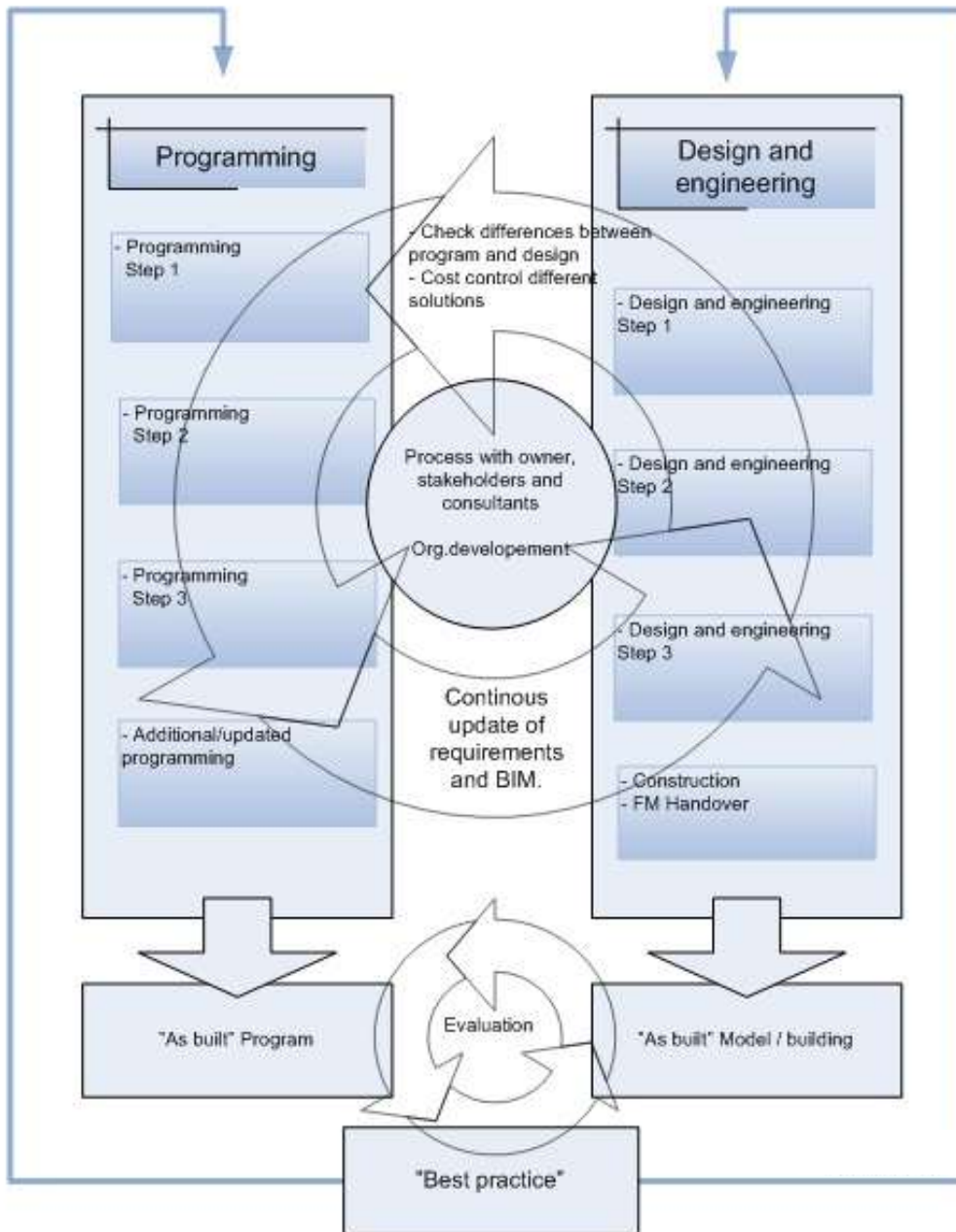


Information Delivery Manual (IDM) for building programming BPie

Ole Kristian Kvarsvik,
dRofus AS

Since December 5th...

