



# DRIVING DOWN THE COST OF DECOMMISSIONING THROUGH DIGITALIZATION

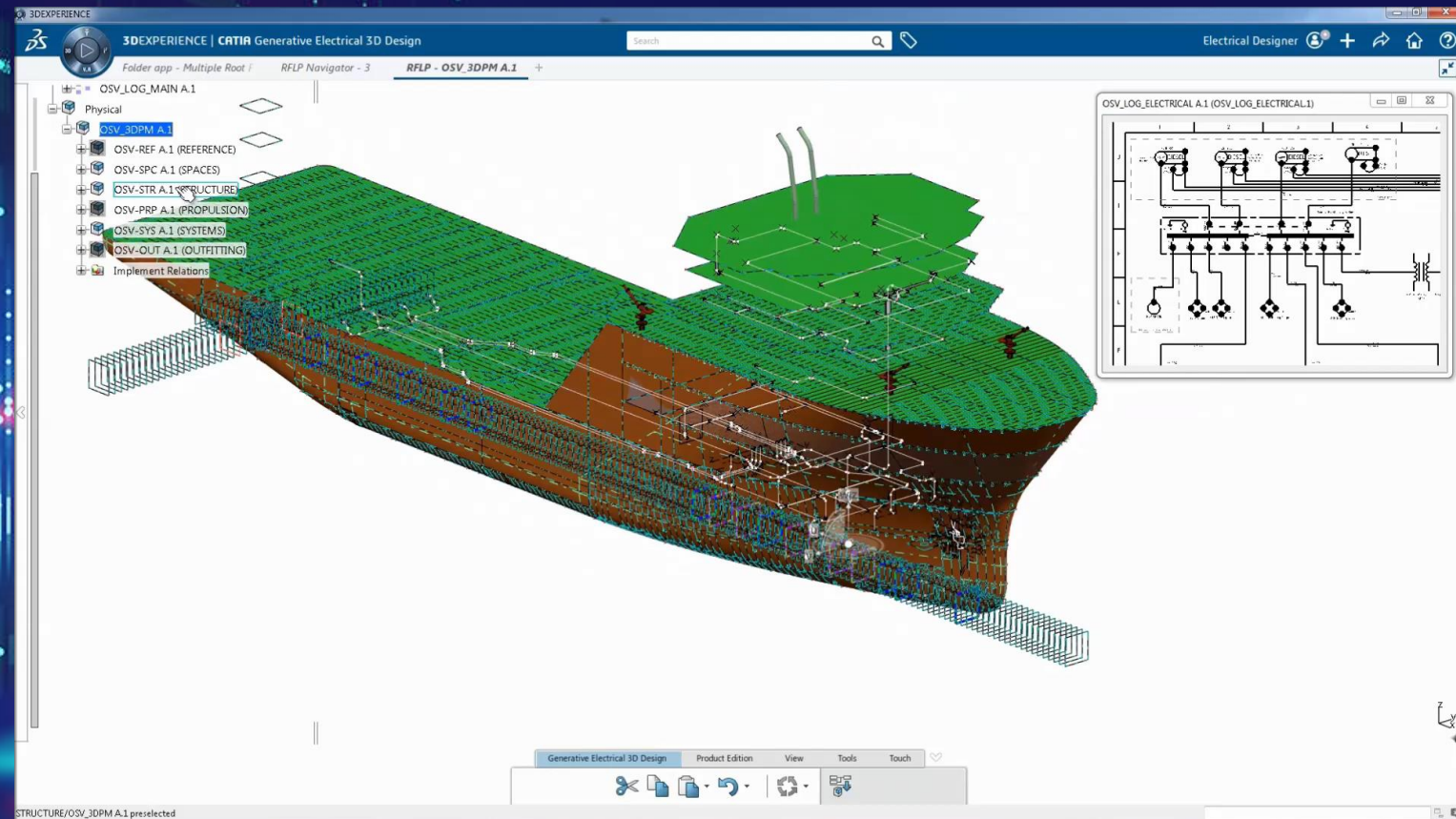


**BUREAU  
VERITAS**

**SOLUTIONS**  
Marine & Offshore

VERISTAR AIM<sup>3D</sup> PROVIDES  
A DIGITAL TWIN OF YOUR  
MARINE OR OFFSHORE  
ASSET FOR USE  
THROUGHOUT ITS LIFE

THE CENTRALIZED  
MANAGEMENT INTERFACE  
OF VERISTARAIM<sup>3D</sup>  
UPDATES AUTOMATICALLY  
AND IS COMPATIBLE WITH  
MULTIPLE SOFTWARE  
FORMATS



# VERISTARAIM3D DECOMMISSIONING SOLUTION

- A digital solution to drive down cost through standardization of approach and process.
- A collaborative platform that all can access to view the same information anywhere at anytime on any device.
- A digital twin will provide much needed clarity of the history and current status of offshore assets.
- The benefit of a digital twin will commence from the first implementation, even in early operation, increasing as life extends and adding further benefit in the preparation and execution of decommissioning.





# THE VALUE IMPACT ON DECOMMISSIONING

The value will be realised by all parties. It will improve the definition of scope, improve the quality of proposals, lower estimated and actual costs, and improve execution efficiency.

