

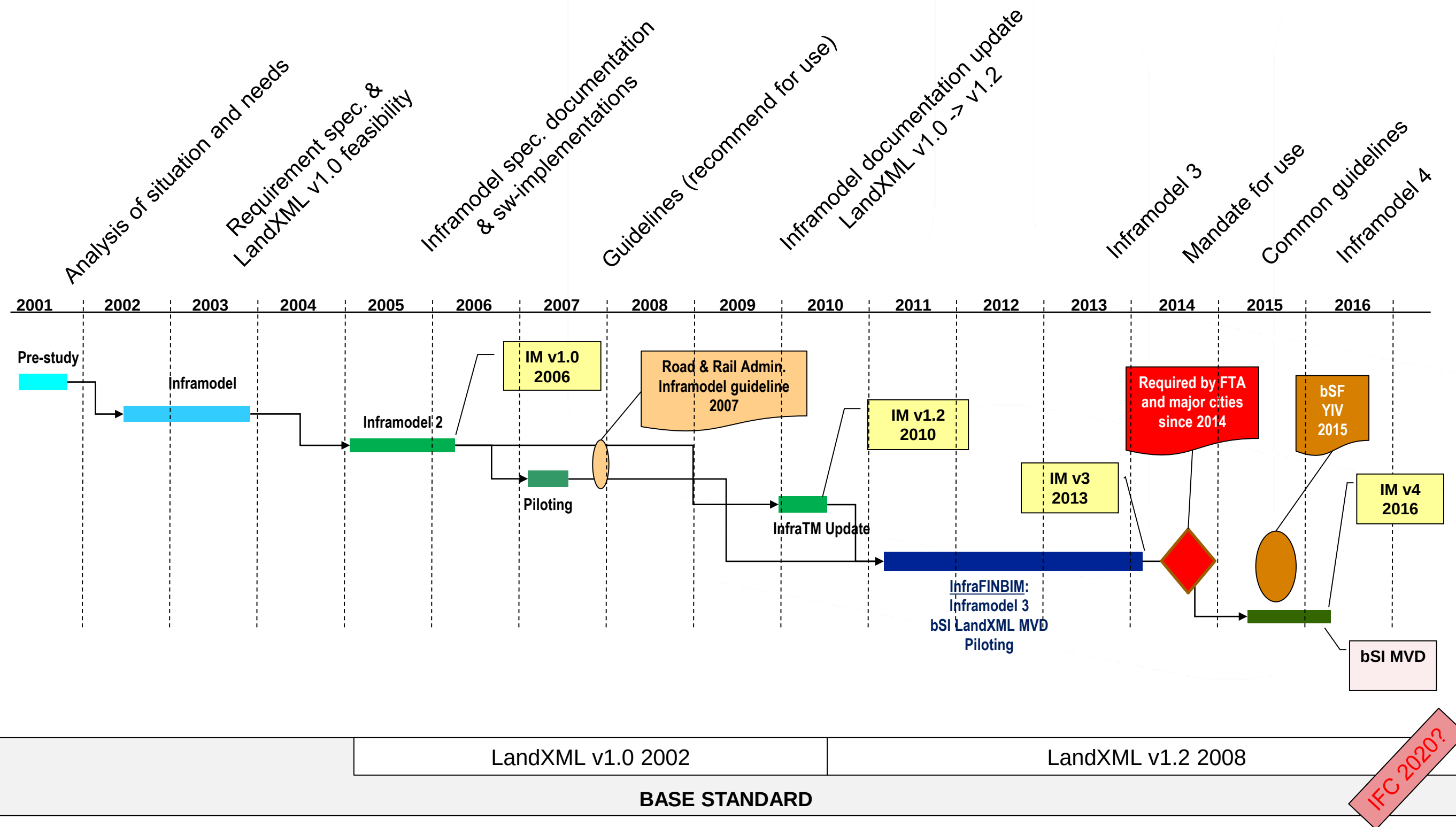
INFRAN KANSAINVÄLINEN STANDARDOINTI

Infra-O kick-off 25.4.2017

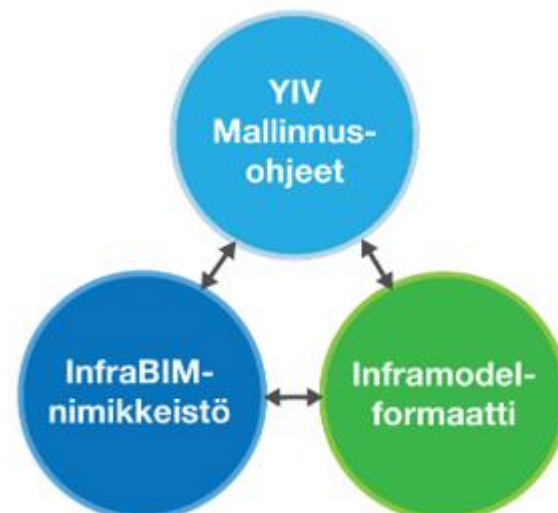
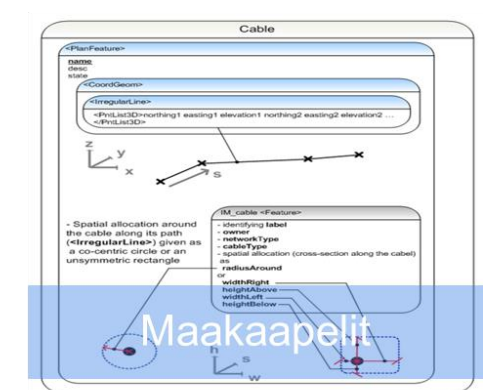
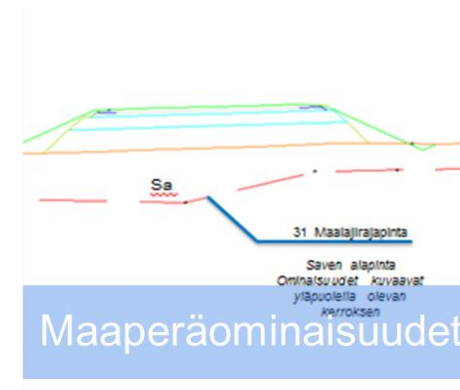
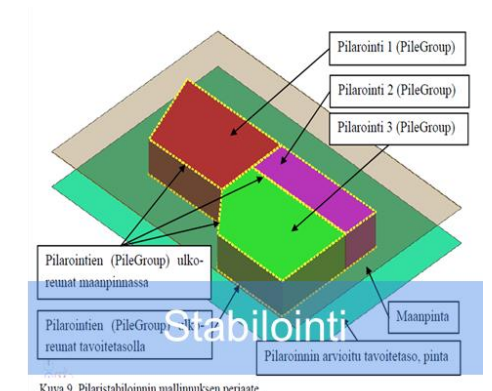
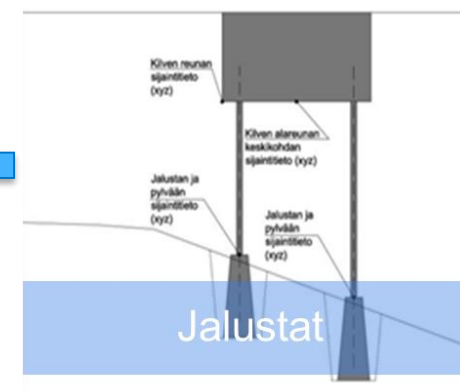
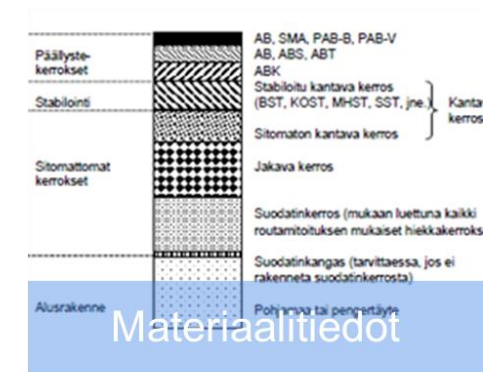
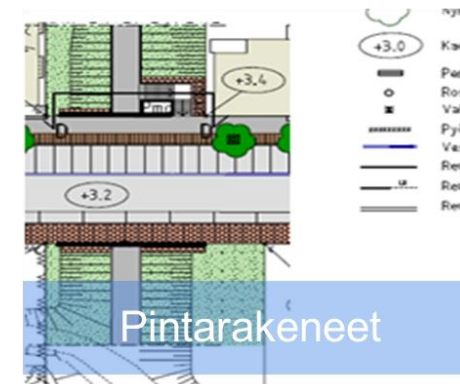
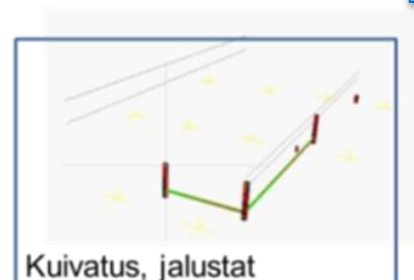
