Meeting #04

Machine Readable
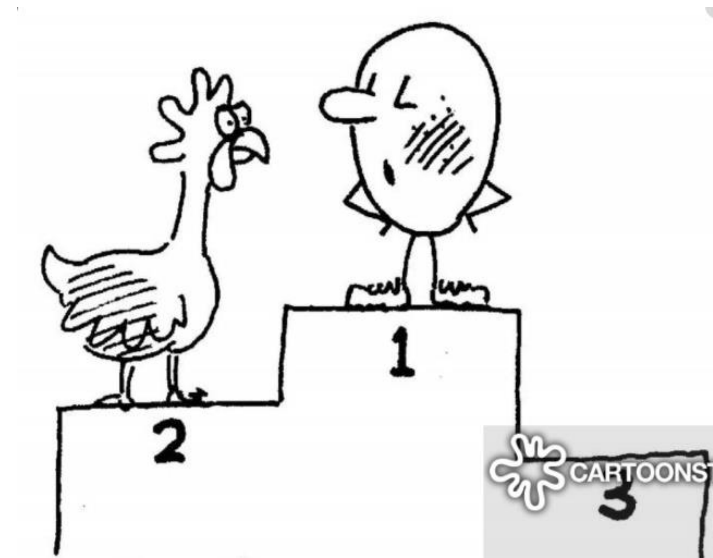# Information Delivery Specifications

AKA "Information Delivery Specification (IDS)"

Agenda bSi IDS meeting #04

1. Short update

2. Meeting groundrules

3. Recap last meetings

    1. Present principles from version 0.01: Cyrille

    2. Present ideas around version 0.01: Arie, André and Thomas

4. Workshop towards version 0.1 - reactions on ideas

5. Next session #05

heijmans

1. Short update

- Several new group members…again…
- Version 0.01 Arie, André and Thomas
- …still some discussion

- Goal: get use-cases implemented into software Revit & Solibri (minimal)

2. Meeting Ground Rules

- Use-case pull instead vs solution push
- Only people that speak have their camera + mic ON
- All other people that DOT NOT speak have their camera + mic OFF
- People can speak for a max of 2 minutes
- Respect each others use-cases, perspective and vision
- …

3. Agreed for version 0.01 (Arie, André, Thomas)

1. End user should be able to specify ObjectTypes ('things') in her/his own language -> mapping on IfcEntity if possible, if not possible then map on IfcBuildingElementProxy.

2. End user should be able to specify 'properties' in her/his own language -> using user defined PropertySets (not part of the IFC standard), optionally being able to map them to the correct Pset_Common (predefined).
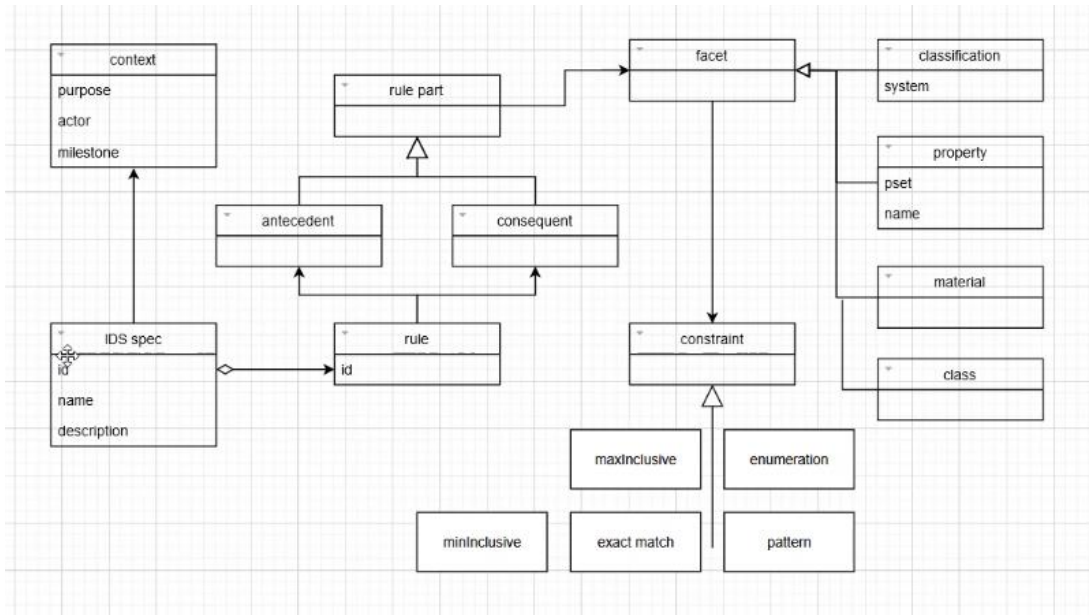
   Example: ObjectTypeProperties should be 1 propertyset (Solibri: visible in 1 tab)

