

Hva løser standardiserte Datamaler for byggenæringen

Development of International BIM standards

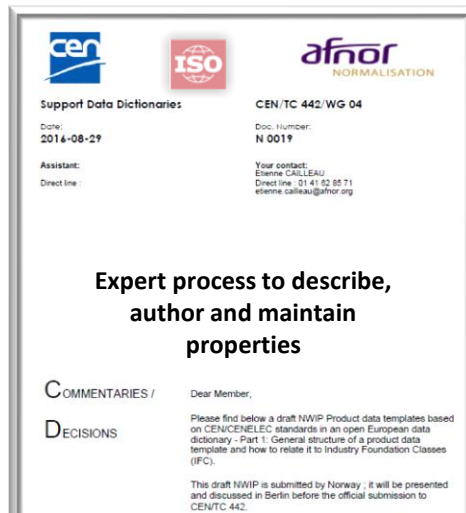


CEN/TC 442



ISO/TC 59/SC 13





Expert process

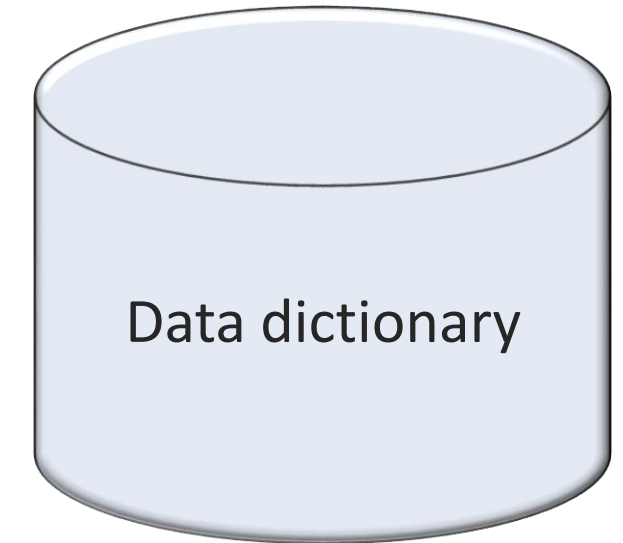
Properties with
attributes

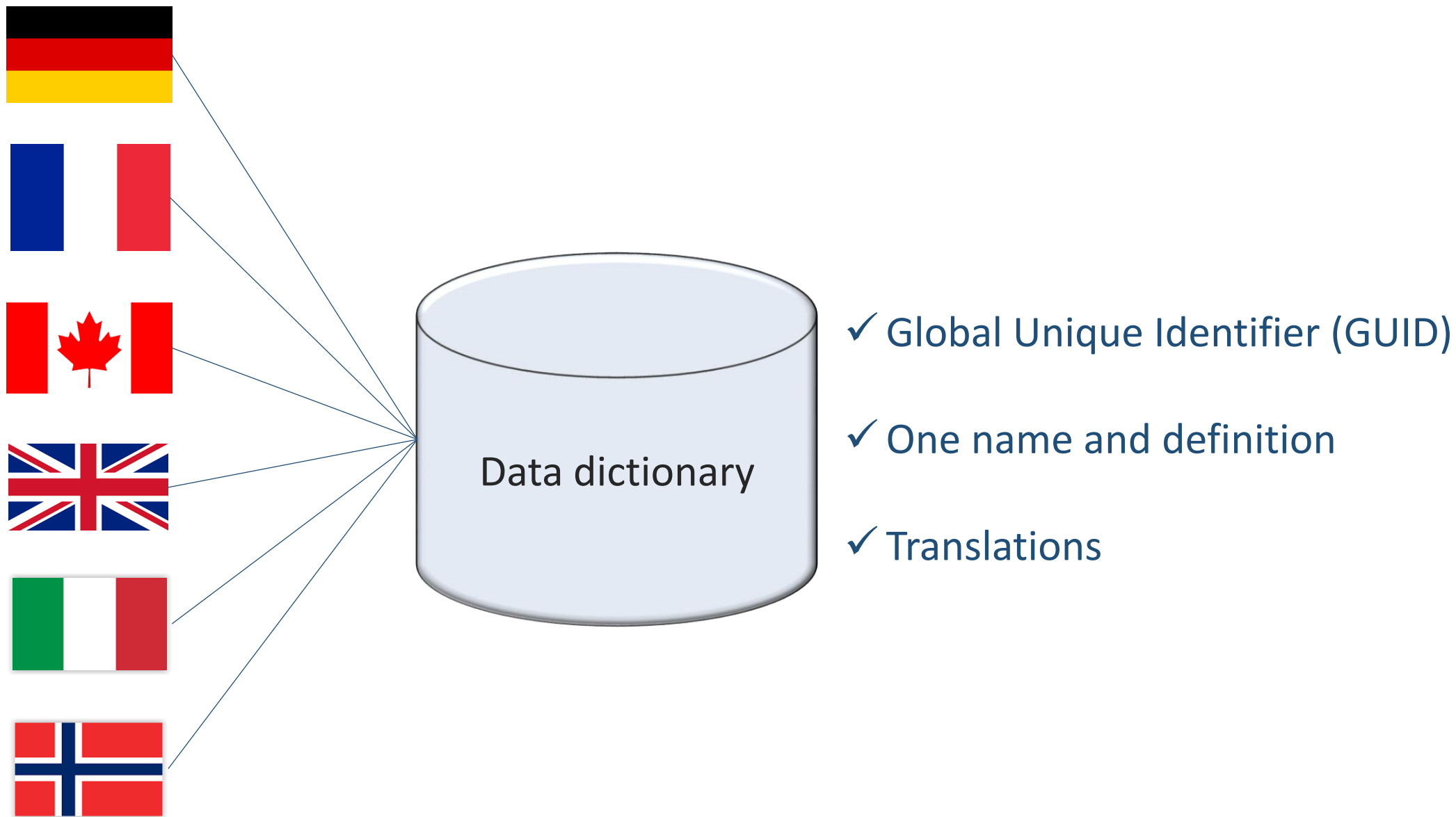
Expert process

Data templates –
general structure

Expert process

Data templates -
CPR





prEN ISO 23386



Support Data Dictionaries

Date: 2016-08-29

Assistant:

Direct line :

CEN/TC 442/WG 04

Doc. Number: N 0019

Your contact: Etienne CAILLEAU
Direct line : 01 41 62 85 71
etienne.cailleau@afnor.org

Expert process to describe, author and maintain properties

COMMENTARIES /

DECISIONS

FOLLOW UP

SOURCE

Dear Member,

Please find below a draft NWIP Product data templates based on CEN/CENELEC standards in an open European data dictionary - Part 1: General structure of a product data template and how to relate it to Industry Foundation Classes (IFC).

This draft NWIP is submitted by Norway ; it will be presented and discussed in Berlin before the official submission to CEN/TC 442.

Relations between the 4 NWIPs are explained in N-Documents 21.

Meeting on 2016-09-13

CEN/TC 442/WG 4 Secretariat

prEN ISO 23387



Support Data Dictionaries

Date: 2016-08-29

Assistant:

Direct line :

CEN/TC 442/WG 04

Doc. Number: N 0019

Your contact: Etienne CAILLEAU
Direct line : 01 41 62 85 71
etienne.cailleau@afnor.org

Data templates for construction objects – Concepts and principles

COMMENTARIES /

DECISIONS

FOLLOW UP

SOURCE

Dear Member,

Please find below a draft NWIP Product data templates based on CEN/CENELEC standards in an open European data dictionary - Part 1: General structure of a product data template and how to relate it to Industry Foundation Classes (IFC).

This draft NWIP is submitted by Norway ; it will be presented and discussed in Berlin before the official submission to CEN/TC 442.

Relations between the 4 NWIPs are explained in N-Documents 21.

Meeting on 2016-09-13

CEN/TC 442/WG 4 Secretariat

WI 442008



Support Data Dictionaries

Date: 2016-08-29

Assistant:

Direct line :

CEN/TC 442/WG 04

Doc. Number: N 0020

Your contact: Etienne CAILLEAU
Direct line : 01 41 62 85 71
etienne.cailleau@afnor.org

Data templates for construction objects – Data templates based on European product standards under CPR

