Com4Offshore
Supporting Vattenfall Sandbank project
by leveraging the decision support & risk management system
Matthias Kraaz¹, Dr. Ralf Borchers¹, Anne Lina Holy²
¹megatel GmbH – An OHB Company - ²Vattenfall Europe Windkraft GmbH

Abstract

• Lack of adequate communication infrastructure between project management office and offshore installation site often leads to insufficient information flow.
• Information bottlenecks hamper project management decisions potentially causing high financial impact on overall installation costs.
• Fusion of all relevant project information in a web-based Decision Support & Risk Management (DSRM) System enables a better overview & planning of construction processes.
• DSRM System was developed for Vattenfall in a very short time based on Agile software development methodologies.
• Agile software development methodology, reducing the time between the identification of a requirement and the delivery of the new feature to a single week.
• Full system development within a single installation project.

Solution

• Integrated Service for communication, sensor devices & software applications for onshore and offshore construction activities.
• Satellite based public service supporting the communication needs of the different user groups in offshore wind farm areas – offshore becomes online.
• WiFi and 3G/4G mobile connections for mobile devices (smartphones, tablets etc.).

System Overview

Benefits

• Reliable communications services adapted to users needs.
• Reduction of installation costs.
• Optimising the supply chain and construction processes.
• Complete tracking of all progresses.
• Transparency and availability of information about the supply chain.
• Near real-time information flow (both offshore and onshore).
• Graphical map-based user interface replaces whiteboards.
• Attractive Graphical User Interface and ease of use.
• Integration of third party data like weather forecast data, sensor data etc.

References

• Com4Offshore project is co-funded by the European Space Agency (ESA).
• More information: www.com4offshore.com