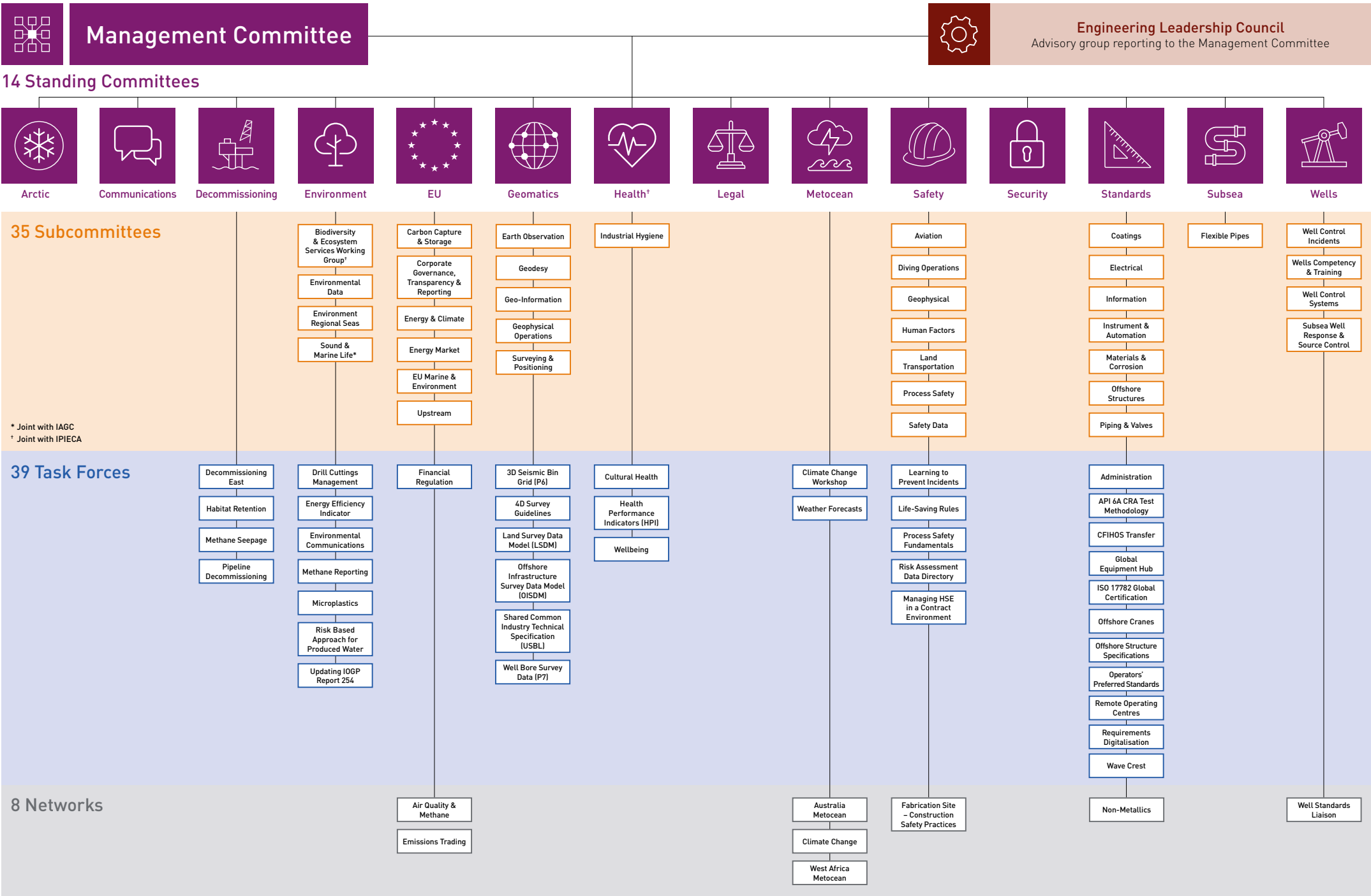


Committees 2020

An introduction to IOGP's Committees and their activities

The following pages provide a brief overview of IOGP's 14 Committees, their key activities, recent highlights, and work streams for the coming year.





* Joint with IAGC
† Joint with IPIECA

Showcasing IOGP's Standing Committees

IOGP's 14 Standing Committees are the foundation of the Association. The work that they do, leveraged by representation from our Members and coordination from the Secretariat, continues to ensure that the industry maintains safe, secure and sustainable production.

Every year, as part of the Business Plan process, we ask each Committee to highlight its achievements and aspirations at our Extraordinary General Meeting. This brochure showcases our accomplishments and acts as an easily digestible supplement to the Business Plan.

If your company would like to be further involved with our Committees, Subcommittees and Task Forces, please contact me to discuss the opportunities available.



Ed Walsingham
Business & Strategy
Manager

ew@iogp.org



Work items for 2020

- Promoting understanding of the term 'Arctic'
- Maintaining a trusted relationship with the pan-Arctic regulatory and policy community
- Emphasising science and experience as the basis for safe and environmentally sound operations, through advocacy of selected research projects and good practices
- Challenging reports, statements, and other stakeholder communications that are misleading or incorrect

Work streams for 2020 and beyond

- Develop information resources on Arctic for IOGP website
- Maintaining a broad network on risks affecting industry access to Arctic resources
- Engage with EU towards 2022 Arctic Policy updates and related studies (with EU Committee)
- Selective engagement with Arctic Council and Arctic Economic Council as relevant for IOGP
- Support NOIA in policy, licencing and regulatory issues

What does the Arctic Committee do?

The Arctic Committee is a unique forum for cross-industry collaboration over the multi-disciplinary aspects of Arctic issues.

