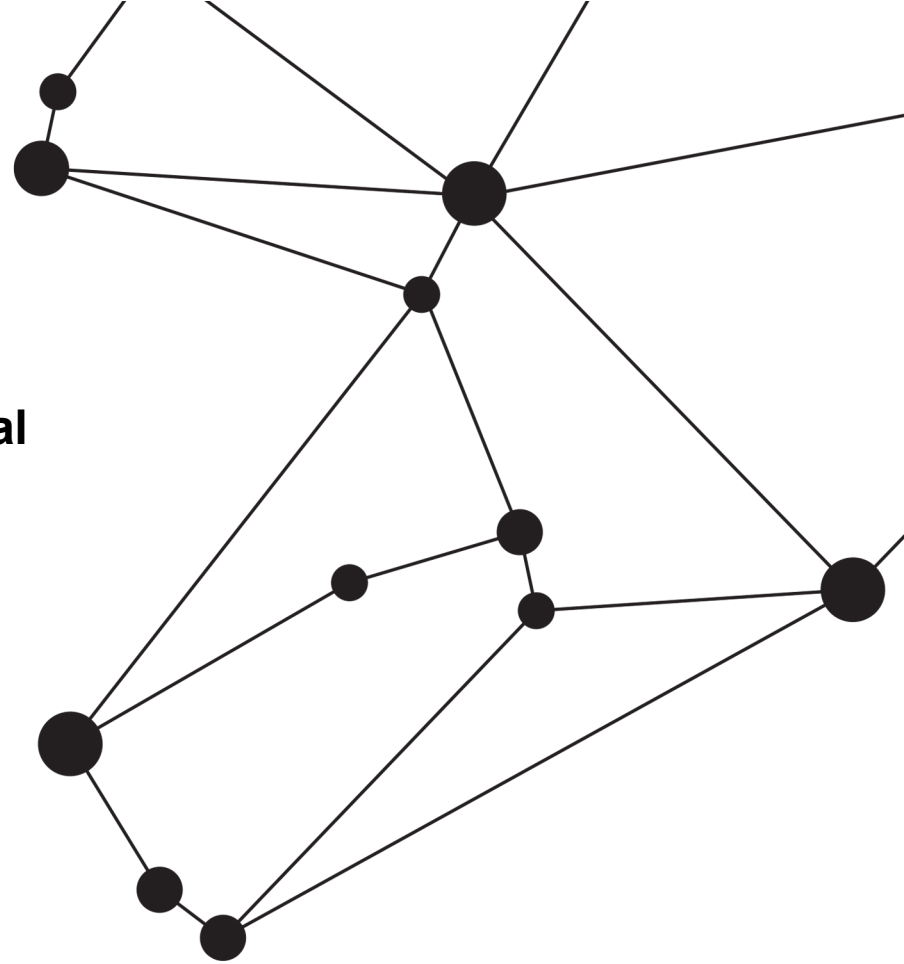


# Den europeiske byggenæringen blir digital

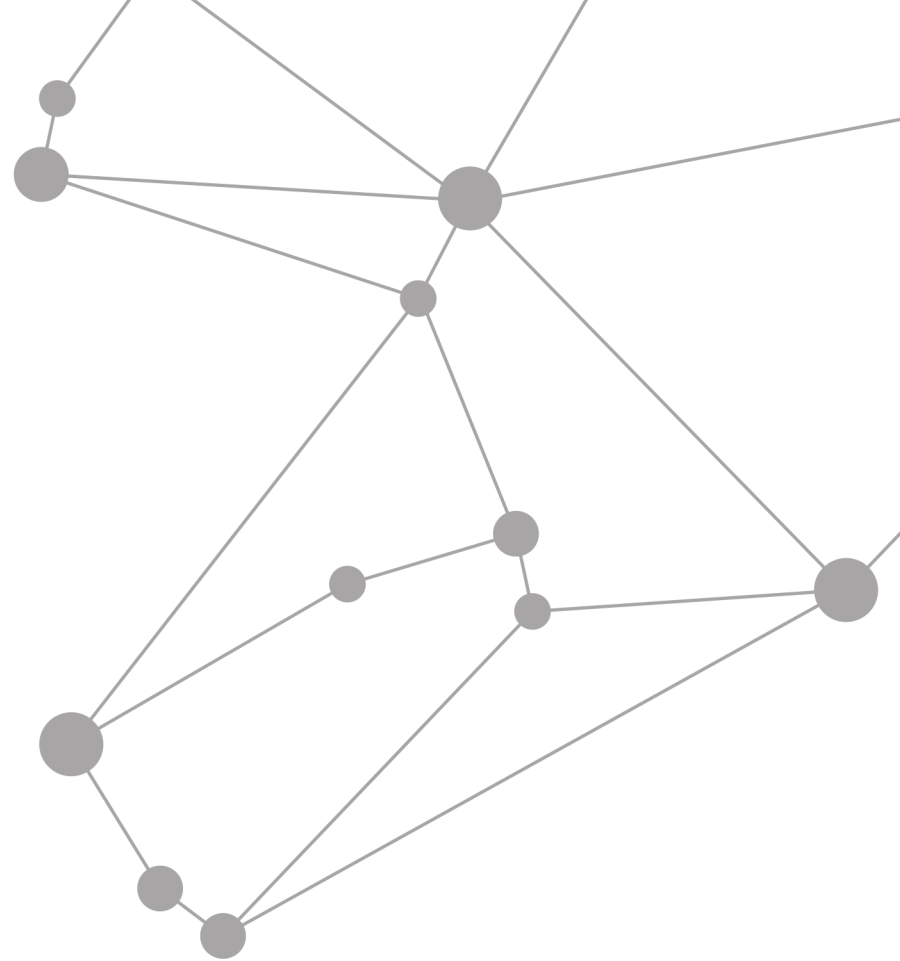
– hva skjer i Europa?

