

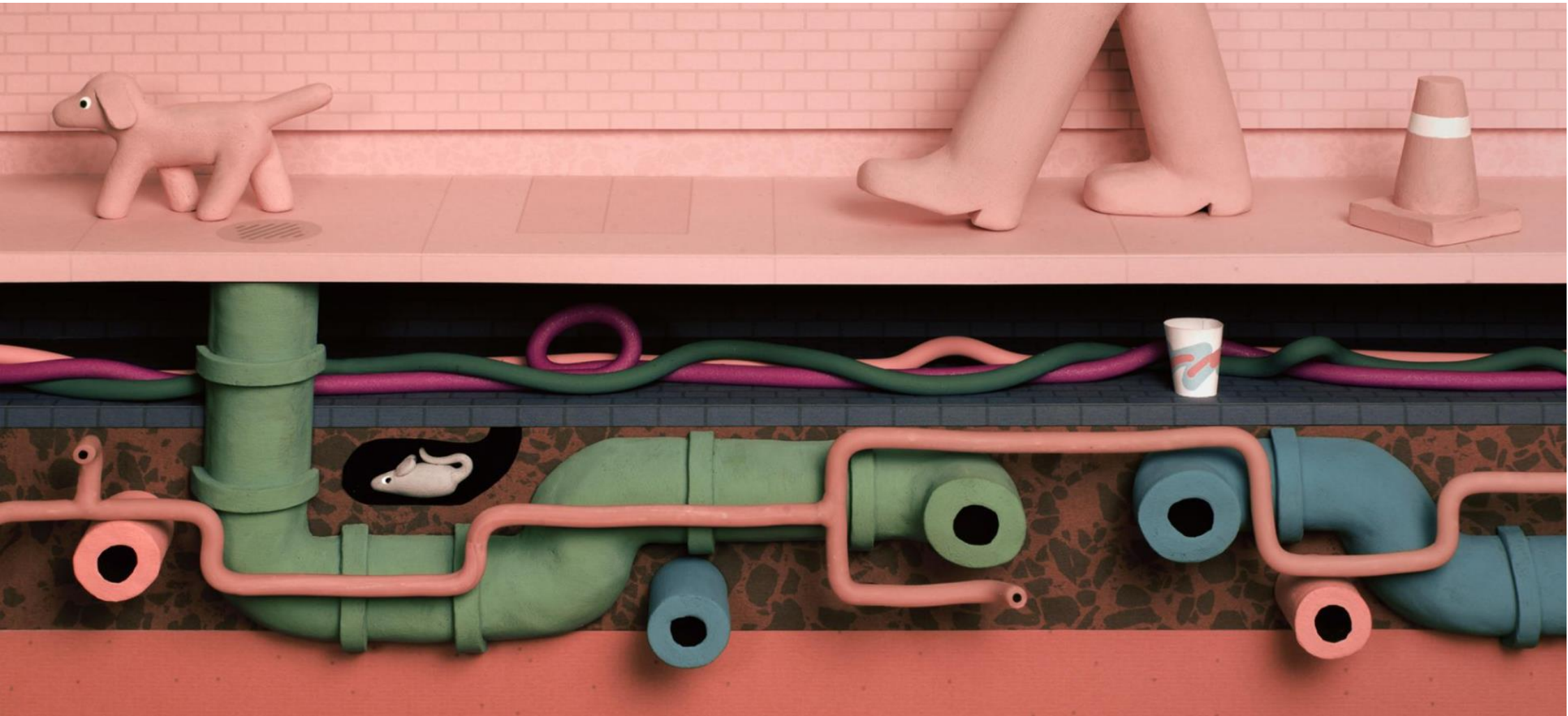
OGC & bSI Collaboration - IDBE:

Integrated Digital Built Environment

Carsten Rönsdorf & Jim Plume

Geospatial Standardisation Workshop, Paris, 22 January 2019

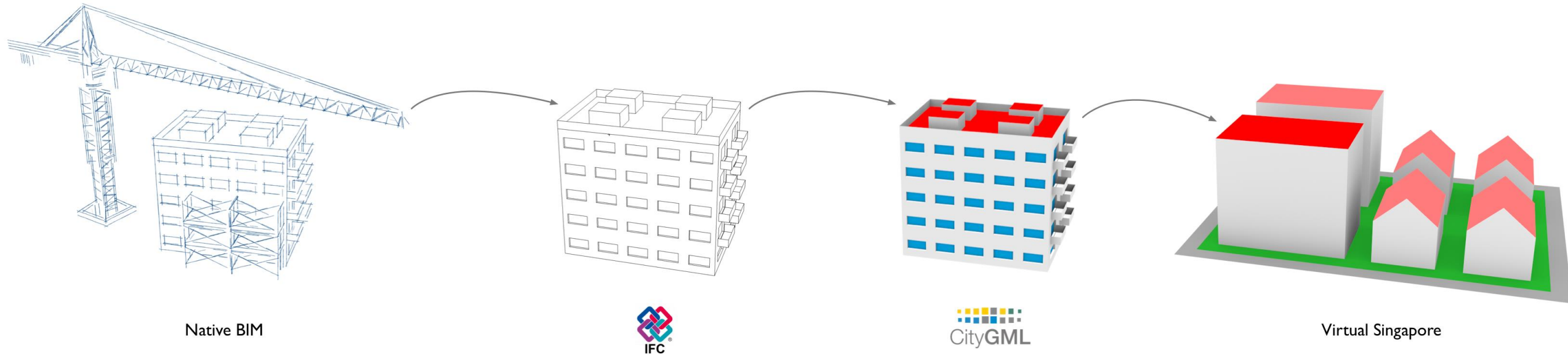
Use case: Underground Infrastructure



Newcastle underground data sharing



Use case: Information harvesting



IFC

CityGML

MVD

Rules

ADE

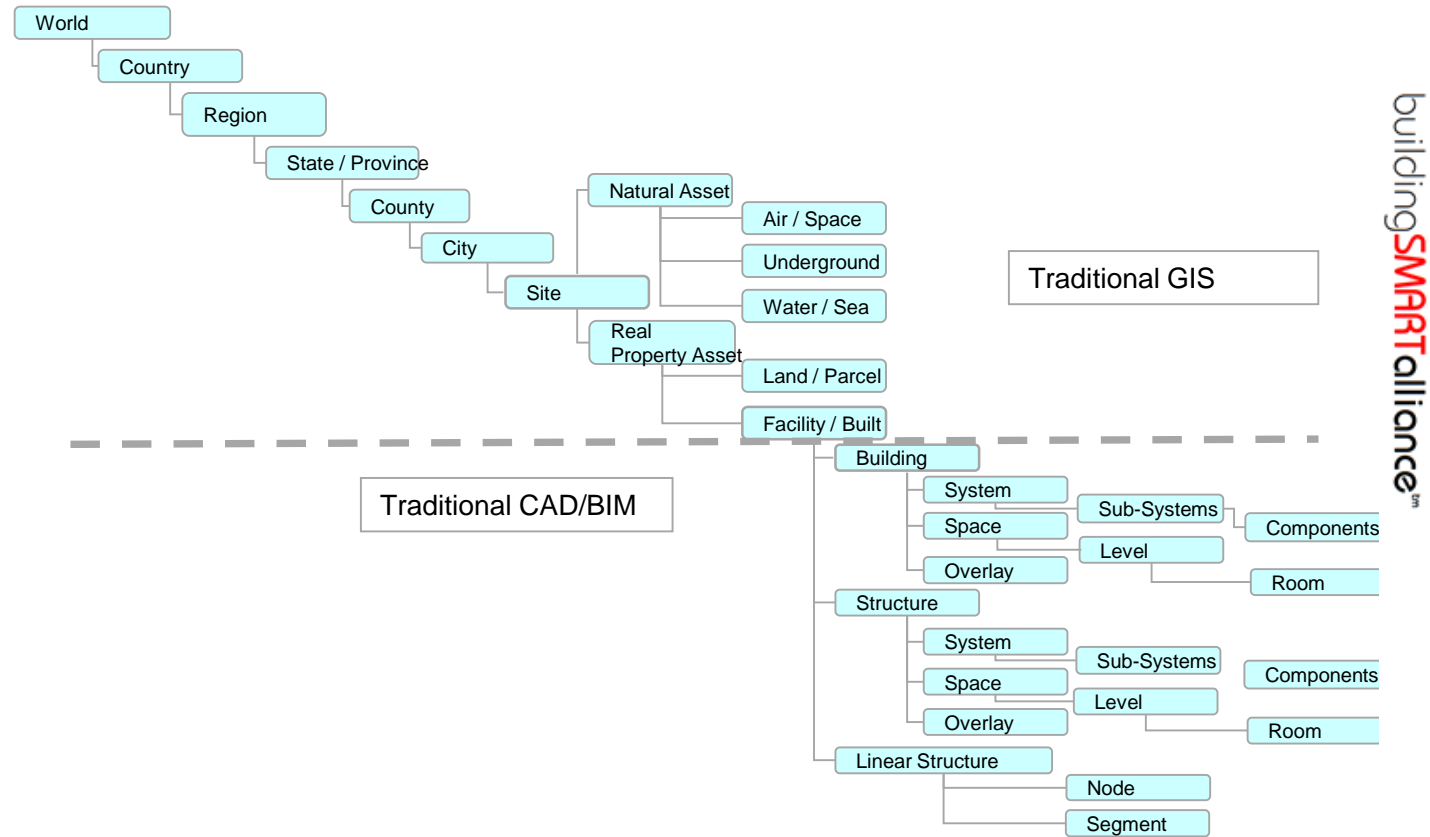
- Triple
- Triple Graph Grammar
- Interoperability connector (MVD+rules+ADE package)