The Committee's scope addresses the Arctic, as well as sub-Arctic and other locations with cold-climate challenges, such as the Sea of Okhotsk, the Caspian Sea, and Offshore East Coast Canada.

2019 Highlights

Work with EU Committee on Arctic issues, including input to Arctic events with European External Action Centre and follow up of the Joint research Centre "Safety Aspects of Offshore Oil and Gas Operations in Arctic and Sub-Arctic Waters."

Chair's message

The Arctic is a politically stable, resource-rich region in a context where such regions are increasingly rare. The oil and gas industry has proven that it can operate responsibly and with high standards across the region. Arctic nations and Arctic peoples should be allowed to act for energy security and economic development where they choose. IOGP is an important industry voice to address media and policy that seek to exclude the Arctic from future resource development.



Work items for 2020

Global Communication Network of Oil & Gas Associations

- Increase the visibility of oil & gas associations at global and regional events
- Consult and exchange views on the main lines of global oil & gas communication

Scale up IOGP's communications engagement

- Strengthen relations with think tanks
- Set up new links with global organisations
- Expand the coverage of social media outreach
- Scale up IOGP's press contacts and presence in the media
- A "campaign approach" to proactively promote IOGP and its products

Reach out to the young people and beyond the industry

- Create an "energy explained" video section on IOGP's website
- Set up an internship program for young graduate students

A more effective Communications Committee

- Increased support to maximise the dissemination of IOGP's reports
- Greater social network interaction with the secretariat
- Suggestions on additional speaking opportunities and new key contacts

What does the Communications Committee do?

In the challenging context of rising energy demand and a lower carbon emissions future, the Communications Committee advocates the case for oil and gas (COG)

- Raising awareness of oil & gas benefits in everyone's life
- Ensuring that oil & gas is recognised as part of the solution
- Sensitising stakeholders to the continuing need for upstream investment to counteract field depletion

2019 Highlights

Affirmed the rising importance of communications within IOGP:

- COG budget: moved from project based to continuous activity with increased travel budget
- New Global Engagement Manager
- New Communications Director

Increased engagement efforts:

- COP24 in Katowice (2018), COP25 Madrid
- B20/G20 in Argentina

Social media achievements:

- Increased to 60k Twitter followers
- Enhanced visibility thanks to 'number of the week' online feature and opinion pieces

Global Production Report:

- Second edition published, third due in November 2019
- Videos released



What does the Decommissioning Committee do?

The Decommissioning Committee is working to establish and maintain the group as the 'global voice of decommissioning' and actively lead the sharing of international experience and good practice and influence the development of policy or guidance of decommissioning worldwide.

Work streams for 2020 and beyond

Communication and Outreach – Serve and connect membership globally and support stakeholders to increase their understanding of decommissioning through information, good practices sharing and conference presentations.

Regulatory Advocacy – Influence the development of decommissioning regulatory requirements and guidance through IOGP's observer status on international committees and regulatory forums.

Technical Work – Collect and evaluate operational developments (technical, HSE and societal) in critical decommissioning areas to further safe, responsible and efficient decommissioning.

Work items for 2020

Pipeline Decommissioning – Evaluate strengths and weaknesses of current approaches and identify any gaps for further work; we will also consider turning the 2019 internal paper into an external publication.

Habitat – Consider turning the 2019 internal paper into an external publication and that could be used for advocacy and continue connections with scientific community.

Methane – Methane seepage is a topic we expect will need to be monitored and follow up on post 2018/19 advocacy.

Risk – Develop a risk matrix that identifies the potential issues/topics of risk to industry related to decommissioning and evaluates them in terms of likelihood of occurrence and risk to the industry.

2019 Highlights

Pipeline Decommissioning – Reviewed practices and trends, develop an internal 'IOGP Brief' that outlines technical methods used, residual liability, and assessment of fate and effect of common contaminants.

Habitat – Promoted view that habitat retention can be positive; collect and evaluate key science and case studies undertaken worldwide; synthesise into an internal 'IOGP Brief'. Created global connection of marine scientist.

Both work items to be undertaken in collaboration with Environment Committee.

Methane – Re-established the external dialogue about biogenic methane seepage naturally occurring on the seafloor in the marine environment versus assertions that methane seepage is associated with well bores through review of current guidance/reports on the topic of methane seepage.

Regulatory advocacy – Significant advocacy efforts OSPAR 98/3, Offshore Safety Directive, London Protocol

Chair's message

We are transitioning the Decommissioning Committee to achieve a global reach.

We are dealing with topics of global relevance, advocating on international, regional, and national regulations, and we have active participation by members from five continents.

With this shared learning and global collaboration, we aim to facilitate an industry that develops new norms to deliver safe, responsible, and economical decommissioning outcomes.



What does the Environment Committee do?

- Develop and promote good environmental practice
- Sponsor and undertake scientific research to develop appropriate risk management approaches *e.g. \$60M invested to date in underwater sound research to better understand the impacts of the industry on marine life*
- Proactively develop and advocate the industry's position in response to changing regulations *e.g. drill cuttings discharges*
- Engage with regulators and relevant stakeholders to raise awareness and improve our reputation *e.g. meetings with IOPER, presence at the Regional Seas Conventions*

2019 Highlights

Documents to be published:

- Methane Reporting Comparison Study
- Remote Sensing Guide 'The applicability of air- and space-borne remote sensing to operational environmental monitoring'
- Risk-Based Approach to Produced Water Phase 1 Report (internal report)

Stakeholder Engagement:

- Sound and Marine Life engagement and Concept/Reference EIA
- International Offshore Petroleum Environment Regulators (IOPER) engagement – May, July and Oct
- Regional Seas Conventions – increased Barcelona, Abidjan and OSPAR activities
- EU Hydrocarbons BAT Guidance document – pragmatic outcome due to IOGP input