COMMENTARIES /

DECISIONS

FOLLOW UP

SOURCE

Dear Member,

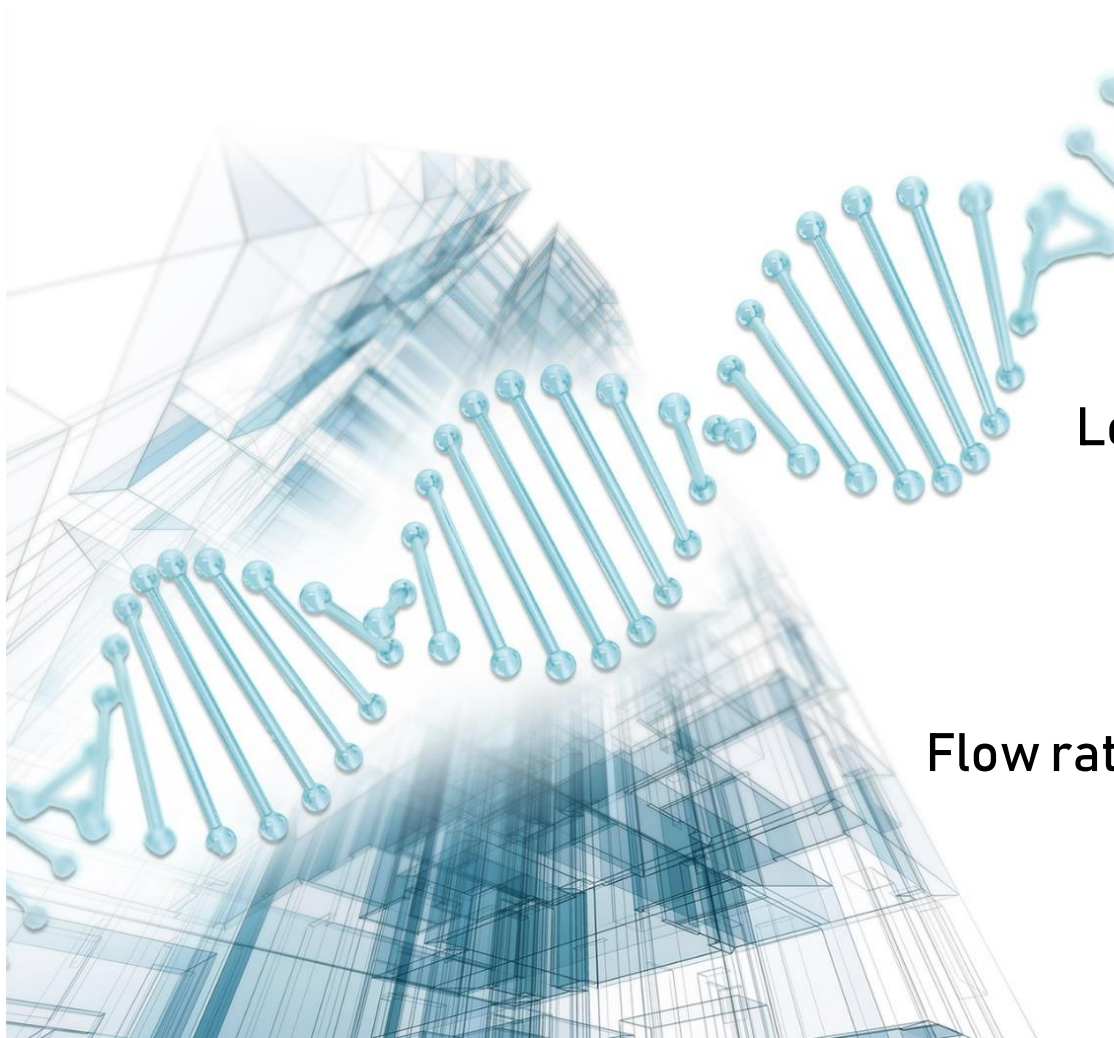
Please find below a draft NWIP Product data templates based on CEN/CENELEC standards in an open European data dictionary - Part 2: Framework for product data templates based on harmonised technical specifications under the Construction Products Regulation (CPR), and how to relate the product data templates to Industry Foundation Classes (IFC).

This draft NWIP is submitted by Norway ; it will be presented and discussed in Berlin before the official submission to CEN/TC 442.

Relations between the 4 NWIPs are explained in N-Documents 21.

Meeting on 2016-09-13

CEN/TC 442/WG 4 Secretariat



Thermal Transmittance

Light transmission

Width

Color

Load bearing

Global warming

Compressive strength

Flow rate

Warranty time

Reaction to fire

Bending strength

GUID
Name
Definition
Status
Date of creation
Date of revision
Symbol
Visual representation
Country of use
Country of origin
Data type
Tolerance
Physical quantity
Dimension
Number of values

