



## TECHNICAL CHAMBER OF GREECE

### THE IMPACT OF MEGA TRENDS IN

# THE BUILT ENVIRONMENT, CONSTRUCTION INDUSTRY AND REAL ESTATE ATHENS , NOVEMBER 2018



**CHRISTOPHE CASTAING  
CHAIR  
EFCA BIM TASK FORCE**



 Representing  
FIDIC in Europe

# BIM TASK Force

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Monitoring CEN TC442



**Director of the digital engineering plan**



**Chairman of the EFCA BIM Task Group  
European Federation of Consulting Associations**

**Technical leader of Infrastructure room –  
And standard committee member  
Vice Chair the French chapter**



**Deputy director of the National Project MINnD**



**Editorial Committee of PTNB**





## Bim task force: in liaison with CEN TC 442

- Created in 2016
  - Monitoring the CEN TC 442 WG
  - Monitoring OpenBim
  - Identification of industry relevant topics in forthcoming **ISO 19650** standard: booklet
  - Euro Digiplace

Anne Croiseau			EFCA
Jan Van der Putten			EFCA
Christophe CASTAING	France	Syntec Ing./Egis	Chair
Mathias BRAUN	Germany	OBERMEYER	
Maximilian Grauvogl	Germany	VBI	
Daan ALSEM	Netherland	Royal HASKoning DHV	
Inge EBBENSGAARD	Denmark	Danish association	
Ingrid ALVSAKER	Norway	COWI	
Veljko Janjic	Slovenia	BEXEL	
Roger Robeiro	france	Syntec ing/egis	
Jorgen Storm Emborg	Denmark	FRI/COWI	
Antonio Vettese	Italy	OICe	
Joseph Ickmans	Belgium	ORI/Tractebel	
Ionnis Ladopoulos	Greece	SEGM	
Szymon Dorna	Poland	Sidir	
Gilles Pignon	Luxembourg	OAI	
Thomas Griffin	Ireland	ACEI	



- **CEN/TC 442** and **WG** meetings:
- Meetings with:
  - **EU BIM Task Group:**
    - Handbook for the Introduction of BIM by Europe's Public Sector Community
  - **FIEC** (contractors) representative:
    - conveying joint (technical) views to CEN
  - **ACE** (architects) 12 June 2017 meeting
- **Regional Infrastructure Conference** (Belgrade, March 2017)
- **OICE conference** in Milano (2016)



# benefits

## Value proposition of BIM

- **Economic:** increase productivity, potential for growth, enhance position of European industry on international markets (construction, IT), ...
- **Environmental:** less waste, lean supply chain, lower energy demands, lighter carbon footprint, ...
- **Social:** facilities aligned with societal needs, job creation including for the “otherwise unemployable”, ...



