buildingSMART International An Update

Richard Petrie, Chief Executive October 2017



Three Important Questions

Why are Open, Universal Digital Standards important?

Why is buildingSMART important for Open Standards?

Why should you take a leading role?



The Importance of Standards

Change is inevitable

Digital Technology has completely upended traditional business models

Consumers expect service and products to get better and cheaper

The building and infrastructure industry is ripe for disruptive change

Lead, follow or be crushed: change is inevitable!



The Importance of Standards

Benefits

Save time and money

On design

On construction

On operations

Make better, more informed decisions

Deliver better results for your customers



The Importance of Standards

Requirements

Open Shareable Machine Readable Data

Good data is essential: what is good data?

Living with legacy

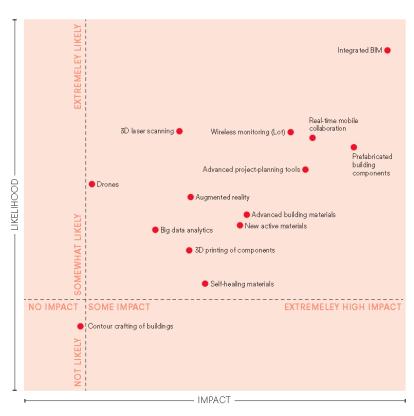
Good data requires open standards



Opportunity

World Economic Forum underlines importance of openBIM

IMPACT-LIKELIHOOD MATRIX OF NEW TECHNOLOGIES



Our <u>brochure</u> demonstrates:

- Pivotal role of buildingSMART
- How you can contribute
- Business case for interoperability
- Membership options

SOURCE: Shaping the Future of Construction, World Economic Forum/The Boston Consulting Group



buildingSMART Introduction



buildingSMART

buildingSMART was founded in 1995 and has evolved to meet the demands of the building and infrastructure sectors.

building

Applies to the entire built asset industry. buildingSMART has grown from serving the Building sector and now also servers the Infrastructure sector.

SMART

Identifies the way in which we wish to build: with intelligence, interoperability, and teamwork to design, build and operate built assets.