Thermal Transmittance

Light transmission

Width

Color

Load bearing

Global warming

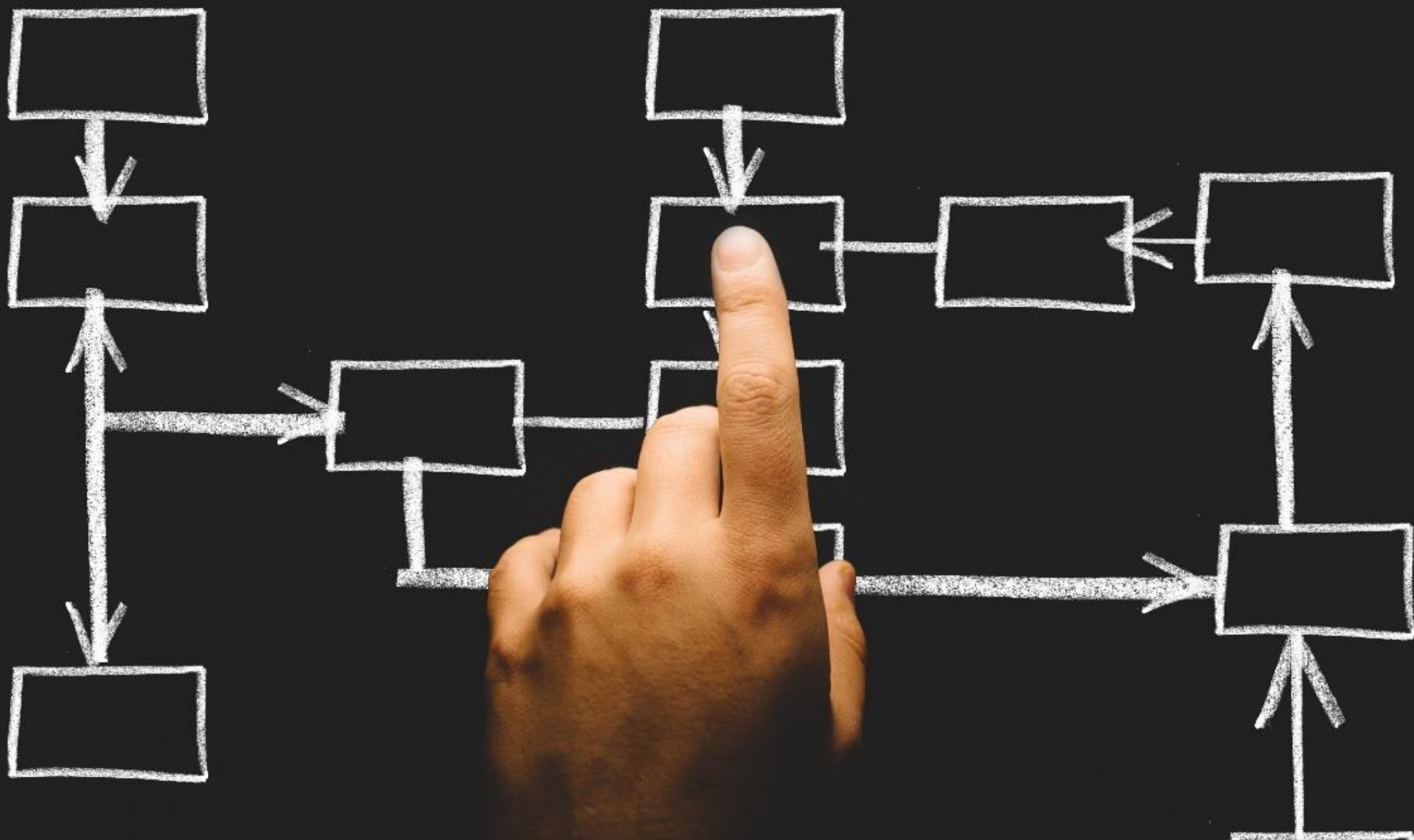
Compressive strength

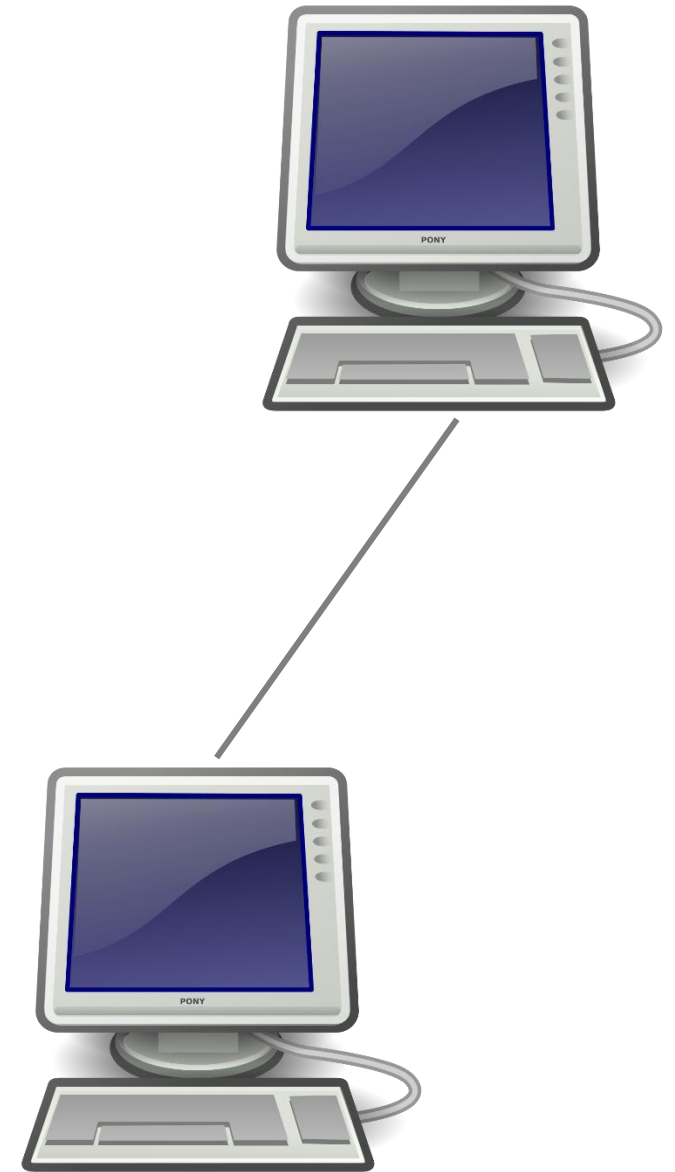
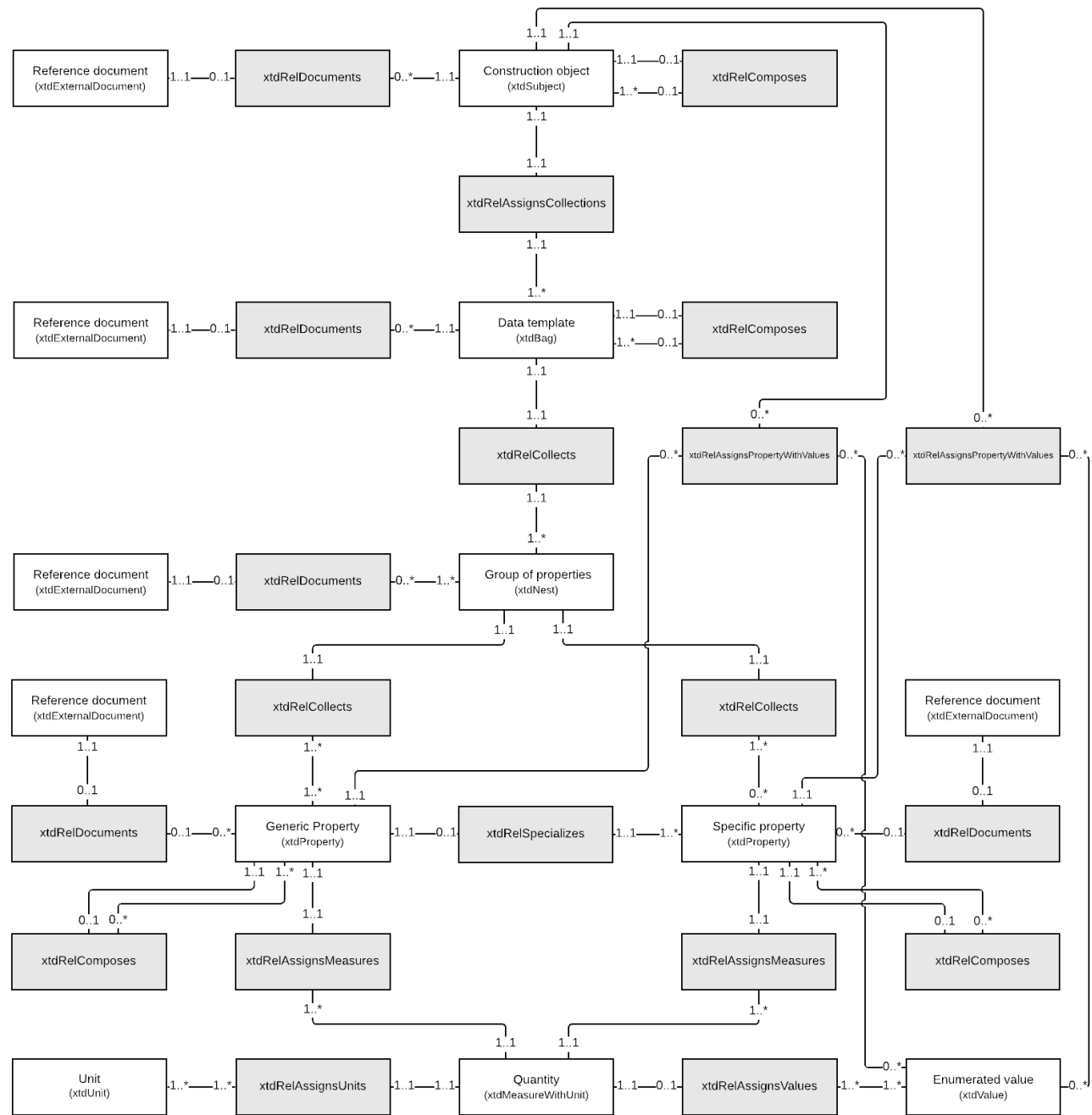
Flow rate

