

Reference Designation System (RDS)

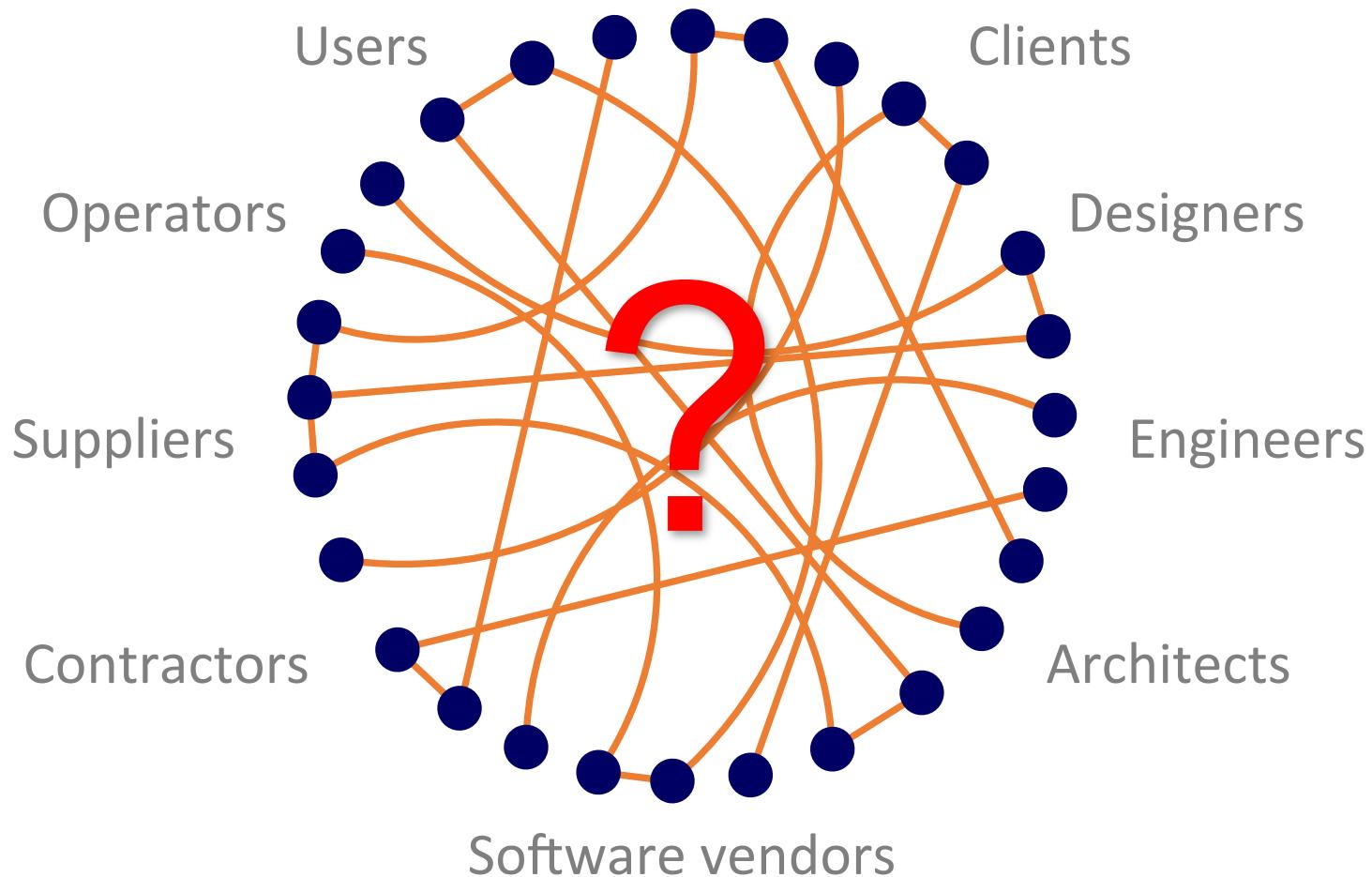
A common naming convention for systems and their elements