3. UID required, UUID optional for both object Type and PropertySet.

4. Optional: add link to classification system according to 'National Norm'.

5. Limit DataTypes of Properties to one of: Enumerations (String/Integer/Real) or String/Boolean/Integer/Real.

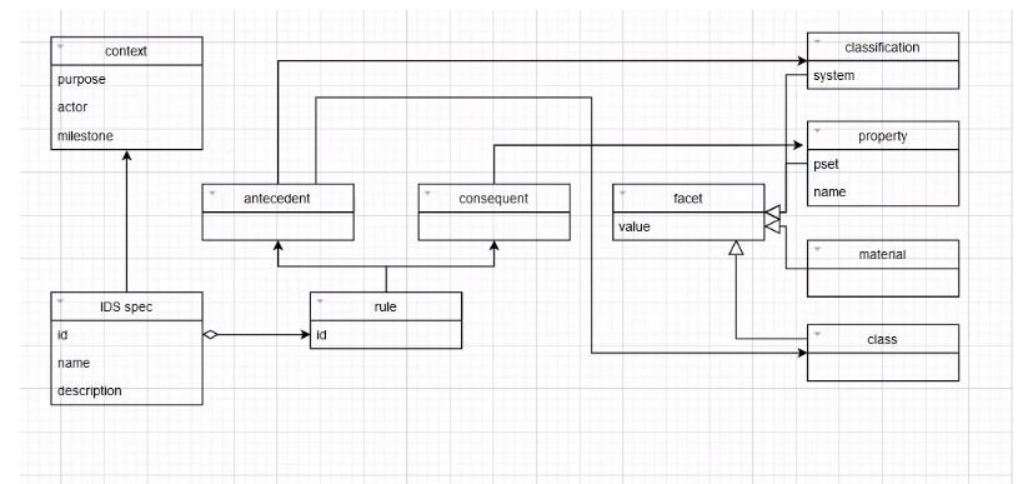# 3. Disagreed for version 0.01 (Arie, André, Thomas)

1. How to handle multiple people having to enter properties into 1 ObjectType. For example: Column: CON specifies steel grade, ARCH specifies color.

2. Practical way to define units.

3. Thomas

Remarks:
Properties vs alpha numerical data
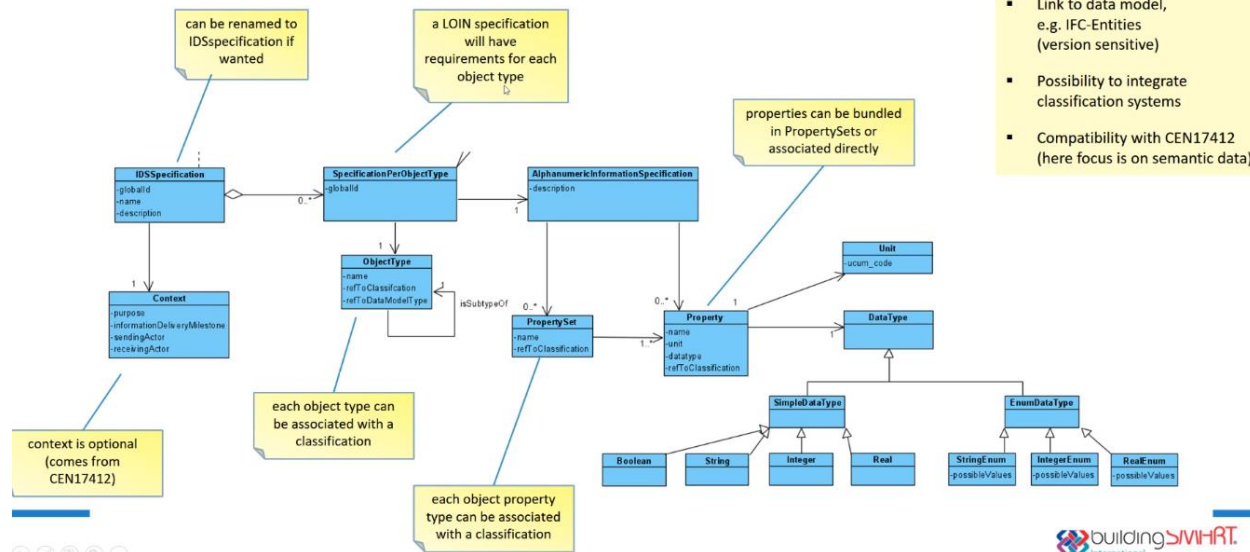Constrain of values?
Complexity needed? Or worth the effort?