Examples of added value;

## **Preparation for decommissioning**

- A collaborative standard approach. Simulation capability to destruct in a virtual space

## **Contractor Supplychain**

- Digital solution to provide “mirror image” of an asset which all can view and estimate against the ‘as it is’ information
- Mitigates inconsistency across tenders
- Eliminate additional cost due to access and egress issues on-site
- A compilation of accurate engineering work packs with minimal requirement for a site visit
- Move toward price certainty/fixed price, increases the opportunity to share commercial model
- Time and opportunity to evaluate alternative scenarios, approaches and technologies

## **Heavy Lift**

- A collaborative standard approach with simulation capability to establish lift, laydown, Finite Element Analysis (FEA) and Centre of Gravity (COG) requirements in a virtual space



# THE VALUE IMPACT ON DECOMMISSIONING

## **Transport to shoreside**

- Establish transport requirements well in advance of activity
- Optimise lead times to barge / heavy lift vessel
- Optimise window of opportunity to minimise time on station

## **Identify onshore requirements**

- Enable, optimise and project share onshore resources to manage the supply chain and develop work packs across a portfolio of assets
- Optimise event sequencing from mobilisation to asset arrival onshore

## **Safety**

- Enable virtual simulation to run hazardous activity without physical presence
- Eliminate or mitigate risk
- Familiarisation to asset prior to mobilisation of personnel
- Laydown and storage of plant and equipment offshore
- A digital solution that will, if required, link into Permit to Work (PTW) system
- Simulate access and egress from hazardous operations for personnel in an ever changing environment



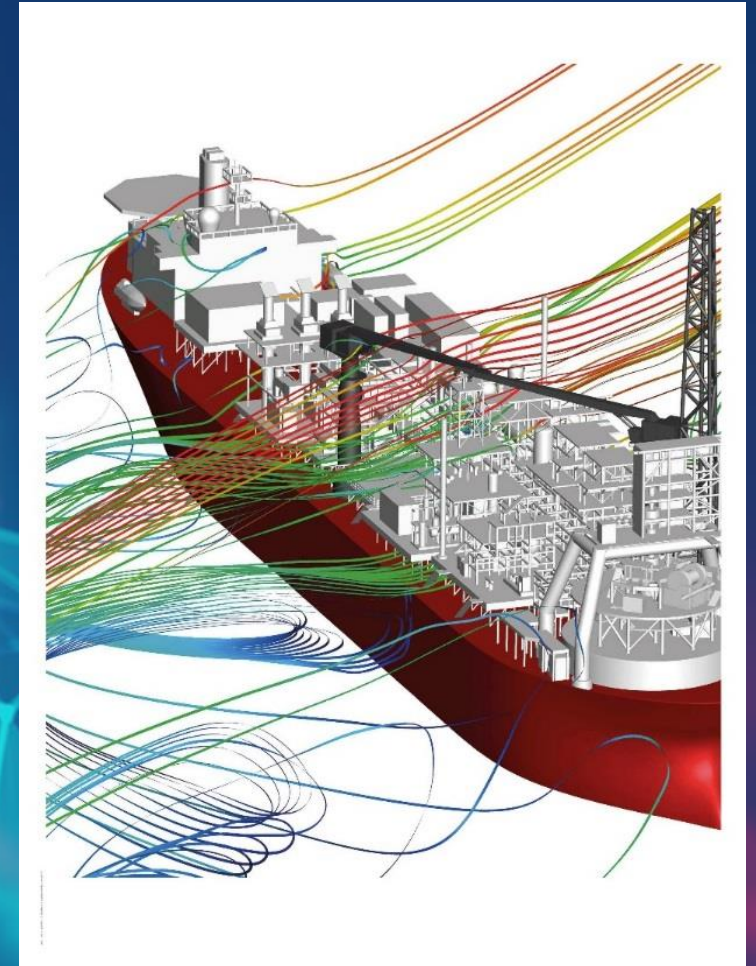
# THE VALUE IMPACT ON DECOMMISSIONING

## Insurers

- Allows visualisation of risks through simulation and respective risk mitigation / elimination actions
- The Insurer and Underwriter shall have a better understanding of the risks and control measures being taken
- A better appreciation of the decommissioning project may drive down premiums

## HSE

- Rundown of Safety Case through visualisation
- Reduced requirement for HSE visits to the site





# THE BROADER VALUE

The value to the **Operator** shall be significant cost reduction through optimisation, efficiency gains, collaboration, improved relationship with regulators, supply chain and insurers.

- The value to **industry** is the standardisation of approach and process
- The ability to manage across a portfolio of assets at the same time
- Potential Economies of Scale
- Decommission subsea infrastructure and topsides simulation

The value to the **UK Government & Taxpayer** is a significant cost reduction and burden on the public purse. Improved execution results in the supply chain will increase overseas competitiveness and improve financial performance which will greatly contribute to the UK Government's 2035 vision goals.



# THE COST OF VERISTARAIM3D



- This project requires Operator support to determine a complexity index per asset type, from which the level of detail required in the resultant twin can be quickly ascertained.
- BV Solutions – Marine & Offshore are working with OGTC to create a work group and provide financial support to realise this exciting opportunity that could become a game changer in decommissioning.





# FOR THE BUSINESS AHEAD

IF YOUR INTERESTED IN FINDING OUT MORE CONTACT;

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