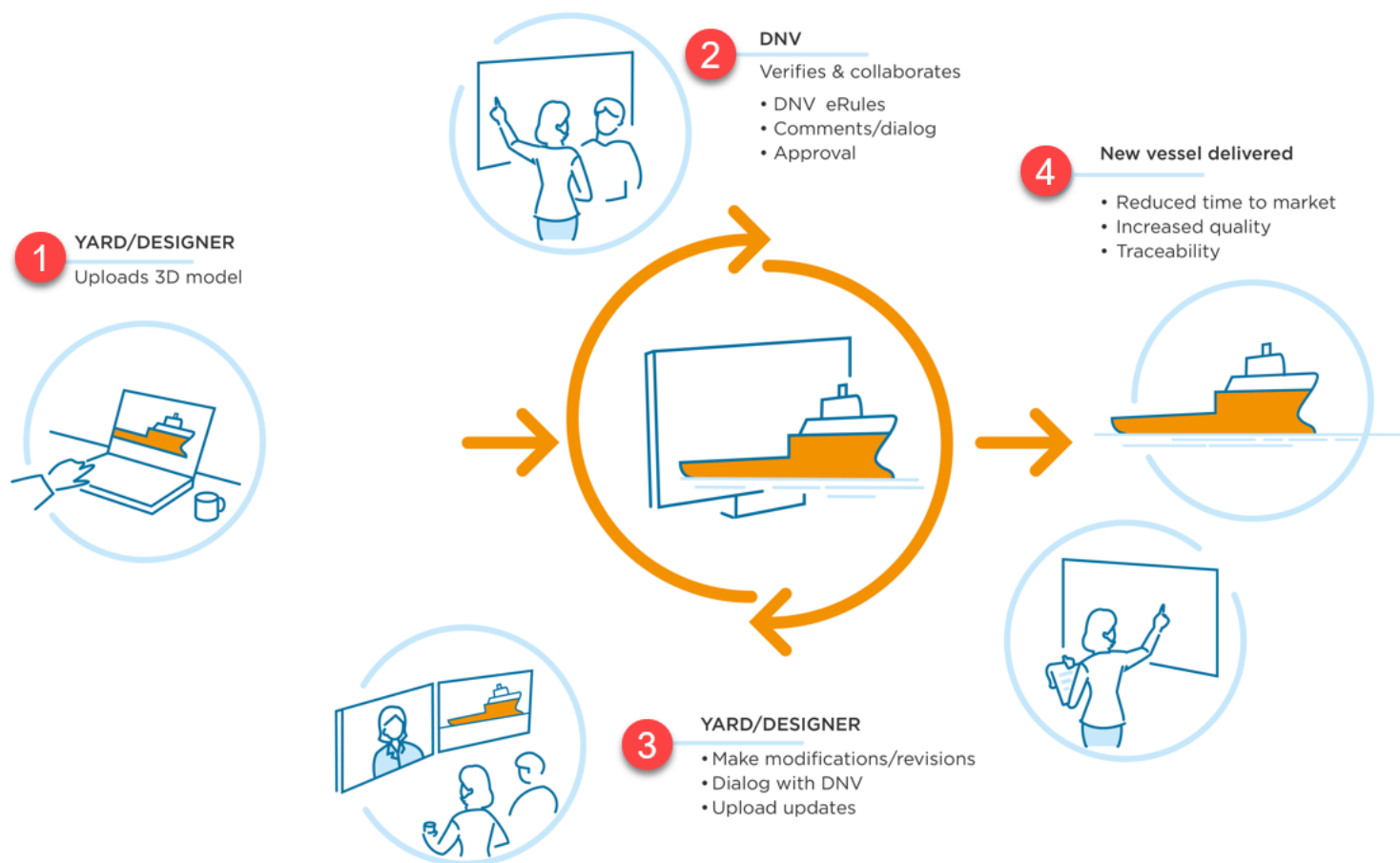


# 3D approval: A real case

Ole Chr. Astrup, DNV  
Ozan Uyanik, AVEVA

# 3D Approval – The Customer Journey with DNV



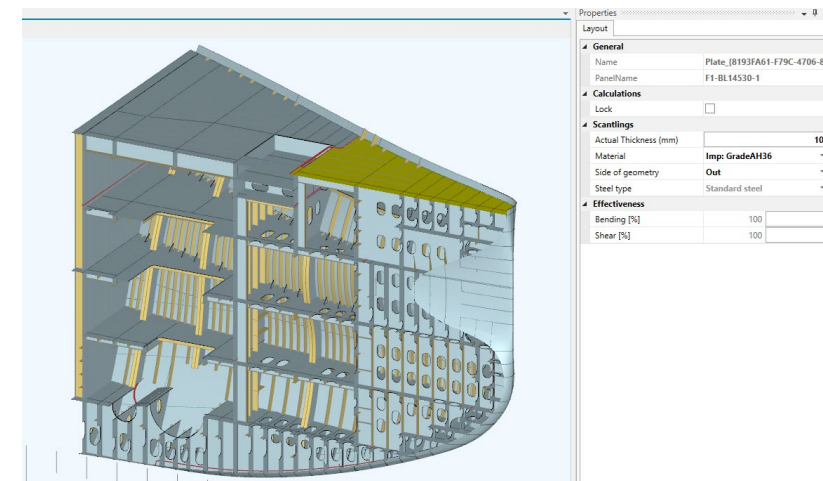
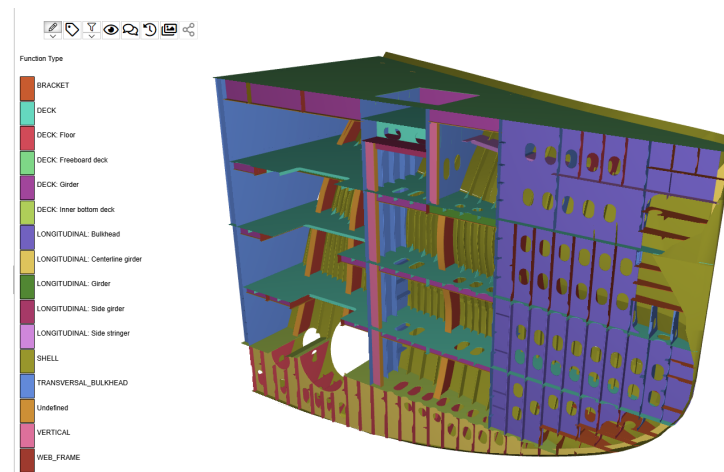
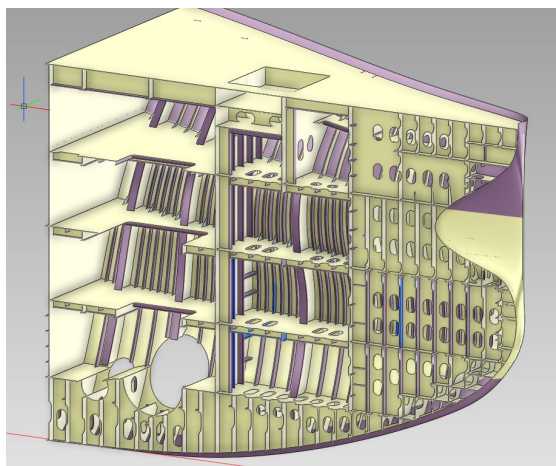
## Customer interaction steps:

1. The yard/designer submits the 3D model to DNV together with other design documentation
2. DNV reviews the 3D model, give comments and can reuse the model for calculations
3. The yard/designer receives feedback/comments and submit a revised model
4. The design is approved and the yard receives the approval confirmation.

