

Off-Shore Project - CLS

Project team

Team members

CLS

CLS has over 25 years experience in delivering data and services to customers all over the world. With a staff of 470, in France and abroad, CLS offers services in environmental monitoring, maritime security, and management of marine resources to a broad range of professionals including government, industry and the scientific community, and maintains an operational center with expert support 24/7. Since 2001, CLS has developed services for the oil & gas industry based on its built-in expertise on data collection, radar imagery or numerical modelling.

Meteogroup

Meteogroup, founded in 1986, is one of the largest European weather organizations (12 offices including Poland), serving the Oil & Gas industry with numerous products & services. Meteogroup is present on all continents addressing the Oil & Gas community (operators, engineering, and seismic) and thus has a perfect understanding of the EO weather data that are critical throughout an oil & gas project life-cycle.

Nansen Environmental and Remote Sensing Center (NERSC)

NERSC, founded in 1987, is a key Norwegian leader that provides oceanography EO and model products to Oil & Gas industry.

Tullow Oil

Tullow Oil kindly supports the team as a consultant.

Description

Funded by the European Space Agency, the aim of the EO4OG project is to determine the current and future needs of the Oil & Gas industry in terms of Earth Observation products and services. The project will unroll in three phases over a 10 month period.

Our selected participants have received a PDF brochure ([click here to download](#)) explaining the EO4OG project goals and objectives and providing a brief overview of the survey questions. The survey itself will be carried out over the telephone, to best understand participants' challenges and requirements.

As the survey forms are completed, we will make the results available online, via the OGEO portal.

This project is driven by the needs of the oil & gas industry with regards to offshore exploration and operations, Health and Safety, sustainable development and national and international regulations. The goal is to determine how Earth Observation products and services can best aid the industry at all phases of the OGP lifecycle. Our consortium will work in close collaboration with the oil & gas industry to identify challenges, provide an inventory and description of existing EO data solutions, analyze the gap between user requirements, available products and current uses, and define expectations in terms of improvement of EO data/services and development of new services.

Special attention will be paid to the typical phases of an OGP project: Pre-license acquisition, Exploration, Development, Exploitation/Production, and Decommissioning.

Our geographical areas of interest include:

- Angola,
- South Africa,
- Mozambique,
- Northern Brazil,
- Argentina,
- Caspian Sea.

Challenges

The OTM assessment of information needs is organised into 6 areas; [pre-license phase](#), [exploration phase](#), [development phase](#), [production phase](#), [decommissioning phase](#), and [generic requirements](#). To access the list in each category, click on the links.

The challenges have also been organised into "challenge trees". To access each challenge tree click on the box in the image below. To see the full challenge tree, open [the pdf file](#). All challenges are available in a single numerical list on the [CLS challenges page](#).



Pre-license phase

- CLS-1.1: Historic Metocean data for high level risk assessment
- CLS-1.2: Model validation
- CLS-1.3: Inputs for numerical model
- CLS-1.4: Environmental conditions

Exploration phase

- CLS-2.1: Selection of the drilling rig
- CLS-2.2: Seismic survey: current velocities (3D and 4d surveys)
- CLS-2.3: Seismic survey: sound propagation properties
- CLS-2.4: Hurricane tracks
- CLS-2.5: Drilling Survey preparation : Metocean conditions, hindcast & forecast
- CLS-2.6: Drilling Survey preparation : Environmental conditions
- CLS-2.7: Monitoring water discharge/drill cuttings

Development phase

- CLS-3.1: Recommendations for the design of the structure
- CLS-3.2: Coastal morphology
- CLS-3.3: Evaluation of the efficiency of the structure
- CLS-3.4: Metocean forecast to avoid down time
- CLS-3.5: Monitoring of the Water Quality / turbidity during operations
- CLS-3.6: Estimation of the Climate Change impact
- CLS-3.7: Visibility during operations

Production phase

- CLS-4.1: SAR imagery to detect ships and icebergs
- CLS-4.2: Pollution monitoring
- CLS-4.3: Efficiency of vessels and helicopters operations
- CLS-4.4: Safety of marine operations

Decommissioning phase

- CLS-5.1: Metocean monitoring
- CLS-5.2: Environmental monitoring

Generic requirements

- CLS-6.1: Global requirements on EO products
- CLS-6.2: Site monitoring

Meetings

Participants to discussions

Meeting	Date	Location	Agenda	Notes	Comments/Documents
Workshop	ko+10 months				
Review	ko+2 months				
Kick-off	7th March 2014	Frascati			

Documents

This is the area to show published documents for review or for use. Documents in preparation by the team should be kept on the project team page.

Document	Source	Date	Description
Kick-off Presentation	CLS	7th March 2014	Outline of the project and planning
CLS_requirements_schema.pdf	CLS	29th of July 2014	Requirements organization
EO4OG_D1_requirements_methodology_results.pdf	CLS	29th of July 2014	CLS methodology and results
EO4OG_Survey.pdf	CLS	29th of July 2014	CLS survey brochure
EO4OG_Offshore_D21_D22.pdf	CLS	24th of February 2015	Delivery D2
EO4OG_Offshore_D3_Roadmap.pdf	CLS	24th of February 2015	Delivery D3
EO4OG Workshop summary report (final).pdf	CLS	24th of February 2015	Workshop Report
	CLS	24th of February 2015	Ocean Surface Schema
EO4OG_Offshore_D21_D22_Appendix_A.pdf	CLS	24th of February 2015	Appendix A : EO-Based products
EO4OG_Offshore_D21_D22_Appendix_B.pdf	CLS	24th of February 2015	Appendix B : Case studies