

# **Offshore Decision Support Tool**

Navigating offshore operations with precision

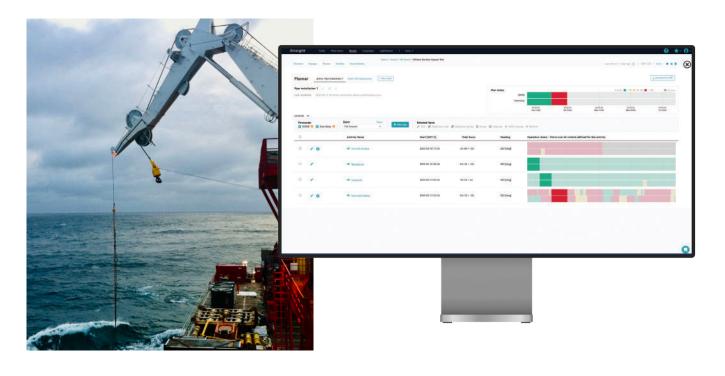
Unlock the power of predictability with the Offshore Decision Support Tool (ODST), a digital solution transforming the marine operations industry with advanced planning and execution capabilities, increasing vessel operability and efficiency.

ODST is built in collaboration with the industry to reflect real offshore processes in activity planning and execution. It supports operational assessments to minimize weather-related delays, enhance safety, and improve coordination between onshore and offshore teams.

The service enhances the operability of any type of weather dependent vessel operations and provides valuable insight on vessel performance.

# **KEY BENEFITS**

- → Reduces waiting on weather resulting in shorter operations
- → Enhanced forecasting with higher accuracy of prediction
- → Faster decision support for upcoming activities
- → Enables deeper understanding of schedule optimisation opportunities
- → Enhanced operational safety through utilisation of more accurate weather predictions
- → Improved collaboration and communication on decision support between offshore crew



### **OPTIMISE VESSEL OPERATIONS**

ODST provides critical decision support delivered simultaneously to onshore and offshore personnel.

Operating limits for offshore operations are traditionally established based on upfront analyses, carried out before the actual operations take place. Consequently, the limiting sea states for a marine operation is generally based on historical environmental data and analysis approximations, potentially introducing inaccurate limitations or even unnecessary conservatism.

ODST addresses the constraints of a traditional approach. The service combines live vessel response data and weather forecasts with advanced analytics to predict vessel operability with high accuracy. The user can define weather and vessel motion-based criterion/ limits relevant to the planned operating modes, resulting in GO/NO-GO decision support for many days in advance. 4insight® Offshore Decision Support Tool will advise on operating windows for optimal activity execution including advice on the best possible vessel heading.

Easily access actionable insights provided by ODST through an intuitive user interface. Designed for both onshore and offshore stakeholders, the interface offers a layered degree of detail, allowing you to easily navigate and make informed decisions.

#### **FEATURES:**

- Operability dashboard Examine how weather forecasts and alpha factors will affect future vessel operability in one intuitive view
- Activity manager Manage activities and assess the most efficient sequence
- Vessel motions Use measurement data to accurately predict vessel behavior many days in advance
- Weather forecast Analyse weather data from multiple forecast providers and compare with real-time weather data
- Heading advisory Get advised on the optimal heading for operations

## SYSTEM ARCHITECTURE

The architecture behind 4insight® is designed to receive and compute large amounts of data, unlocking the true potential of the data to ensure the best possible decision support for operators. The service contains Digital Twins of the assets and helps operators improve data quality and manage the ownership, security, sharing and use of data, while at the same time reducing operational costs and risk. 4insight® is a multi-tenant solution residing on Microsoft Azure.



**4Subsea** is a leading provider of technology and services that help operators optimise energy production from subsea oil & gas fields and offshore wind farms. We combine domain expertise with data analytics and digital services to maximise lifetime of assets, reduce operational cost and optimise future projects through data-driven design.

The company was established in 2007 and clients include the major energy operators as well as the large suppliers of subsea equipment. 4Subsea is headquartered in Asker, Norway with additional offices in Bergen, Kristiansand, Stavanger, Rio de Janeiro, Kraków and Aberdeen. 4Subsea is a company in the Subsea 7 Group.

#### 4Subsea - Share ideas, move forward