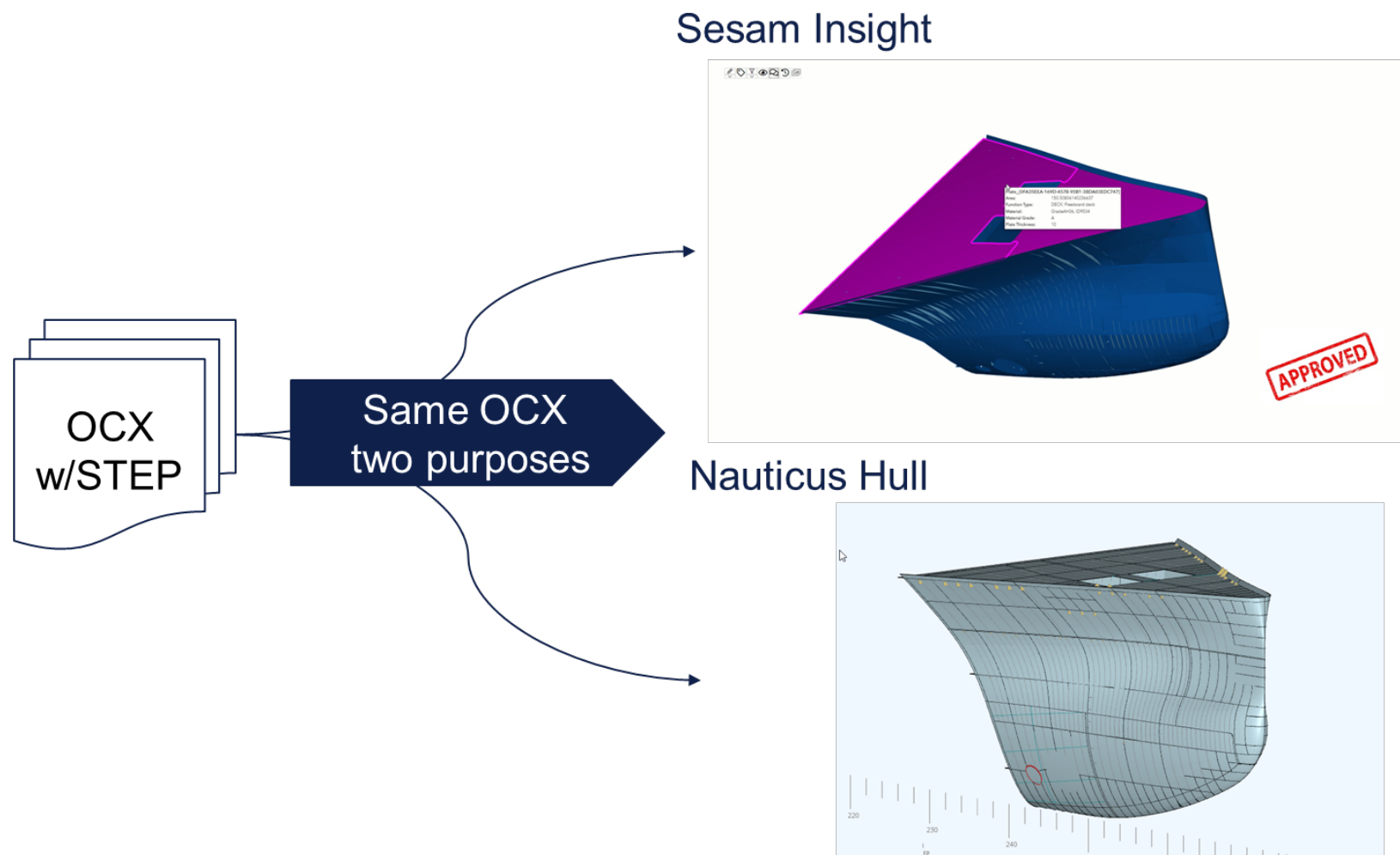
# First commercial 3D Approval with Deltamarin of one engineering unit