### What kind of savings related to the € 1.2 trillion

- 0,1%: 1,2 billion €
- 1% : 12 billion €
- 10% of 120 billion €



Monitoring buildingSmart International

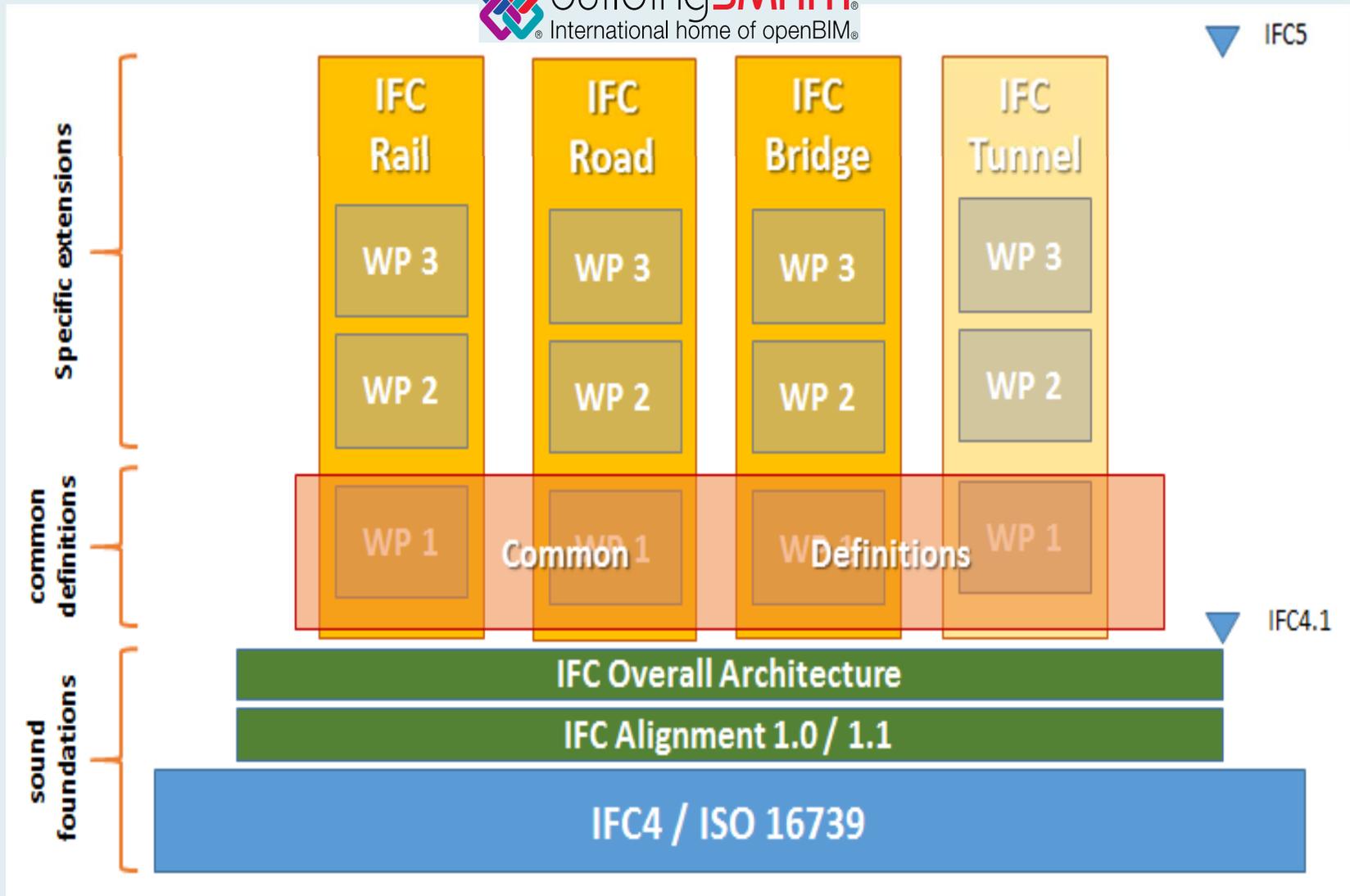


# EFCA BIM TASK FORCE





# INFRA ROOM ROADMAP

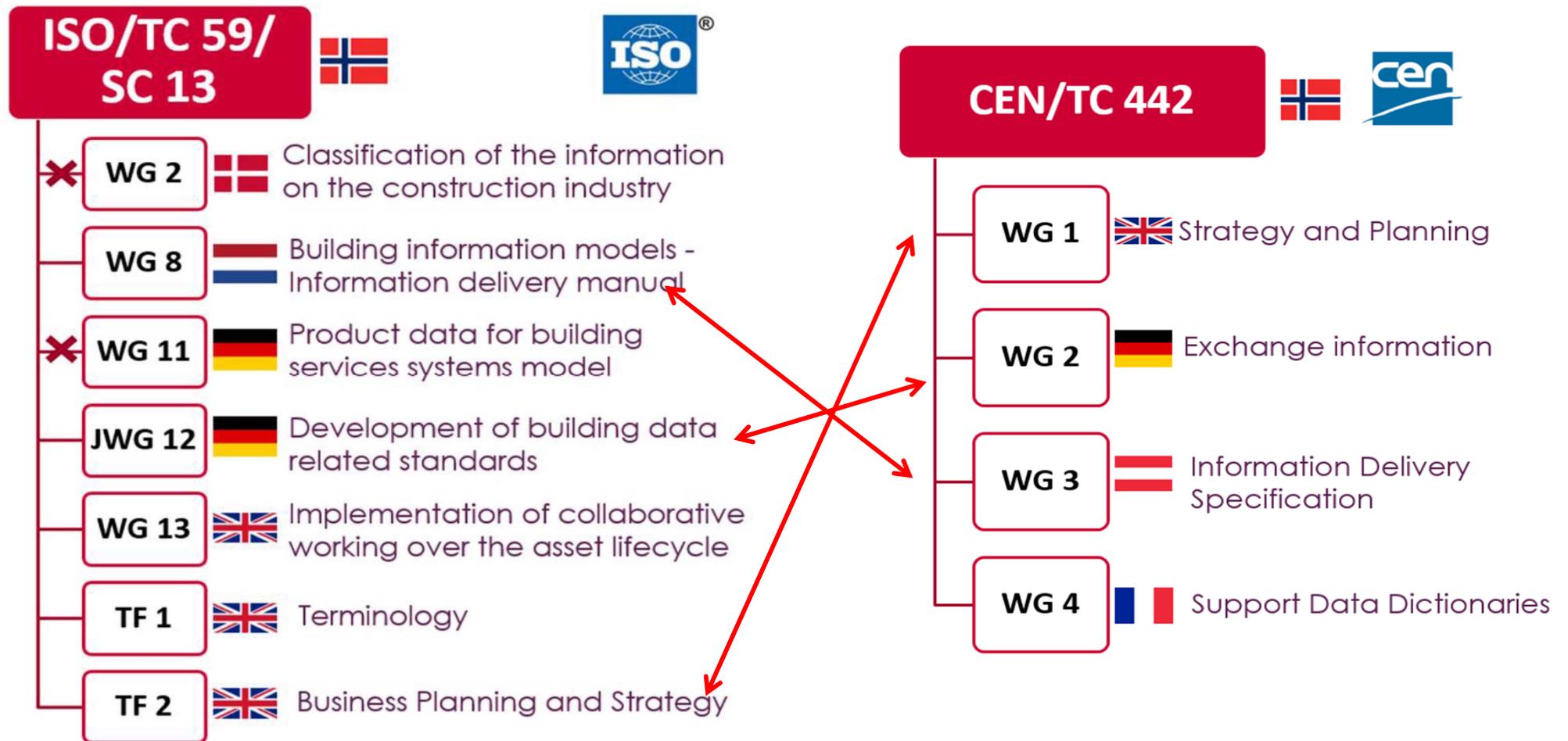




Monitoring CEN TC 442

# EFCA BIM TASK FORCE







## The importantest result of year



ISO/TC 59/SC 13 **N 471**

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– ISO 19650:

**Information management  
using  
building information modelling**



## BIM : some key words

- *Bim definition:*
  - **building information modelling (BIM)** : use of structured data and information to support the delivery of a project and operation of an asset.
- *Comments*
  - *3D models + semantic + workflow + other information*
  - *And processes: delivery*
-