Future City Pilot (FCP), Phase 1

- OGC in collaboration with bSI
- Accelerate standards process, requirements based
- 6/8 months project
- Pilot interoperability arrangements in Geo and BIM
 - Link IFC and CityGML in an interoperable environment using Open Standards
- Use cases
 - Urban Planning
 - Social Deprivation (Humidity - social housing)
 - Flooding



Continuum of Scales (ancient slide)

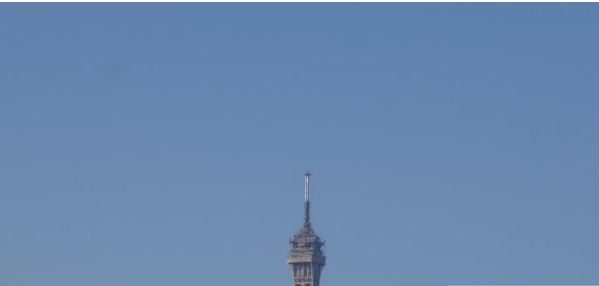


Collaboration re-confirmed mid-2016



New Collaboration strategy and MOU launched in 2-day Workshop in Nov 2016

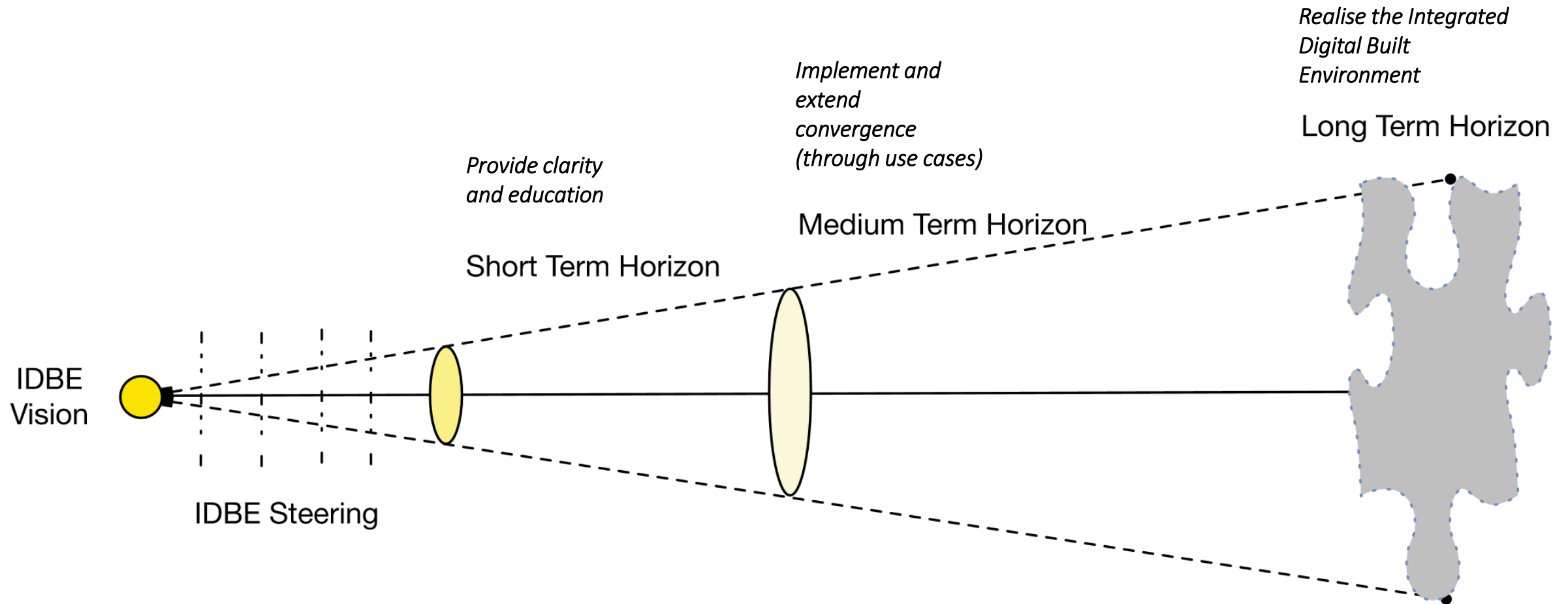