- AVEVA E3D

DNV 3D Approval Platform



# OCX based model Approval



## Drawing replacement

- Exact replica of the design model
- The information DNV approves

## Calculation model

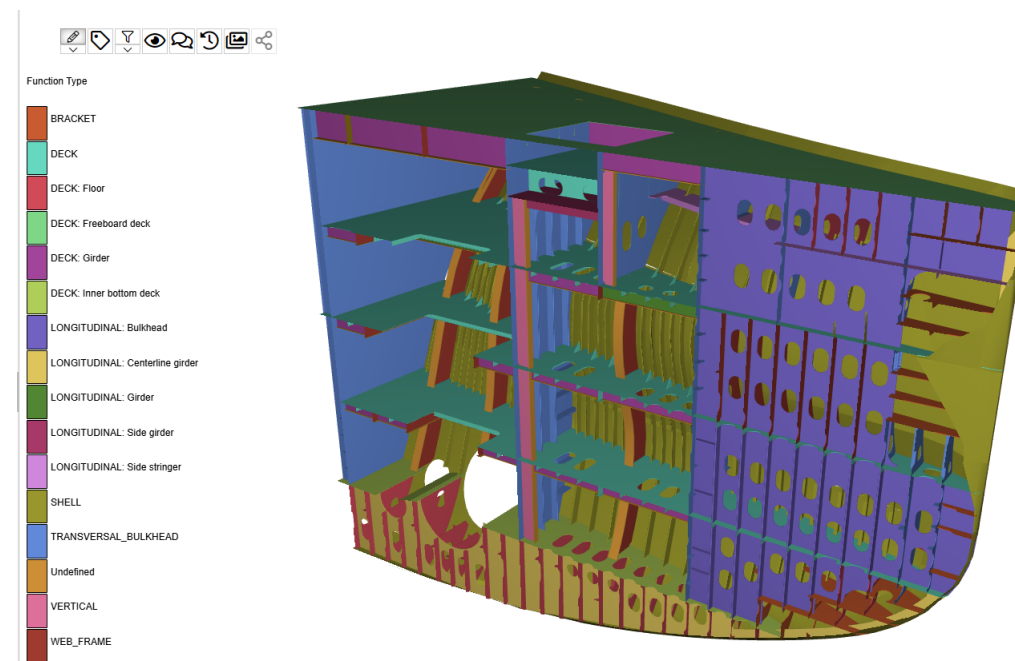
- Does not use step, OCX geometry + topology
- Need not import 100%
- Easy to add any missing parts in the calculation tool