Additional Highlights:

- Energy Efficiency Indicator TF – launching Pilot Benchmarking Exercise with three 3rd party companies
- Risk-Based Approach to Produced Water TF - workshop in London 25-26 September to discuss Phase 2 Guidance Document
- Methane Guiding Principles – input to Reducing Methane Emissions Best Practices global toolkit and outreach programme
- Drill Cuttings Management TF – developed pre-read document for regulators on 'Offshore drill cuttings discharge regulations: a high-level summary of the rationale supporting their development'

Work items and streams for 2020 and beyond

- Microplastics internal briefing paper
- Environmental Genomics JIP
- Project 'iAtlantic' on marine ecosystems
- Publish and launch Report 254: Environmental Management in the O&G E&P – Joint IOGP/IPIECA/UNEP Report
- Continued IOPER engagement
- Conferences: SPE International HSSE-SR Conference March 2020 in Bogota and UN Our Oceans Conference June 2020 in Lisbon

Collaborative work continuing in 2020:

- Decommissioning: pipelines and habitats (joint Decom-Env)
- Update of Industry Guidance on Voluntary Sustainability Reporting (joint IPIECA-API-IOGP)
- Joint Ventures HSE Governance update (joint IPIECA-IOGP)
- Update of Flaring Management Guideline (joint IPIECA-IOGP-GGFR)

Existing work led by IOGP Subcommittees:

- Sound and Marine Life – advocacy and comms from SML JIP
- Environmental Performance Data continuous improvement
- Regional Seas Conventions – engagement and advocacy

Existing work to be led by IOGP Task Forces:

- Energy Efficiency Indicator, Risk-based approach for Produced Water, Drill Cuttings Management, Microplastics, Methane

Continuous collaborative efforts:

- Other IOGP Committees incl. Geomatics, Decommissioning, Arctic
- Other organisations incl. IPIECA Climate Change, Environment, Biodiversity, Water, Oil Spill and Reporting Groups, UNEP, GGFR, SPE

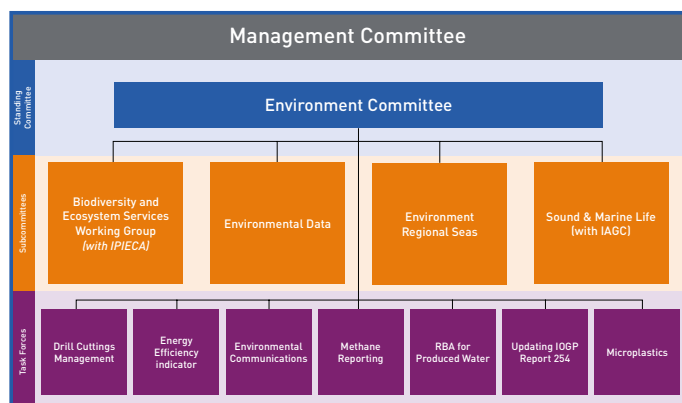
Chair's message

Our strategy is to provide value to IOGP Members via an efficient model to identify and address current and future environmental challenges to enhance our Members societal licence to operate.

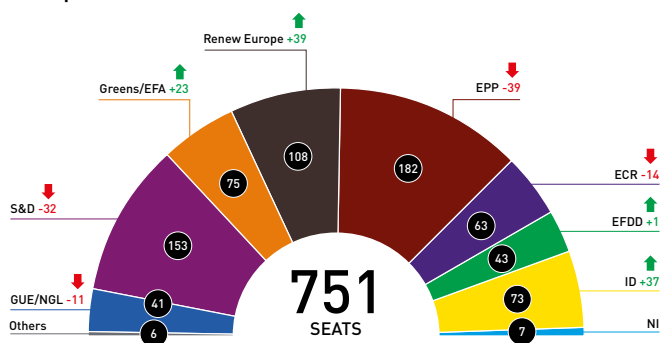
We focus on three priority areas:

- Responsible access to new areas
- Encouraging environmental excellence in our operations
- Advocacy and outreach to our members and external stakeholders

We regularly review challenges and business needs of our members to ensure the work program is up-to-date and relevant.



European Parliament Results



What does the EU Committee do?

- Promote E&P, the role of oil & gas in the EU climate and energy debate, and the socio-economic benefits of EU upstream activity
- Communicate the safe, responsible, and profitable performance of members in Europe to EU institutions and other stakeholders
- Provide technical expertise and industry perspective in the various legislative initiatives undertaken by the EU
- Build relationships with EU policymakers (Commission, Parliament, Council) and relevant stakeholders (other industrial sectors, NGOs, think tanks, etc.)
- Raise awareness of the upstream sector and the use of oil & gas in general

Work streams for 2020 and beyond

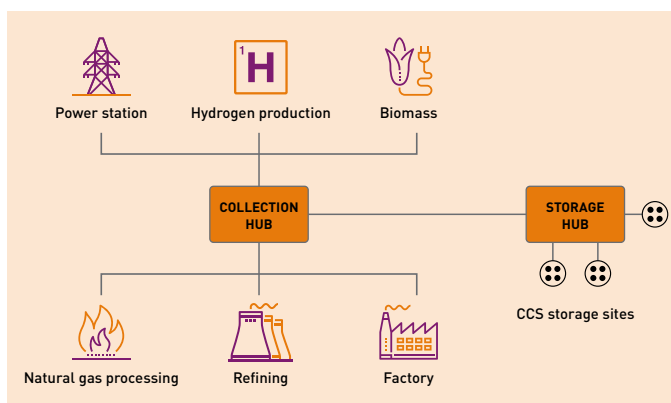
- Monitor and shape all regulatory developments which impact our industry in the EU, or risk spilling over to those abroad
- Delivering the European oil & gas industry's vision to EU policymakers and maintaining an open and constructive dialogue with them
- Make sure industry has a say in shaping both its own role, and that of oil & gas products in the European energy mix
- Raise awareness of industry's contribution to the EU's climate ambition, including through CC(U)S and the long-term role of natural gas in hydrogen form
- Develop new relationships between its Members and emerging oil & gas players in Europe

