BIM in China

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CLASS 1 REGISTERED ARCHITECT
LEED AP
DIRECTOR OF BIM CENTER
DIRECTOR OF BUILDINGSMART CHINA CHAPTER

CHINA INSTITUTE OF BUILDING STANDARD DESIGN & RESEARCH (CBS)
CHINA INSTITUTE OF BUILDING STANDARD DESIGN & RESEARCH (CBS)

- Standards and standard design
- Architectural & engineering design
- Urban planning design
- Residential industrialization
- Underground space and civil air defense for subways
- Steel structure
- Anti - seismic
- Green building and energy-saving
- Building Information Modeling
- Building product application technical research and certification
- International cooperation
GROUP – CHINA CONSTRUCTION TECHNOLOGY CONSULTING CO. LTD
China Architecture Design Group

- State owned Enterprise
- Total 13 companies
- Largest Architectural Design consulting group
buildingSMART CHINA

- 中国BIM认证
- China BIM Certifications
- BIM最佳实践导则
- BIM Executive Practice Guide
- 国内外BIM标准和技术的交流
- Community of BIM standards and technology
- IFC等标准的发展和本地化
- Research & localization for IFC
- BIM知识普及
- BIM training
EXISTING SITUATION OF CHINA AEC INDUSTRY

BACKGROUNDs

• China is going through decline period in GDP growth.

• Downturn of Real Estate appears across the whole country.

• Government offers financial easing policies to infrastructures and public buildings.

• Supervision of public constructions are strengthened by government.

• New technologies are promoted. BIM, Pre-fabrication, green building, smart-city, etc.
BIM DEVELOPMENTS IN CHINA

• AEC industry started to accept idea of BIM substantially. Some universities and design companies provided frame of theory and practice.

• Since then BIM has been adopted in many huge and complicated constructions, such as Shanghai Center, Beijing Citicorp Tower, Hi-speed railways.
BIM DEVELOPMENTS IN CHINA

Ministry of Housing and Urban-Rural Development of the People’s Republic of China (MOHURD): • Guild line for Promoting Implementation of BIM, June 6, 2015

By 2020:
Survey, design, construction enterprises with class A grade should implement integrated applications of BIM and management systems and other information technology.

Integrated implementation of BIM should apply for processes of survey, design, construction and facilities management in no less than 90% new project of:
1) Large or middle size buildings invested by state;
2) Public buildings or Green ecological demonstration area to apply for "GREEN STAR".
CHINA STANDARDS HIERARCHY

Standardization Administration of P.R. China (SAC)

Ministry of Housing and Urban-Rural Development of P.R. China (MOHURD)

NATIONAL

INDUSTRIAL

PROVINCIAL

ASSOCIATIONAL

ENTERPRISE
Mandatory standards-----YOU HAVE TO FOLLOW STANDARDS!
Recommend standards-----YOU'D BETTER TO FOLLOW STANDARDS!
CHINA STANDARDS ADMINISTRATION IN AEC INDUSTRY

- SAC
- MOHURD

Professional Committees

- Administrate
- Approval and issue

Standard Work Committees

- Organize
- Review and Checkup

- Technical research
- Write
- Publicize and explain
BIM PROVINCIAL STANDARDS
BIM STANDARDS SYSTEM

IFD  ISO 12006  International Framework for Dictionaries ---  Classification and Coding Std

IDM  ISO 29481  Information Delivery Manual  ---  Delivery Standard

IFC  ISO 16739  Industry Foundation Classes  ---  Data Exchange Standard

China
CHINA NATIONAL BIM STANDARDS

- Classification and Coding Standard
- Delivery Standard for Design
- Data Exchange Standard
- Unified Application Standard
- Application Standard for Construction
- Expression Standard for Design

Standard Drawing for Electrical BIM
BIM DEVELOPMENTS IN CHINA

JINSHA RIVER LONGKAIKOU HYDROPOWER STATION

Award Bentley
The Year in Infrastructure 2016
BIM DEVELOPMENTS IN CHINA

PHOENIX CENTER
BIM DEVELOPMENTS IN CHINA
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- 山东日照丁肇中科技馆
  Samuel Chao Chung Ting Science Museum
CURRENT BIM PROBLEMS

- 标准化（系统化）程度不足
  Lack of standardization
- 数据化（信息化）程度不足
  Insufficiency of data
- 平台化（整合化）程度不足
  Shortage of Integration

- 标准化  Standardization
- 数字化  Digitization
- 集约化  Centralization
BIM DRIVING POWER

CHINA BIM

GOVERNMENT UNIVERSITY OWNER PLANNER SURVEYOR DESIGNER CONTRACTOR MANUFACTURE COST CONSULTANT
BIM DRIVING POWER

- Platform
- Resources
- Applications
BIM INTERNATIONAL COOPERATIONS
CHINA BIM CERTIFICATIONS

buildingSMART China

China State Construction Engrg. Corp. Ltd

China Academy of Railway Engineering

China Communications Construction

China Construction

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Thanks

谢谢