



Tønsbergprosjektet

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Project Manager – Digital Collaboration

Project Manager – Technical Interfaces

The Tønsberg Project

Sykehuset i Vestfold HF

Collaboration ?



Source: venturetransafrica.net



Source: deepakarora1984.blogspot.no

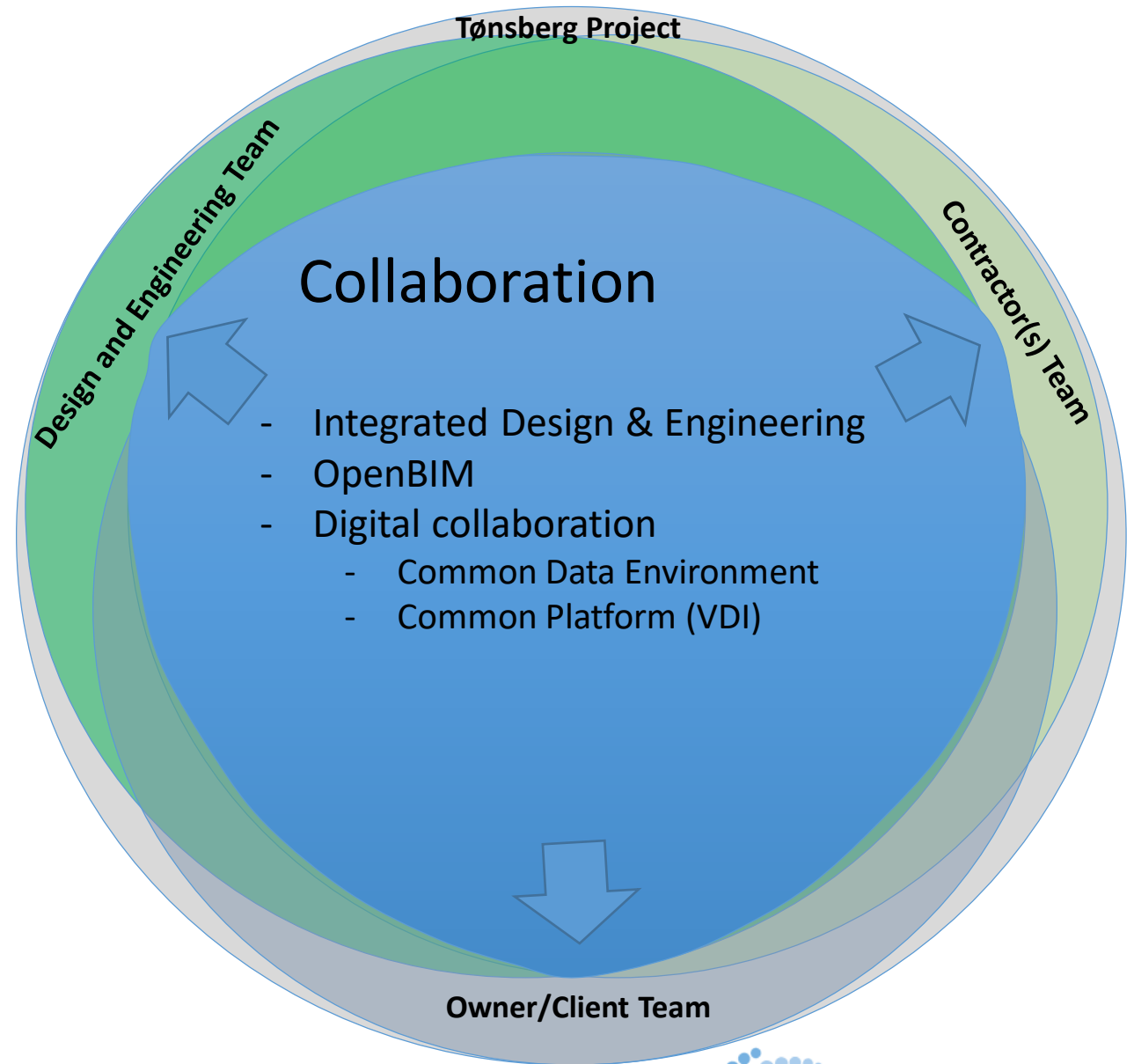


Source: wikipedia.org

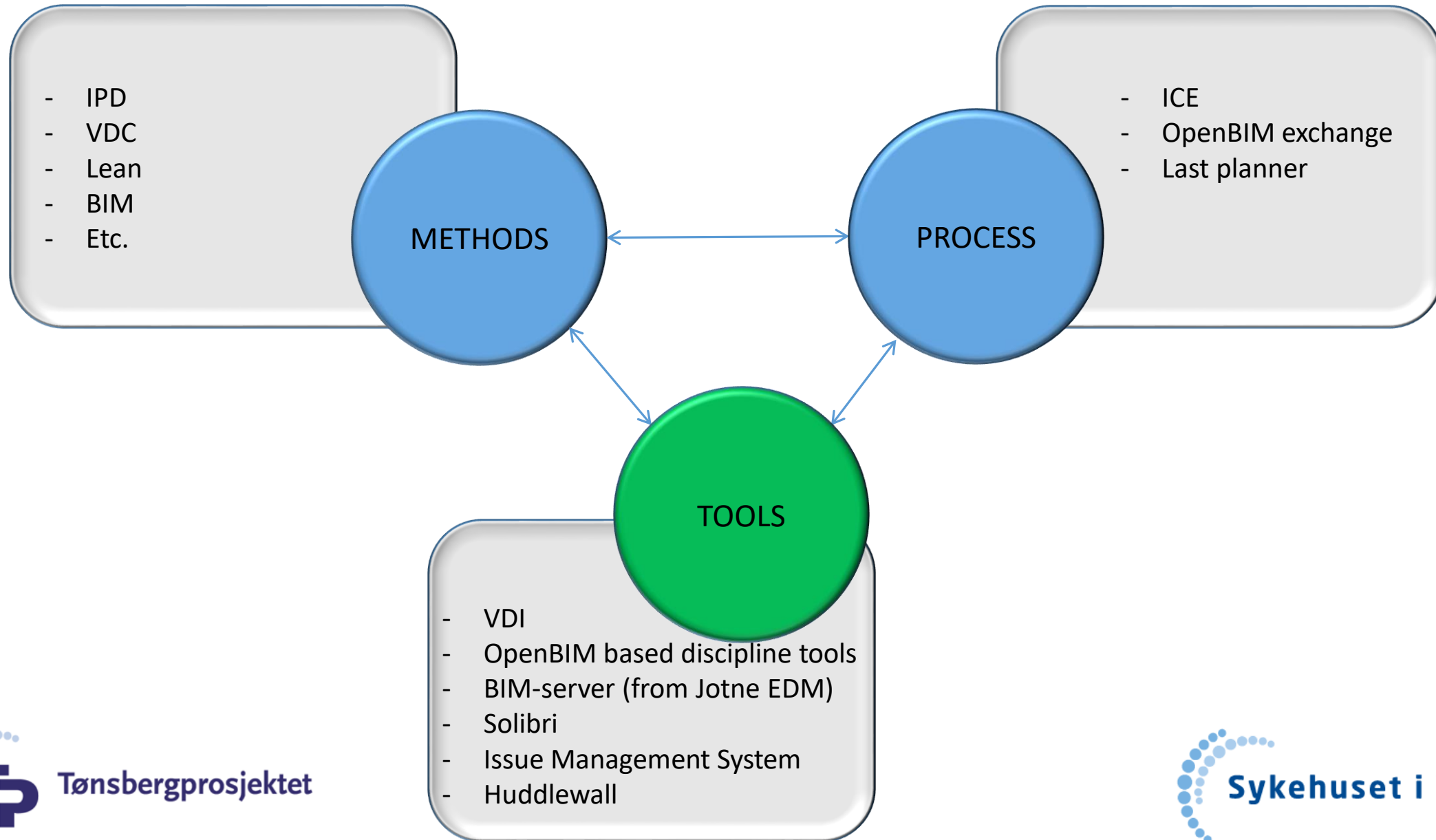
Does the projects participants drive on the **same road** - in the **same direction** – have the **same goal** and in the **same speed**?