# BIM : ISO 19650 part of ISO 9001

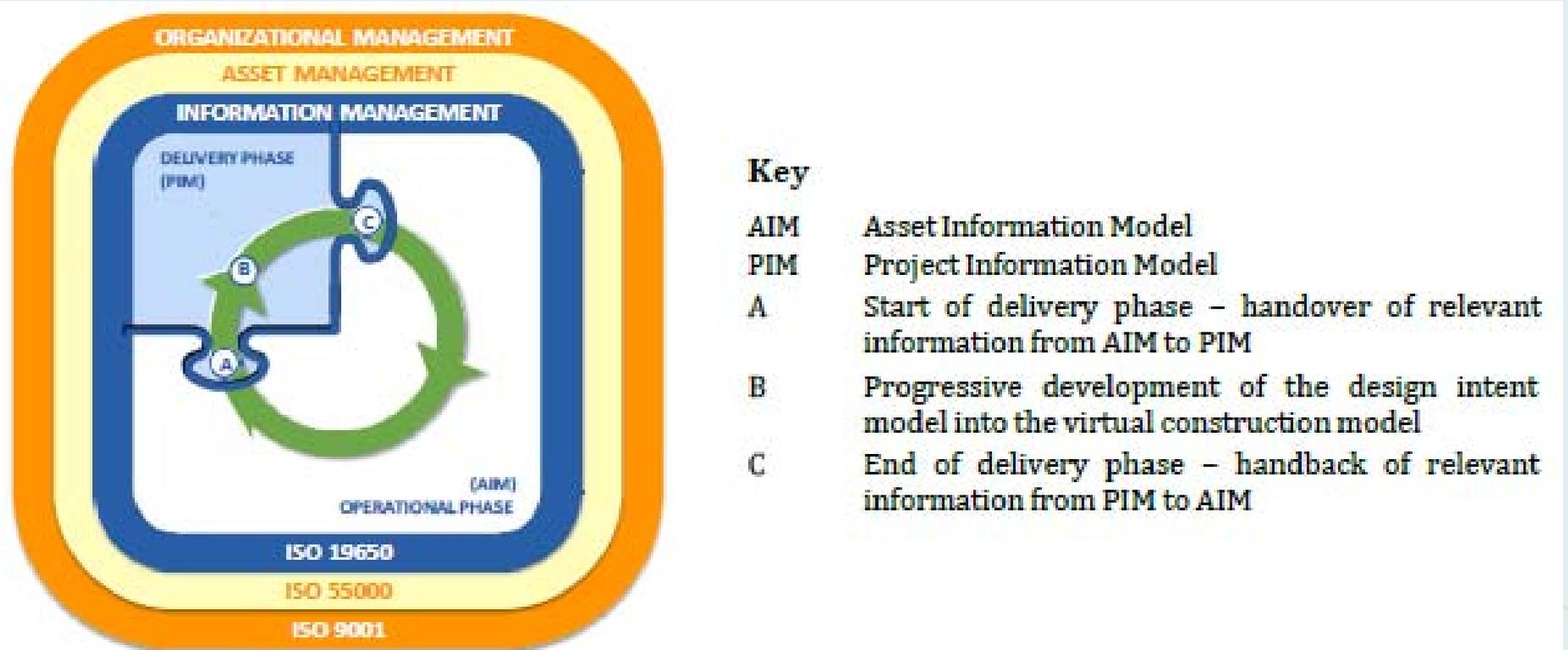