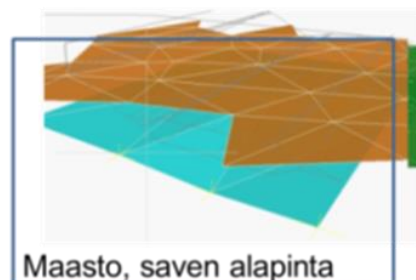
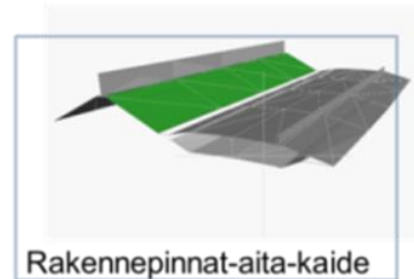
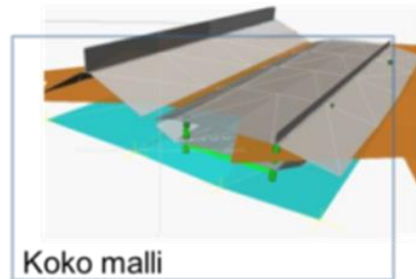
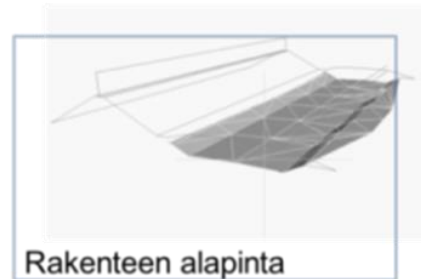
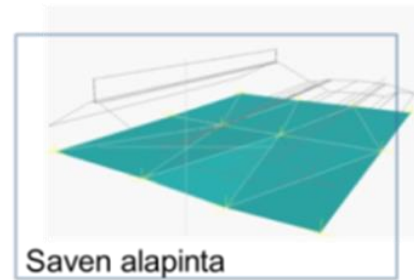
Juha Liukas

buildingSMART Finland

INFRAMODEL HISTORY



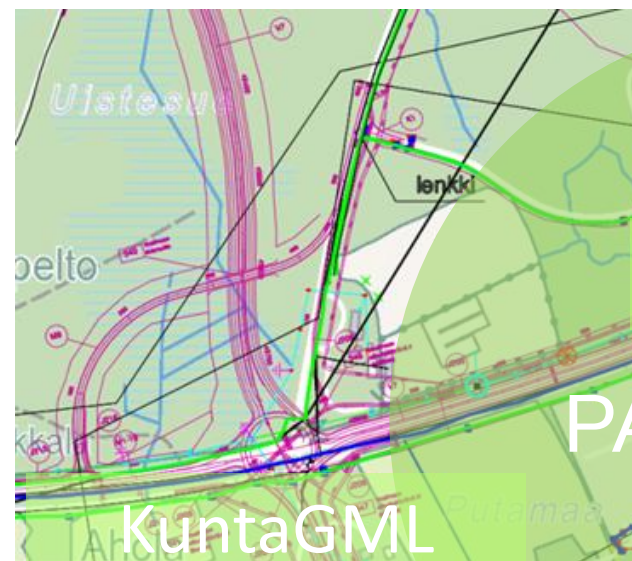
Inframodel3 + Inframodel4



https://buildingsmart.fi/wp-content/uploads/2014/04/Inframodel_4_uudet_osat.pdf

Standardit - näkökulmat elinkaaren eri vaiheissa ?

