

National Institute of BUILDING SCIENCES

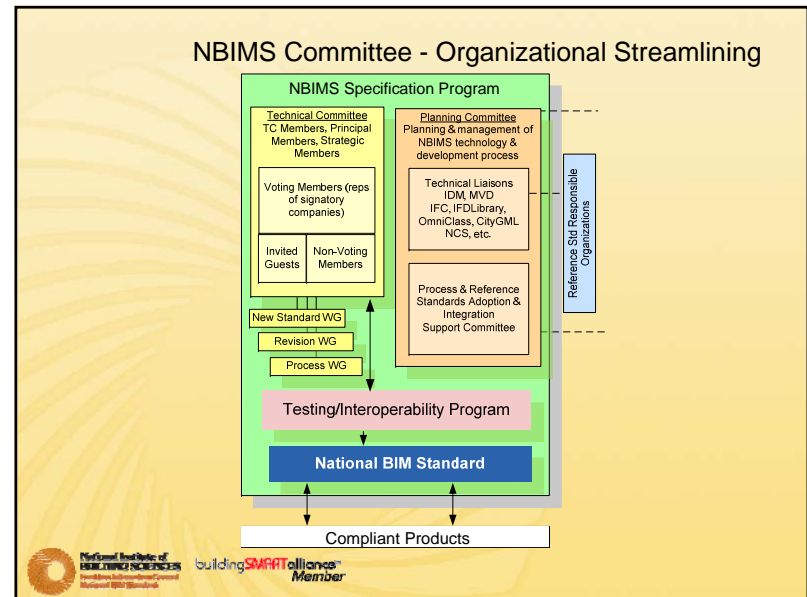
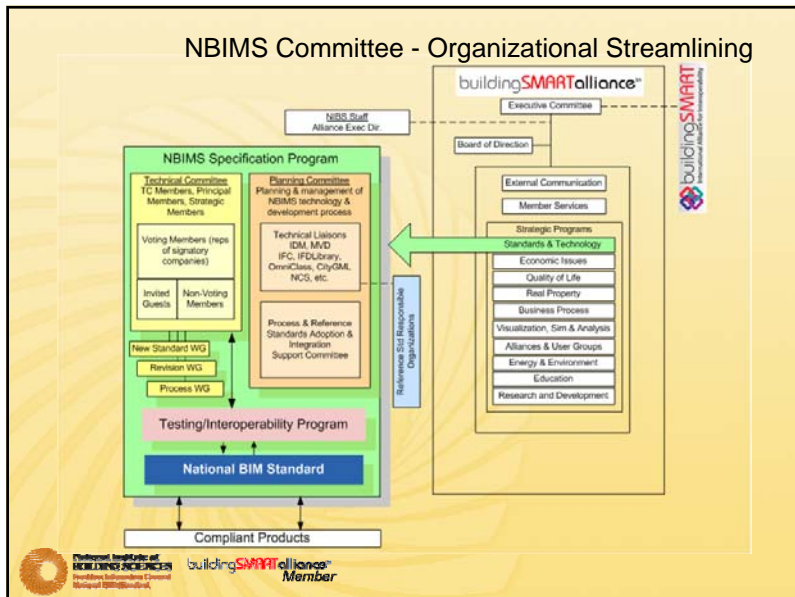
Facilities Information Council
National BIM Standard

National BIM Standard Update

May 21, 2008

Agenda

- Organization
- Beginning Operations
 - Process
 - Technical Basis
- OmniClass™ Revisions
- Consensus Process
- Projects
- NBIMS Version 1 – Part 2 Planning

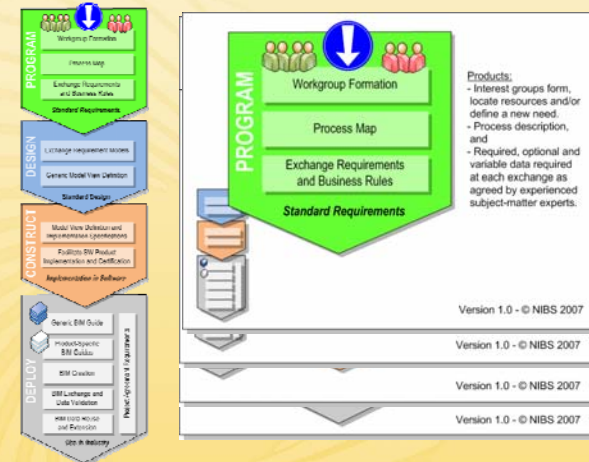


Technical Basis

Purpose	Norm Std	Owner	Documentation
Business Process and Information Requirements	IDM, v2	BuildingSMART Intl.	IDM 2 Methodology, buildingSMART Norway
Generic & Schema-specific Model-View Definition	MVD	BuildingSMART Intl.	NBIMS V1-P1, NIBS
Information, Modeling and Validation Framework	IMV		NBIMS V1-P1, NIBS
Virtual Building Objects, Properties and Associations Data Model	IFC, v2x3	BuildingSMART Intl.	ifc.buildingsmart.com/
Building Process & Component Classification	OmniClass	CSI & CSC	www.omniclass.org/
Building & Construction Terminology Reference Library	IFD Library	CSI, CSC, buildingSMART Norway, STABU Foundation	www.ifd-library.org



