



EO<sub>4</sub>OG SURVEY

FOR OIL & GAS: OFFSHORE



# ABOUT E040G PROJECT

Funded by the European Space Agency, the aim of the E040G 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.

- **Phase 1:** Survey of Oil & Gas operators to identify their geo-information requirements for each phase of operations.
- **Phase 2:** Assessment of industry needs and the EO datasets available today.
- **Phase 3:** Compilation of a catalogue of EO data and services responding to O&G needs.

In conclusion, an International Workshop will present the results of the project to the survey participants and other actors in the Oil & Gas industry. The workshop conclusions will provide a roadmap towards implementing operational solutions.

## WHY PARTICIPATE IN OUR SURVEY

This survey is an opportunity to identify challenges you face within your day-to-day work due to insufficient or unsatisfactory data and observations.

By providing feedback on the limitations of your current geo-information products, the E040G project will be able to evaluate which EO datasets can respond to your requirements.

Your participation in this survey will help the project partners to determine in which ways EO data could make your job easier, safer and more cost-effective. In addition, by participating in our survey, you will be invited to participate in the International Workshop hosted by the ESA to be held in London in November 17-18, 2014 where all results will be presented.

## GOALS AND BENEFITS OF THE SURVEY

- Provision of the inventory and description of the EO data and their added-value
- Determination of the uncertainty on the EO data and their limitations for operational use regarding the way they are currently used
- Analysis of the existing gaps between user requirements, available products and current uses
- Determination of the added-value for forthcoming EO missions



# SAMPLE QUESTIONS:

The survey is comprised of 20 questions. It takes approximately 30 minutes to complete over the phone.

Please select your theme among the following:

## Metoccean data mapping and monitoring

- Historic records for winds, waves and currents
- Wind, waves and currents observations to operations
- Historical Hurricane probability and tracks
- Hurricane Observations
- Sea level

## Environmental monitoring

- Baseline historic mapping of environment and ecosystems
- Continuous monitoring of changes throughout O&G lifecycle
- Water quality during operations
- Coastal morphology
- Gas flaring
- Seeps (exploration)
- Oil spill monitoring and response
- Ice monitoring excluded from E040G due to previous study on ice charting]

## Infrastructure monitoring

- Subsidence monitoring

## Other

- Please describe:

### General Description:

- 1/What data products do you use?
- 2/When do you use this kind of dataset?
- 3/What are your actual limitations and do you have a work around?
- 4/What are your needs and expectations on EO data ?

### Challenge Classification:

- 5/In which lifecycle stage do you intervene?
- 6/What is the geographic context/restrictions?
- 7/What activity is impacted/concerned?

### Data requirements:

- 8/What update frequency would be ideal?
- 9/What spatial resolution is necessary?
- 10/What formats should data be delivered in?
- 11/ What are the existing standards you work with?





## TARGET AREAS OF INTEREST

The EO40G project is driven by four consortiums, two for offshore and two for on-shore.

The offshore consortiums are headed by CLS and C-Core. Each consortium covers a specific geographic zone.



Within the project framework, each consortium will address a specific zone.

-  CLS will address Angola, South Africa, Mozambique, Northern Brazil, Argentina, and the Caspian Sea.
-  C-CORE will address Myanmar, Eastern Mediterranean, West of Ireland, Morocco, South China Sea, and Falklands.



The European Space Agency (ESA) is Europe's gateway to space. With 20 member states, its mission is to shape the development of Europe's space capability and ensure that investment in space continues to deliver benefits to the citizens of Europe and the world. In this capacity, ESA also funds a number of projects such as the EO40G project, to ensure the best dissemination to industry and the general public of space-derived products.



CLS has over 25 years of 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. For the EO40G Project, CLS leads a consortium composed of METEO GROUP and NERSC. Tullow Oil kindly supports the team as a consultant.



With unparalleled harsh-environment expertise and worldleading capability in Remote Sensing, Ice Engineering and Geotechnical Engineering, C-CORE provides R&D services and technology solutions to industry and government clients on every continent. Our Remote Sensing team combines expertise in Earth Observation with Radar and Vision Systems to provide operational detection services, product development and applied R&D to advance new technologies with applications in resource development, transportation, defense, and security and environmental monitoring. For the EO40G project, C-CORE heads a consortium composed of StormGeo, Stantec, Hatfield Consultants and GeoCento.

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