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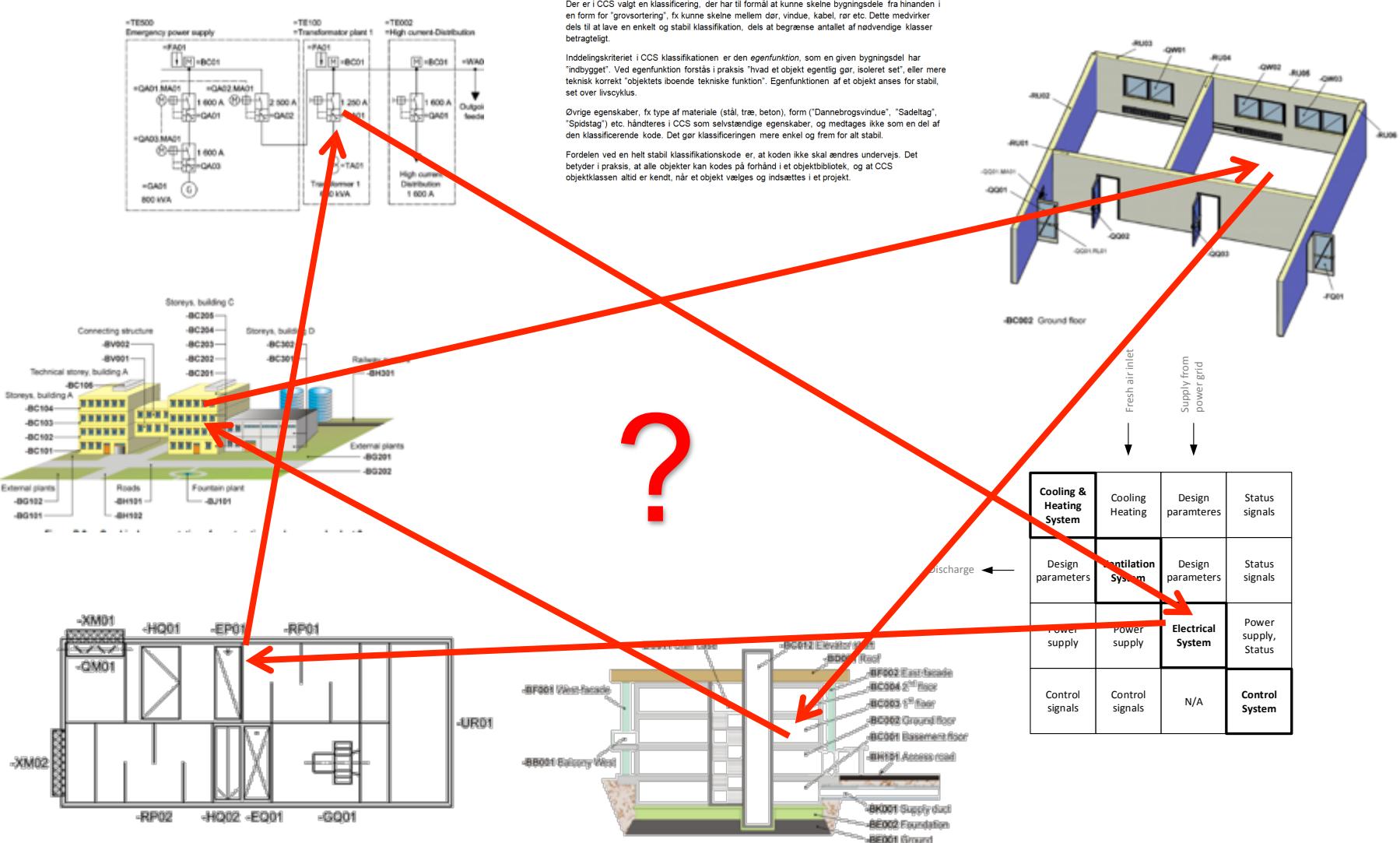
It's all about creating a common language...