Work items for 2020

- European Green Deal
- Offshore Safety Directive
- Gas Legislative Package
- Methane Emissions
- Hydrogen from Natural Gas
- Carbon Capture and Storage
- Sustainable Finance

2019 Highlights

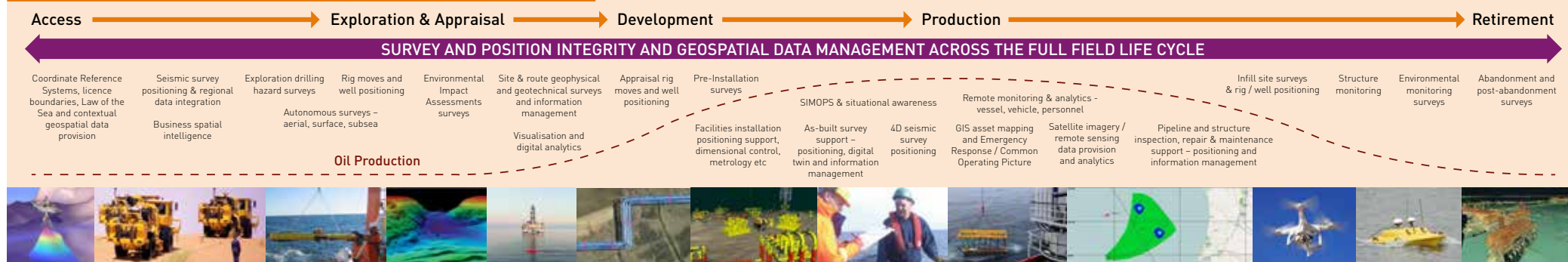
- HC BAT acceptable for industry
- Impact of Brexit on IOGP Brussels
- Coordination of CCS Report for EU Commission Gas Regulatory Forum
- Recognition of role of CCS by policymakers
- EU Elections
- Launch of 'H2 for Europe' study
- Exemption for use of microplastics in offshore drilling
- EIB Lending Policy
- Increase in resources for 2020-onwards



Chair's message

The EU is the world laboratory for climate policies and its spill-over effect is huge. Our industry is at a crossroads in the EU, and the IOGP Brussels office under the EU Committee leadership has the strategic role of showcasing our determination to supply not only the energy we need to fuel our economy today, but also the large-scale solutions to achieve deep emission cuts through technologies such as hydrogen and CCS. With the appropriate strategy and the right means, we can position the oil & gas industry as the EU's partner in this endeavour.

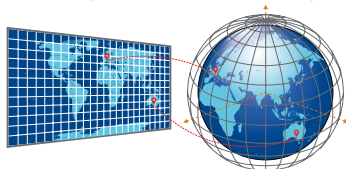
Geomatics support during the upstream oil and gas life cycle



What does the Geomatics Committee do?

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 data exchange formats, data models, and a global geodetic parameter dataset (EPSG), and liaises with industry associations.



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 ITRF
- 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 GN19 – Guidelines for GNSS positioning in the oil & gas industry

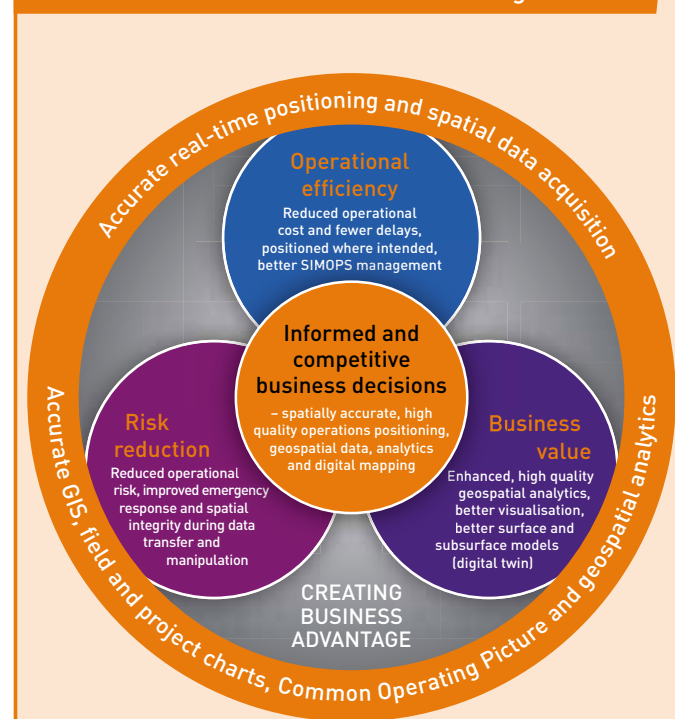
Work items for 2020

- Release of new EPSG Platform and new GIGS Platform
- Ongoing maintenance of IOGP's EPSG Geodetic Parameter Dataset
- Joint 10th Petrobras/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

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
- 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 GIGS documents and test data sets
- Major revision of EPSG supporting documentation
- Development of new 4D Seismic Guidance
- Cooperate with IMCA's Offshore Survey Division on revision of their current and planned guidelines, incl. joint IMCA/IOGP Workshop
- Cooperate with IPIECA Oil Spill Working Group Technical Stewardship TF on Common Operating Picture