Steen Sunesen  
Oslo, 30.04.2019



## Agenda

1. CEN-veileder til EIR/BEP
2. CEN-veileder til ISO 19650 del 1 og 2
3. EFCA Guide



# CEN-veileder til EIR/BEP

Implementering av ISO 19650 i prosjekt

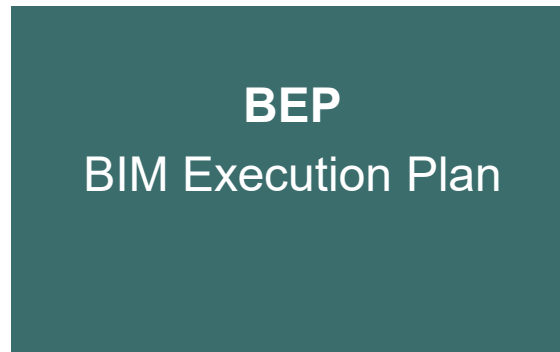
Oppdragsgivers krav til BIM-leveranser og prosess.



ISO 19650-2 kap. 5.2.1

*Establish the appointing party's exchange information requirements.*

Prosjektgruppens svar på hvordan de vil innfri kravene.

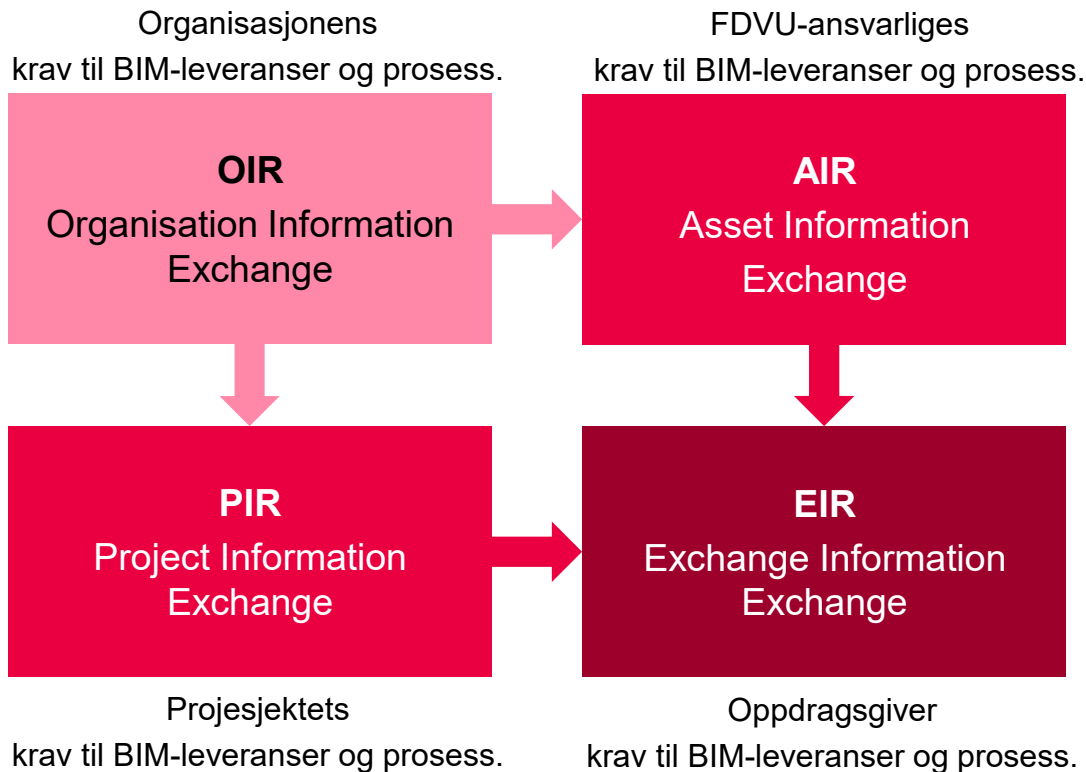


ISO 19650-2 kap. 5.3.2

*Establish the delivery team's (pre-appointment) BIM execution plan.*

# CEN-veileder til EIR/BEP

Implementering av ISO 19650 i prosjekt

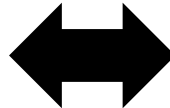


# CEN-veileder til EIR/BEP

Implementering av ISO 19650 i prosjekt

## EIR

- **Context and project information**
- **Purpose of using BIM**
- **Acceptance criteria**
  - The Project's Information Standard
  - The Project's Information Production Methods and Procedures
  - Project's Reference Information and Shared Resources
- **Exchange information requirements schedule**



## BEP

- **Project Information Delivery Team information** (names and organisation(s))
- **Delivery strategy (purpose/goals)**
- **Delivery team's acceptance of using provided**
  - The Project's Information Standard
  - The Project's Information Production Methods and Procedures
  - Project's Reference Information and Shared Resources
- **Delivery team's acceptance of using provided exchange information requirements**

Additional guidance on OIR, AIR and PIR perspectives

# CEN-veileder til EIR/BEP

## Implementering av ISO 19650 i prosjekt

### BEP

**Additions or amendments to the project's information production methods.**

- **The Project's Information Standard**
  - Information container identification, metadata and content structure
  - Federation strategy and breakdown structure for information containers  
(General Project Model Decomposition and Identification Attributes)
  - Object identification and classification
  - Object property specifications, includes:  
Rules for establishing new properties.  
Rules for how to differ between properties for design requirement and object type performance.
- **Common Data Environment infrastructure**
  - Exchange platforms and hardware
  - BIM software, exchanges and versions
  - Managed processes for information exchange (reference to High Level Responsibility Matrix).