SE Co-operation



Their challenge



The solution

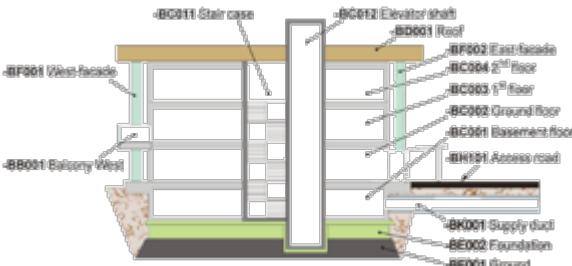
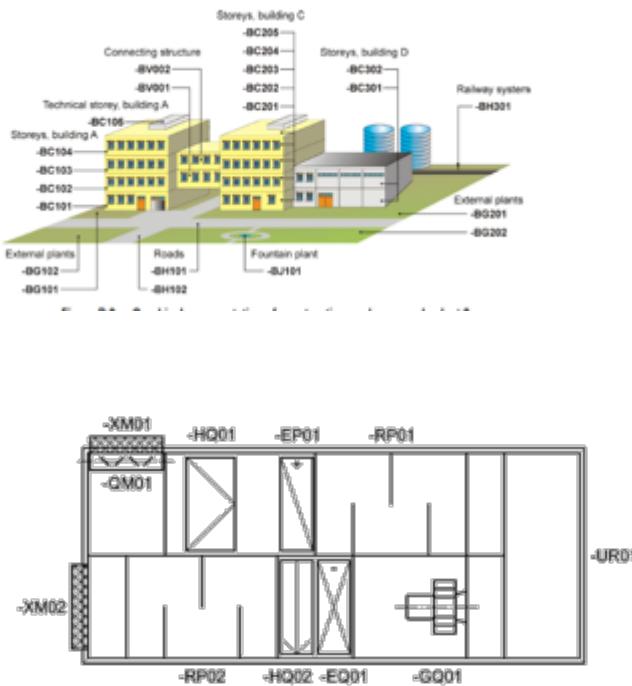


Figure B.1 — Graphical representation of construction works, example plant 1

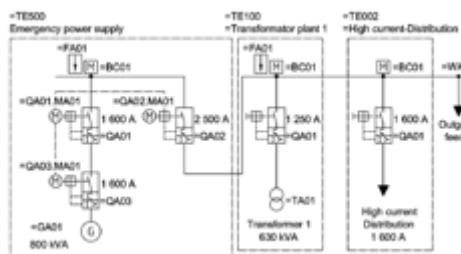
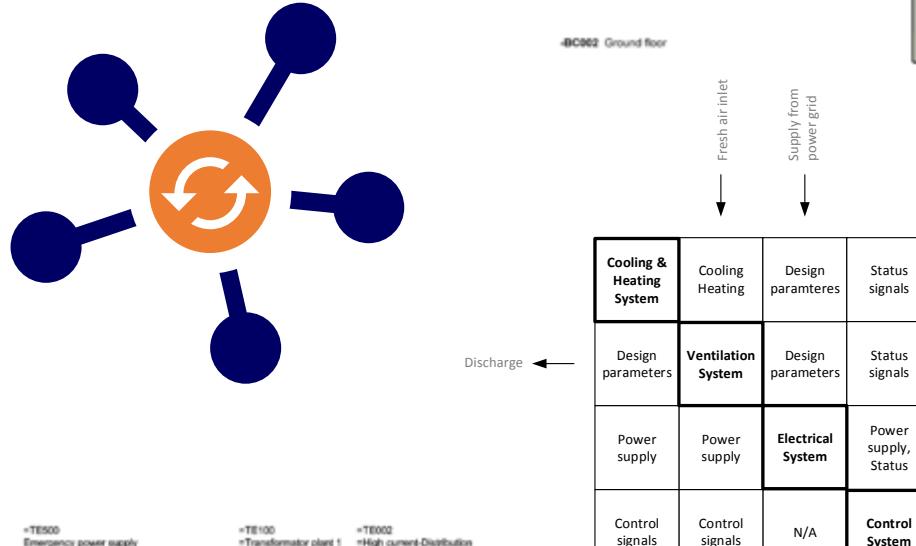


Der er i CCS valgt en klassificering, der har til formål at kunne skelne bygningsdele fra hinanden i en form for "grovsortering", fx kunne skelne mellem dør, vindue, kabel, rør etc. Dette medvirker dels til at lave en enkelt og stabil klassifikation, dels at begrænse antallet af nødvendige klasser betragteligt.