Business value of Geomatics in the oil & gas sector



I. Purpose and integrated Health Management Systems

"We are passionate about the health and wellbeing of workers and communities, and work towards a responsible and caring culture that enables people to perform to the best of their potential"

Guidance: IOGP 343 – *Health Management in the Oil and Gas industry* (2019) provides the business case and organisational framework for delivering Health management in the O&G industry and introduces the three pillars of 'risk assessment', 'mitigation' and 'health care delivery'

Tools: Health Performance Indicators reported annually by IOGP and IPIECA Members (see IOGP 2018h for the most recent data)

II. Health risk assessment & opportunities

Provide basic scope and model for preventing illness from exposure in/near the workplace by conducting Health Risk Assessment and Health Impact Assessments

Guidance

IOGP 384 – *Health Risk Assessment* (2006, will be revised in 2020)
IOGP 548 – *Health Impact Assessment* (2016, plan to revise in 2022)

II. Health risk mitigation & management

Provide Health Committee position on impact and management of key health risks and opportunities

Guidance

Wellbeing (work in progress, 2019-2021)
Management of Worker Health Protection (work planned for 2020)
IOGP 445 – *Substance misuse* (2011, plan to revise in 2022)
IOGP 626 – *Managing Fatigue in the workplace* (2019)
IOGP 470 – *Fitness to work* (2012, update in 2021 including return to work)

III. Health care delivery

Purpose: provide framework for managing (acute) illness and chronic disease at the worksite including in remote locations

Guidance

Managing medical emergencies (worked planned to start in 2021-2022)
Primary Healthcare delivery (worked planned to start in 2021-2022)

Collaborating, promoting and partnering

I. Purpose and integrated HMS

- Present at SPE HSE 2020 promote committee work
- Partner with the Faculty of Remote and Rural Health Care to deliver syllabi and independent accreditation for training providers and individuals around the globe

II. Health risk assessment & opportunities

- Work with the IOGP EU Committee on issues such as Benzene Occupational Exposure Limit.

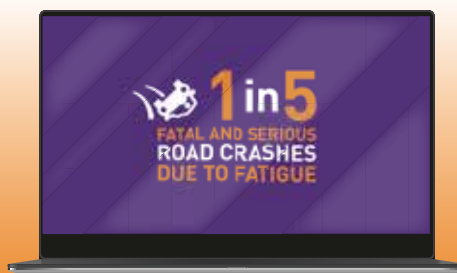
III. Health risk mitigation & management

- Commission a white paper on artificial light, its impact on alertness and other health impacts.
- Continue to support and contribute to the Building Responsibly initiative for the construction industry.



The Committee has a leadership role to

- Bring health to the forefront of everyday operation of our industry
- Collaborate internally and externally to identify, debate and prioritise relevant health issues of interest to its members and share best health practice
- Develop scientifically independent, evidence-based guidance and recommendations on a range of strategic health issues, including occupational, environmental and public health
- Provide adaptable tools to member health organisations meet their specific needs and opportunities
- Promote cross-industry harmonisation and digitalisation



Fatigue and road safety awareness video

Published since we last met





What does the Legal Committee do?

The Legal Committee deals with international law or comparative national law or international conventions, organisations and insurance matters. The Committee comprises specialists from IOGP member companies working in the areas of:

- Civil liability, insurance
- International conventions affecting E&P activities
- Contract law

2019 Highlights

- The Environmental Liability Directive (ELD) (2004/35/EC)
- The Offshore Safety Directive
- Energy Transition

Work items for 2020

The Legal Committee offers advice on major strategic issues (such as international sanctions) and on matters of association business, such as JIP agreements, Memorandum & Articles of Association. The Committee advises the IOGP EU Committee on issues that are dominated by legal considerations, such as transparency, financial security and environmental liability.

Work streams for 2020 and beyond

In 2020, the Legal Committee will be further working with the EU Committee on the legal implications of Brexit, on regulation and CCS development, and on data sharing.

Chair's message

Legal committee contributes pro actively to establishing common understanding of rules and regulations necessary for IOGP to execute on its ambition on behalf of the members



What does the Metocean Committee do?

- Provides a focal point for communicating industry's requirements to global and regional metocean data archiving, data analysis and metocean forecasting organisations
- Leads the offshore industry in applying new metocean techniques in offshore structure design and operations
- Provides critiques of existing and proposed rules and regulations of government agencies and certification societies
- Develops relevant metocean standards in safety and engineering, and metocean operational standards to reduce weather related risk
- Provides guidance on how to understand and quantify risks associated with climate change
- Provides a forum for the discussion of on-going regional metocean projects relevant to the oil industry and, where appropriate, plays a role in initiating such projects to be undertaken by industry and/or governments