White Paper - Finalised



Meeting in Paris, April 2017 ...



IDBE vision



Integration/interoperability

approaches/framework (4 levels)

1. Formalising and relating modelling techniques
2. Joint conceptual model
3. Linking of conceptual models
4. Instance linking

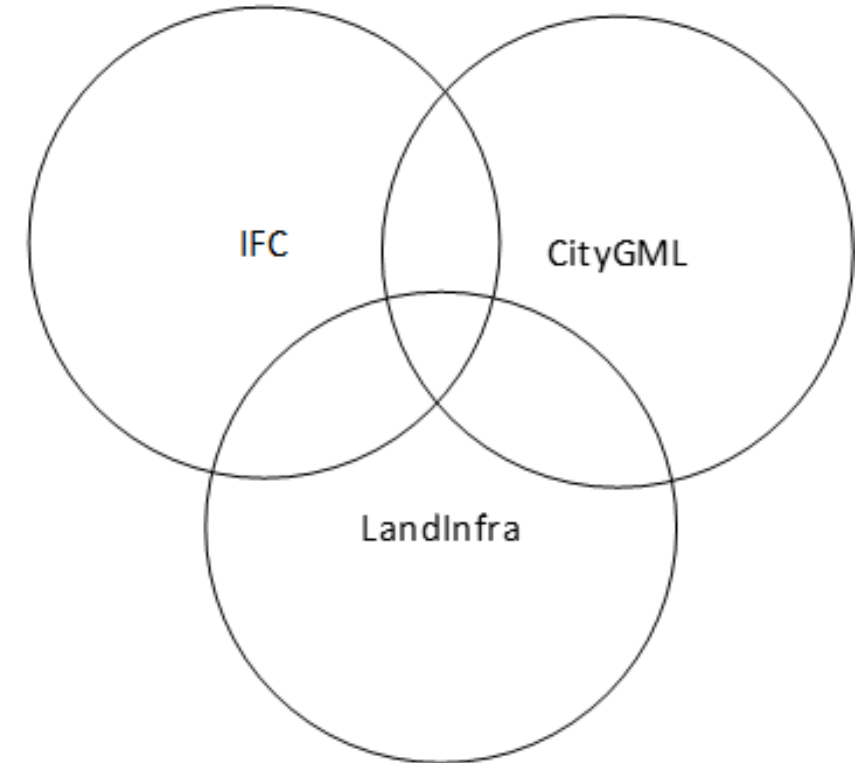
Munich Workshop 19-20 April 2018

Understanding commonalities and differences of 3 standards

- Thomas Kolbe (CityGML)
- Thomas Liebich (IFC)
- Hans-Christoph Gruler & Johnny Jensen (InfraGML)

3 questions:

- Uniqueness of 3 standards
- Overlaps
- Anything not covered (outside)