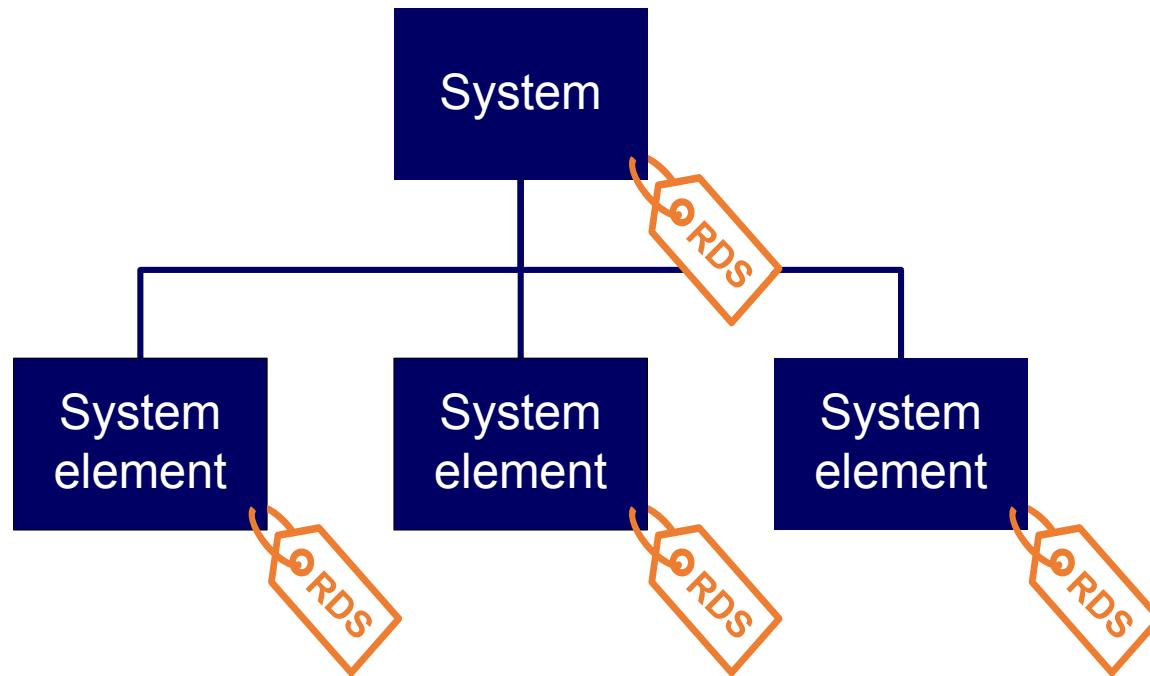
Inddelingskriteriet i CCS klassifikationen er den *egenfunktion*, som en given bygningsdel har "indbygget". Ved egenfunktion forstås i praksis "hvad et objekt egentlig gør, isoleret set", eller mere teknisk korrekt "objekts idøende tekniske funktion". Egenfunktionen af et objekt anses for stabil, set over livscyklus.

Øvrige egenskaber, fx type af materiale (stål, træ, beton), form (Dannebrogsvindue", "Sadeltag", "Spidstag") etc. håndteres i CCS som selvstændige egenskaber, og medtages ikke som en del af den klassificerende kode. Det gør klassificeringen mere enkel og frem for alt stabil.

Fordelen ved en helt stabil klassifikationskode er, at koden ikke skal ændres undervejs. Det betyder i praksis, at alle objekter kan koddes på forhånd i et objektbibliotek, og at CCS objektklassen altid er kendt, når et objekt vælges og indsættes i et projekt.



RDS = System Label (a TAG)



RDS = ISO/IEC 81346

Industrial systems, installations and equipment and industrial products

Designed to designate systems and their elements

Plants – Machinery – Building construction – Anything!