Vision



Enable full benefits from digital ways of working in the built asset industry



Goals



openBIM Solutions

openBIM Standards

openBIM Adoption

openBIM Compliance

openBIM Use



Values



Open

Neutral

Non-Profit



History

1995 Established

2000 IFC2

2001 IFD ISO

2012 IFC4 + bSDD

2013 IFC ISO

2014 IFC Infrastructure

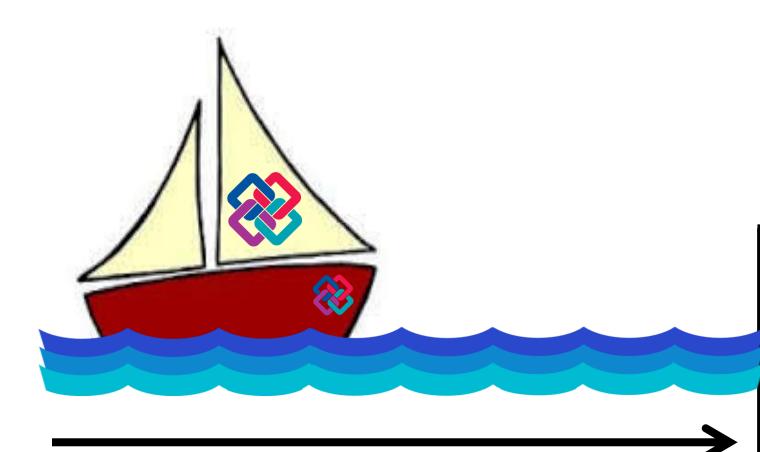
2015 BCF

2016 Enabling workflows





Standardisation



Standardisation



ISO

CEN

National Standards



Partnerships

with other standards organizations











Chapters

Our national organizations





































Members

Strategic Members











NEMETSCHEK GROUP

International Members











Standard Members



































Sponsors

Building & Infrastructure









Individual Certification







Rijkswaterstaat Ministry of Infrastructure and the **Environment**

buildingSMART Data Dictionary















BIM Collaboration Format











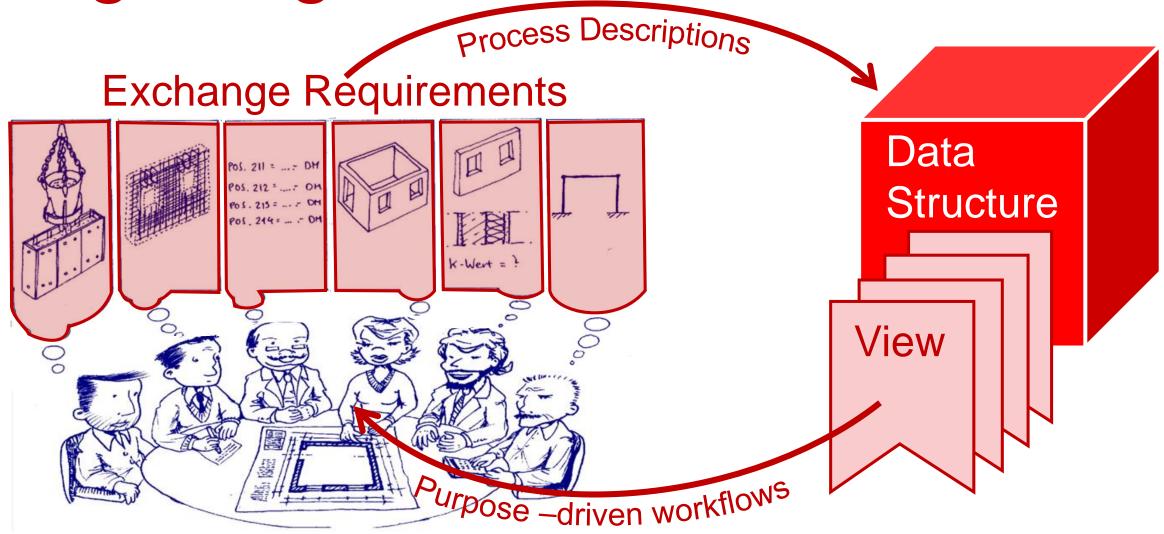




buildingSMART Activities



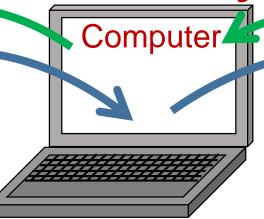
Digitising workflows

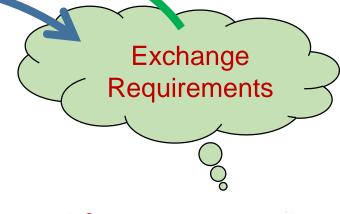




Enabling digital ways of working











2. Enabling Data Structure

3. Change coordination

4. Defined terms and types

5. Digital Workflows

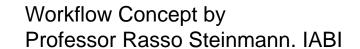
IDM IFC

BCF

bSDD

MVD

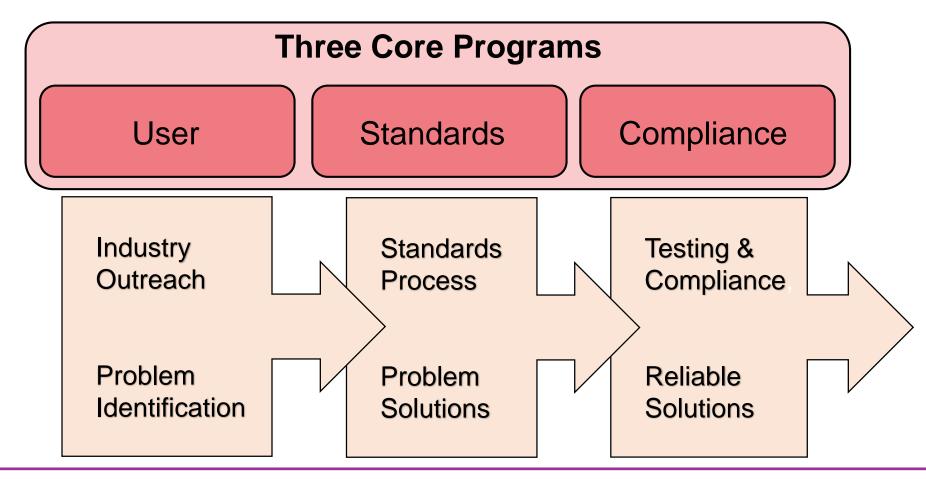






Core Programs

Users Drive our Process





User Program

Engagement with National & Client Programs





















Standards Program

Organization

Standards Committee (SC)