ISO / CEN



KuntaGML

InfraGML

PAIKKATIEETO

INFRA

GML

CityGML

RAKENNUS

IFC Road

IFC Railway

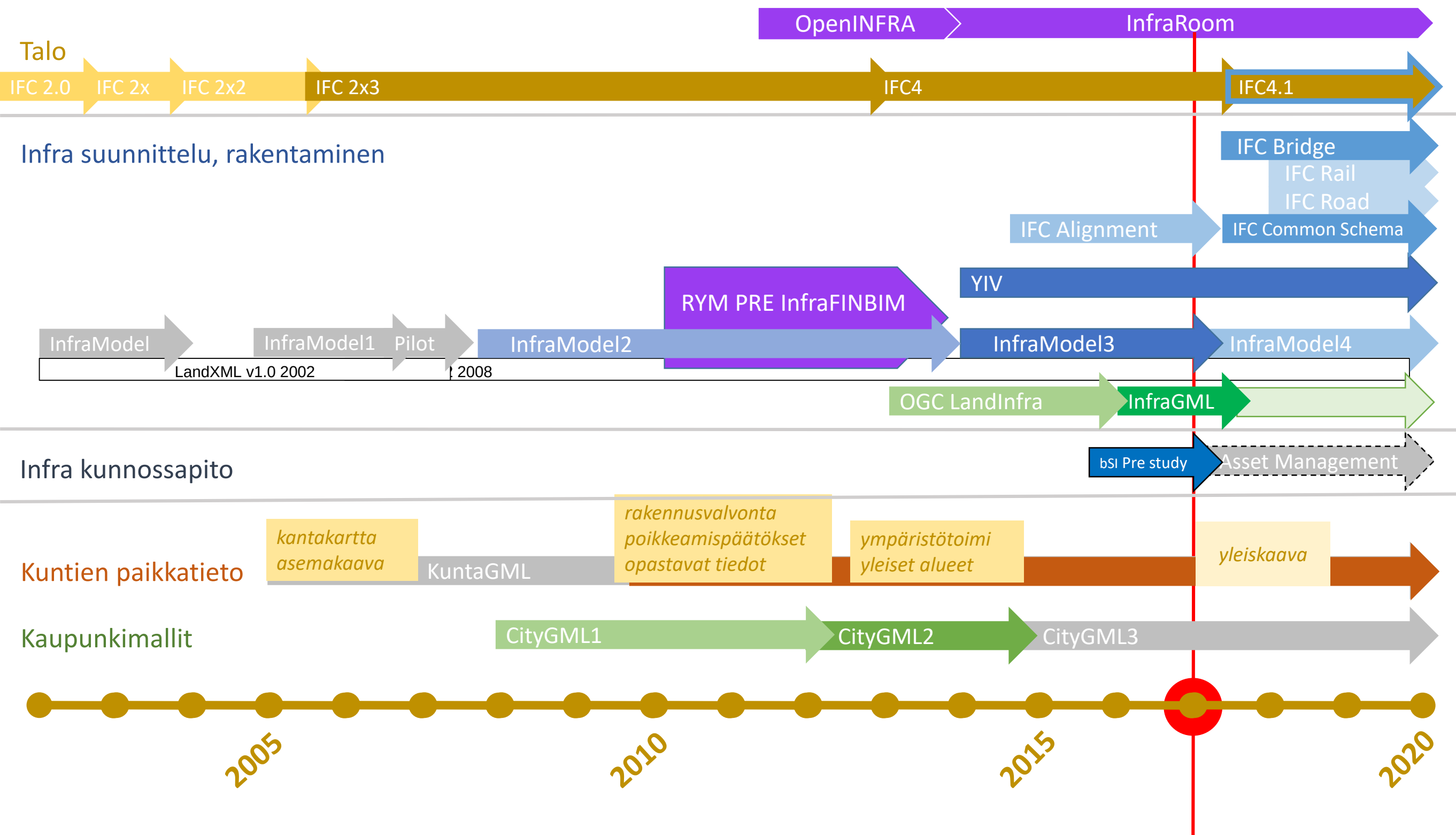
Inframodel
LandXML

IFC Bridge

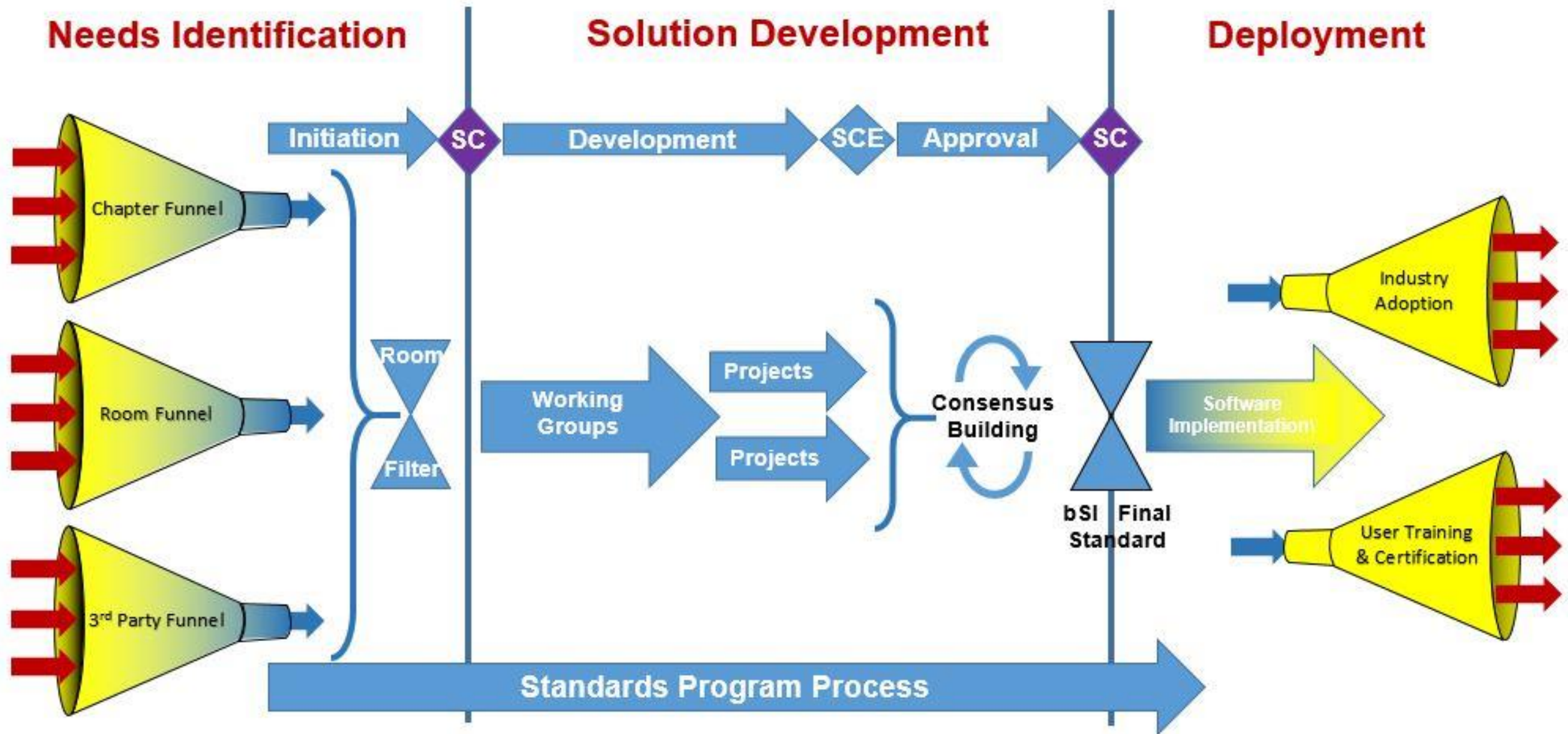