Interdisciplinary “naming convention”



Part 1+2: Fundamental rules and classification

Part 10+12: Industry specific applications

Three core elements of RDS

Aspects & structure

How are the objects related

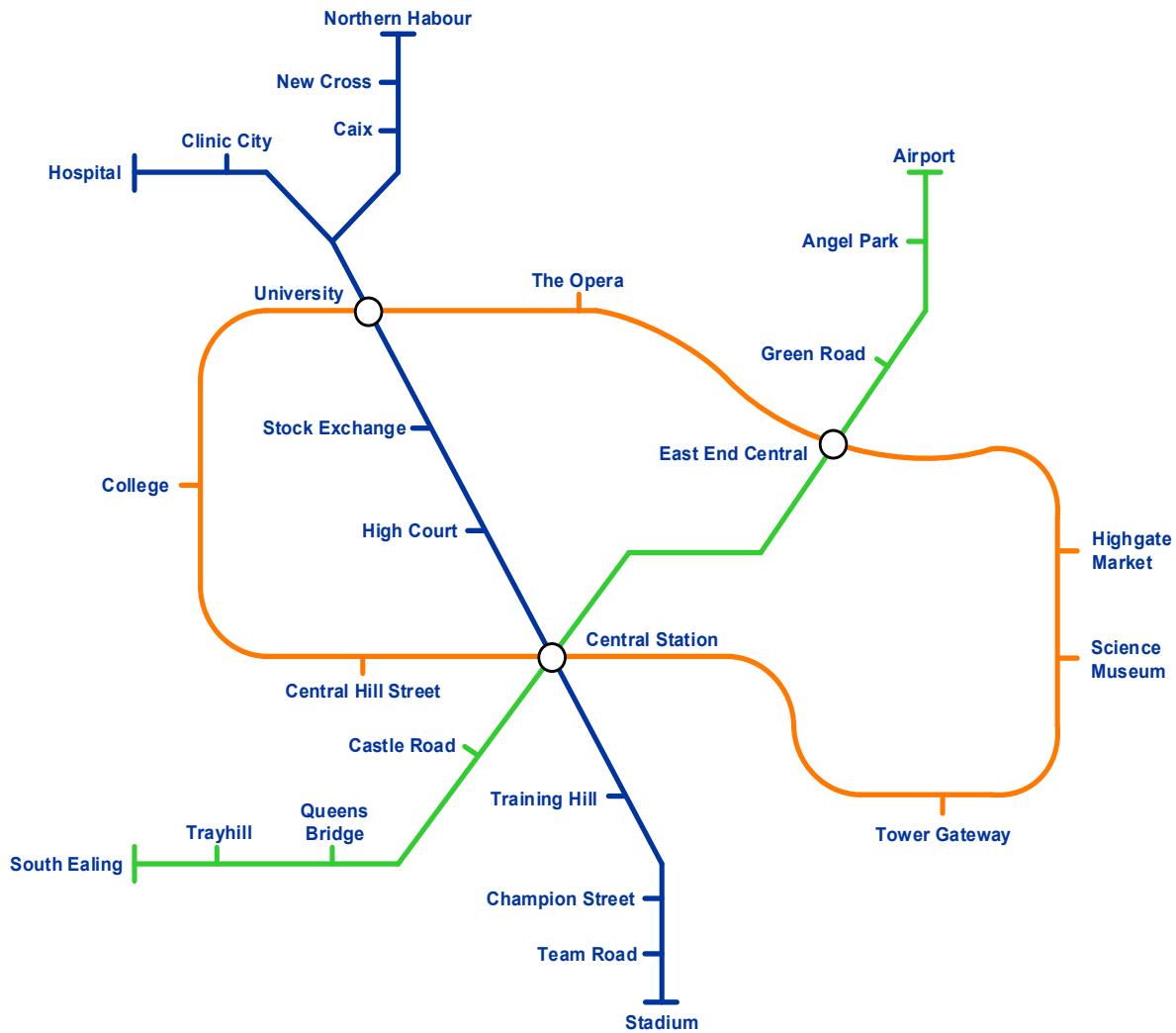
Classification

What kind of object