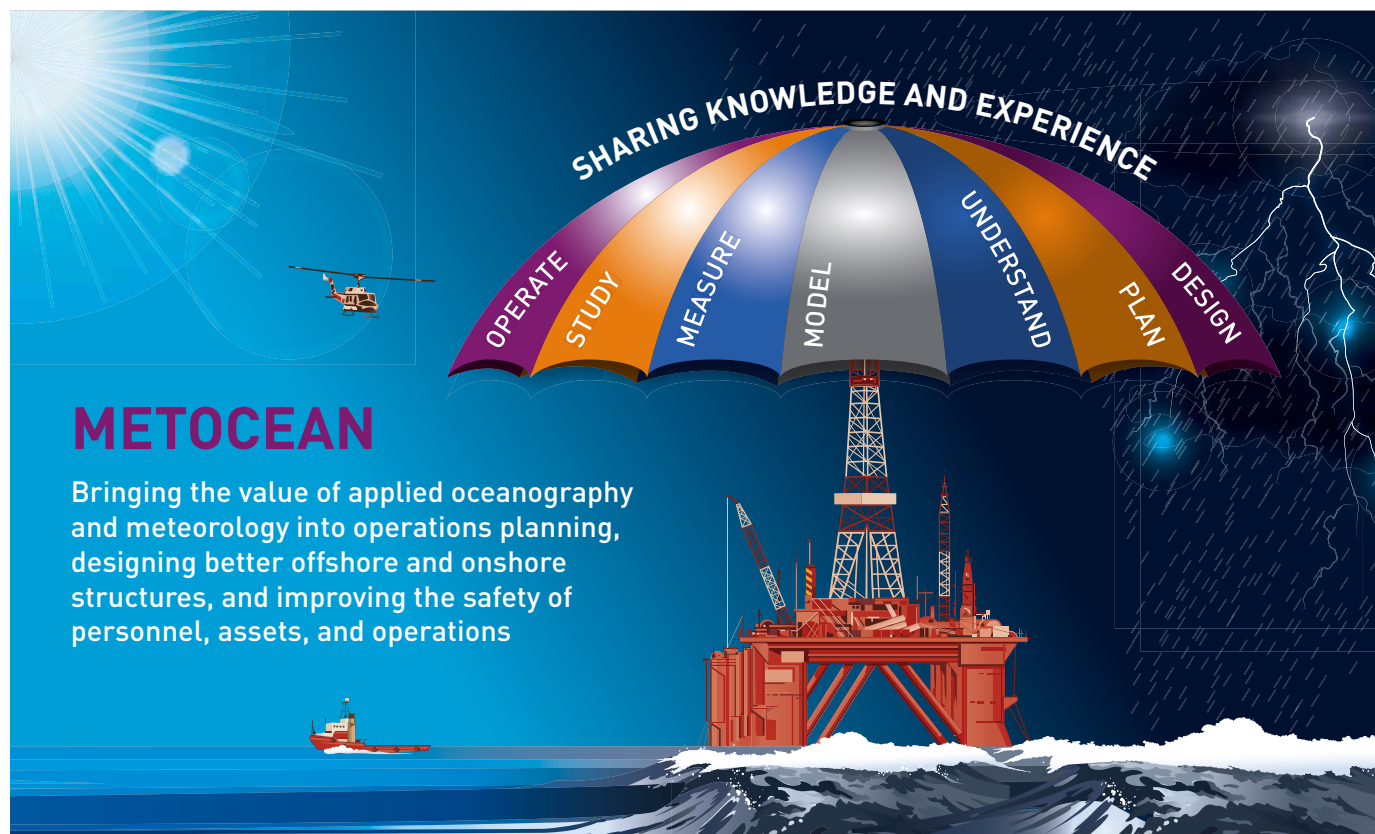
2019 Highlights

- Delivered seminar on Extra-Tropical Storms (Sep 2019, London)
- Established two new Networks – West Africa Metocean and Australia Metocean – to tackle weather related challenges for operations in these regions
- Worked closely with IPIECA's Adaptation and Resilience TF with objective to align projects of mutual interest
- Provided recommendation for revision of IOGP Report No. 447: HSE guidelines for Metocean surveys including Arctic areas



METOCEAN

Bringing the value of applied oceanography and meteorology into operations planning, designing better offshore and onshore structures, and improving the safety of personnel, assets, and operations



Work items for 2020

- Develop recommendations for how IOGP members should consider the potential physical impacts of climate change on design and operations (work initiated by the 2018 IOGP/JCOMM/WCRP "Our Future Climate" workshop)
- Improve contact between industry and academia via establishing a Climate Change Network and dedicated workshops
- Review opportunities to share industry and publicly-available meteorological and oceanographical data in Australia and West Africa regions (via Metocean Networks)
- Identify opportunities to improve the quality of weather forecasts used for the offshore oil and gas industry (via Weather Forecast TF)
- Develop the industry guideline on best practices and configurations for ADCP
- Support of active Metocean JIPs and work to align new JIPs within the IOGP framework
- Collaborate with JCOMM on planning 2nd Wave Measurements Workshop.
- Provide support to revision of ISO 19901-1:2015: Specific requirements for offshore structures – Part 1: Metocean design and operating considerations, and ensure alignment with API RP 2MET (under Standards C.)
- Coordinate with IPIECA's Adaptation and Resilience TF within areas of mutual interest

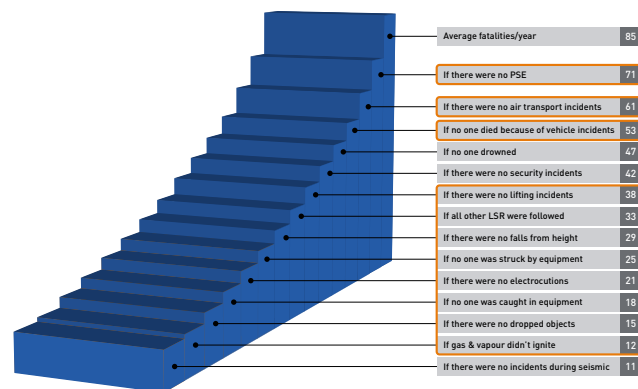
Active projects and studies supported

- **Australian Tropical Cyclones Reanalyses:** Aiming to improve the historical record describing tropical cyclone location, intensity and structure
- **Australian Tropical Cyclone Forecasting Improvements:** Aiming to improve forecasting of cyclone formation and estimation of wind and wave impacts from tropical cyclones in the 10-day forecast window for the Australian region.
- **CASE:** Developing new tools and technology for characterization of deepwater currents in the Gulf of Mexico
- **DEEPSTAR:** Technology development forum focused on creating value in the development of deepwater assets
- **EMMET (proposed JIP):** Develop atmospheric and wave models for offshore North Basil (towards Trinidad and Tobago) that can be used for offshore design and operation planning (hindcasting)
- **LOADS:** Extreme wave modelling to provide practical recommendations for the wave heights and crest heights to be used in (floating) platform design
- **LOWISH:** Depth-limited shallow-water waves modelling
- **NEXT:** North Sea and Norwegian Sea long-term metocean hindcast studies including wave and wind modelling
- **NFAST:** Nonlinear internal waves (solitons) modelling
- **REMO-H (proposed JIP):** Working closely with Academia (Brazil) on developing oceanographic models that can be used for environmental licensing and offshore design (hindcasting)
- **SEAFINE:** Development of wind and wave hindcast on a fine grid of the southern part of the South China Seas