IFC

BSI

OGC

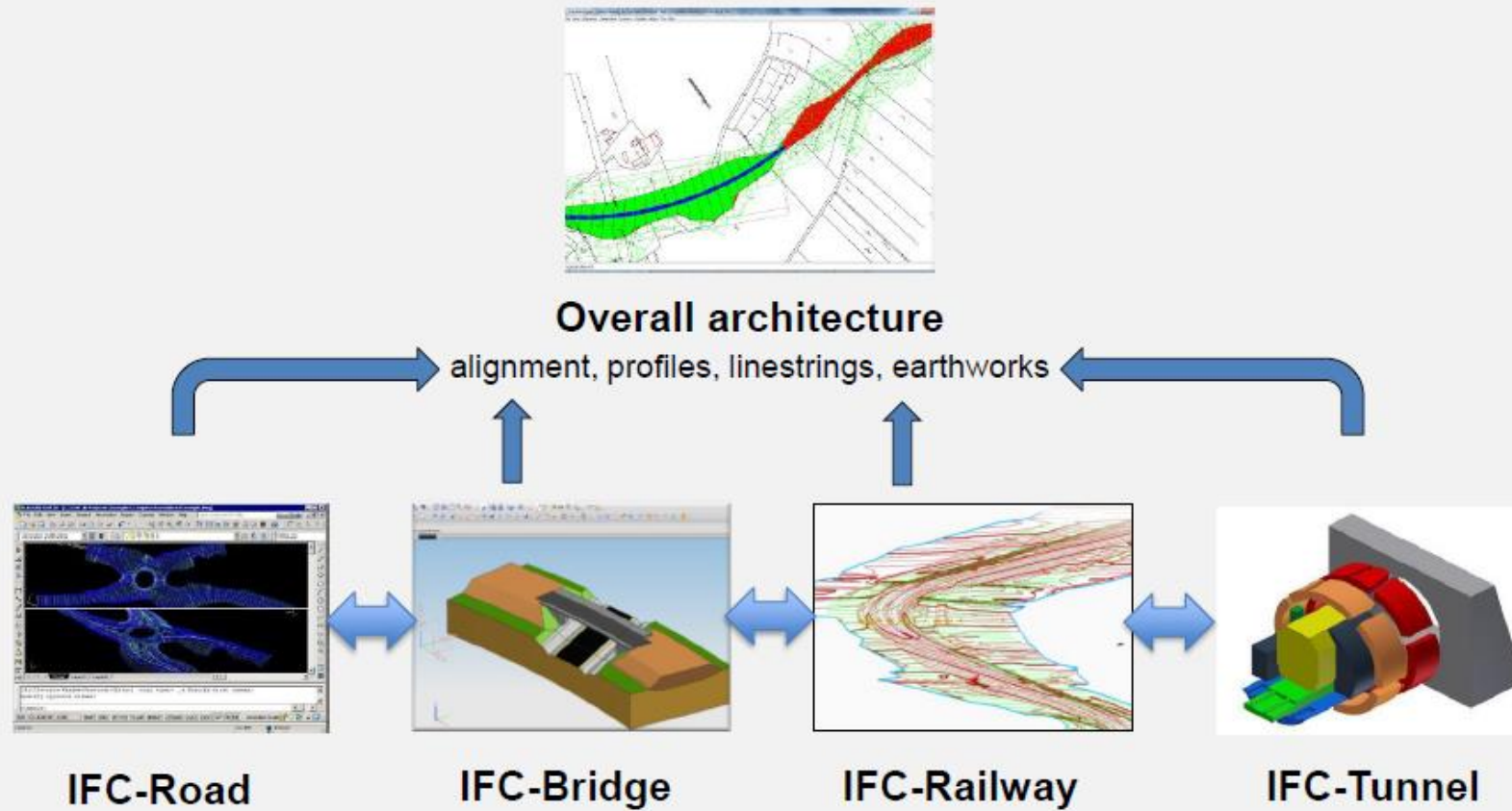


bSI Standardointiprosessi



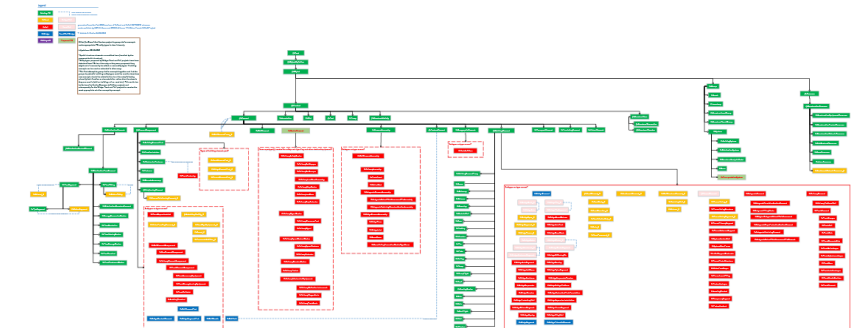
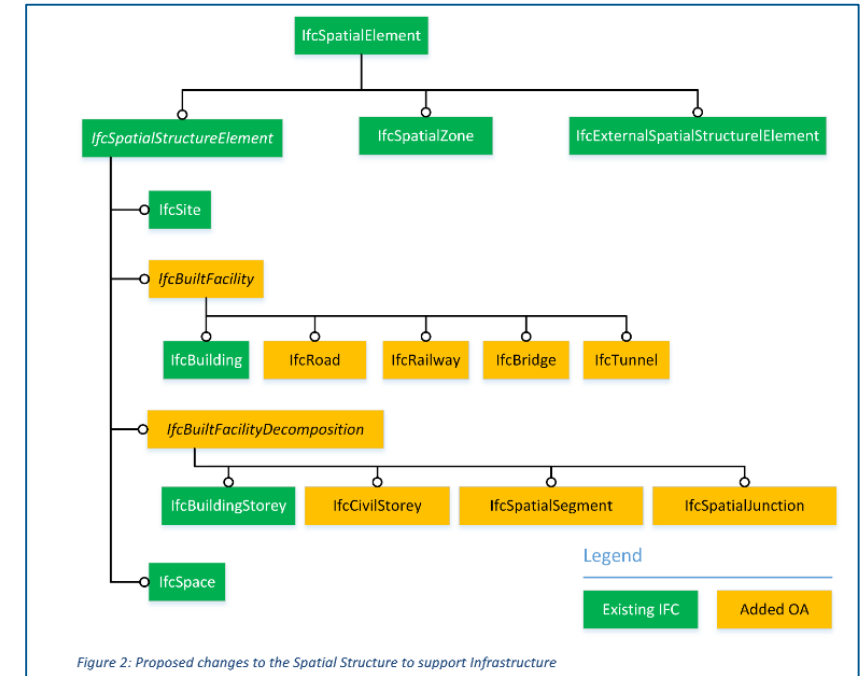
IFC Infra