Numbering

Which object

Aspects – a way of viewing the world



The RDS - 81346 aspects

Four basic aspects

**Product
Prefix -**



**Type
Prefix %**

**Function
Prefix =**

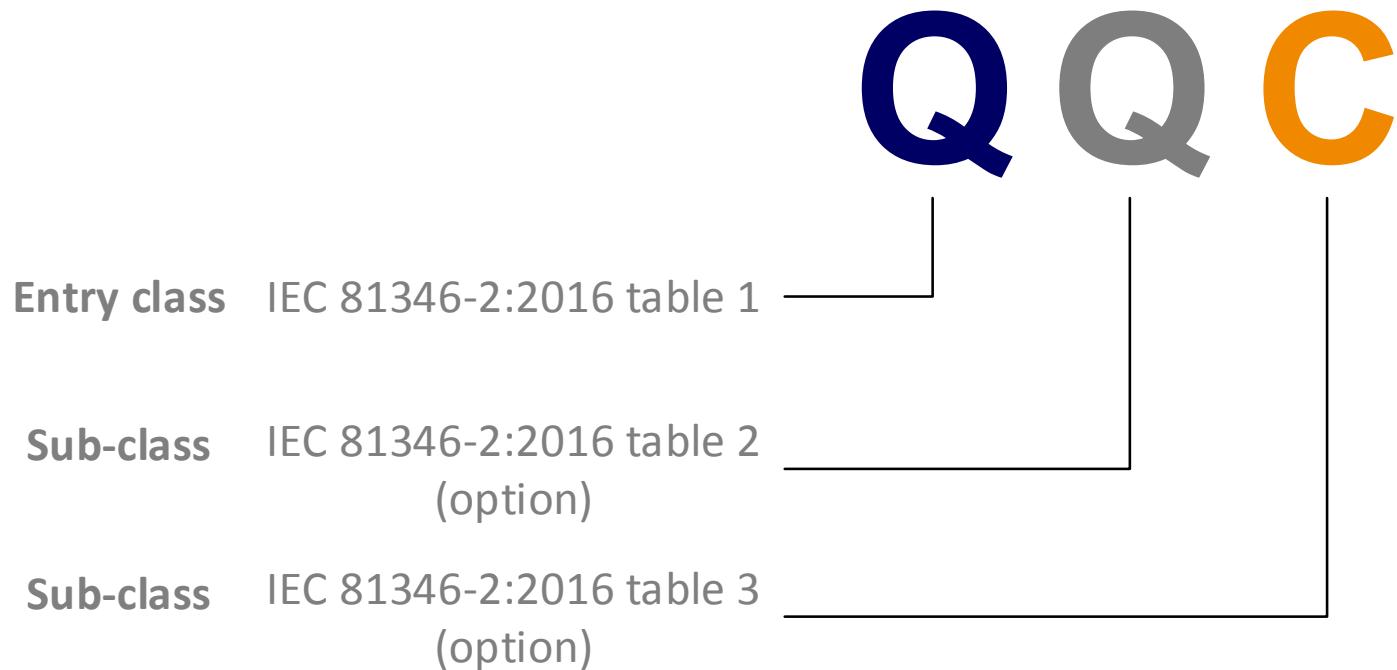


**Location
Prefix +**

classification A, B, C...