Warranty time

Reaction to fire

Bending strength





3

Standards



Common European
technical language in a
data dictionary based on
EN ISO 12006-3

Essential characteristics

Watertightness



EN XXXXX



ISO XXXXX

Reaction to fire



EN XXXXX

Effectiveness



EN XXXXX

None-Essential characteristics

Property 1

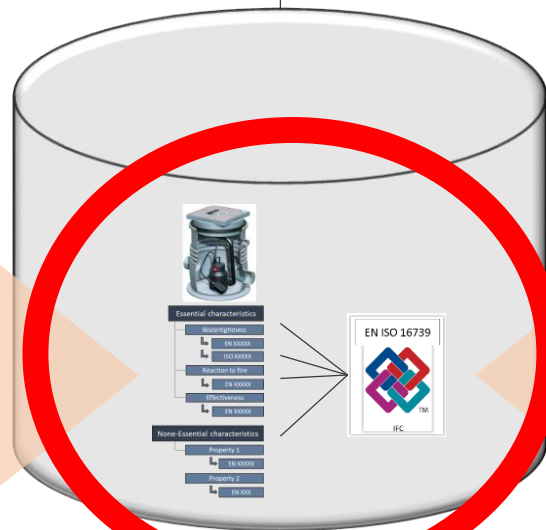


EN XXXXX

Property 2



EN XXX



EN ISO 16739



TM

IFC



Everyone
creates
information
locally



Standardiserte Datamaler

-brukt i byggverk og infrastruktur

Espen Schulze

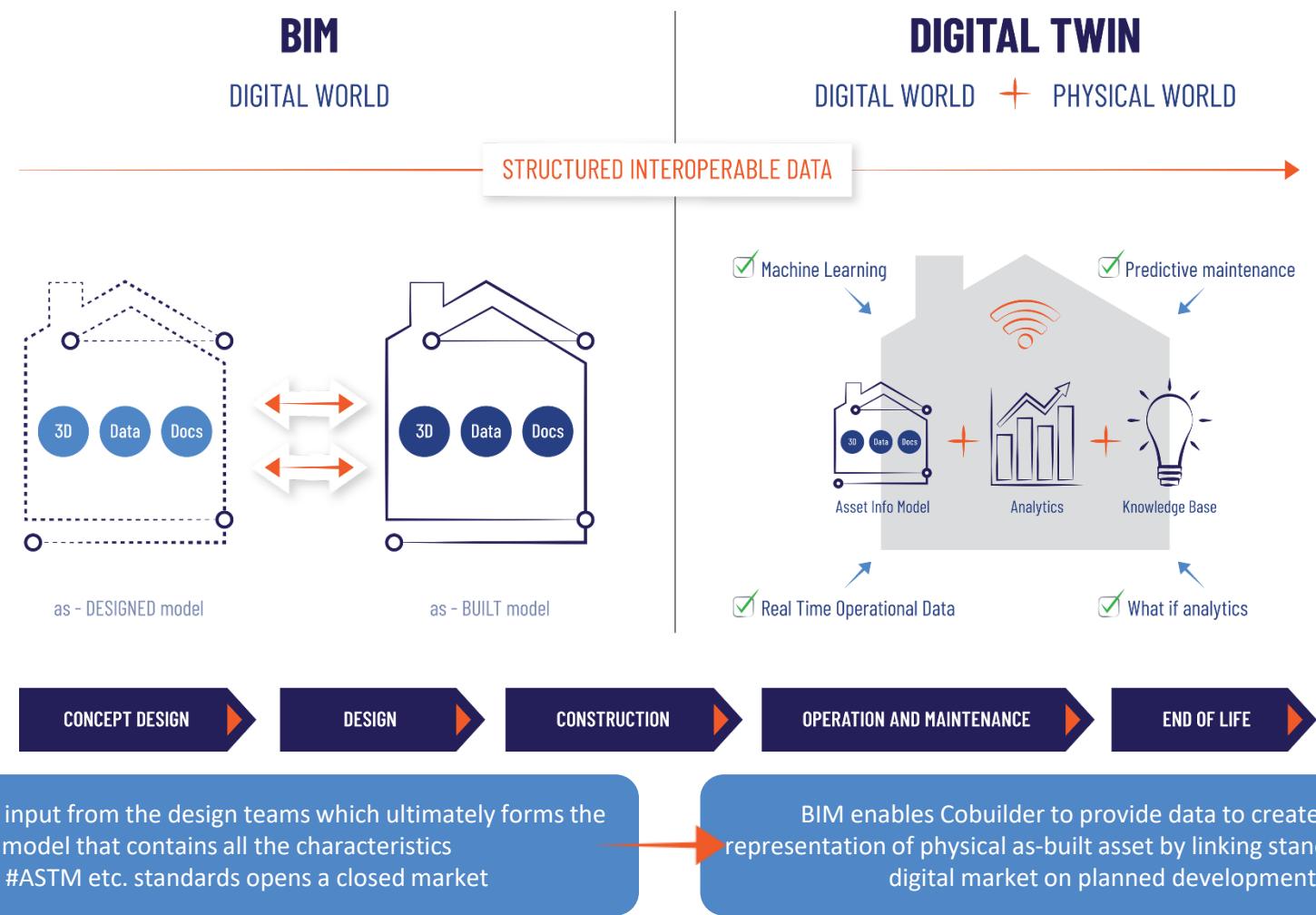
Group VP Research

About coBuilder

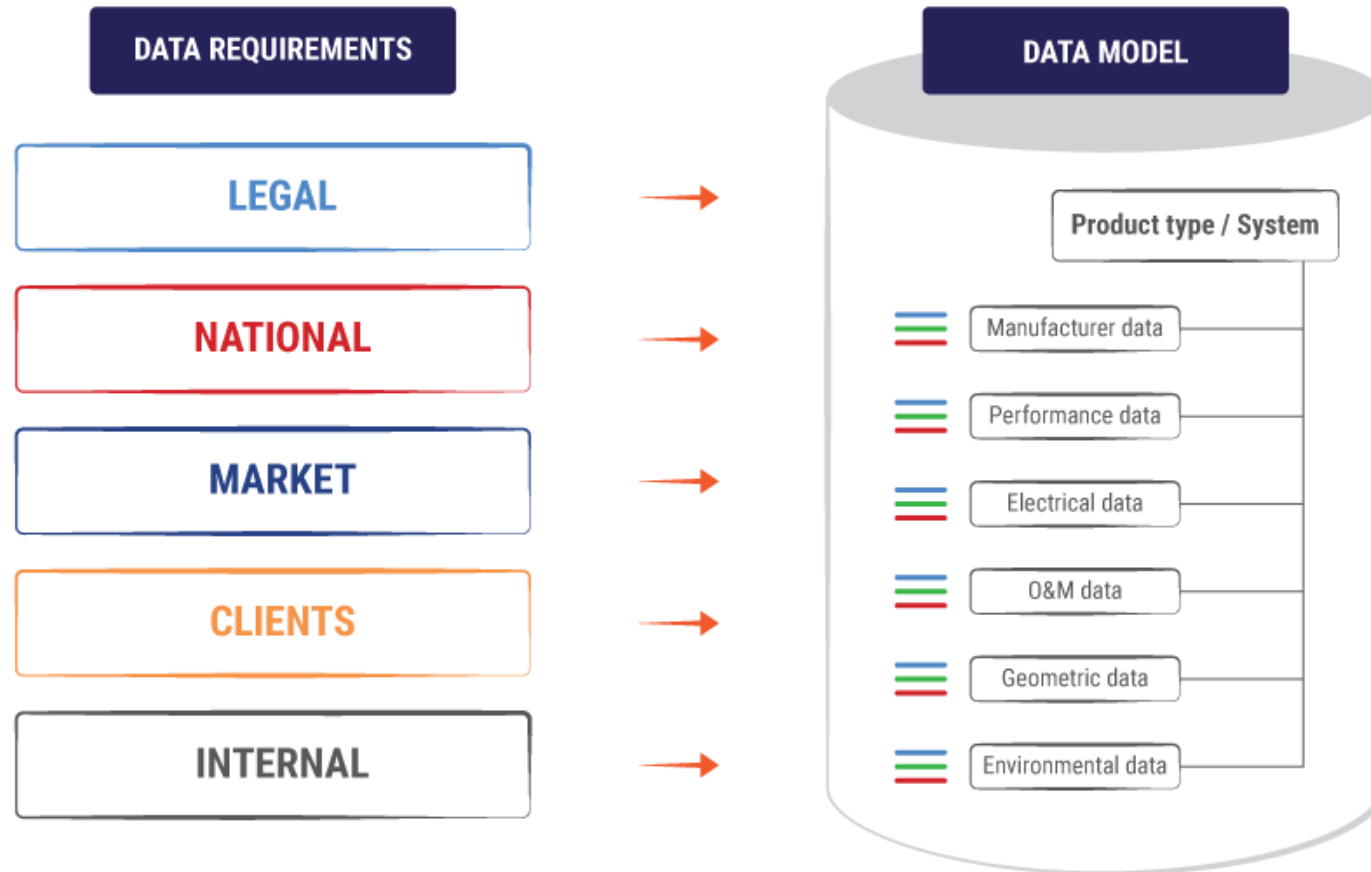
- coBuilder is a Norwegian technology company with a European presence operating at the forefront of digitalizing the Construction Industry.
- The company is a privately owned medium-sized company based in Oslo, Norway. Operating in the market since 1997, coBuilder has positioned itself as a company having vast product data/information expertise within the AECO industry. The group companies have a total of 135 employees (Q1/18), 20 people on full time in Norway.
- Sales offices in the UK & France and exclusive distributors in Italy, Austria, Germany & Finland.
- Member of BuildingSMART International
- Winner of multiple innovation awards in the UK
- Contributor to major international standardisation bodies such as ISO, buildingSMART, CEN and CENELEC.
- Developing solutions integrated with Autodesk Revit, Navisworks and ARCHICAD, supporter of openBIM.