Overall architecture as common resource

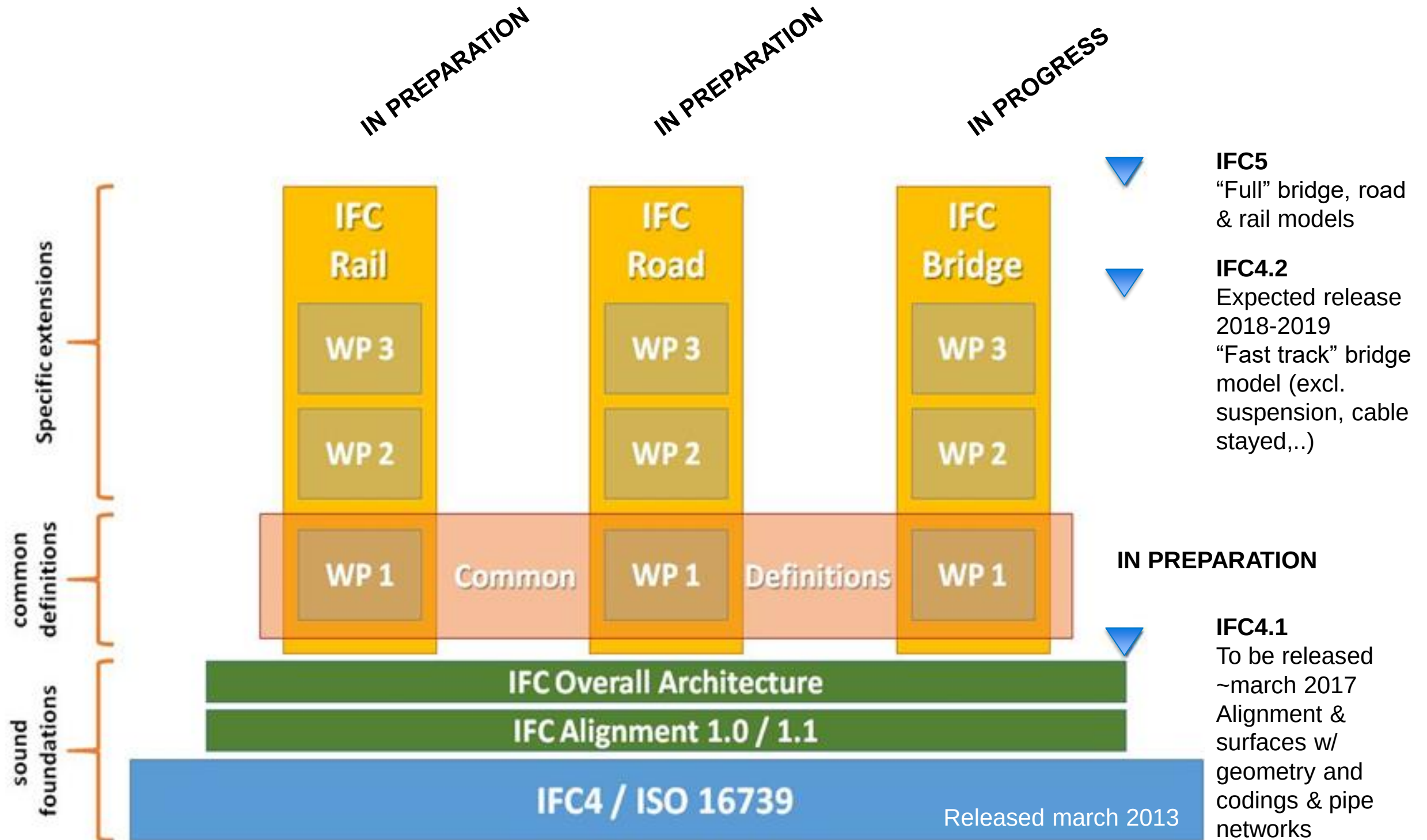


bSI IFC-Infra Overall Architecture

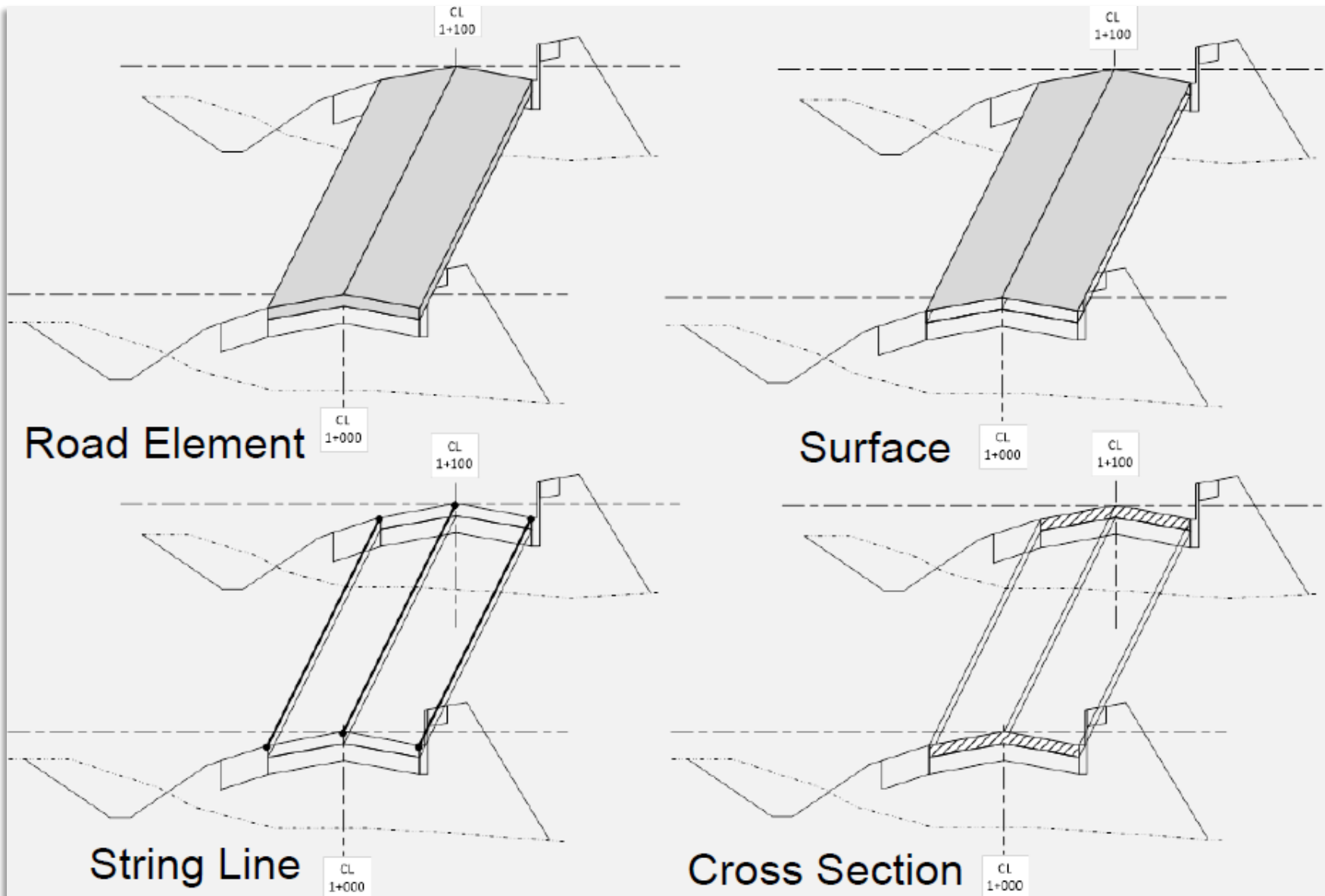
buildingSMART
International home of openBIM