... so you can recognize objects within and across aspects

Classification hierarchy

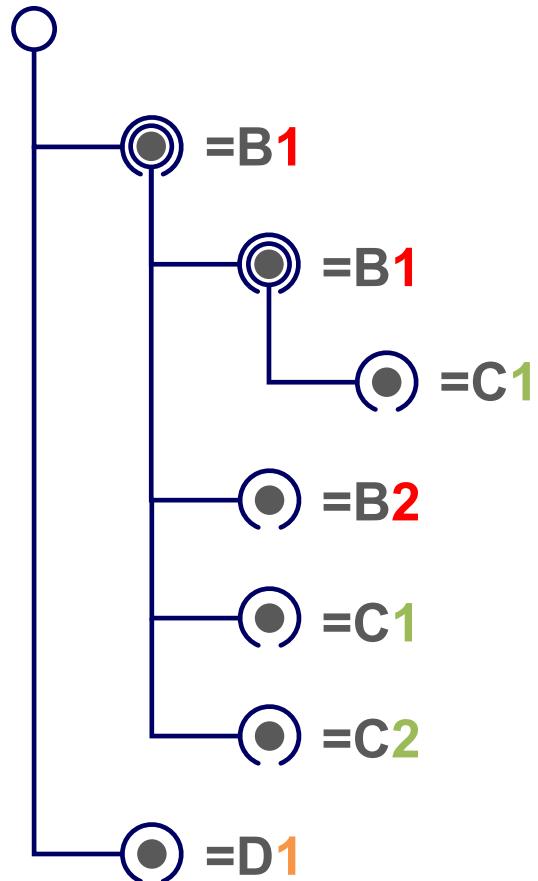


A total of 17 entry classes

Class code	Class definition (ISO/IEC 81346-2 2016-edition)	Class name
	B <i>object intended to pick up information and provide a representation</i>	sensing object
	C <i>object intended to store for subsequent retrieval</i>	storing object
	E <i>object intended for emission</i>	emitting object
	F <i>object intended to protect against the effects of dangerous or undesirable conditions</i>	protecting object
	G <i>object intended to provide a controllable flow</i>	generating object
	H <i>object intended to treat matter</i>	matter processing object

...

Numbering 1,2,3,...