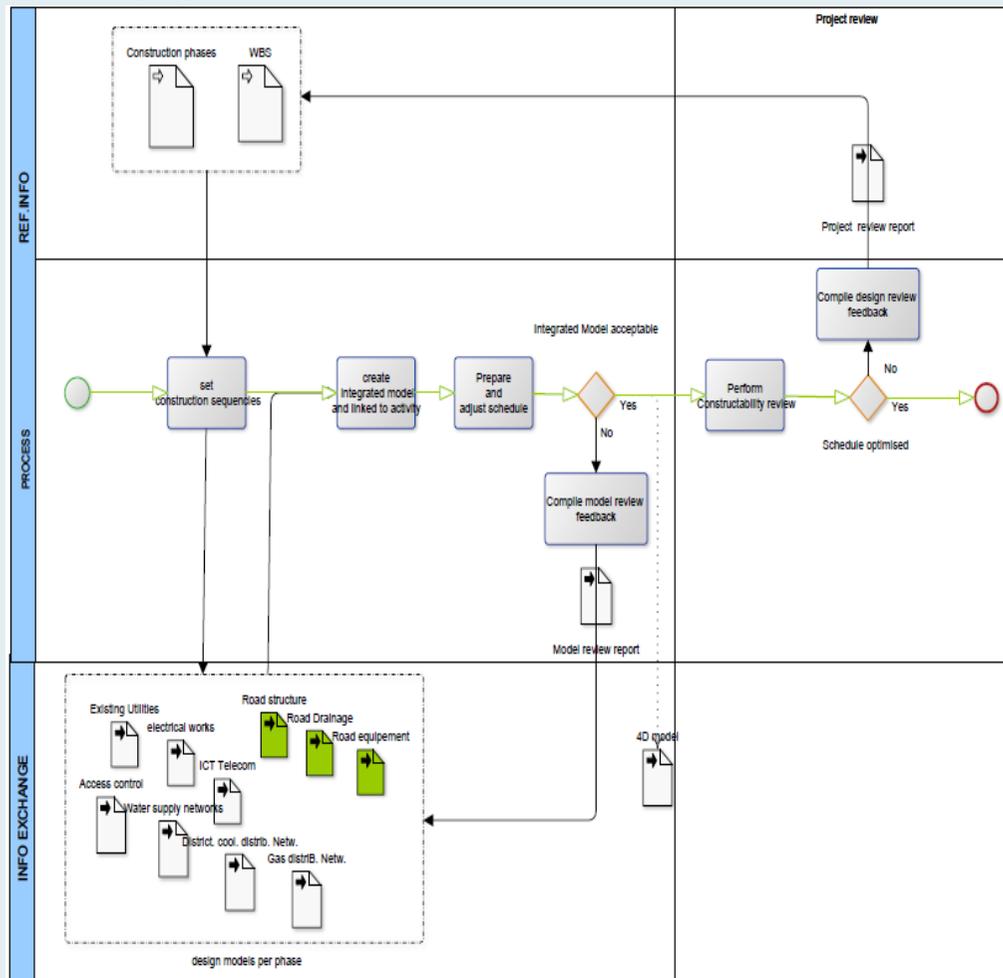