Standardointi: IFC



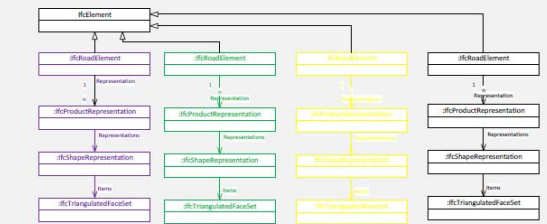
InfraRoom – IFC Infra



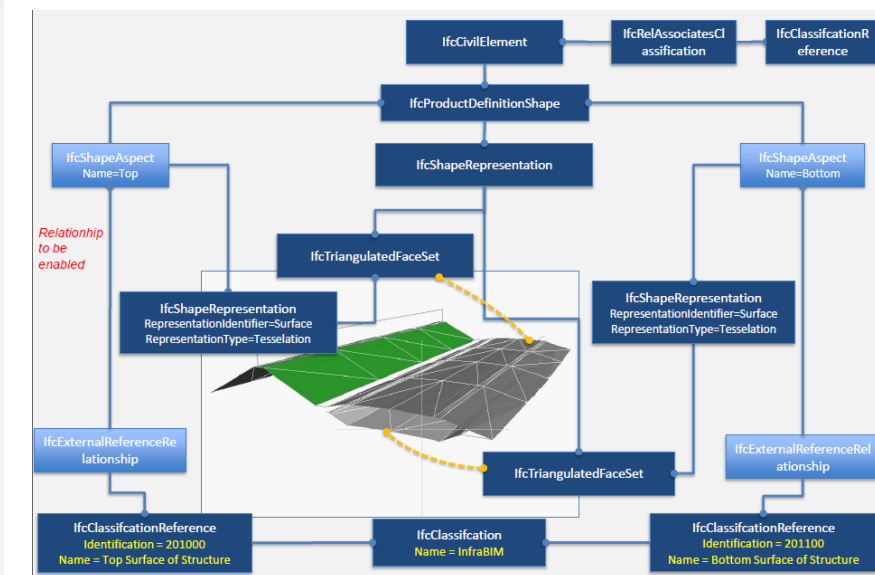
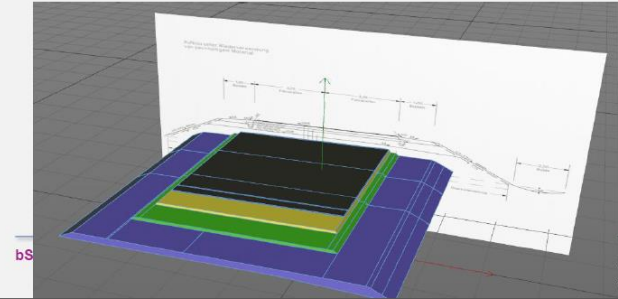
bSI IFC-Infra Overall Architecture



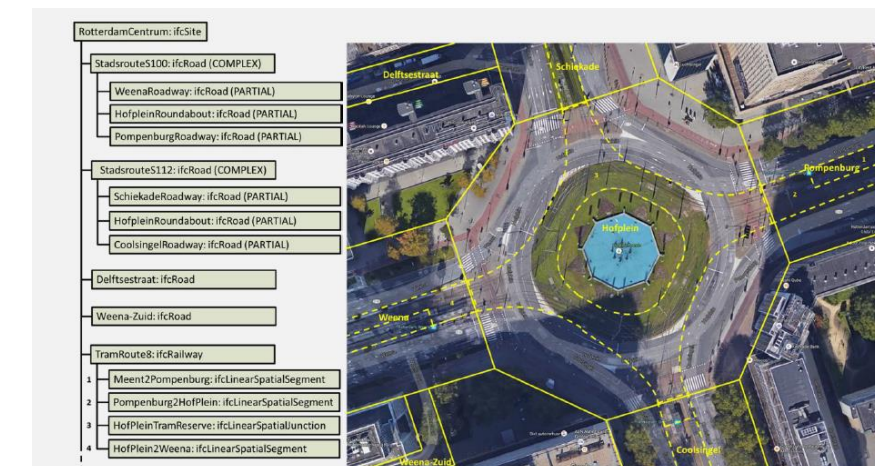
Surface representation



- Infra assets can be represented by a number of surfaces



bSI IFC-Infra Overall Architecture



FINLAND

OGC® Land and Infrastructure Conceptual Model Standard (LandInfra)

- be supported by a recognized, dependable Standards Developing Organization, OGC
- align with existing OGC (and ISO TC211 and SQL/MM) standards, including the modular spec
- **benefit from functionality already supported by GML**, including features, geometry, coordinate reference systems, linear referencing, and surface modeling (TIN)
- **initially focus on alignments/roads, survey, and land parcels, the subject areas** which have identified need and committed resources for development
- using modular extensions, **be able to expand into other areas (e.g., "wet" infrastructure pipe networks)** as resources become available
- be use-case driven
- be based on a UML conceptual model developed prior to GML (and any other future) encoding
- have more up-to-date functionality
- **be synchronized with the concurrent efforts by buildingSMART International** in their development of Infrastructure-based Industry Foundation Classes (IFCs)
- be more **easily integrated with CityGML and TransXML**
- <http://docs.opengeospatial.org/is/15-111r1/15-111r1.html>

OGC InfraGML

OGC seeks public comment on candidate InfraGML encoding standards

[Tweet](#) [Like 5](#) [G+1](#) [Share](#)

Contact:

info@opengeospatial.org

Release Date:

Tuesday, 17 January 2017 UTC

The membership of the Open Geospatial Consortium (OGC®) seeks public comment on its candidate InfraGML standards.

OGC seeks comment on candidate InfraGML Part 7 Land Division Standard

[Tweet](#) [Like 3](#) [G+1](#) [Share](#)

Contact:

info@opengeospatial.org

Release Date:

Thursday, 20 April 2017 UTC

The Open Geospatial Consortium (OGC®) is seeking public comment on the candidate *InfraGML 1.0: Part 7 – LandInfra Land Division - Encoding Standard*.