# Upload to DNV and view the 3D OCX model

1

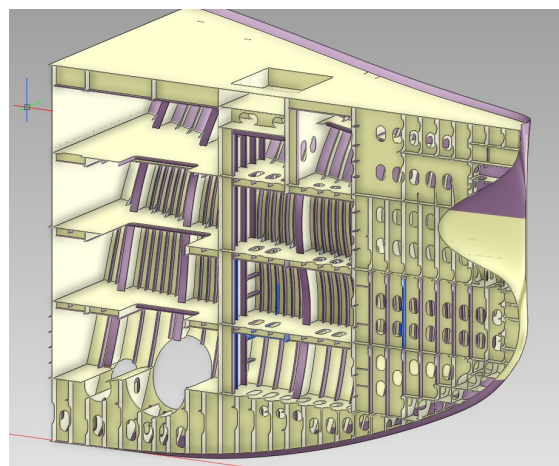
YARD/DESIGNER

Uploads 3D model

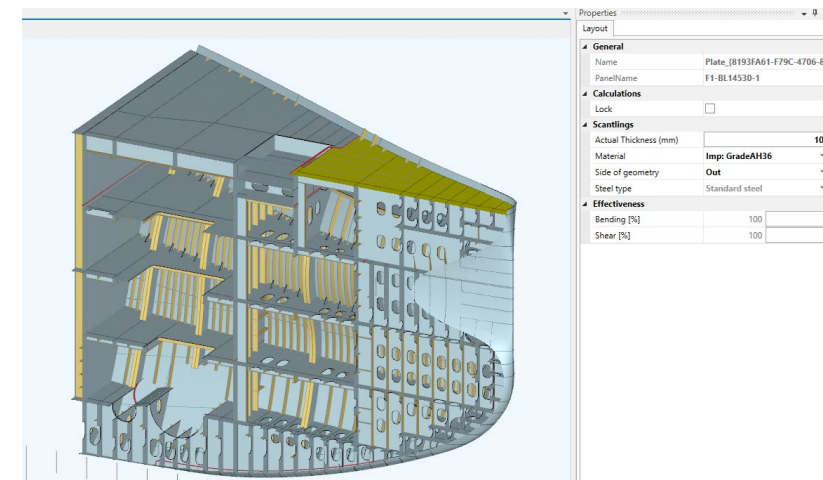
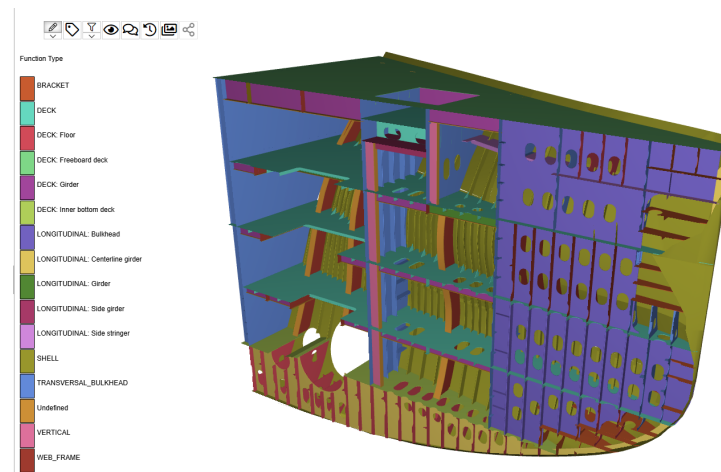


# First commercial 3D Approval with Deltamarin

- AVEVA E3D



## DNV 3D Approval Platform





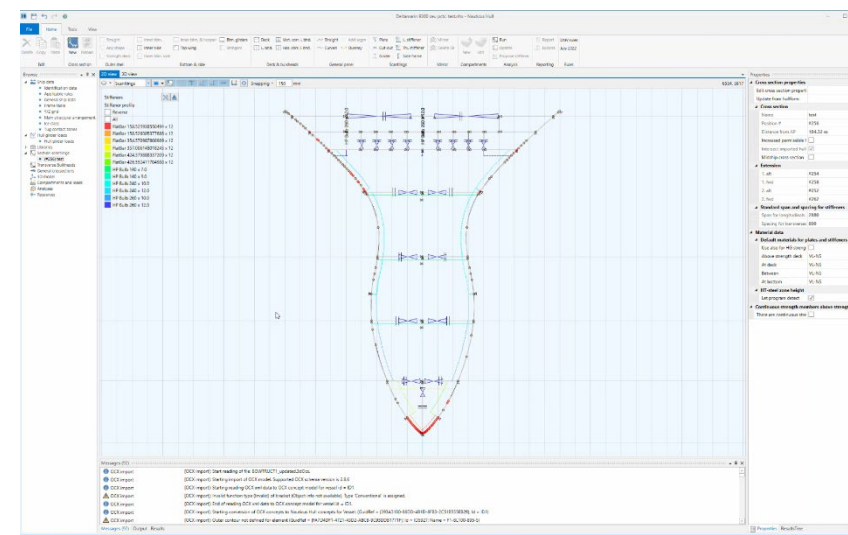
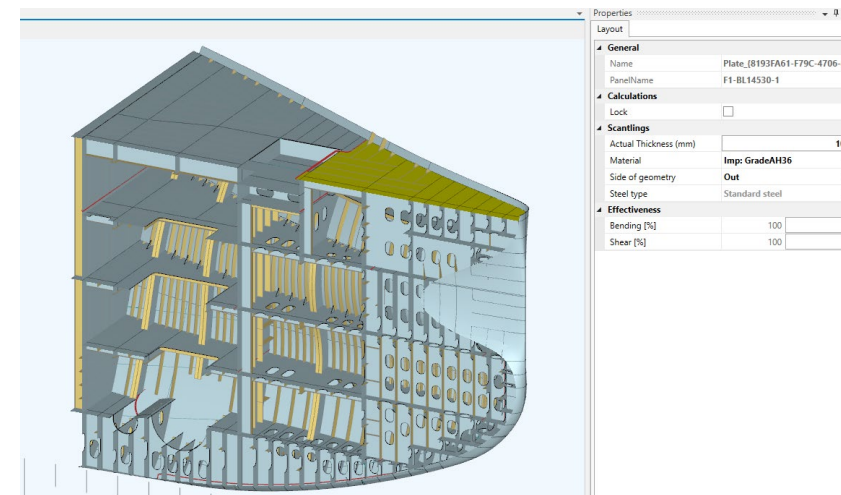
# Approval Expert (AE) can carry out rule calculations using the uploaded OCX