Real Collaboration

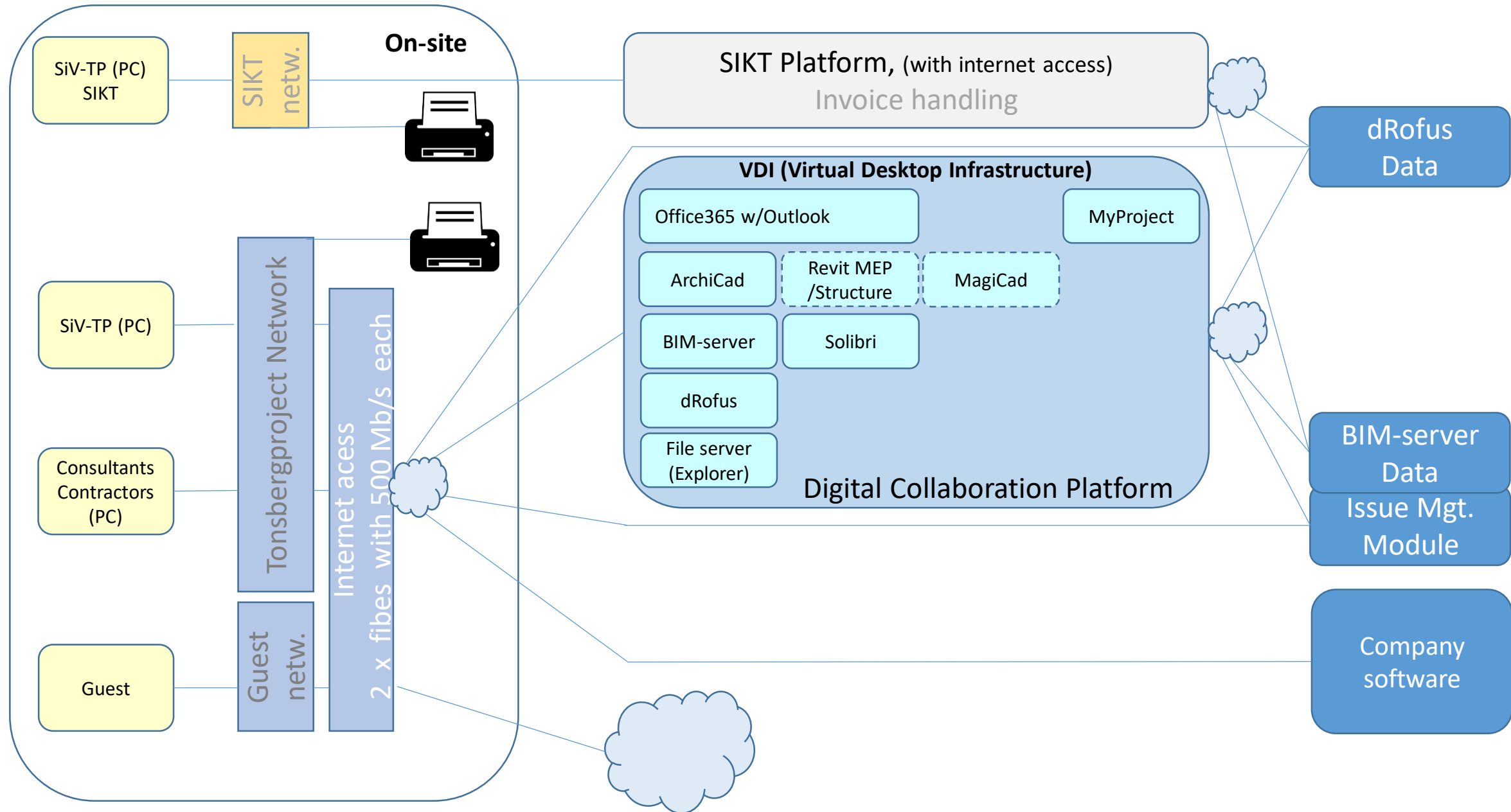
- Integrated Project Delivery (IPD)
 - Early involvement – all participants
- Co-location
 - Big Room
 - Huddlewall
- Digital collaboration
 - All participants driving on the same digital highway - Virtual Desktop Infrastructure (VDI)
 - Full control over type of software and versions
 - OpenBIM
 - BIM-server
 - Issue Mgt. System
 - MyProject (for documents)



Process and OpenBIM



Total System with Digital Collaboration platform



BIM Requirements



Source: bimpanzee.com

BIM - Level of Development

specification based on BIM Forum LOD:2015

Level of Development(LOD) - description

LOD 100 - non geometric +

*information + information - approximate **SKETCH** - text or symbol*

LOD 100 – SYMBOL or ONLY INFO=> INFO

LOD 200 - generic placeholders +

*information - approximate **SYSTEMS DESIGN** - volume*

LOD 200 – VOLUME+INFO=> “PLACEHOLDER”