Some InfraGML Parts depend upon other parts:

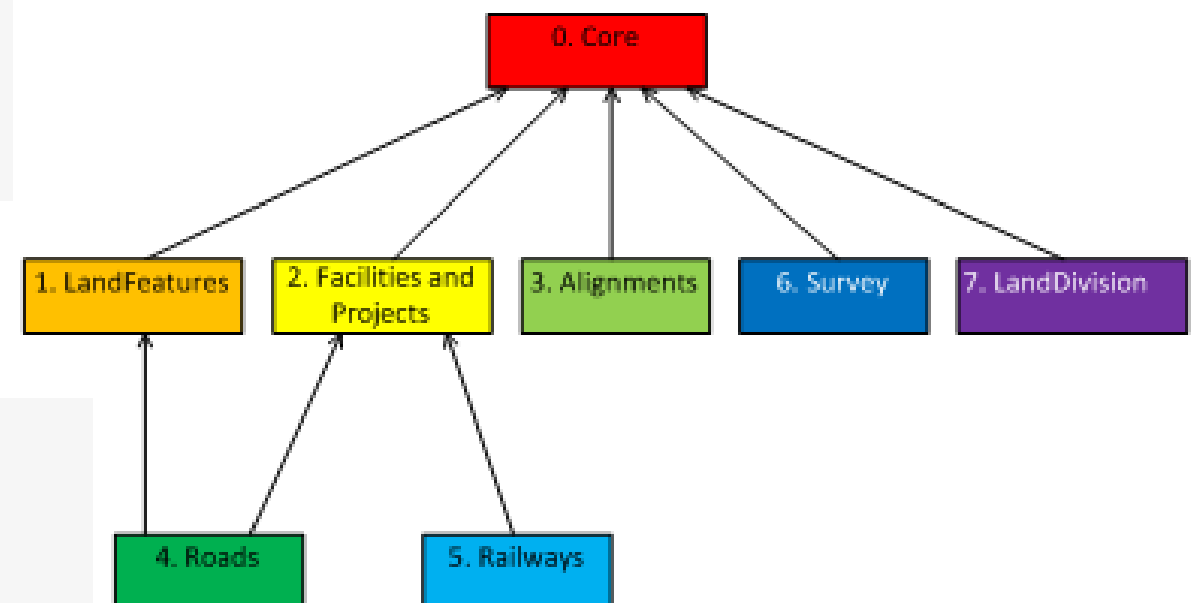


Figure 1. InfraGML Part Dependencies

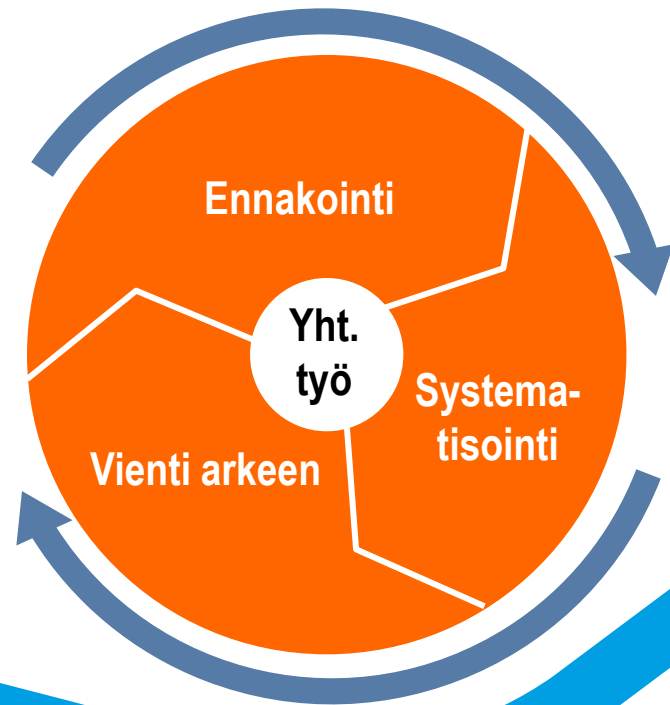
OGC to initiate Phase 1 Development of Interoperability Standards for Underground Infrastructure Data

Release Date: 2017-02-07

Content:

The Open Geospatial Consortium (OGC®) is pleased to announce that the Fund for the City of New York and its sister organization, the National Center for Civic Innovation, has made a \$25,000 grant to the OGC. These funds, along with contributions from Ordnance Survey Great Britain and other contributors, will enable OGC to initiate the first of a three-phase project to establish interoperability standards for underground infrastructure data.