2

DNV

Verifies & collaborates

- Rule calculations
- Comments/dialog
- Approval



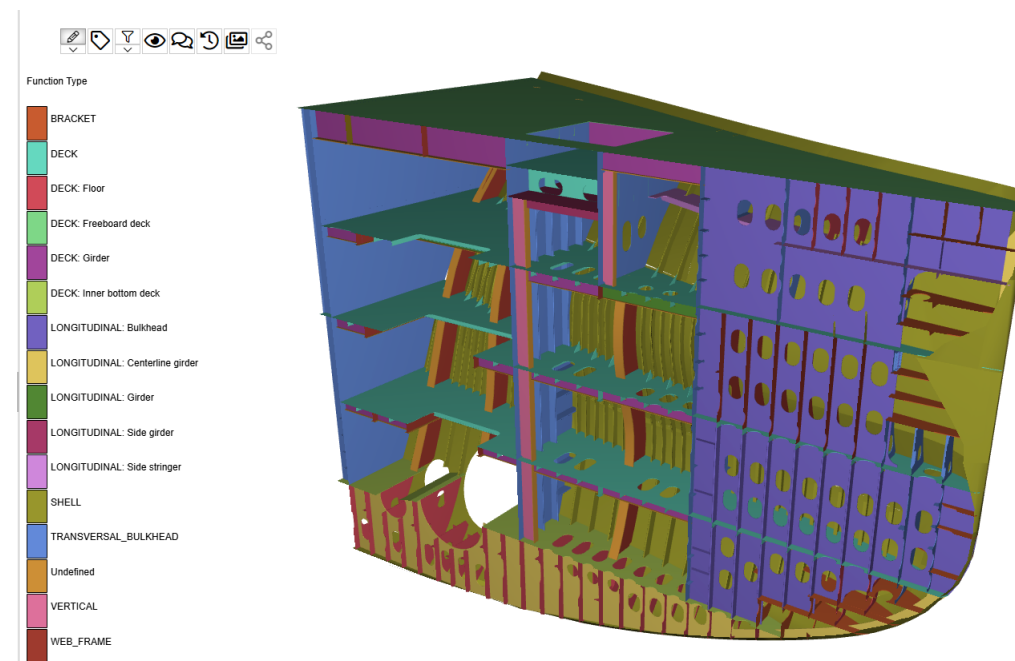
# The AE reviews the model in Sesam Insight