Figure 4 — Scope of ISO 19650-2



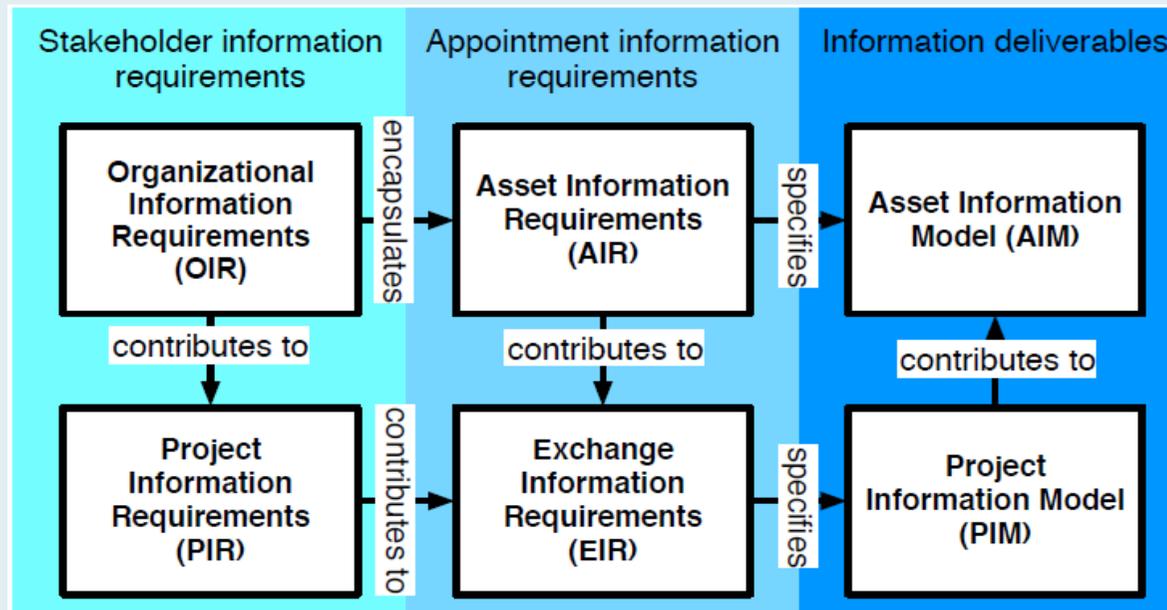
# 4D BIM

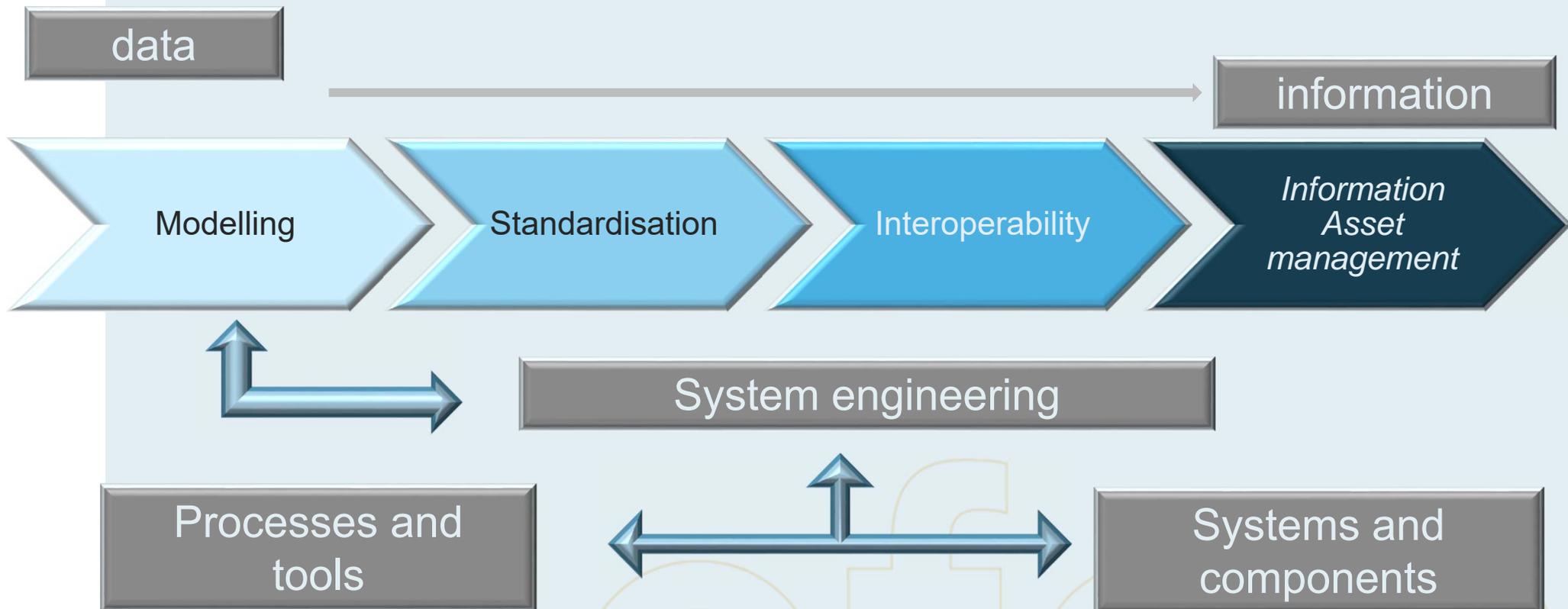
4D	med	DD / FD	to integrate the temporary works possible impact on the design
			i. 4D capabilities for scheduling, phasing, sequencing, and animation





# Requirements management







# CDE

single source of information for any given project or asset, used to collect, manage and disseminate each element of the information model using a managed process