Ryhmän tarkoitus:
Olemme rakennetun
infrastruktuurin vauhtipyörä



Uusi liiketoiminta

INFRA 2025 =
Fyysinen
infrastruktuuri
+ Informaatio

VISIO

Suomen parantunut
tuottavuus ja
kilpailukyky

Elinkaaren
kattavat
standardit ja
ohjeet

Tiedon-
hallinnan
kattava
osaaminen

Yhteis-
toiminnalliset
mallipohjaiset
prosessit

Avoimen
tiedon
synnyttämät
palvelut

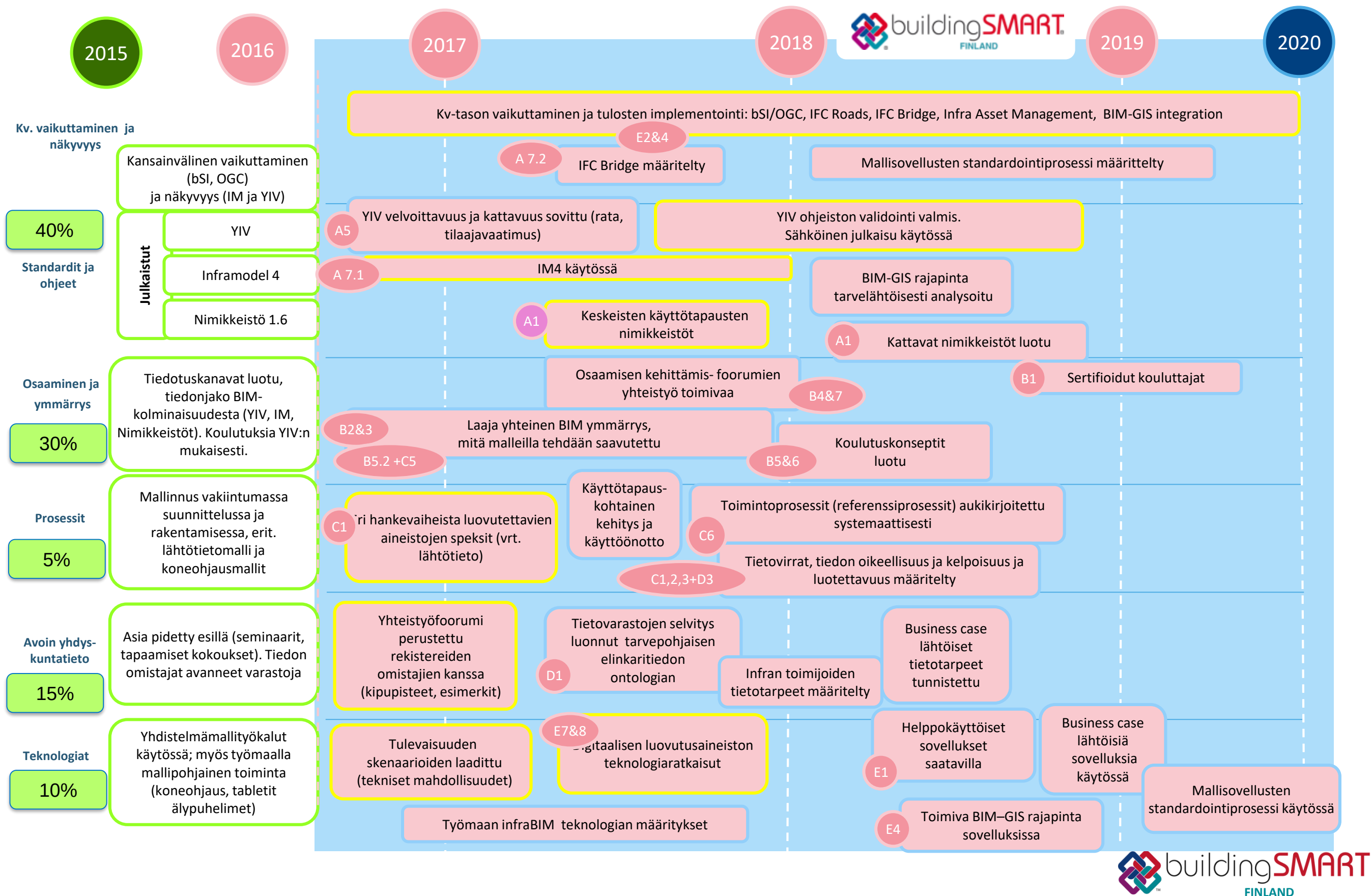
Mahdollistava
teknologia



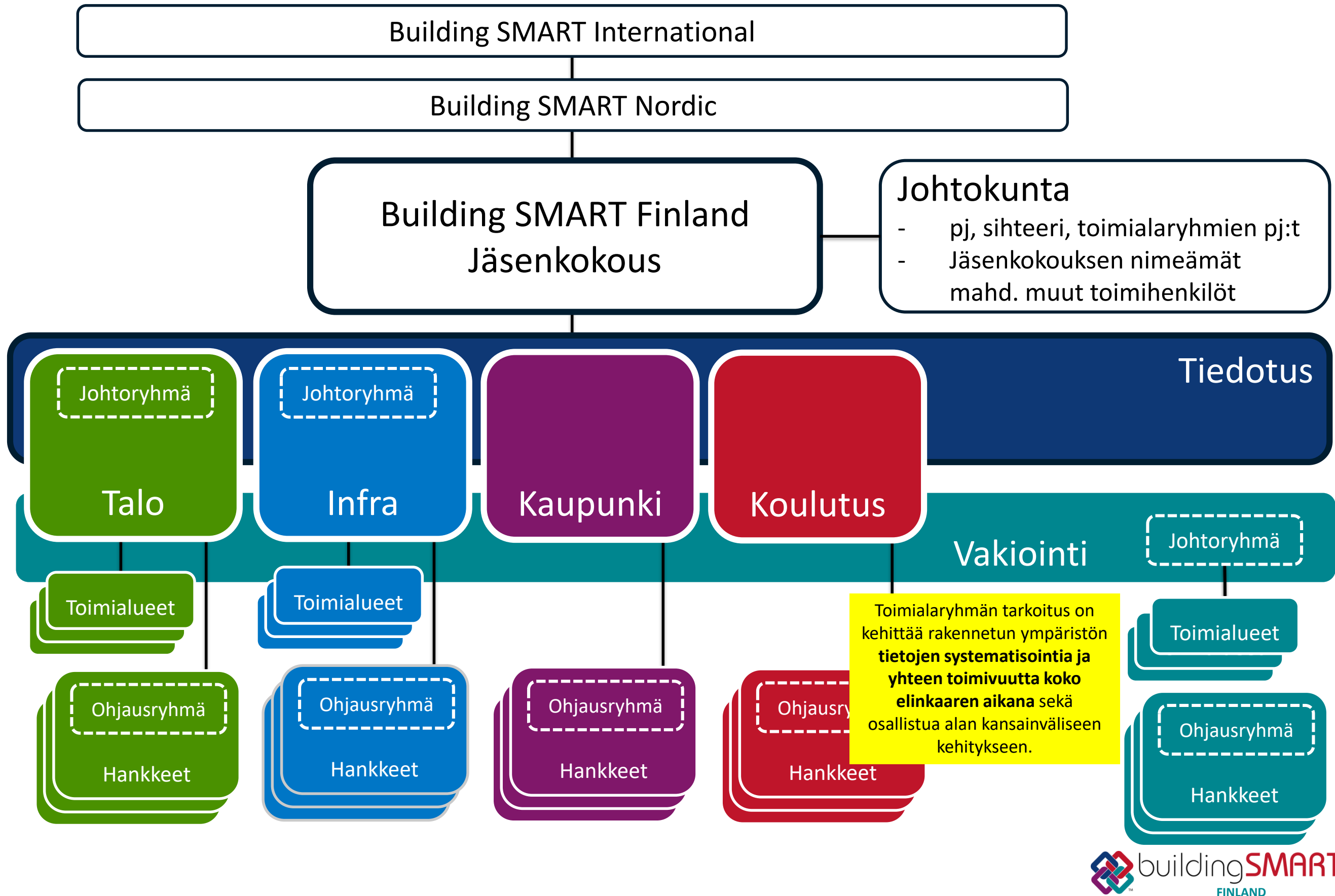
Infra-toimialaryhmän strategia

10.12.2014

Roadmap 2017- 2019: Tärkeimmät kehitysstepit



buildingSMART Finland organisaatio 2017



Kiitos !

Hankerekisteri
Espoonportti

juha.liukas@sitofin.fi

Käyttömalli: 2005

Yleistarkastus

Silta: ESP-231-12
Tila: Kuntotarkastus
16.11.2014

Yleistarkastus

Pysäkki: 19234
Korotettu: Kyllä
Katos: Metalli
Kuntoluokka: 4

Tie 11845

KVL: 3020
Tietyyppi: 821
Päällyste: Ab
Hoitourakka: 2014 Espoo