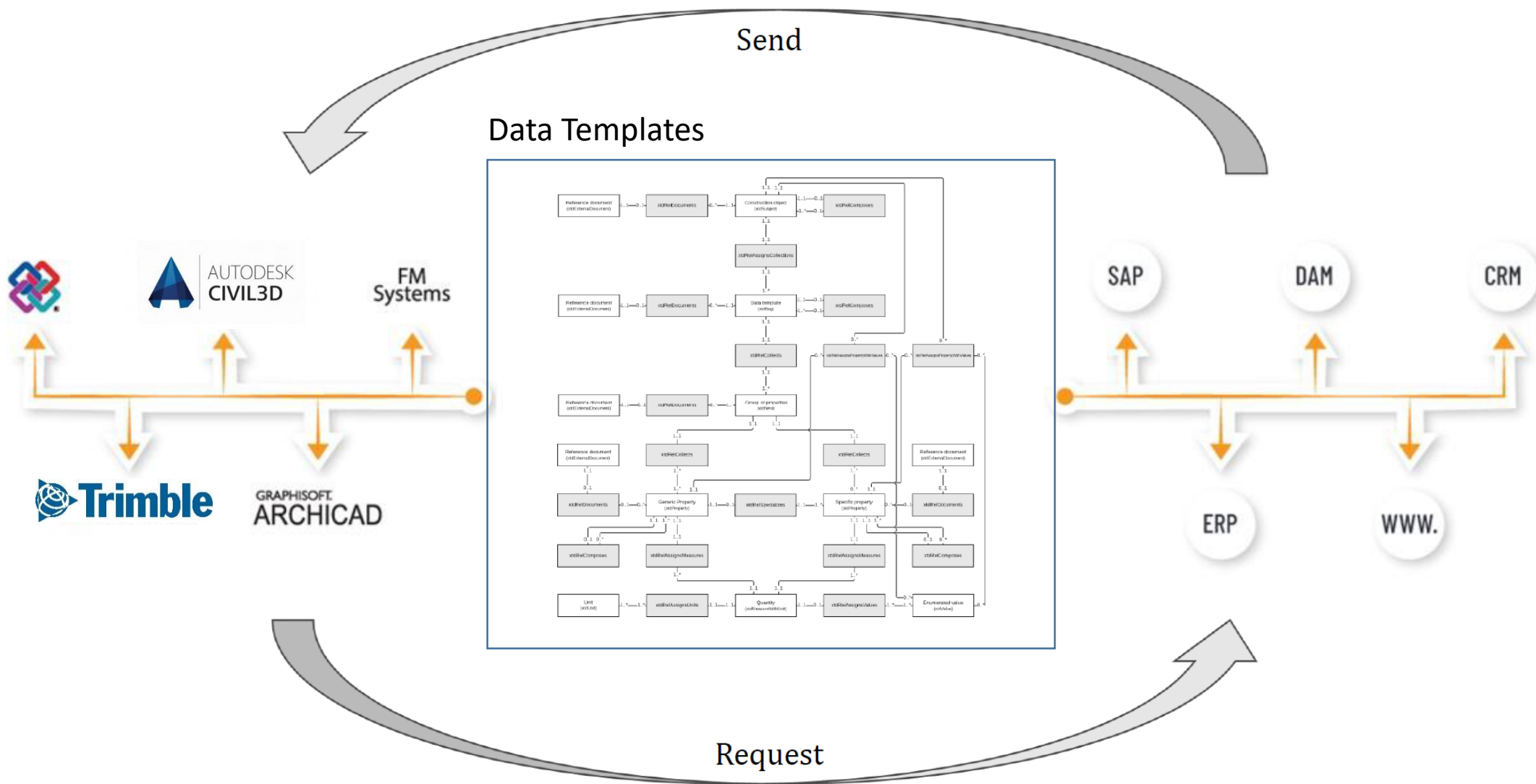


Digital twin - this new digital market is becoming a priority for market actors

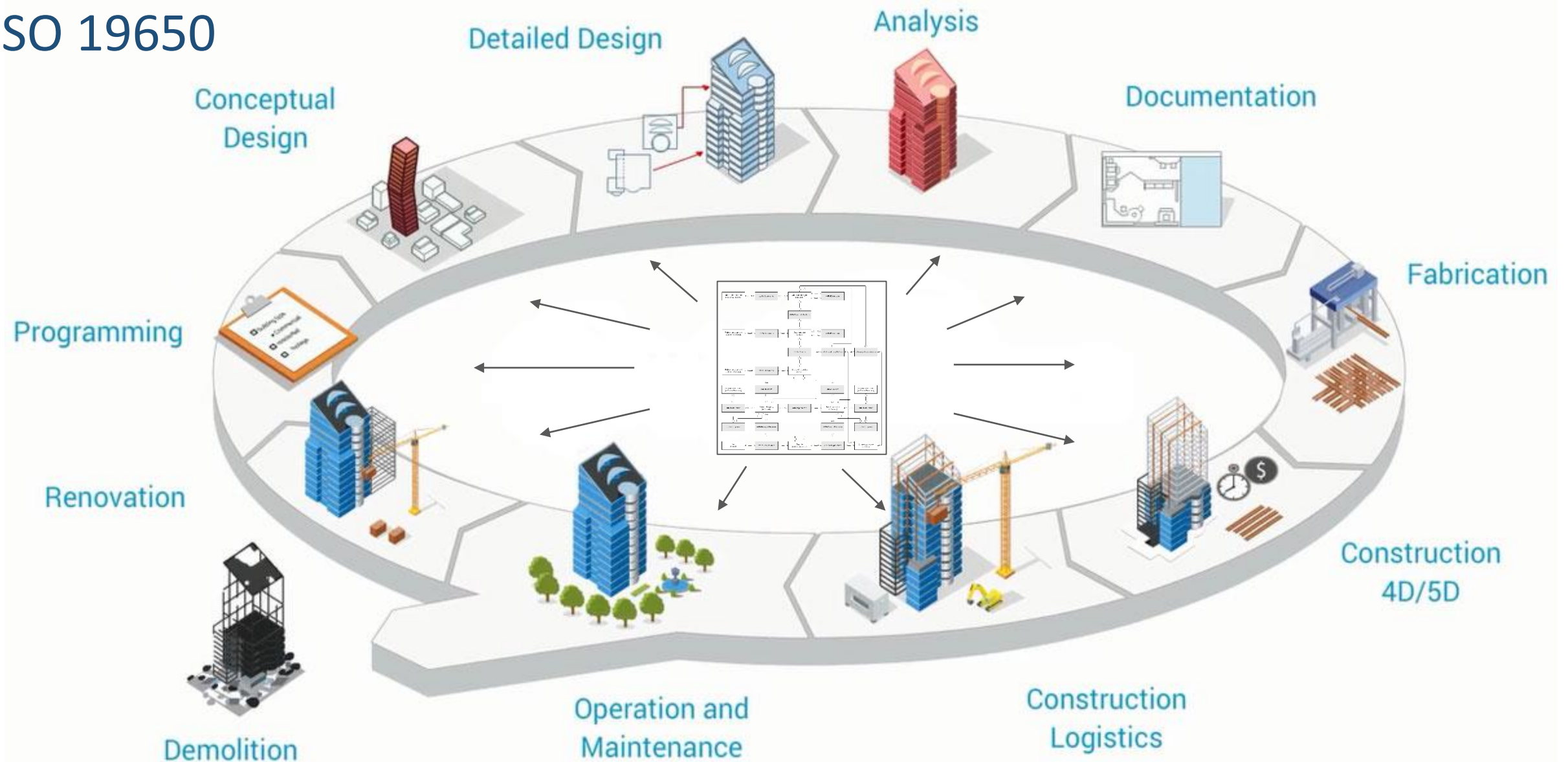


Development of a Data Template





BIM according to ISO 19650



At the center of our offer: the Data Template and its uses

TEMPLATE

COBUILDER Pump Template

CLASSIFICATION:

Uniclass 2015 - Pr_65_53
Pump products

Pset 1 (Manufacturer data)

- Article number
- Production year
- Product name

Pset 2 (Performance data)

- Flow rate
- Head
- Pressure class
- Sound pressure level

Pset 3 (Features data)

- Fluid type
- Thermal class
- Motor type

REQUIREMENT

COBUILDER Pump Template

CLASSIFICATION:

Uniclass 2015 - Pr_65_53
Pump products

Pset 1 (Manufacturer data)

- Article number ✓
- Production year ✓
- Product name ✓

Pset 2 (Performance data)

- Flow rate
- Head ✓
- Pressure class
- Sound pressure level ✓

Pset 3 (Features data)

- Fluid type
- Thermal class
- Motor type

SPECIFICATION

COBUILDER Pump Template

CLASSIFICATION:

Uniclass 2015 - Pr_65_53
Pump products

Pset 1 (Manufacturer data)

- Article number - **2268358**
- Production year - **2016**
- Product name - **Pump Magma**

Pset 2 (Performance data)

- Flow rate - **> 4 l/s (m3/h)**
- Head - **> 3 m**
- Pressure class - **PN10**
- Sound pressure level - **< 50dB**

Pset 3 (Features data)

- Fluid type - **water**
- Thermal class - **-**
- Motor type - **E motor**

MANUFACTURED PRODUCT

KSB Configurator Pump

CLASSIFICATION:

Uniclass 2015 - Pr_65_53
Pump products

Pset 1 (Manufacturer data)

- Article number - **2268358**
- Production year - **2016_07_06**
- Product name - **Pump Magma**

Pset 2 (Performance data)

- Flow rate - **4,5 l/s (m3/h)**
- Head - **6 m**
- Pressure class - **PN10**
- Sound pressure level - **46dB**

Pset 3 (Features data)

- Fluid type - **water**
- Thermal class - **-**
- Motor type - **E motor**

Use case **association**

BRITISH
WATER

Data Templates for British Water

AutoSave Off Pr_60_70_22_22 - Distribution boards - BIM4Water Standards Library PDT Template Rev 1.0.xlsx - Excel (Unlicensed Product) Lars Chr P