Sequential class based numbering
within each sub-structure

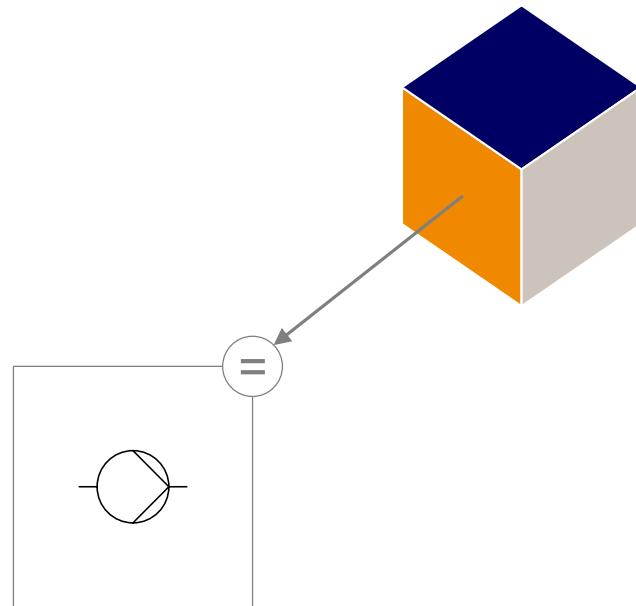


AN EXAMPLE

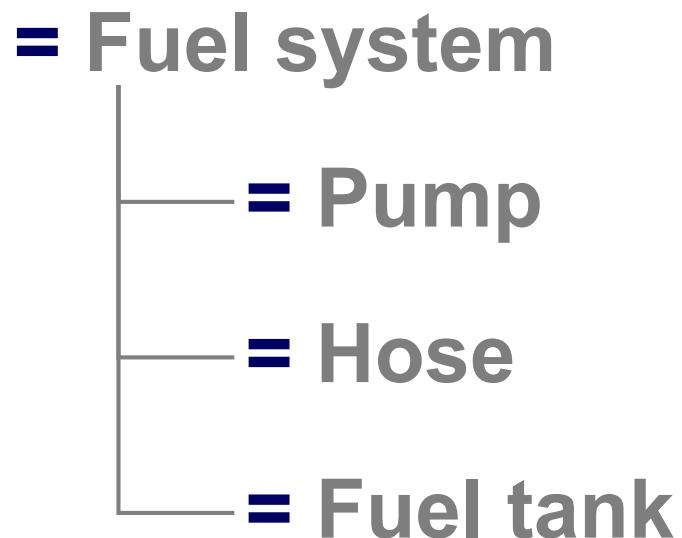
Choose an aspect

Function

what an object is designed to do



Structuring



Classification

=G Fuel system

=GPA Pump

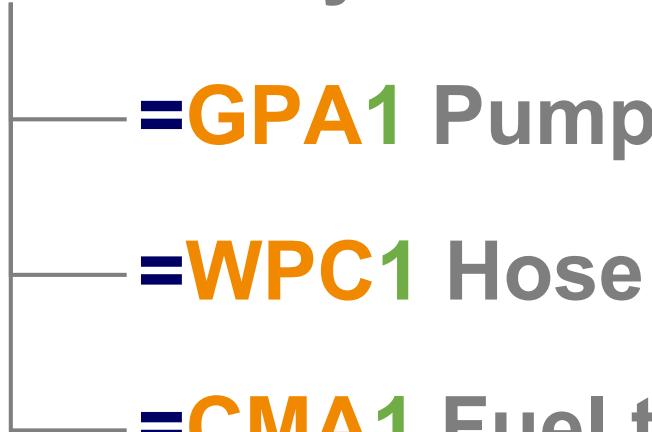
=WPC Hose

=CMA Fuel tank

3

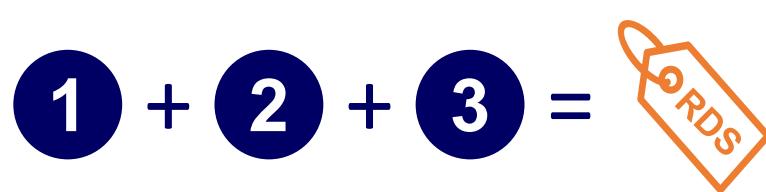
Numbering

=G1 Fuel system



- =GPA1 Pump
- =WPC1 Hose
- =CMA1 Fuel tank

Forming a reference designation



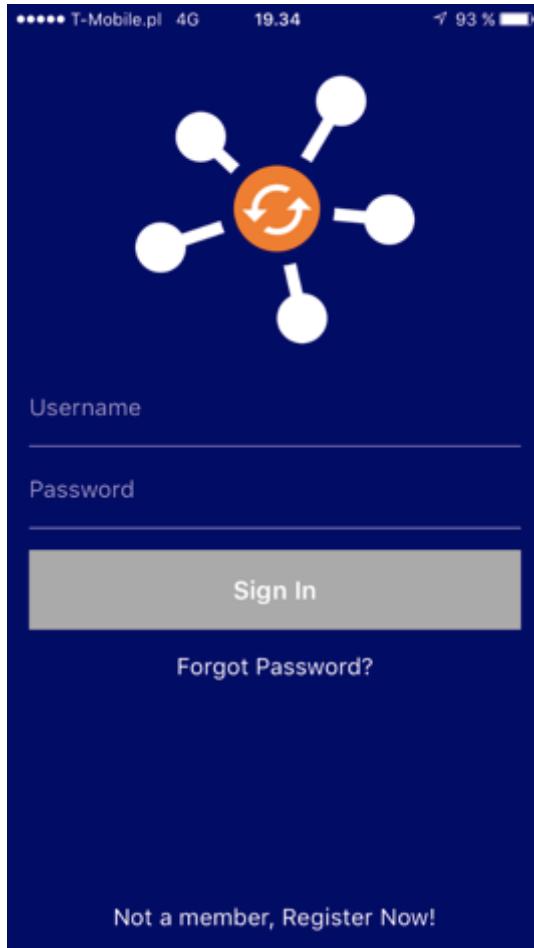
=G1 Fuel system

- **=GPA1** Pump
- **=WPC1** Hose
- **=CMA1** Fuel tank

=G1=GPA1

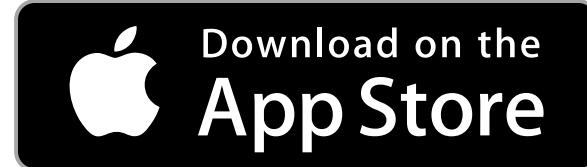
Reference Designation

RDS at your fingertips



ISO/IEC 81346 part 2 and 12

IEC 61355 (document classes)



More information



WWW.SYSENG.DK



WWW.81346.COM