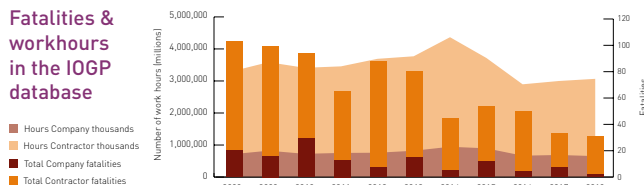


What does the Safety Committee do?

Promotes the integration of safety in industry, currently focused on eliminating fatalities through Project Safira



Fatalities & workhours in the IOGP database



With contractors undertaking ~80% of the hours worked in 2018, they continue to contribute to the majority of reported fatalities (29 of 31).

The Safety Committee activities often aim to develop standardised ways of working safely which can lead to:

- Simplified training
- Improved understanding of critical controls to prevent incidents
- Consistency in communicating experience and lessons learned
- Reduced complexity and cost as contractors move from operator to operator / worksite to worksite.

Thank you to all Members contributing to our data and reporting:

- Safety Performance Indicators
- Process Safety Events
- Aviation accidents
- Motor vehicle crashes

2020 work items

- Promote the IOGP Life-Saving Rules as a common industry set
- Complete the work of simplifying and operationalising IOGP Report 590 – Aviation management guidelines
- Publish a set of Process Safety Fundamentals targeted to help the workforce identify and raise the issues that have led to fatal process safety events and other Tier 1 process safety events with a high injury potential that have been historically reported to IOGP
- Revise IOGP 365 – Land Transportation Recommendation Practice and update the Journey Management guidance in collaboration with the Security Committee
- Partner with a broad range of stakeholders on harmonising Contract HSE Management (IOGP 423) to collectively deliver lasting improvements in safety and efficiency

Learning to prevent incidents

This new 2020 project will focus on how to learn, not just from incidents, but from successful work.

- How do we learn from work that goes “okay”?
- How do we take advantage of good practice from work that goes “better than expected”?
- What can we gain from verification, assurance and other leading information?
- What are the realistic options for putting this into practice in operations?



It will also promote the continued relevance of IOGP Report 552 as a sound foundation for systematic learning, and explore the human and organisational factors that support it.

Working with industry partners

Continue to work with Global NCAP on the promotion of 5-star rated light vehicles, and develop a crash test protocol and programme for buses/coaches/people carriers, which represent a large exposure for our workforce.

Through a Joint Industry Project, IOGP Members are accelerating initiatives to improve offshore helicopter safety. The project is open to new participants, and is currently funding initiatives such as:

- Evidence-based Training for pilots
- Human Hazard Analysis Training for designers
- Automatic Dependent Surveillance - Broadcast (ADS-B) Trial

Of the 27 fatal incidents reported in 2018, analysis shows at least 85% of the 31 lives lost might have been prevented if one or more IOGP Life-Saving Rules had been followed.



9 Rule in a minute videos

“We have to do something before we have a bad accident” says the VP. “It seems like our people are taking risks, making mistakes and simply not doing what they are supposed to do.”



There is silence, at the end of the table the engineering manager cautiously says, “I wonder if it’s something we are doing?”

Now that is a very good question...

IOGP Report 453 collates recent insight and experience to help leaders develop ideas for practical action to shape the culture and success of their organisation.





What does the Security Committee do?

The Security Committee defines SECURITY as the identification, evaluation, and management of threat and risks arising from intentionally directed actions against people, assets, information, operations and reputation regardless of the cause.

The primary objective of security is to provide a safe and secure operating environment by mitigating security threats to people, assets, information, operations, and reputation. This is achieved by implementing robust threat and risk assessment processes and minimizing the impact from security-related incidents, should they occur.



Chair's Message

The global threat remains dynamic and difficult to predict with increasing connectivity requiring closer monitoring and quicker assessments of evolving situations.

During 2019, the Security Committee continues to learn from previous security events, better share information as a group and link up with other industry sectors (Aviation and Maritime this year).

Given that the majority of IOGP reported security incidents relate to personnel movements in remote/higher threat locations, we are also looking at current IOGP journey management guidance to include security considerations.

2019 Highlights

Managing security risks is an essential business activity within the global upstream oil and gas industry. The range of security threats posed varies in scope and intensity and companies should ensure they have comprehensive security awareness and knowledge. Without consistent security risk management strategies, companies may be exposed to an increasing level of security instability and unpredictability.

Cooperation and sharing of information within the industry is crucial to help companies collectively respond to emerging threats and, importantly, learn from incidents where things have gone wrong. The Security Committee addresses common concerns and developing/sharing knowledge of security issues and lessons learned from previous incidents in their meetings.