FileHomeInsertPage LayoutFormulasDataReviewViewHelpTell me what you want to do

PasteClipboard

Font

Alignment

Number

Styles

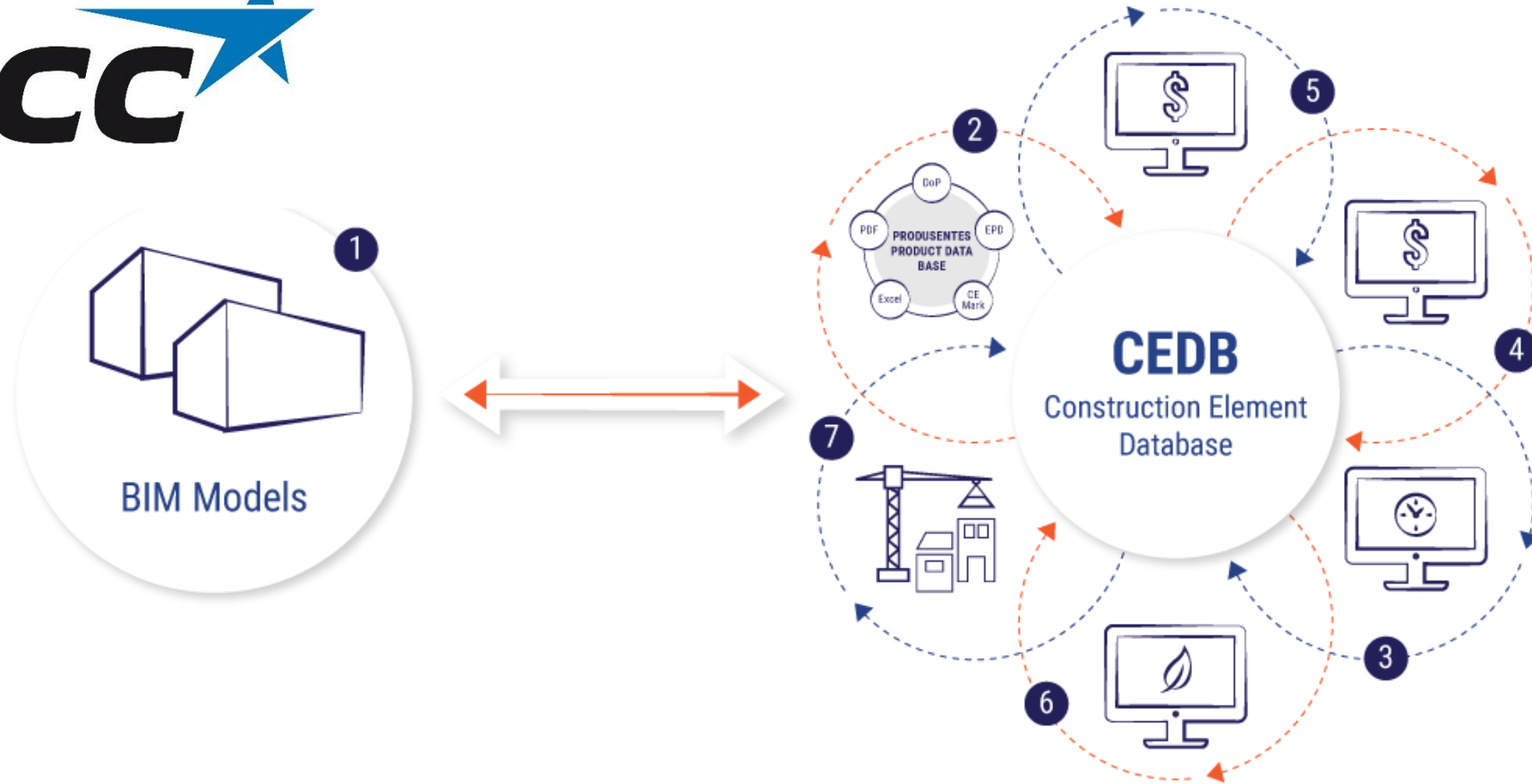
Cells

Editing

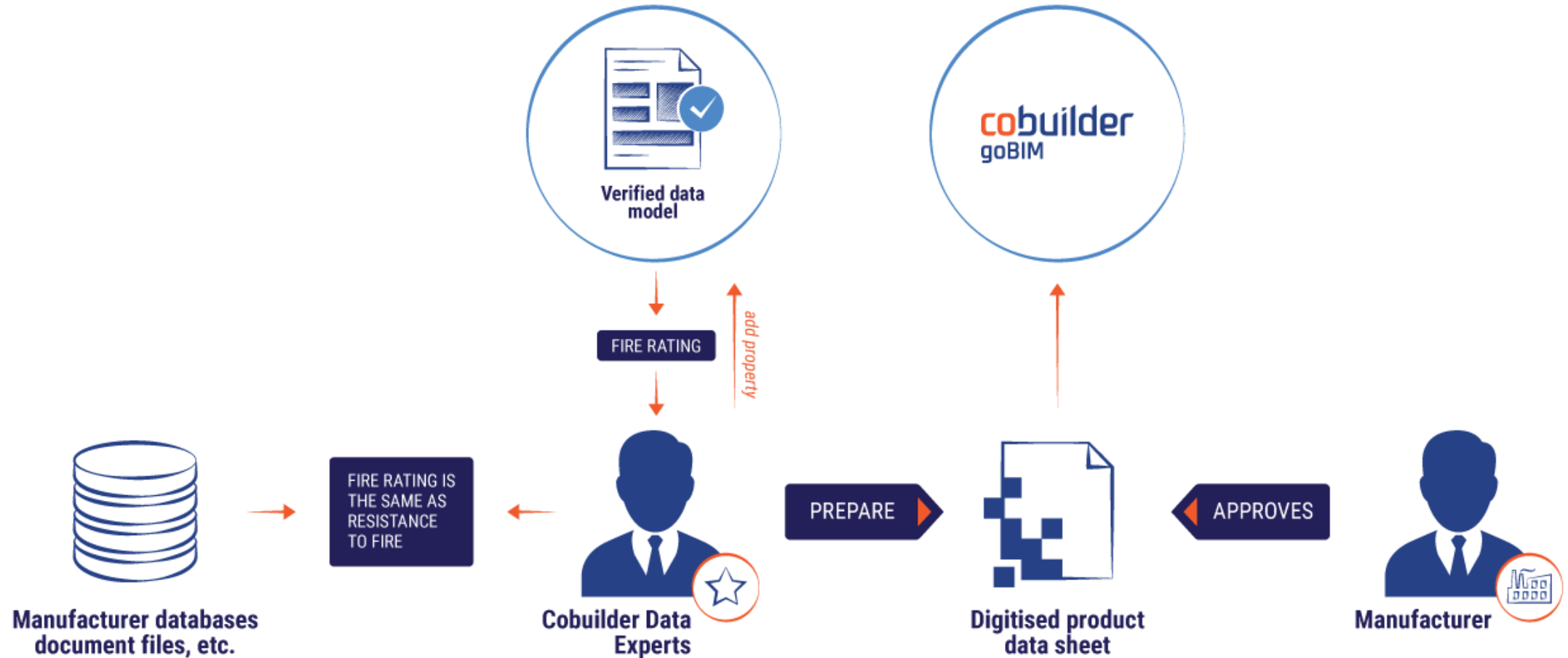
124									
1	Template Version	1.0							
2	Template Date	30 April 2018							
3	Suitability for Use	Draft version							
4	Classification System	Uniclass 2015							
5	Classification Code	Pr_60_70_22_22							
6	Classification Title	Distribution Boards							
7	Creator	Northumbrian Water Ltd (Peter Brodie E: Peter.Brodie@jn Bentley.co.uk T: 07814 660 908)							
8	Template Custodian	British Water							
9	Information Category	Parameter Name (ISO15926 where applicable)	Value	Units	Notes				
10	Manufacturer Data								
11	Specifications	Manufacturer	1	Text					
12	Specifications	Manufacturer Website	2	URL					
13	Specifications	Product Range	3	Text					
14	Specifications	Product Model Number	Test1	Text	or code				
15	Specifications	CE Approval	4	Text	number, yes, no				
16	Specifications	Approvals	5	Text	e.g. ATEX				
17	Specifications	Product Literature	6	URL					
18	Specifications	Features	7	Text	Free text to describe product				
19	Construction Data								
20	Specifications	Type	8	Text	Eg DB compartment				
21	Specifications	Stand Alone Assembly	9	Text	Eg Yes, Built into MCC / Switchboard or other				
22	Specifications	Stand Alone Design Type	10	Text	Wall Mounted, Floor Mounted				
23	Specifications	Construction type	11	Text	Eg: Welded or modular				
24	Specifications	Form of Separation	12	Text	Eg: Form 2 or form 4 type 2 to 7				
25	Specifications	Material of Construction	13	Text	Mild Steel / GRP / Stainless				
26	Specifications	Access	14	Text	Eg Front / Rear etc				
27	Specifications	Coating	15	Text	Eg: Powder or baked				
28	Specifications	Finish	16	Text	Eg: Semi gloss, textured or 316 stainless				
29	Specifications	Colour	17	Text	Eg: BS 18E51 or RAL 7032				
30	Specifications	Grade	18	Text	Eg: Standard grading which the product corresponds.				
31	Specifications	Accessibility performance	19	Text	Eg: The accessibility issue(s) which the object satisfies.				
32	Specifications	Standard	20	Text	Eg BS EN 60947-4-1				
33	Specifications	Features	21	Text	Eg: Other important characteristics or features relevant to DB specification				