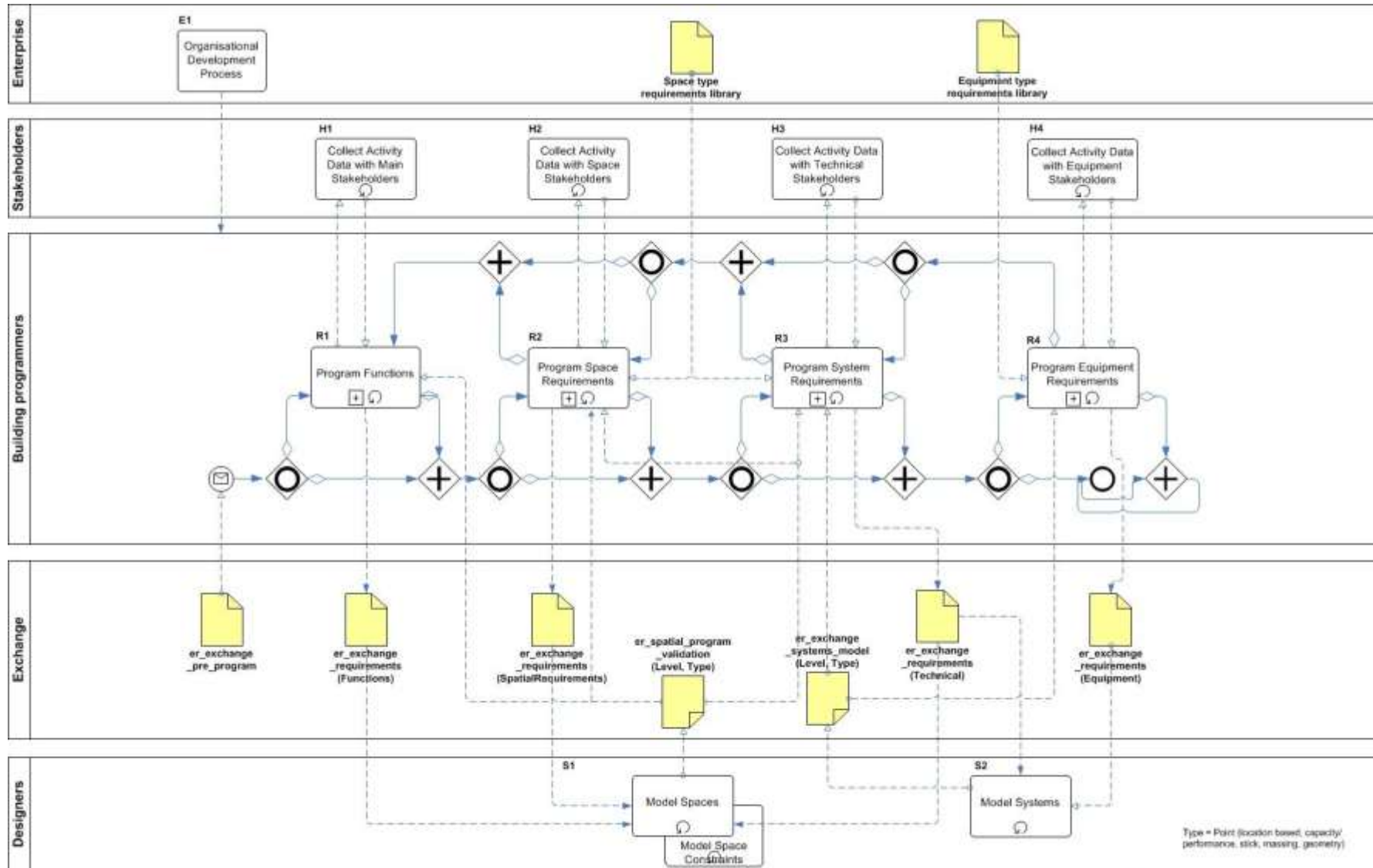
- Dec. 2011, BPie established
 - Part of Challenge 2013
- Review for comments Dec. 5th – March 5th at BuildingSMART/IUG site. Presented in Washington DC, Building connections AIA
- Several valuable comments received through review period
- Revised version distributed March 15th
 - Ifc binding/MVD in progress
 - Project proposal, new properties ifc4



The iterative process of client requirement management

- Standardized Requirements model
- Exchange and present requirements in design tool
- Exchange and compare design to requirements
- Deviations trigger minimum one of the following actions:
 - Update design
 - Update requirements
 - Present delta
- All data exchange using open BuildingSMART standards

Proces Map



Type = Space Relationship Matrix
 Bubble Diagram
 Missing Model
 Space Function/Type Identification
 Equipment in Space
 Level = Main, Detailed, Unitary

