Geomatics support during the upstream oil and gas life cycle

**Access**
- Coordinate Reference Systems, licence boundaries, Law of the Sea and continental geospatial data provision
- Seismic survey positioning & regional data integration
- Exploration drilling hazard surveys
- Rig moves and well positioning
- Environmental Impact Assessments surveys

**Exploration & Appraisal**
- Site & route geophysical and geotechnical surveys and information management
- Appraisal rig moves and well positioning
- Pre-installation surveys
- Facilities installation positioning support, dimensional control, metrology etc.
- As-built survey support – positioning, digital twin and information management
- 3D seismic survey positioning

**Development**
- 4D seismic survey positioning
- GIS asset mapping and Emergency Response / Common Operating Picture
- Satellite imagery / remote sensing data provision and analytics

**Production**
- In situ site surveys & rig/well positioning
- Structure monitoring
- Environmental monitoring surveys
- Abandonment and post-abandonment surveys

**SURVEY AND POSITION INTEGRITY AND GEOSPATIAL DATA MANAGEMENT ACROSS THE FULL FIELD LIFE CYCLE**

**About IOGP**
- The Geomatics Committee provides global guidance for the survey & positioning and geospatial data management disciplines.
- Geomatics helps IOGP Members by developing and disseminating good practice, providing a forum for exchanging knowledge, influencing regulators and standards organizations, maintaining international position exchange formats, data models, and a global geodetic parameter dataset (EPSG), and liaises with industry associations.

**Work items for 2020**
- Release of new EPSG Platform and new GIGS Platform
- Ongoing maintenance of IOGP’s EPSG Geodetic Parameter Dataset
- Joint IOGP Geomatics Industry Day (Rio de Janeiro)
- Work with OGC, ISO, SEG and Regulators to promote adoption or improvement of coordinate data and reference system standards
- Joint 9th APSG / IOGP Geomatics Industry Day (Houston)

**Subcommittee and Task Force activities**
- Create material and deliver web-seminars to promote P1, P2, P6 and P7 position data exchange formats to the industry
- Ongoing maintenance of IOGP’s EPSG Geodetic Parameter Dataset
- Joint 10th Petrobras/IOGP Geomatics Industry Day
- Work with OGC, ISO, SEG and Regulators to promote adoption or improvement of coordinate data and reference system standards

**Business value of Geomatics in the Oil & Gas Sector**
- Accurate real-time positioning and spatial data acquisition
- Reduced operational cost and lower delays, positioned where intended, better SIMOPS management
- Informed and competitive business decisions – spatially accurate, high quality operations positioning, geospatial data, analytics and digital mapping
- Enhanced, high quality geospatial analytics, better visualisation, better surface and subsurface models (digital twin)

**Accurate, Reliable and Cost-Effective**
- SIMOPS & situational awareness
- Satellite imagery / remote sensing
- Operational efficiency

**Geophysical Operations Workshop on 4D Surveys (London)**
- Deliver new Land Survey (GIS) Data Model and new Offshore Infrastructure Survey (GIS) Data Model
- Major revision of P7 wellbore survey data exchange format
- Major revision of P7 wellbore survey data exchange format
- Major revision of GIGS documents and test data sets
- Environmental monitoring surveys
- Reduced operational cost and lower delays, positioned where intended, better SIMOPS management
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- Work with OGC, ISO, SEG and Regulators to promote adoption or improvement of coordinate data and reference system standards
- Joint 9th APSG / IOGP Geomatics Industry Day (Houston)
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**2019 Highlights**
- Major update of EPSG model to maintain compliance with ISO 19111
- Promote adoption of Seabed Survey Data Model V2 as OGC Community Standard
- Geophysical Operations Workshop on 4D Surveys (London)
- Workshop on the application of Earth Observation data for environmental monitoring and management strategies (Paris)
- Joint 9th APSG / IOGP Geomatics Industry Day (Houston)

**Released:**
- Revised Geomatics GN3 Contract area description and GN25 Dynamic versus Static CRSs and Use of the TRF
- NEW IOGP P6/11 Seismic Bin Grid Data Exchange Format – User Guide
- NEW Geomatics GN26 Coordinate Transformations in the US Gulf of Mexico OCS
- Still to be released in 2019:
- NEW Common Industry Technical Specification for the Calibration and Verification of Ultra Short Baseline (USBL) Positioning Systems
- Revised Geomatics GN11 – Guidelines for GNSS positioning in the oil & gas industry

For more information visit [www.iogp.org/our-committees/geomatics](http://www.iogp.org/our-committees/geomatics)