Remarks:
Simpler version to implement.
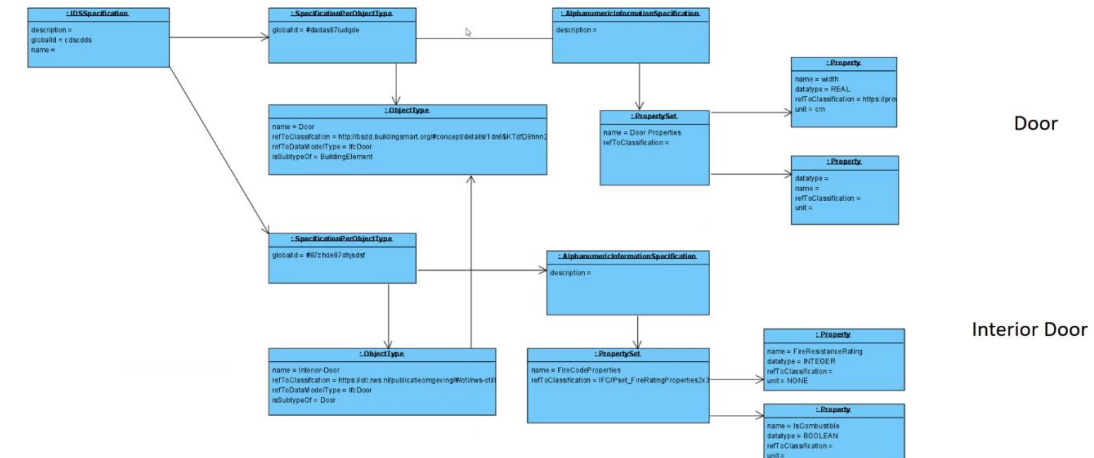How many releases of IDS do we want?
Complete enough version 0.1

3. André

UML Class diagram

Underlying rational:

- Simplicity
- Use-case driven
- Link to data model, e.g. IFC-Entities (version sensitive)
- Possibility to integrate classification systems
- Compatibility with CEN17412 (here focus is on semantic data)

Remarks:
Units in UCUM-code (unambigiously)

UML Instance diagram

Remarks:
Use reference to Classification
IFC as data model is fine, but lacks fine-grained

3. Arie

Propertysets (just a set of properties)

Properties (of elements)

```
<prop ID='RequiredOutputID' type='rea
        <name>Required output</name>
        <desc>Required heat emission of
</prop>
<prop ID='StatusID' type='label'>
        <name>Status</name>
        <enum ref='NewID'/>
        <enum ref='ExistingID'/>
        <enum ref='DemolishID'/>
        <enum ref='TemporaryID'/>
</prop>
```

Properties (of element type

```
<prop ID='HeatEmissionID' type='real' un
        <name>Heat emission EN442 75/65/2
        <desc>Heat emission with an input
</prop>
<prop ID='WaterContentID' type='real' un
        <name>Water content</name>
</prop>
<prop ID='PanelTypeID' type='integer'>
        <name>Panel type</name>
        <enum val='10'/>
        <enum val='11'/>
        ...
        <enum val='44'/>
</prop>
```

```
<pset ID='PanelRadiatorTypePsetID'>
        <name>Panel radiator type properties</name>
        <prop ref='HeatEmissionID'/>
        <prop ref='WaterContentID'/>
        <prop ref='PanelTypeID'/>
</pset>
<pset ID='PanelRadiatorPsetID'>
        <name>Panel radiator properties</name>
        <prop ref='|
        <prop ref='!
</pset>
```

Class (type/element part with IFC mapping)

```
<etyp>
        <pset ref='PanelRadiatorTypePsetID'/>
        <map2>
                <if
                <if
                <if
        </map2></e
<elem>
        <pset ref=
        <map2>
                <if
                <if
                <if
        </map2></e
```

Class (Panel radiator)

```
<class ID='PanelRadiatorID'>
        <name>Panel radiator</name>
        <desc>Body made of steel filled with water to heat a space<desc>
        <etyp>
                <pset ref='PanelRadiatorTypePsetID'/>
        </etyp>
        <elem>
                <pset ref='PanelRadiatorPsetID'/>
        </elem>
        <ifc2>IFCSPACEHEATERTYPE/PANELRADIATOR</ifc2>
        <ifc4>IFCSPACEHEATERTYPE/RADIATOR</ifc4>
        <ifc5>IFCELEMENTTYPE/PanelRadiator</ifc5>
</class>
```

Remarks:

Remarks:

4. Workshop – reactions towards ideas

Decisions

- XML
- Wording standard - LOIN

5. Next meeting #05 :

- Get all software vendors (implementors) involved
- Continue the discussion in the Chat Channel of the MS Teams

- Options:
- ~~A) implement version 0.01~~
- B) Go from version 0.01 -> to version 0.02