buildingSMART-standards
“information and demonstration”

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- Challenges in AEC-FM industry
- The buildingSMART prescription
- Demonstration
- Wrap up
Today's "document centric" situation

Some of the challenges with this model

- Within the same domain there is often significant communication errors and loss of project information
- 25-30% of the construction cost is caused by splitting up of processes and lousy communication
- The same information is re-entered on average 7 times in different systems before the building is handed over to owner organization
- Same information is re-created several times by different software
Tomorrows “information centric” model

buildingSMART in Norway
- “develop eCollaboration based on buildingSMART”
Participants

- The Federation of Norwegian Construction Industries
- Association of Consulting Engineers
- Association of Architects
- Norwegian Homebuilders Association
- Norwegian Construction Products Association
- The Organization of Timber and Building Materials Merchants
- Association of Technical Entrepreneurs
- The Norwegian Joinery Manufacturers Association
- Norwegian Master Builder Association
- Standards Norway
- SINTEF/Byggforsk - Norwegian Building Research Institute
- Statsbygg - The Directorate of Public Construction and Property

- Funding partners
  - Innovation Norway
  - Building Cost program

buildingSMART

Objectives

- Define **structure and method** for behavior for tomorrows building- and construction industry
  - nationally and internationally
- Make Norwegian industry **competitive** through optimalised use of technology.
- Be the most important **innovation pillar** in the industry
The Norwegian buildingSMART - project

1. Develop buildingSMART
   Semantic technologies
   - IFC-IDM (data model and information exchange requirements)
   - IFD (ontology project) International Framework for Dictionaries
   Activities
   - Standardisation
     - IAI
     - ISO TC 59/ TC 184
     - EU's 7 Frame program

2. Implement/deploy buildingSMART eCollaboration & eProcurement
   - Electronic collaboration
   - Product information
   - Changes in business processes
   - eGovernment
   Activities
   - Pilot projects
     - HITOS
     - AHUS
   - Pilot groups
   - User requirements

3. Business development
   - International business development
   - National business development
   Activities
   - Export of knowledge
   - Investigate new business models
   - The "Nordic model"

4. Knowledge based systems
   Active and Smart building Knowledge platforms

...we are not alone

buildingSMART is the brand of IAI (International Alliance for Interoperability)

13 Chapters ~40 Countries >600 Organisations
buildingSMART is about exchange and sharing of information

Demonstration

- Ole Kristian Kvarsvik
  - Statsbygg - The Directorate of Public Construction
Statsbygg's tasks

Statsbygg is the Norwegian Directorate of Public Construction and Property. Organized as a government corporation, Statsbygg's tasks include:

- construction
- property management
- property development
- buying and selling

Statsbygg's focus on BIM and IFC

- Statement 2007

Statsbygg aims to increase the utility value of its buildings for tenants and users, and aims to significantly reduce construction and operating costs and building damage through use of BIM, based on open, international standards (IFC).
Demonstration

- Ole Kristian Kvarsvik, **Statsbygg** - The Directorate of **Public** Construction

Wrap up
We need funding for new projects!

Is Eurekabuild something for us?

buildingSMART-challenges ahead
Project Ideas:

- Enterprise understanding
  - Change in business processes
  - Enterprise models
  - Enterprise architectures
  - Develop IDM (Information Delivery Manual)
  - Legal issues

- Implementation in the industry
- Active knowledge systems
buildingSMART-challenges ahead
Project Ideas:

• Develop good ICT-Tools
  – shared data models
  – shared interfaces
  – software

• Digital libraries
  – IFD-Library
  – Object Libraries
  – Product Library

Thank you!

• More info:
  http://www.buildingsmart.com/
  http://www.buildingsmart.no/
  http://www.iai-international.org/
  http://iai.no/
  http://www.ifcwiki.org/
  http://idm.buildingsmart.no/
  http://www.ifd-library.com/

• FTP-Site:
  ftp://ftp.buildingsmart.no/pub/