Standards Committee Executive (SCE)

Standards Committee Technical Executive (SCTE)

Chapter & Member reps

Rooms (specialist domains)

Building

Infrastructure

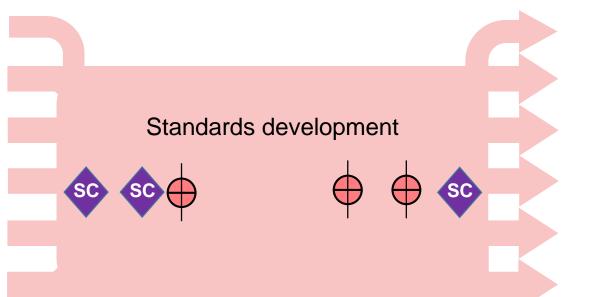
Product

Technical

Regulatory

Construction

Airport





Standards Committee votes



Expert Reviews:

- End User
- · Technical Architecture
- Commercial
- Implementer





Barcelona Summit 2017

Memorandas of Understanding



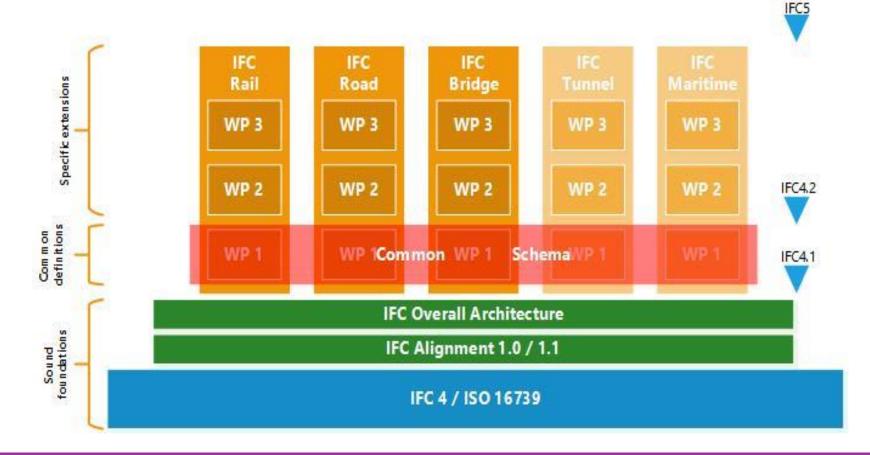
The InfraRoom is pleased with the signing of the IFC Common Schema, IFC Rail, and IFC Road MOUs and appreciates the work by all parties involved.



Standards Program

Infrastructure Room

Work Plan





Data Dictionary

European ambitions

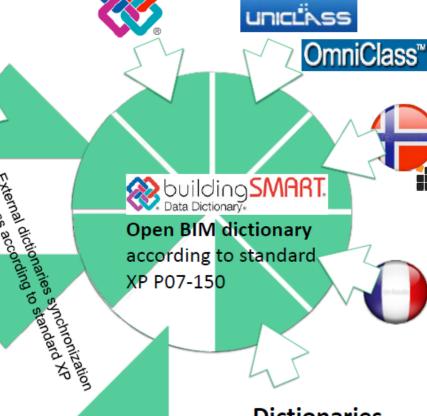
UK dictionaries

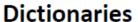
CEN dictionary

Private dictionaries

harmonized & synchronised with bSDD following standard XP P07-150

Lexicon





harmonized following standard XP P07-150

context in bSDD





oBuilder

PPBIM

Compliance Program

Individual Qualification Scheme

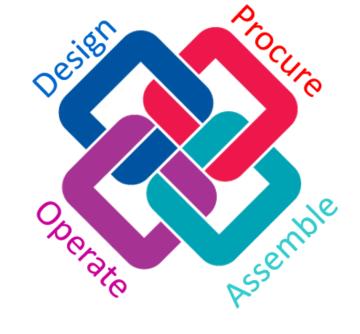
Launch Q3 2017

Software Certification

Reference View NOW Open

Design Transfer View - requirements definition





Thank You

Richard Petrie, Chief Executive

www.buildingsmart.org