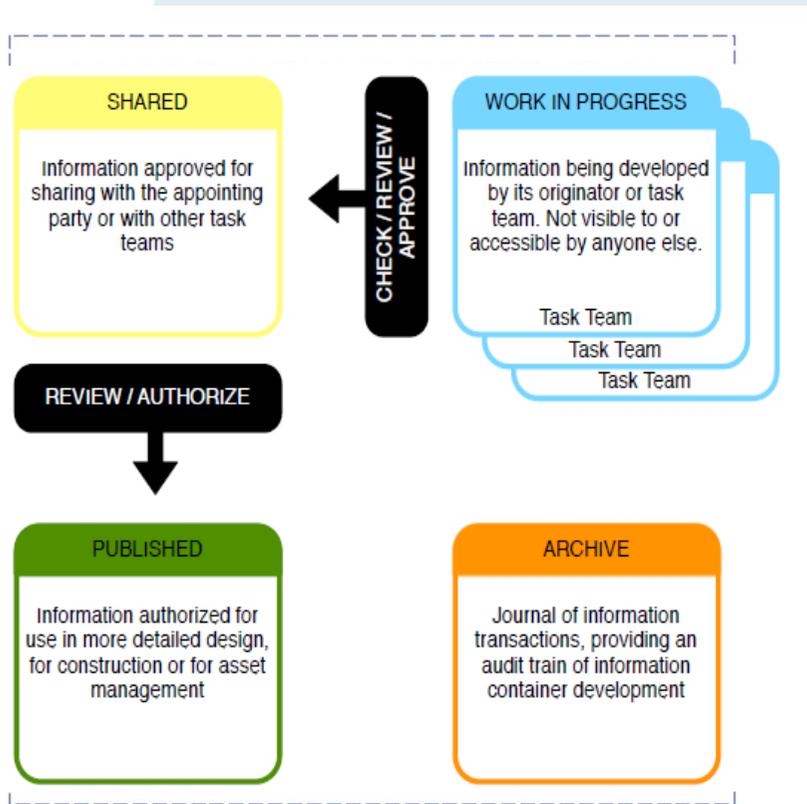
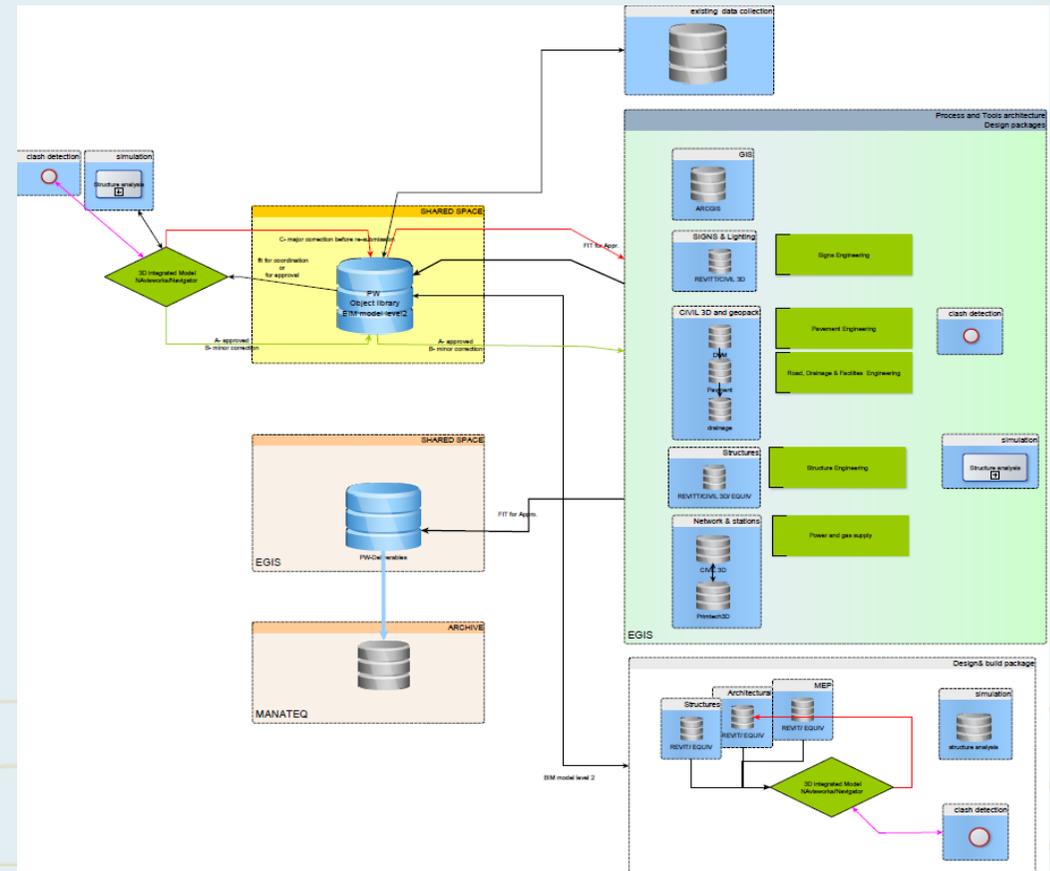


Figure 1: High-level Common Data Environment





# BimExecution Plan

- early engagement;
- a clear and integrated contractual framework
- clear processes, training, discussion,



# Booklet table of content

-> 2018/2019



## Content

- Chapter 1: Introduction
- Chapter 2: What ISO is saying
- Chapter 3: What ISO is not saying, but to be said
- Chapter 4: ISO and Bim execution plan
- Chapter 5: Impact on the contract
- Appendices: examples

# DigiPLACE



European project  
for  
a collaborative platform  
for  
the construction industry

## An open platform :

- Open sources
- Open standards : IFC, GML, etc..
- Collaborative :
  - buildings and infrastructures
  - Bim & GIS
  - Design to Operation
  - Life cycle management

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