Revison HistoryPDS_ADTPDTIndexIdentifier

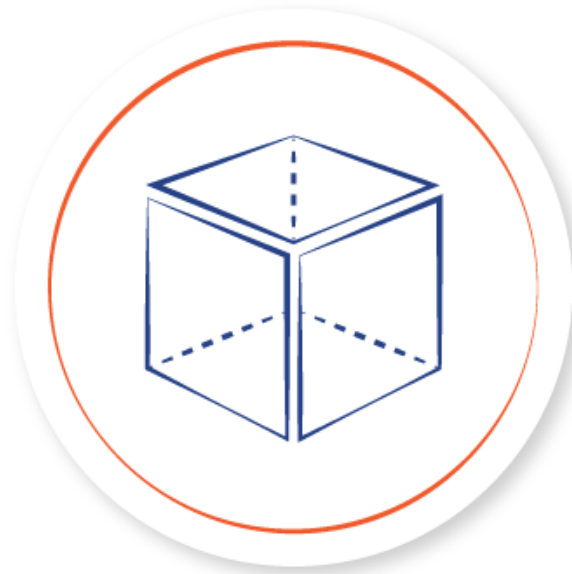
Use case contractor



Use case Manufacturer



The change towards data



GEOMETRY

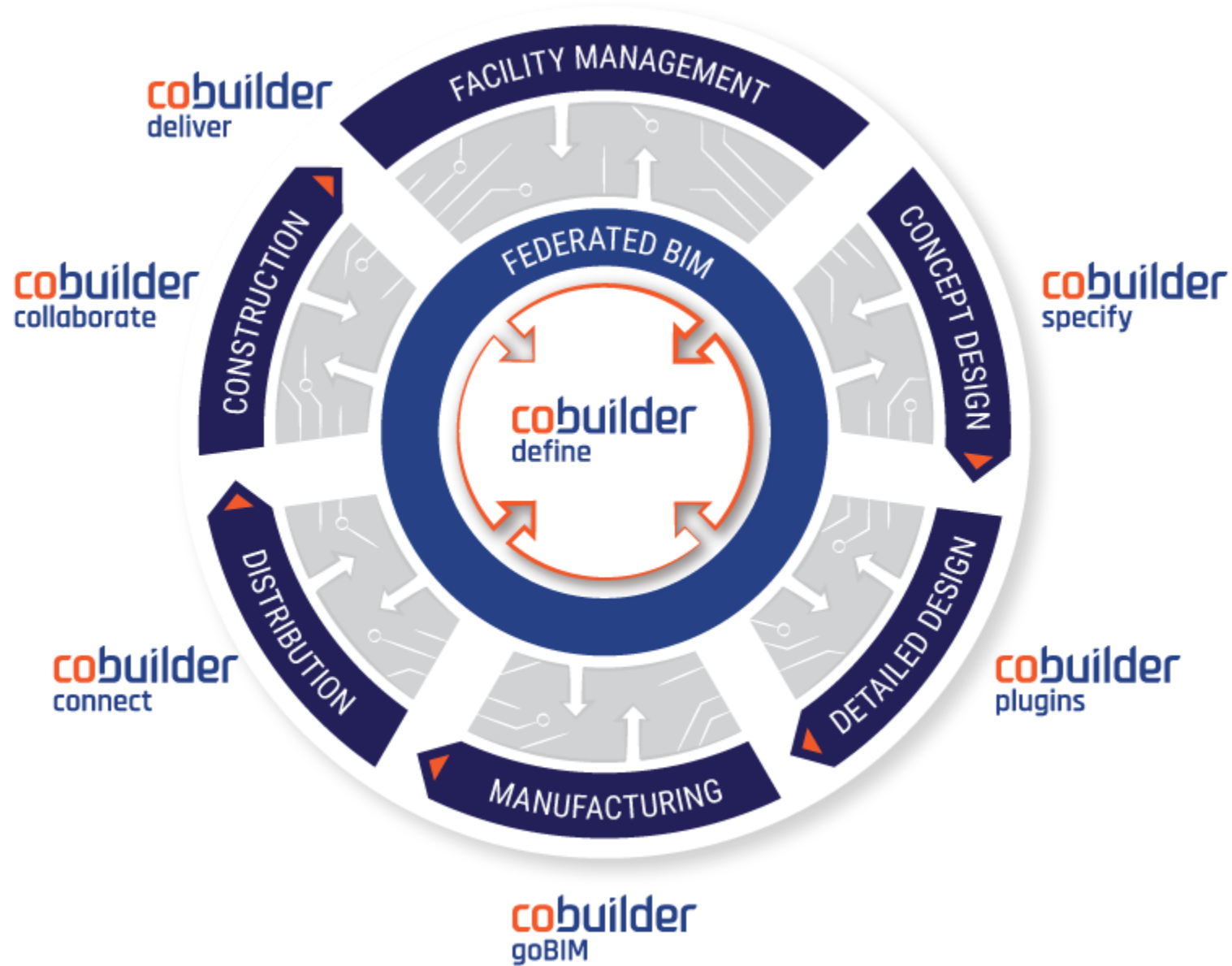


DATA



DOCUMENTATION

Cobuilder platform



En verdikjede i
endring – Hva løser
standardiserte
Datamaler for
strukturering av
data?



BYGGTJENESTE

Byggtjeneste

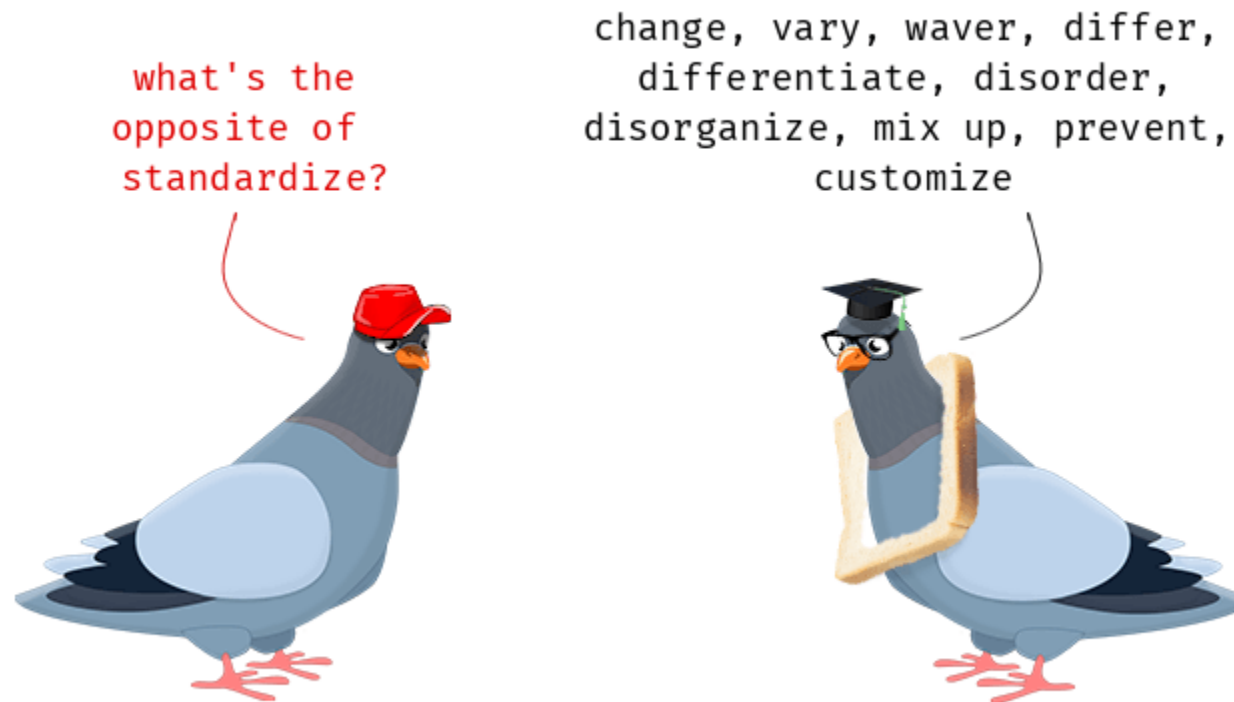
- Informasjon til byggenæringen -



Regelverk	Dokumentasjon	NOBB
- PBL for praktikere - Planserien - Byggkatalogen - Byggenormserien	- ByggDok - ECOproduct	- NOBB Norsk Byggevarebase - NOBB Integrasjon - NOBB Leverandør - NOBB Kontrakt - NOBB Skanner - Byggtjeneste Frakt

Svaret ligger i tittelen

- Strukturert og standardisert informasjon tilgjengelig på tvers av system og språk



Thesaurus.plus

<https://thesaurus.plus/thesaurus/standardize>

Hva gjør Norsk Byggtjeneste?



ETIM
International



building**SMART**®
International



CEN/TC 442



ISO/TC 59/SC
13

ETIM - en klassifiseringsmodell

- ETIM : European Technical Information Model
- Logisk, entydig klassifisering av produkter i produktklasser.
- Åpent og tilgjengelig for alle



DYNAMIC: 4924
ETIM-7.0: 4725
ETIM-6.0: 4544
ETIM-5.0: 3883

Classes

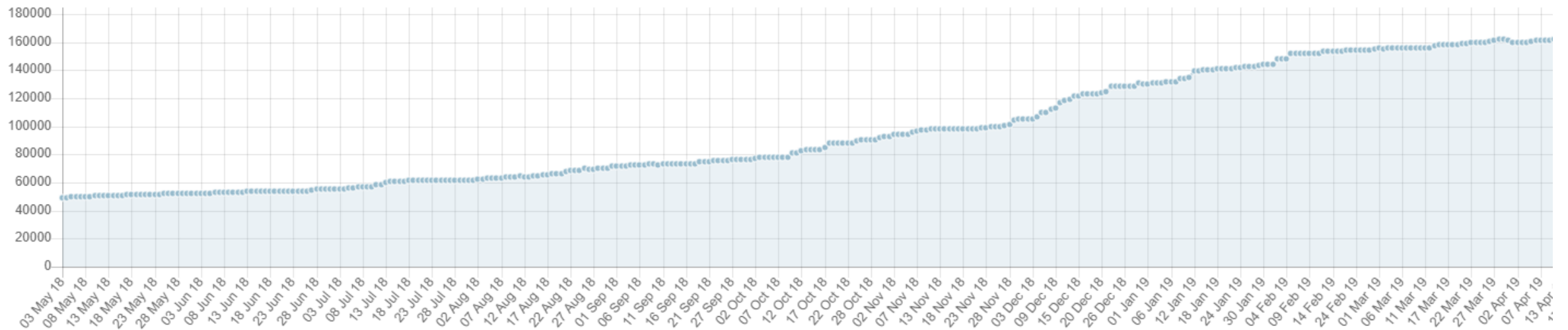


Total: 3375
Approved: 2459
Indevelopment: 904
Dismissed: 12

Change requests (RFCs)

Mer enn 160 000 varer med tekniske egenskaper

Products having property relations



DDF®-døren

MAXBO
Byggevarer i butikk og på nett!

 **ALVDAL**
SKURLAG

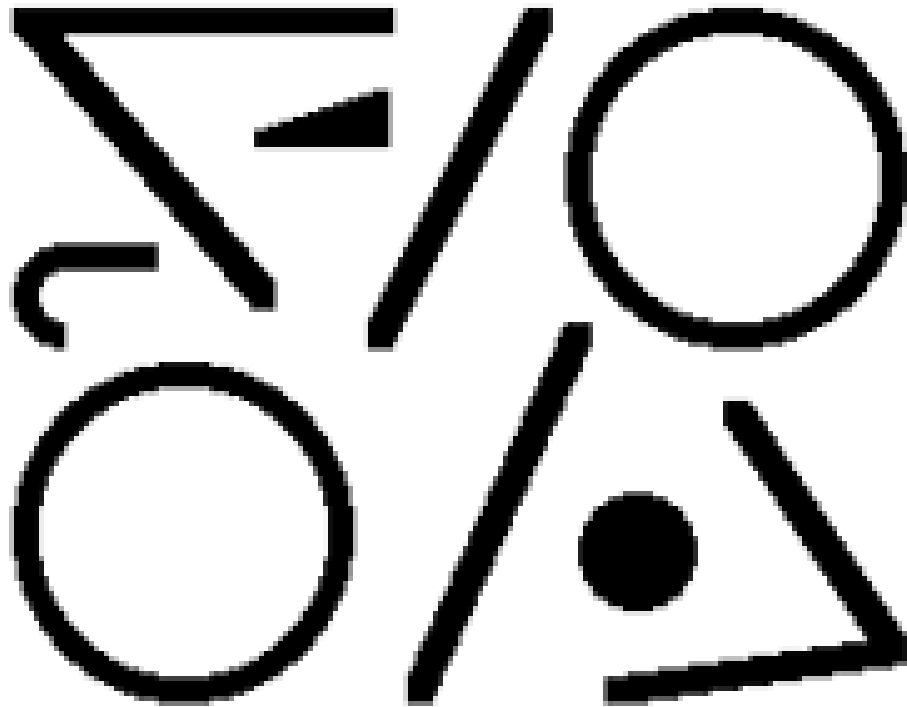
Prosjekt ETIM kontekst i bSDD

- Ledet av Byggtjeneste i tett samarbeid med EFO, og NRF
- Assistanse fra BuildingSmart
- Teknisk assistanse og programmering fra Catenda