Ideas

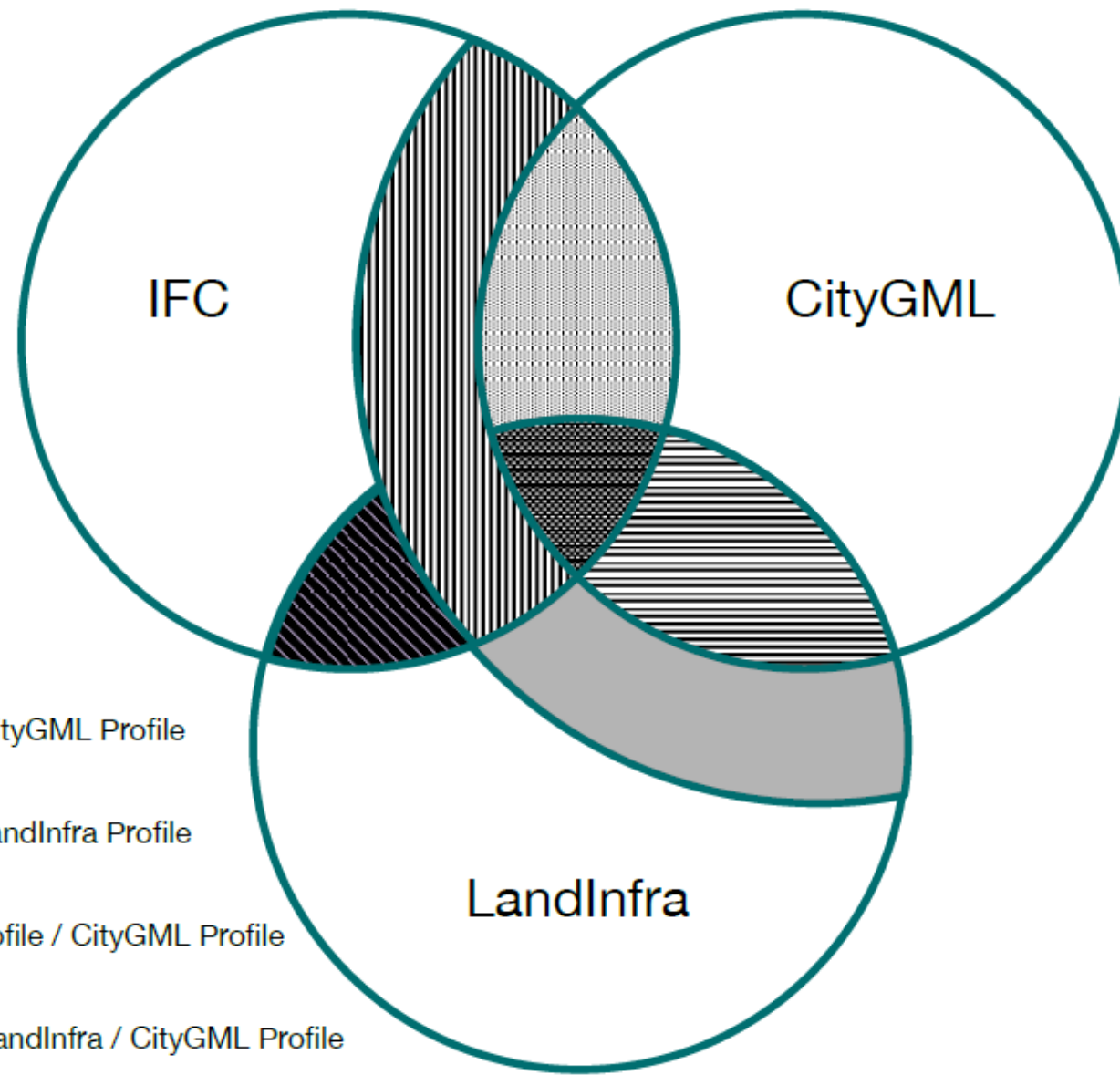
- Do we need a common Schema Project across bSI (Infra?) and OGC?
- Would the geospatial metadata approach create value for IFC
- Can we use ISO19650 in the geospatial domain?







