Wednesday 10 April. This document will serve as background for my short presentation that will focus on the actors, activities and opportunities with the more overtly expressed need for interoperability between BIM, GIS and infrastructure specific requirements.

Original contents:

Several recent events would be of interest to the BIM-GIS Committee and perhaps could provide traction and a framework for cohesive and productive work in the BIM-GIS domain. I will be happy to answer questions or elaborate on these events if you could afford the time - it seem to mesh well with items 4 and 5 on the agenda. Briefly, albeit quite a long email, here are the high-lights.

During the buildingSMART International (bSI) meetings in Waltham, MA a half day workshop was held to kick-off a coordinate initiative to develop bSI/BIM compatible standards for Infrastructure and Civil Works. The event was the culmination of several efforts and trends:

1. The openINFRA steering group under chair Christophe Castaing has been laying the ground work for expanding the scope of bSI standards beyond buildings. openINFRA was started by several large infrastructure design, management and construction companies, especially in France, which followed on the IFC Bridge project.

2. Growing demands from several governments for integrated BIM that includes Infrastructure design, procurement and operation.

3. The government groundswell is spearheaded by the UK government, but governments in France, Germany, Finland, Norway, the Netherlands and several others also have similar bSI/BIM for Infrastructure initiatives. The UK government is eager to help fund international standards and has officially invited high-level government officials from several countries for a meeting in London, in order to help bSI grow further support and coordinate the work. Much work indeed.

4. The UK government's BIM initiative has high level cabinet support and funding of 50 million pounds budgeted over the five years. See details here: <http://www.bimtaskgroup.org> The goal is to have all UK government projects, including infrastructure and civil works, be designed, procured and managed as integrated BIM projects, starting in 2016. Not all infrastructure work types could be covered by that time, but the high priority ones will be.

5. In recognition of the amount of work to be accomplished bSI has renewed and strengthened its memorandum of understanding with OGC. OGC and bSI are committed to coordinate and collaborate, to avoid duplication of effort and to develop interoperability between bSI and OGC standards in overlapping area. The goal is to have transparent interoperability from the user perspective.

6. At a joint OGC/bSI meeting in Redlands in January 2013, ESRI expressed interest to investigate implementing input capabilities from IFCBIM to ESRI tools.

Additionally, the new version of IFC has been released during the Waltham meetings. IFC4 is significant in that it has for the first time a native as well as a simple ifcXML full equivalent. The important point is that this will enable, with some caveats, IFC in-flow data compatibility with new ifcXML-based software for Infrastructure.

The bSI Infrastructure work is being organized as a virtual Room, where several, or hopefully, many projects will simultaneously work on aspects of Infrastructure work. The current openInfra projects will continue as projects in this space, and the new steering committee may choose to continue name it openInfra, even as it is now a broader international effort. A Room Coordinator will have the responsibility to ensure progress as well as coordination of user requirements and technical aspects among working groups. The projects will be defining reference work processes and the data requirements to support data exchanges (and related business rules). Snapping building footprints into coordinates that Deborah mentioned is a good example of a small project. There will be larger projects needed to define processes of design and alignments of roads, railways, waterways; linear construction, geotechnical, GIS and system related aspects such as environmental, traffic, control electronics etc.

A document drafted by the openIFRA group to describe the priorities of projects is attached. We would welcome your comments and input. We also hope that several of the listed projects (or ones not listed) would be of sufficient interest to members of this group to start these projects in the Infrastructure Room context. This could be done as soon as projects and participants are ready to go. The focus will be international standards, but many international projects had been lead by groups from specific bSI chapters. Experience has also shown that most regions of the world have similar core issues with few local, legal or other requirements that can be handled in local extensions of the basic international standards.

The next face-to-face meeting of the bSI Infrastructure group will be in Munich, Germany, during the week of October 7th when a steering committee will be elected during this meeting for the Infrastructure Room. It would be good to have strong candidates from the US, so please consider suitable nominations.

Regards,

Francois Grobler

Serving as bSI Technical Management Chair