



Geomatics in a low carbon future: emerging technologies for deepwater survey and geospatial operations

IOGP / Petrobras 10th Geomatics Industry Day

7-8 December 2021 (online event)

The energy industry is increasingly aligned with climate action and environmental goals to reduce carbon emissions and the drive to 'net zero'. Geomatics has a strong part to play in this arena across a multitude of activities, with examples including: minimal- and un-crewed, remotely-operated, and autonomous survey operations; advanced positioning technology and geospatial visualisation; environmental baseline & monitoring surveys; methane emissions mapping visualisation and monitoring; carbon capture and storage support; improved crisis management through integrated common operating picture and geospatial analytics; to name but a few.

The 2021 IOGP / Petrobras 10th Geomatics Industry Day will highlight Operator and Contractor-led use cases in the Survey and Geospatial domain, through the lens of deepwater.

The event will comprise two half-day sessions, each split into two parts:

- **Day 1 (7 December 2021, 1300-1700 UTC)**
will focus on how emerging Survey, Positioning & Geospatial technologies support global deepwater activity, improved operational efficiency and reduced energy consumption.
- **Day 2 (8 December 2021, 1300-1800 UTC)**
led by Petrobras, will showcase deepwater Geomatics activities specifically in Brazil region, including efforts from Educational Institute and Government bodies.

To register, please visit www.iogp.org/event/10th-geomatics-industry-day

For more information, please contact the Geomatics Committee Manager, Lucyna Kryla-Straszewska, at lks@iogp.org



Programme – Day 1: 7 December 2021

TIME (UTC)	PRESENTATION	SPEAKER
Day 1 – Part 1		
13:00 – 13:05	Welcome	Frederic Auger, TotalEnergies
13:05 – 13:15	Introduction to IOGP Geomatics Committee	Walter Jardine, Independent
13:15 – 13:30	Introducing Geospatial Integrity of Geoscience Software - GIGS Version 2	Josh Townsend, bp
13:30 – 13:55	IOGP low-carbon future agenda	Concetto Fischetti, IOGP
13:55 – 14:00	Setting up the scene	Frederic Auger, TotalEnergies
14:00 – 14:20	Shell Geomatics Deployment of Technologies	Michael Lees, Shell
14:20 – 14:40	A collaborative risk-based approach to digital pipeline inspection	Stephen Hogg / Elchin Teymurlu, bp
14:40 – 15:00	BREAK	
Day 1 – Part 2		
15:00 – 15:05	Welcome	Frederic Auger, TotalEnergies
15:05 – 15:25	Managing First-use of a New Subsea Technology on a Challenging Offshore Construction Project	Trevor Pugh, UTEC Survey
15:25 – 15:45	Lower-Carbon Delivery of Survey and Inspection Data	Mike Liddell, Fugro
15:45 – 16:05	Semi-automatic mapping of the position and freespan of underwater pipelines with AUV supported SAS system	Arthur Ayres Neto, Universidade Federal Fluminense
16:05 – 16:25	A vision for the future of life of field monitoring	Shaun Dunn, Sonardyne International Ltd
16:25 – 16:45	Changing how we think about Offshore Bandwidth - Remote Metrology	Keith Vickery, Zupt LLC
16:45 – 16:55	Q&A	Walter Jardine, IOGP
16:55 – 17:00	Adjourn	Frederic Auger, TotalEnergies

Programme – Day 2: 8 December 2021

TIME (UTC)	PRESENTATION	SPEAKER
Day 2 – Part 1		
13:00 – 13:10	Welcome	Marksuel Xavier Bastos, Petrobras
13:10 – 13:20	Host Presentation	Joelson Falcap Mendes / Felipe Augusto Farias de Carvalho, Petrobras
13:20 – 13:30	Setting up the scene	Rafael Santos Genro, Petrobras
13:30 – 13:45	Remote Operations for Inspection Maintenance and Repair (IMR) Services in Brazil	Hernandes Coutinho Fagundes, Petrobras
13:45 – 14:00	Remote Sensing for Offshore Monitoring of Oil and Production Water	Cristina Maria Bentz, Petrobras
14:00 – 14:15	Offshore riser inspection using drone technology	Marcus Casagrande, Petrobras
14:15 – 14:30	Start with why! Challenges and opportunities of Digital Transformation, data and AI for Oil & Gas industry	Walace Rosa Laurindo de Oliveira, Petrobras
14:30 – 14:45	Detection of space conflicts between simultaneous operations involving vessels - mitigation of operational risks	Marcos Ferreira dos Santos, Petrobras
14:45 – 15:00	Triple Source in Marine Seismic Surveys: Reducing exposure and increasing efficiency	Felipe Andrade Apolonio, Petrobras
15:00 – 15:15	Q&A	Rafael Santos Genro, Petrobras
15:15 – 15:30	BREAK	
Day 2 – Part 2		
15:30 – 15:35	Welcome	Marksuel Xavier Bastos, Petrobras
15:35 – 15:55	Management of Oil Exploration and Production Data in Brazil and its Importance In Attracting New Investments	Paulo de Tarso Silva Antunes, Agência Nacional do Petróleo, Gás Natural e Biocombustíveis (ANP)
15:55 – 16:15	The Provisional Regulation for Autonomous Vessel Operation	Joao Roberto V. Martins, Diretoria de Portos e Costa (DPC) - Marinha do Brasil
16:15 – 16:35	Modeling Positional Uncertainty for Hydrographic Surveys with AUV	Arthur Ayres Neto / Victor Fernandes, Universidade Federal Fluminense
16:35 – 16:55	Creation of an alternative method for extracting homologous points in bathymetric data collected by autonomous platforms	Laura Andrade / Italo Ferreira, Universidade Federal de Viçosa
16:55 – 17:15	Hitting the Bullseye. Vision based solution for torpedo pile installation project in Brazil	John Chatten, Fugro
17:15 – 17:35	Remotely Operated Survey Technology	Ryan Larsen, Oceaneering
17:35 – 17:55	Automating subsea inspections and geospatial data deliverables	Ole Kristesen / Antonio Felipe Silva, EIVA
17:55 – 18:00	Adjourn	Marksuel Xavier Bastos, Petrobras