Statements

IFC is a publication format for BIM

CityGML is a way to structure urban information

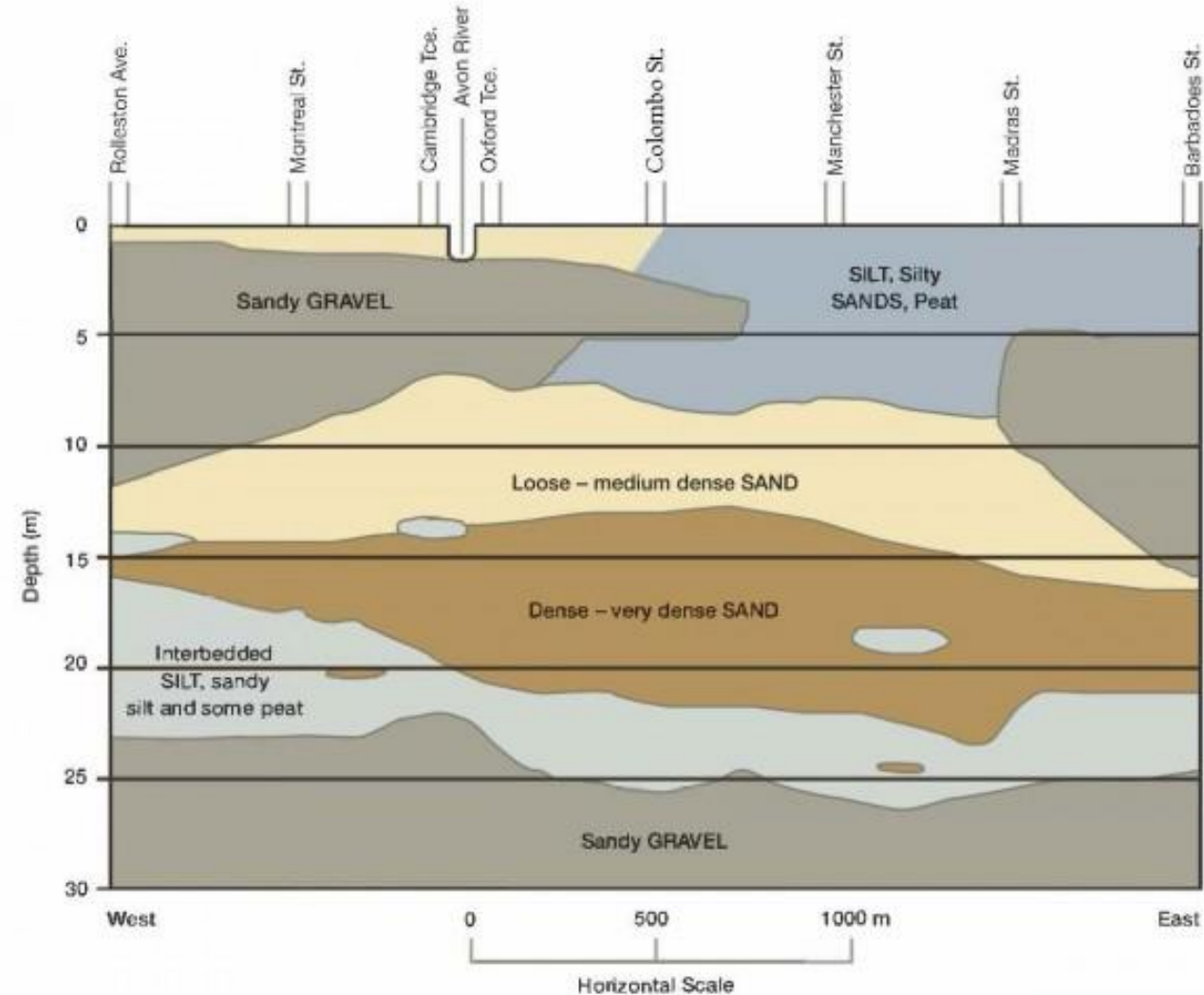
LandInfra is an alternative to LandXML



-  IFC MVD / CityGML Profile
-  IFC MVD / LandInfra Profile
-  LandInfra Profile / CityGML Profile
-  IFC MVD / LandInfra / CityGML Profile
-  CityGML ADE for IFC
-  CityGML ADE for LandInfra

Geotechnics

- Role for IDBE to coordinate
- Existing standards like GeoSCIML
- Link to bSI Common Schema
- IDBE focus topic