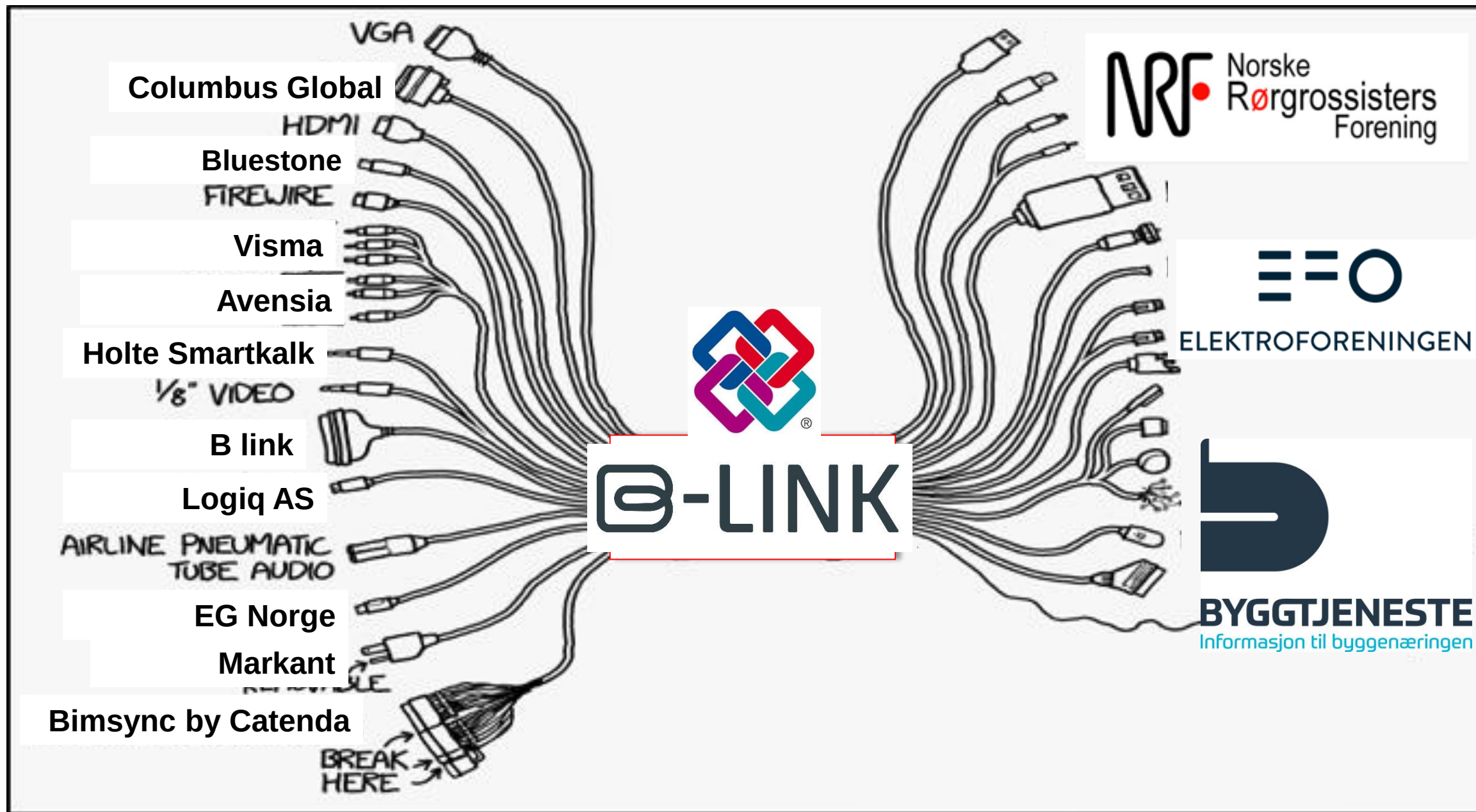
Hvorfor en ETIM kontekst i bSDD?

Ut av kontekst



I kontekst





SN/K 374

Norsk kontekst



Byggenæringens
Landsforening



buildingSMART
NORGE

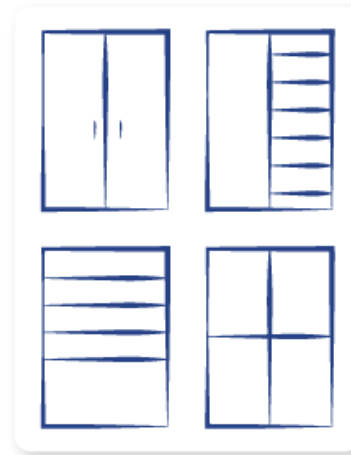


STANDARD



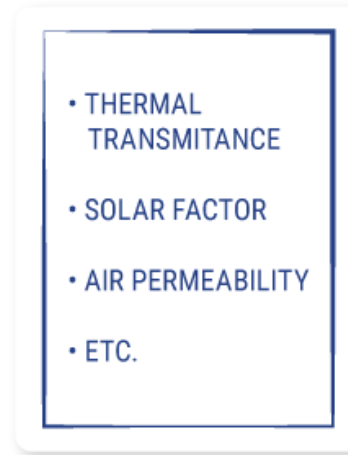
DEFINES

PRODUCT TYPE



DEFINES

A SET OF WINDOW PROPERTIES

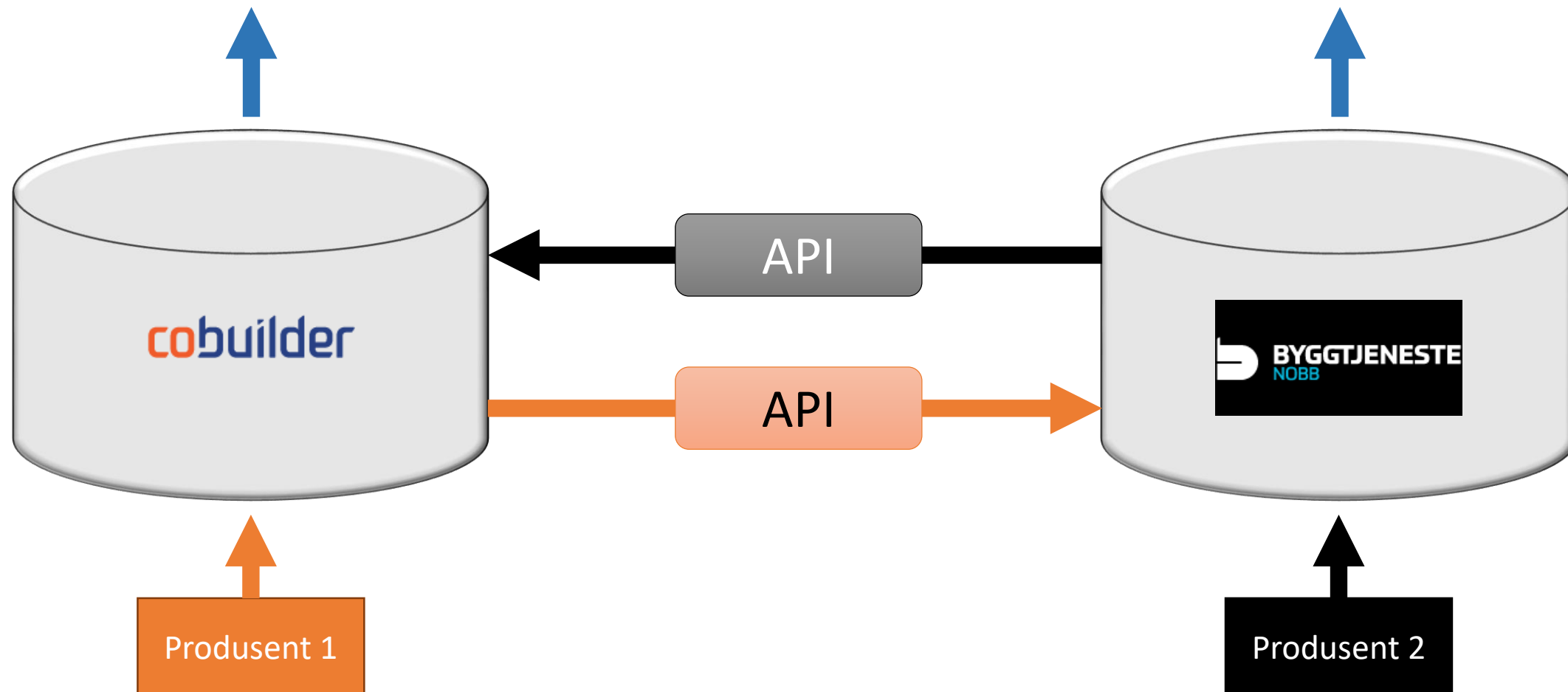


DEFINES

DATA TEMPLATE



Programvare



Takk for oss!