

BIM Specifications: new tools for visualization

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Traditional Specifications

- Specification articles from NS 3420
- Additional project specific text
- Quantities

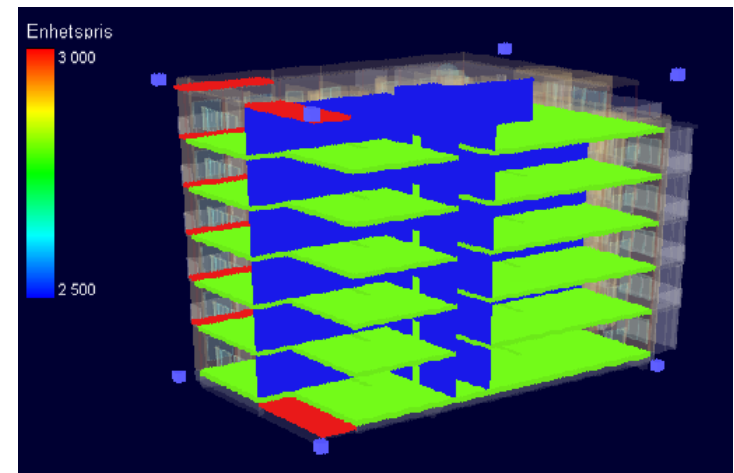
Norconsult AS

06.06.2015

Prosjekt: Veidekke kurs						Side
Kapittel: 05 Betongarbeid						
Postnr	NS-kode/Firmakode/Spesifikasjon	Enh.	Mengde	Pris	Sum	
05.23.3 ✓ s	LG1.1545220 PLASSTØPT NORMALBETONG Volum Konstruksjonsdel: Vegg Fasthetsklasse: B35 Bestandighetsklasse: M40 Kloridklasse: Cl 0,40 Utførelse og kontroll: Utførelsesklasse 2 Herdetiltak: Valgfritt etter NS-EN 13670+NA Lokalisering: yttervegger 1.etg Andre krav: <input type="checkbox"/> Ja <input checked="" type="checkbox"/> Nei	m ³	150,00	1750,00	262500,00	

Specifications from cost estimate

- Import elements from Calcus
- Pre-tender cost estimate
- Additional project specific text
- Quantities



BIM Specifications 2007 - 2014

- Integrated BIM Viewer
- Manual linking specification articles with BIM objects
- Quantities
 - IFC-quantity
 - Solibri quantity
 - G-prog quantity
- Quality assurance

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Prosjekt: Demonstrasjon

Kapittel: 05 Betongarbeid

Postnr	NS-kode/Firmakode/Spesifikasjon	Enh.	Mengde
05.25.1 ✓	Betongdekke, t = 200 mm. 120 kg armering pr m3 betong, B30Betong Plasstept 150mm med 50mm påstøp	m ²	2240,25



BIM Specifications from 2015

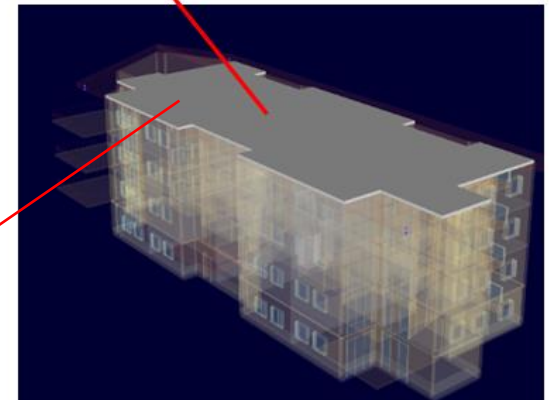
- New national standard NS 8360 BIM-object naming
- Allows for automatic or semi-automatic matching BIM object and specification articles
- Saving lots of work making specifications

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05.25.1 ✓	Betongdekke, t = 200 mm. 120 kg armering pr m3 betong, B30Betong Plasstøpt 150mm med 50mm påstøp	m ²	2240,25

Post: 05.25.1
Post mengde: 2 240,254 m2

GlobalID	3CtcBw5qv31gnpms99xKf
IfcType	IfcSlab
Name	Floor:Betong Plasstøpt 150mm med 50mm påstøp:358003
ObjectType	Floor:Betong Plasstøpt 150mm med 50mm påstøp
Tag	358003
PredefinedType	.FLOOR.
DisplayName	Floor:Betong Plasstøpt 150mm med 50mm påstøp:358003
Model	152 vertices
NS8360	2521_4006.150_5012.50
DimTotal	200
DimCore	150
Materiale	50mm - Gulv - Betong påstøp
	150mm - Betong - Plasstøpt