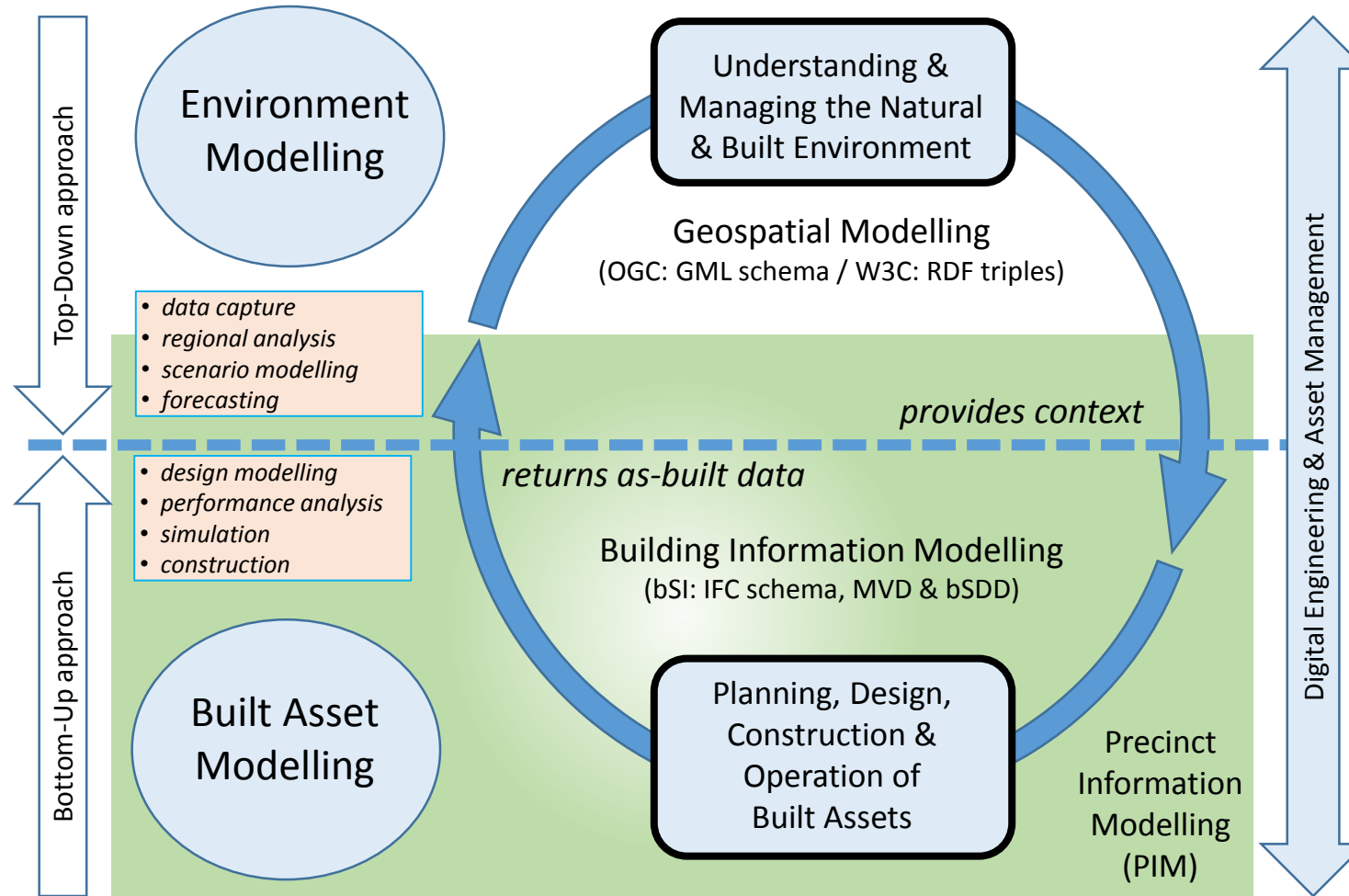


4 reasons to use standards

1. Common concepts enable **integration** with separate systems
2. Long term **independence** from specific solutions (logical / practical)
3. Learn from others—**save costs**
4. New **insights / possibilities**



The Integrated Digital Built Environment



Integrated Digital Built Environment

Jim Plume, buildingSMART Australasian Chapter

J.Plume@outlook.com

Carsten Rönsdorf, Open Geospatial Consortium (strategic member)

Carsten.Roensdorf@os.uk