BUILDING INFORMATION MODELING MODELOWANIE DANYCH BUDOWLANYCH

BIM Guide Manual

Adam Glema

<u>USA</u>

GSA Building Information Modeling Guide, 2007 Series 01 - Overview version 0.6, 2007 Series 02 - Spatial Program Validation version 0.96, 2007 Series 03 - 3D Imaging version 1.0, 2009 Series 04 - 4D Phasing version 1.0, 2009 Series 05 - Energy Performance and Operations version 1.0, 2009 Series 06 - Circulation and Security Validation, 2007 Series 07 - Building Elements, 2010 Series 08 - Facility Management version 1.0, 2011

General Services Administration (GSA) Washington, DC 20405, U.S.

<u>USA</u>

- The National BIM Standard-United States
- General Buildings Information Handover Guide Principles, Methodology and Case Studies, 2007
- National Building Information Modeling Standard Version 3, 2015
- National BIM Guide for Owners, 2017

Washington, DC 20005, National Institute of Building Science.

<u>USA</u>

- AIA Document E203[™]-2013, BIM and Digital Data Exhibit,
- AIA Document G201[™]-2013, Project Digital Data Protocol Form,
- AIA Document G202[™]-2013, Project BIM Protocol Form,
- Guide, Instructions and Commentary to AIA Digital Practice Documents

American Institute of Architects (AIA) Washington, DC 20006-5292.

• The Contractor's Guide to BIM Edition 2, 2010 Association General Contractors of America, Arlington, VA 22201

<u>USA</u>

- The VA BIM Guide v1.0, 2010 Department of Veterans Affairs, Washington, DC 20420, U.S.
- The US Army Corps of Engineers Roadmap for Life-Cycle Building Information Modeling (BIM), 2012 Engineer Research and Development Center Washington: DTIC Document.

<u>USA</u>

- Georgia Tech BIM Requirements & Guidelines for Architects, Engineers and Contractors", 2011, Georgia Institute of Technology
- AECM BIM Guidelines 2012 University at Albany, Albany
- Building Information Modeling (BIM) Guidelines version 1.6 for Design Bid Build Contracts", University of Southern California

<u>USA</u>

- •BIM Project Execution Planning Guide Version 0.1,
- •BIM Planning Guide for Facility Owners Version 2.0, 2013.
- •The Uses of BIM Version 0.9, 2013

Computer Integrated Construction Research Program, University Park, PA, USA, The Pennsylvania State University

- BIM Guidelines and Standards
 - for Architects Engineers and Constractors, 2012
- Indiana University BIM proficiency matrix, 2012
 University Architect's Office, Indiana University.

<u>USA</u>

- BIM Guidelines, 2012
- Design Consultant Guide Appendix, 2013
- BIM Site Safety Submission Guidelines and Standards 2013
- BIM Guidelines and Standards for Architects and Engineers v1.1 NYC School Construction Authority.

Department of Design + Construction, NY 11101, New York City.

• BIM guidelines and standards for architects and engineers, 2012 Division of Facilities Development, Madison, Wisconsin.

FINLAND

• Common BIM Requirements 2012

based on the BIM Requirements published by Senate Properties in 2007 Senate Properties in addition to several other real estate owners and developers, construction companies and software vendors with BuildingSMART Finland

Consists of the following documents:

- 1. General part
- 2. Modeling of the starting situation
- 3. Architectural design
- 4. MEP design
- 5. Structural design
- 6. Quality assurance
- 7. Quantity take-off
- 8. Use of models for visualization
- 9. Use of models in MEP analyses
- 10. Energy analysis
- 11. Management of a BIM project
- 12. Use of models in facility management
- 13. Use of models in construction
- 14. Use of models in building supervision

NORWAY

- Norwegian Home Builders' BIM manual Version 1.0, 2011
- Norwegian Home Builders' BIM manual Version 2.0, Norway, 2012

Norwegian Home Builders' Association.

Buildingsmart NORGE

https://buildingsmart.no

• Statsbygg BIM Manual v1.2.1, , 2013 Oslo, Norway, Statsbygg.

DANMARK

• Det Digitale Byggeri (2007).

Documentation - danish

UNITED KINGDOM

- BIM A Standard Framework and Guide to BS 1192, 2010
- BIM Level 2 Documents and Standards BRE

British Standards Institution London W4 4AL

BS 8536-1:2015 Briefing for design and construction. Code of practice for facilities management (Buildings infrastructure)

UNITED KINGDOM

BS 1192:2007 + A2:2016 Collaborative production of architectural, engineering and construction information. Code of practice PAS 1192-2:2013 Specification for information management for the capital&delivery phase of construction projects using BIM PAS 1192-3:2014 Specification for information management for the operational phase of assets using BIM BS 1192-4:2014 Collaborative production of information. Fulfilling employer's information exchange requirements using COBie. Code of practice PAS 1192-5:2015 Specification for security-minded building information modelling, digital built environments and smart asset manageme PAS 1192-6:2018 Specification for collaborative sharing and use of structured Health and Safety information using BIM

IRELAND

• Construction IT Alliance

CITA



National Guidelines for Digital Modelling, 2009

Cooperative Research Centre for Construction Innovation. Brisbane QLD 4001, Australia,

NATSPEC National BIM Guide v1.0, 2011 NATSPEC BIM Management Plan Template v1.0, 2012

Construction Information Systems Limited, Sydney, New South Wales, Australia 2000.

CANADA

- AEC (CAN) BIM Protocol, 2012
- CanBIM AEC (CAN) Designers Committee

HONG KONG

- BIM User Guide Version 1.0, 2009
- BIM Standards Manual Version 1.0, 2009
- BIM Library Components Reference Version 1.0, 2009
- BIM Library Components Design Guide Version 1.0, 2009

Hong Kong Housing Authority, Development and Construction Division.

SINGAPORE

- Singapore BIM Guide Version 1.0, 2012
- Singapore BIM Roadmap, 2012. Building and Construction Authority. MND Complex Singapore 069110
- Singapore BIM Guide Version 2.0, 2013.
- •BIM e-Submission Guideline for Architectural Discipline v3.5.
- •BIM Essential Guide for MEP Consultants.
- •BIM Essential Guide for BIM Adoption in an Organization.

TAIWAN

- BIM Level of Development Specification, v.2014,
- Research Center for Building & Infrastructure
- Information Modeling and Management,
- National Taiwan University, Taiwan

<u>CHINA</u>

- Shanghai BIM Application Guide, 2015
- Shanghai, Shanghai Government.

BuildingSMART

- bSI SPECIFICATIONS
- Standards, Library, Tools & Services

https://www.buildingsmart.org/standards/standards-tools-services/#spec

• BIM Guide Project, 2016 BuildingSmart,

Guidelines Project

http://bimguides.vtreem.com/bin/view/BIMGuides/