LOD 300 - quantity, size, shape, + location, orientation +

*information - **DESIGN** - object*

LOD 300 – OBJECT+INFO=> MEASURE

B4

LOD 350 - quantity, size, shape + location, orientation +

*information - **DESIGN COORDINATION** - object w/interfaces*

LOD 350 – OBJECT+INFO=> MEASURE+INTERFACES

B5

LOD 400 - quantity, size, shape + location orientation +

*information - **FABRICATION** - object w/interfaces*

LOD 400 – OBJECT - INFO+MEASURE+INTERFACES

B6

LOD 500 - quantity, size, shape + location orientation +

*information - **FIELD VERIFIED (as-built)** - object w/interfaces*

LOD 500 – OBJECT - INFO+MEASURE+INTERFACES



Tønsbergprosjektet

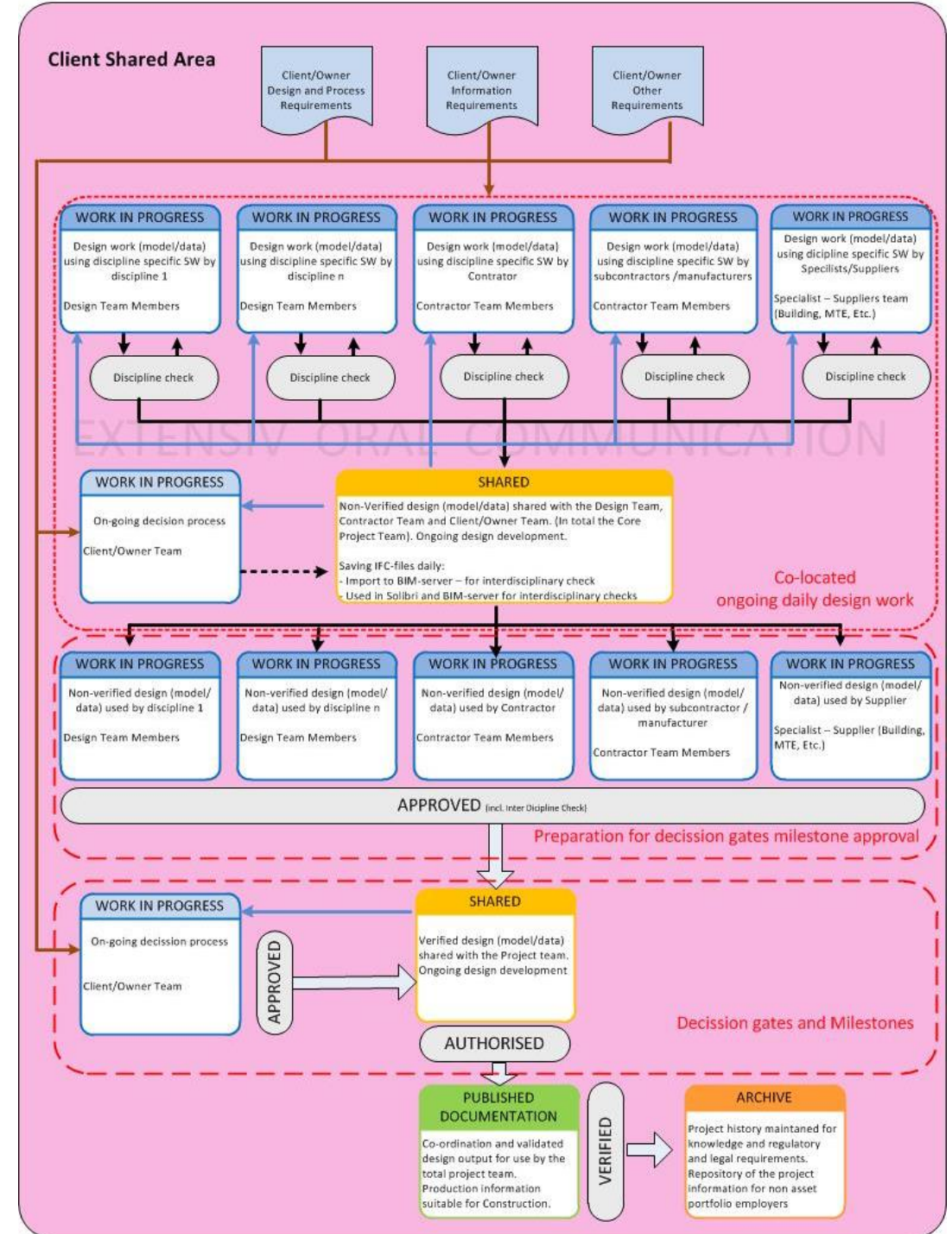


Sykehuset i Vestfold

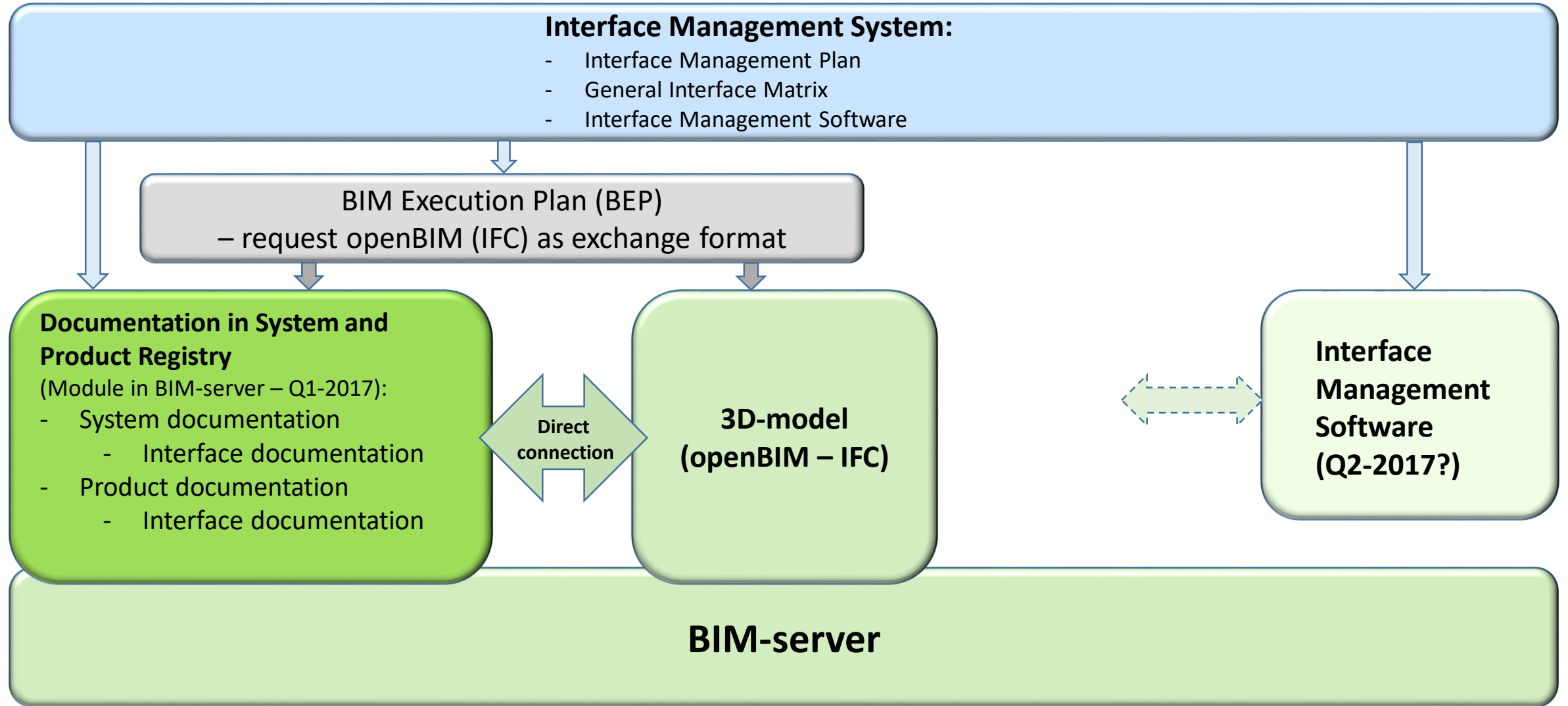
Working process – Open BIM

Basic and detailed design phase

Modelling (structure and sizes) adapted to the speed of IFC export from the software.



BIM, Interfaces and FM-documentation



Industrialized building production

– what do we want to achieve?

- Increased quality
- Less building faults during construction process
- Lower building cost
- Faster construction time and processes

What do **You** want to drive? The first **prototype** of a Kit Car or a car from a **production line**?



Open BIM and Industrialised building production

- Reduced cost
- Higher and more predictable quality
- Faster building process
- Effective use of resources
- Better interface process and handling
- Design and build it correct – the first time
- Less challenges with noise from the building site - for the hospital
- Less hot works on site, reduced SHWE challenges (SHA)
- More work off-site, reduced SHWE challenges on-site



OpenBIM



Industrialised building production



www.tonsbergprosjektet.no



We have our own App, where you can get the latest information about our project (click on the symbol)

Questions?