Building programming
 PM_Building_Programming

© International Alliance for Interoperability 2007-2010

Author: IDM Building Programming Group
 Version: 0.5
 Status: Working

bpmm_space_programming

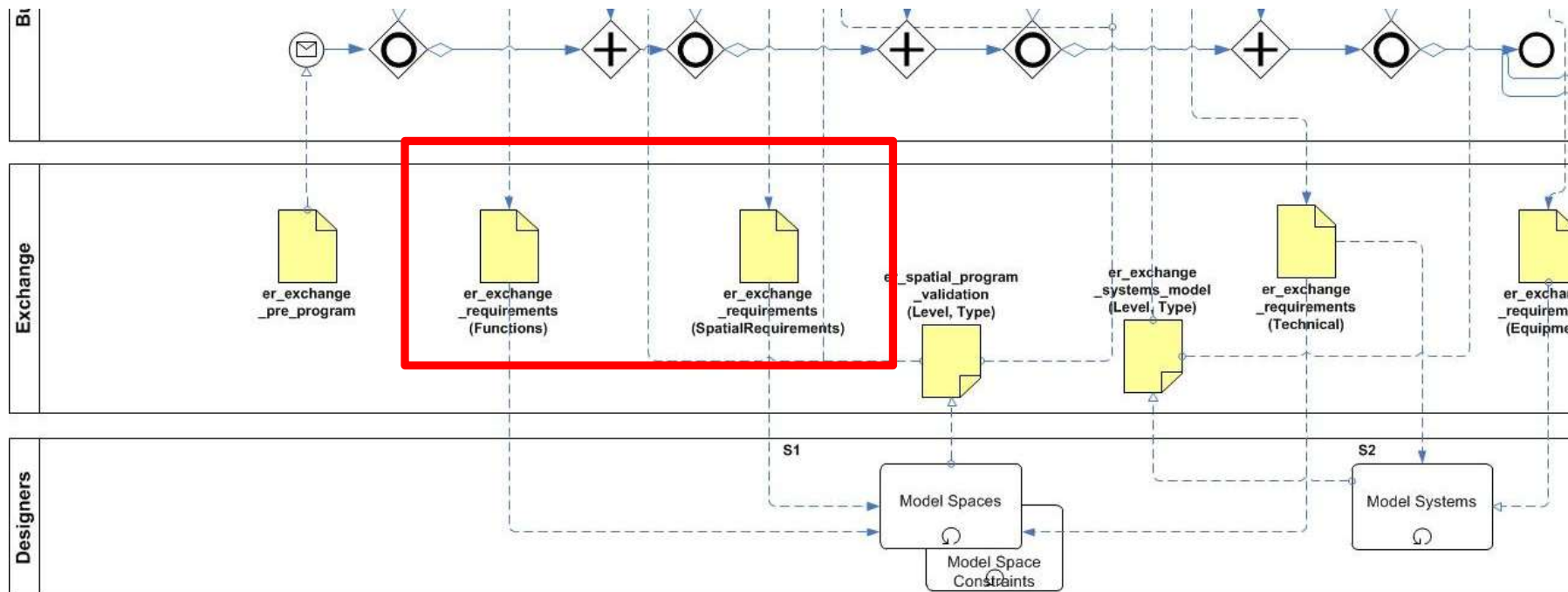
Created: 01/02/2007
 Modified: 29/01/2010
 Modified: 19/09/2011

U2 - Room functions collected
 0.3 - Gateways added for routing
 0.4 - Modifications from Hubnerjard
 0.45 - Removed Zone
 0.5 - Included ER Space program in ER SpatialRequirements



Exchange Requirements

- Functiones and spatial requirements covered
- Ekiupment (FF&E) and systems – not yet defined



Type = Space Relationship Matrix
 Bubble Diagram
 Missing Model
 Space Function/Type Identification
 Equipment in Space

Level = Main, Detailed, Unitary

Building programming	Authors: IDM Building Programming Group	Created: 01/02/2007	0.2 – Room functions corrected
PM_Building_Programming	Version: 0.5	Modified: 29/01/2010	0.3 – Gateways added for routing
© International Alliance for Interoperability 2007-2010	Status: Working	Modified: 19/09/2011	0.4 – Modifications from Holmenfjord ...
bpmn_space_programming			0.45 – Removed Zone
			0.5 – Included ER Space program in ER SpatialRequirements

ER work group (2010/2011)

Name	Organization
Frode Mohus	The Directorate of Public Construction and Property, Norway
Thomas Liebich	AEC3/bS International
Konrad Stuhlmacher	AEC3
Reijo Hänninen	Granlund
Tuomas Laine	Granlund
Arto Kiviniemi	Salford University
Ole Kristian Kvarsvik	dRofus
Rolf Jerving	dRofus

ER for Spatial Requirements

- Separate between *Mandatory* and *Optional* requirements
- Intended to be a set of the most common requirements to pick from (international agreement on what is “most common” is important)
- The list is not “complete”, i.e. requirements are not limited to the defined. New requirements will/can be added as needed

Review of previous BS projects

- Portfolio and Asset management – Performance Requirements (**PAMPeR**)
- International Alliance for Interoperability's **AR-5 Project**
- The **buildingSMART** international Room Data Sheet “**aquarium**” project
- United States General Services Administration project (Concept Design BIM 2010 – **Spatial Program Validation**)
- buildingSMART alliance Spatial Compliance information exchange (**SCie**, pronounced “ski”) project

Findings and feedback

- Room ID - key
- Mandatory/optional
 - Certification and (local) validation
- Glossary of terms
- Zones versus departments
- Proximity requirements
- New properties/attributes added...

Wrap-up, The steps...

- Previous BS efforts/resources – set the scope and framework
- Define (international robust) Process map
- International working group/experts defining the process need (ER's)
- submitted to buildingSMART International for a review and acceptance process to be finally distributed as an buildingSMART International IDM
- Review – previous BS projects.
- Final definition/acceptance
- New project proposal to “fill the gap” presented by IUG (???) to ITM (???)
- Accepted by... ToBeDefined 😊