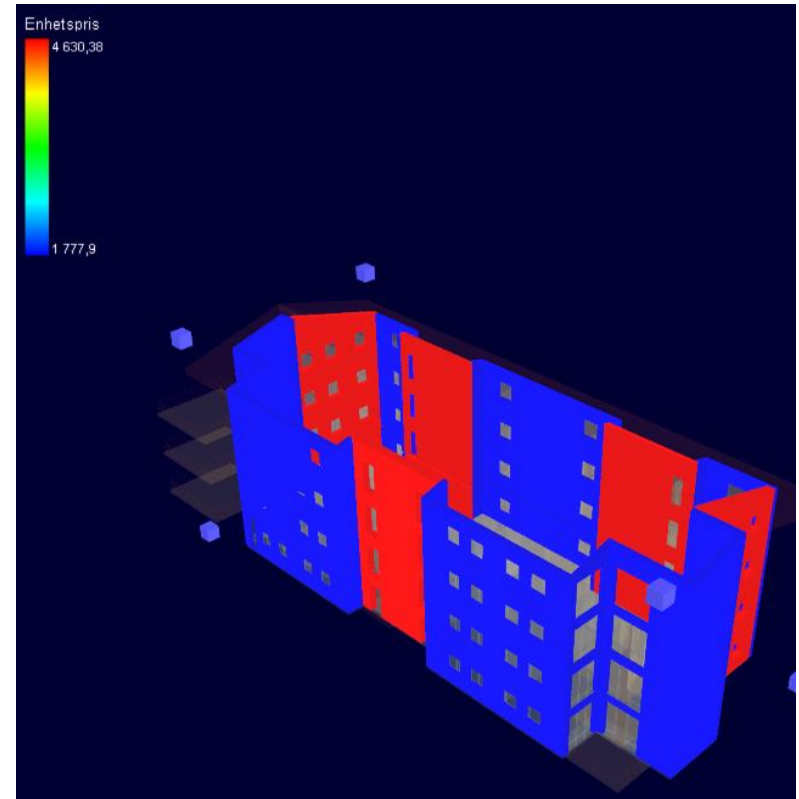
Specification with quantities to tender

- Submitted digitally according to NS 3459 on xml-format
- Contractor import NS 3459 file and calculate price
- Contractor submit his bid on the same format



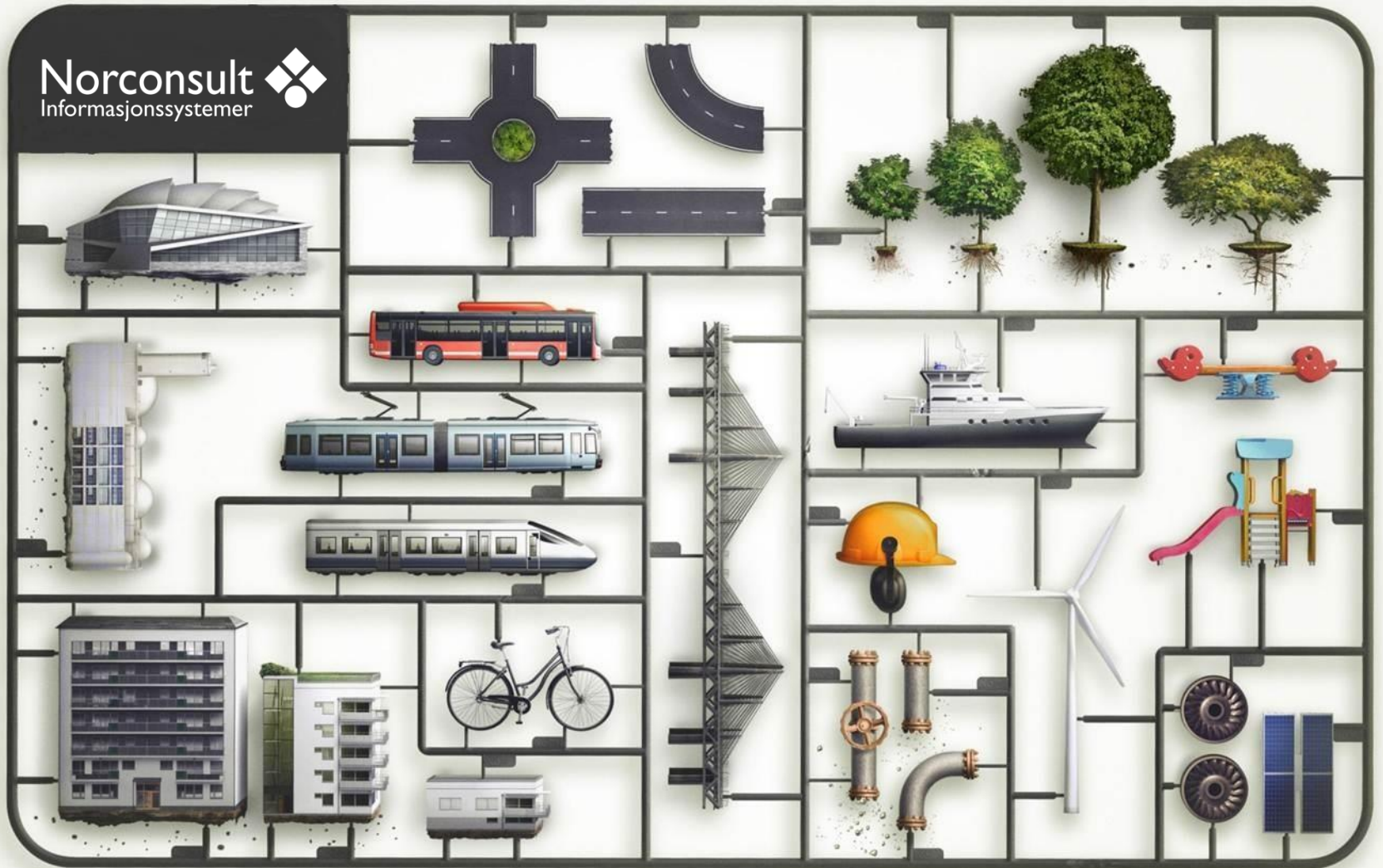
Specification tools for cost analysis

- Bids with tender prices imported. Comparison graphically
- High-Low and gradient



Live demo

- Traditional spec
- BIM spec previously and now
- Advantages of BIM-object naming standard
 - Exact match BIM-object and spec-element
 - Best match with shortlist



Thank you!