### BEP

**Additions or amendments to the project's information production methods.**

- **The Project's Information Production Methods and Procedures**
  - System performance (requirements specified in EIR)
  - Quality plan
  - Data security  
Including access rights
  - Collaboration specifications
  - Best practice modelling
  - Process part of use case/IDM requirements?
- **Project's Reference Information and shared resources**
  - High Level Responsibility Matrix (Information delivery schedule)
  - Capability, capacity and training
  - Mobilisation plan
  - Risk assessment
  - Capture of existing asset information

# CEN-veileder til EIR/BEP

Implementering av ISO 19650 i prosjekt

## Format

Publiseres som teknisk rapport (TR)

## Milepeler

Draft NWI	Desember 2018
Draft internal TR	Juli 2019
Proposal TR	Desember 2019
TR lansering	Juli 2020

*NWI= New Work Item*

# CEN-veileder til ISO 19650 del 1 og 2

Implementering av ISO 19650, del 1 og 2 i Norge

- Det legges siste hånd på en veileder til ISO standardene.
- Veilederen skal ikke motsi eller legge noe til ISO 19650-1 og -2.
- Veilederen består av en rekke tekster som beskriver ISO 19650 mer utførlig.

Eksempel:

Fra ISO 19650-1

## 3.3.15 common data environment CDE

agreed source of information for any given project or asset, for collecting, managing and disseminating each information container through a managed process

Fra veilederen

It is important to understand that the definition of **Common Data Environment** covers both the process for collecting, managing and disseminating information, and the technology which supports this process.

From the technological perspective this means that there could be a number of technological solutions, distributed across organisations, which are serving this environment, but which collectively provide a consistent managed process, allowing for unambiguous and robust control of information production and exchange.

The process management perspective relies on the above technological solution. The process management should provide the “logical” solution “on top of the technology”.



# EFCA Guide

European Federation of Engineering Consultancy Associations

- EFCA er den europeiske organisering av foreninger for rådgivende ingeniører.
- EFCA BIM Task Force jobber også med en veileder (guide) for ISO 19650.
- Komiteen, som bla. har norske deltakelse vil ikke si noe om innholdet i veilederen.
- Veileder er planlagt publisert 10. mai.
- Stay tuned...