## 2

### DNV

Verifies & collaborates

- Rule calculations
- Comments/dialog
- Approval





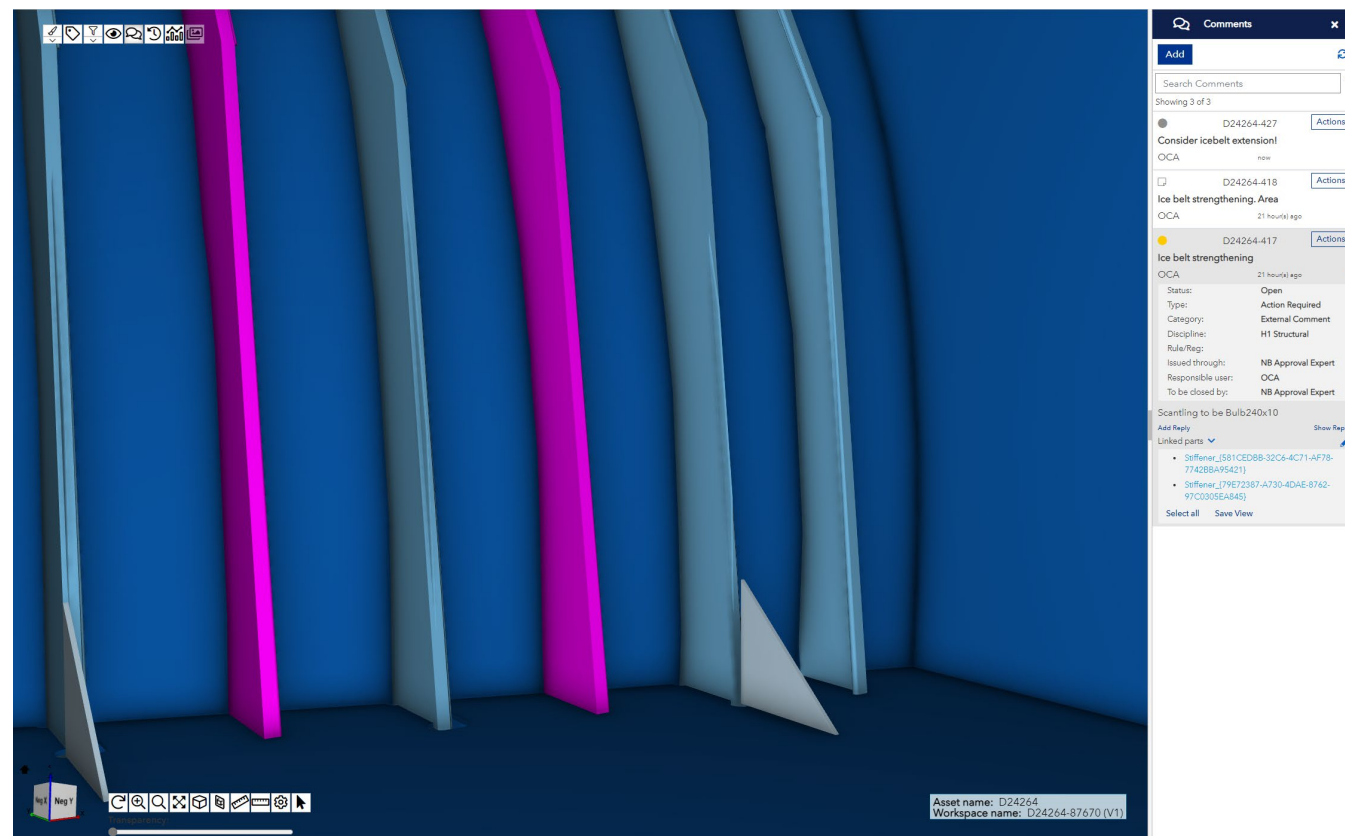
# The AE can review and comment in Sesam Insight

2

**DNV**

Verifies &amp; collaborates

- Rule calculations
- Comments/dialog
- Approval



# Comments can also be made available in AVEVA E3D