Beginning Operations – NBIM Standard Process

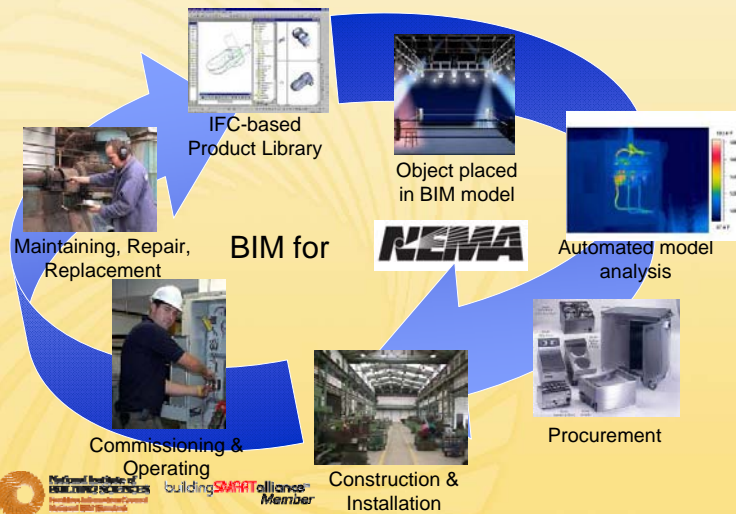


NBIM Standard Product

- The National BIM Standard will consist of specifications and encodings to define the requirements for exchanges of data between parties using building information modeling processes and tools.
- NBIMS will
 - a.) Organize groups of industry professionals to **define requirements**, then **publish exchange specifications** for use in specific business contexts within a holistic facility lifecycle framework
 - b.) Publish **encodings** for the exchange specifications employing internationally acceptable open standards as normative references
 - c.) **Facilitate implementation** by software developers of encodings in software
 - d.) **Facilitate use** of certified software by end-users to create and use interoperable building information model exchanges.



Industry Presentations





Electrical Manufacturing Lifecycle Value Chain

PHASE

Standards and Manufacturing Specifications

Virtual Design/Engineering

Procurement & Installation Planning

Contractor Installation

Operations Engineering

VALUE ADD

Basic physical & performance characteristics

Design requirements
Product Selection
Planned cost, quantity
Geometry placed into model
Systems integration
Conflict resolution
Performance Analysis

Nameplate info
Actual cost
Inventory management

Validate installed components
Commissioning data

Maintenance and repair specs & data
Renewal and replacement specs & data



buildingSMART alliance Member

buildingSMART alliance: Emerging Projects

- Industry Foundation Classes (ifc) (Alliance Technical Committee)
- Information Delivery Manuals (IDM) (Alliance Technical Committee)
- Model View Definitions (MVD) (Alliance Technical Committee)
- Industry Framework Dictionary (IFD) (Alliance Technical Committee)
- National BIM Standard (NBIMS) (NIBS FIC)
- National CAD Standard (NCS) (NIBS FIC)
- AECOO Testbed (OGC/buildingSMART/IAI)
- Architectural Precast (Pankow)
- Automated Code Compliance Checking (AC3) (ICC)
- Construction to Operations Building Information Exchange (COBIE) (NASA/COE)
- Early Design Information Exchange (COE)
- Structural Design (Pankow)
- Geospatial Integration (Alliance)
- Object Standards Harmonization (ISO 16739-ISO 15926) (FIATECH)
- Distance Learning (Alliance)
- Continuing Education Principles (Alliance)
- University Education Coordination (Alliance)
- Project Execution Planning for BIM (Pankow)



buildingSMART alliance Member

Beginning Operations – Standards Projects

- By-laws and Rules of Governance
- Instructional documentation for Reference and NBIMS processes & technology
- Standards Projects
 - Coordinated through Alliance Project Coordination
 - MOU rider for Projects creating standards products



buildingSMART alliance Member

Beginning Operations – Standards Projects

- OmniClass™ Revisions
 - Building Types
 - Space Class by Function
 - Organizational Roles
- Consensus Process
 - Reviewing public consensus processes
 - Preparing draft proposal for Planning Committee
 - Target is August 2008
- Start-up IDM Website & Exchange Database
- Initial population of IFD Library



buildingSMART alliance Member

NBIMS Version 1 – Part 2

- Methods for preparing and submitting candidates for standardization.
- Details of the Consensus process
- Update on Normative Standards
- Details on initial candidates for standardization



National Institute of
BUILDING SCIENCES
Thank You
Facilities Information
National BIM Standards

Alan Edgar, Chair
Diane Davis, IDM
Roger Grant, IFD Library
Richard See, MVD
Tammy McCuen, Consensus
alan.edgar@oscre.org
(765) 215-8251