In 2019, the Security Committee was proud to deliver a number of work products that provide value for members and the industry:

- Update of Report 308: Response to demonstrations at company premises
- Update Report 496: Guidelines for security planning in remote locations – Members Only
- Insider Threats Mitigation Guideline



Work items for 2020

Security incident reporting

IOGP's Project Safira identified that security related incidents are ranked as the 5th most common cause of fatalities in Upstream Operations. Implement and roll out a security incident reporting form to capture learnings and identify areas of focus for the committee

Journey management

Liaise with the Safety Land Transport Subcommittee to review Journey Management procedures and develop a security specific Journey Management guideline

Travel security

Develop a series of infographics for additional travel recommendations and cultural awareness that may be required given the evolving global security threat environment

Global threats

Discuss current and emerging Global Threats and what this means, how to combat these threats and manage the risks

Sharing of security incidents

Continue to share lessons learnt from security incidents within the industry and identify common themes from sharing that can influence the Security Committees ability to allocate resources against specific industry issues

Security publications

Review and update IOGP security publications



Digitalisation

JIP33 delivers

API-ISO standards

Information revolution



2019 Highlights

- Engineering Leadership Council actively engaged
- JIP33 Phase 2 delivered the last of 14 common procurement specifications
- JIP33 Phase 3 Participation Agreement signed with 12 major operating companies around the globe
- JIP33 scale up plans agreed
- JIP35 for Offshore Structures work pushed to deliver common specification
- Standards Solution added more new work items and delivers draft ISO standards
- Revision of IEC 61892-series "Mobile and fixed offshore units - Electrical installations" published
- JIP30 continued to support development of ISO Offshore Structural standards
- Working MOU with Unified Bulk JIP
- Worked to transfer CFIHOS to IOGP governance
- Established Offshore Cranes TF to work with API and CEN improving their standards
- Established Global Equipment Hub TF to develop system to share equipment information
- Requirements Digitalisation TF delivered guideline for improved standards writing
- Signed MOU with API to improve collaboration

What does the Standards Committee do?

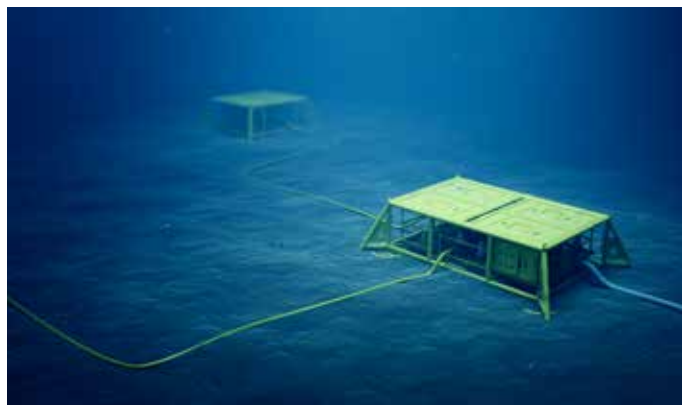
- Harmonises operator specifications through JIP33 and JIP35 creating joint specifications that can replace individual company specifications
- Supports the development of international standards for our industry, identifies areas where new standards are required, works with standards bodies and regulators globally
- Operates the Standards Solution, which provides a legally compliant platform for international standards to be developed
- Works with the Unified Bulk JIP to develop international standards
- Liaises with other IOGP committees on standards
- Supports 7 subcommittees, several task forces and joint industry projects

Work streams for 2020 and beyond

- Continue JIP33 work
- Provide engineering leadership
- Support international standards development
- Maintain Standards Solution
- Push for alignment on preferred standards
- Support and work on information standards
- Maintain close contact with standards organisations
- Network to build excellence
- Experts experience sharing
- Digitising requirements

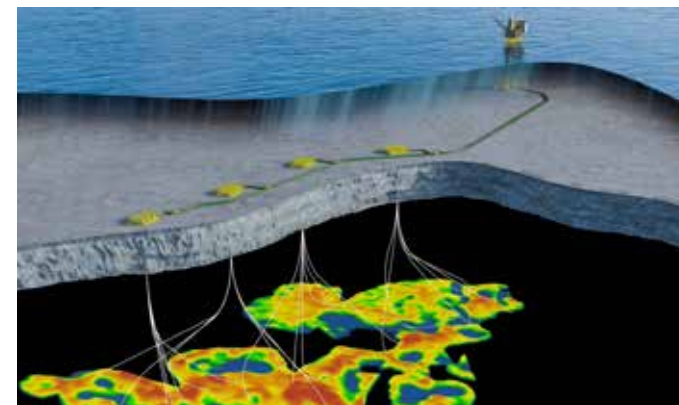
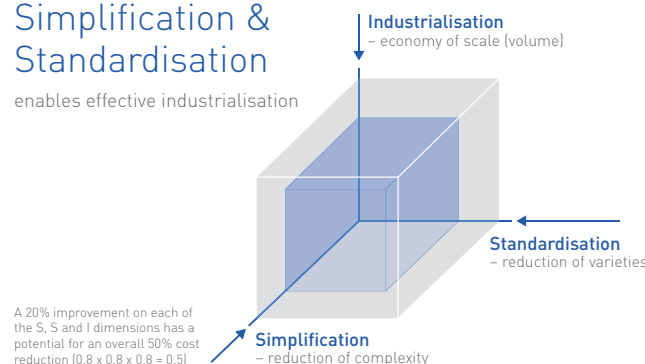
Work items for 2020

- Step up JIP33 to deliver 35-40 more joint specifications
- Work with JIP35 to deliver 12 joint structural specifications
- Work with operating companies to adopt joint specifications
- Work to improve information standards
- Promote IOGP's position and key messages on standards confirming IOGP's role
- Communicate strategically on value of standardisation
- Work with standards organisations to update their standards
- Maintain the Standards Solution to support the development of International Standards
- Collaborate with other IOGP committees
- Step up digitising requirements



Simplification & Standardisation

enables effective industrialisation



What does the Subsea Committee do?

The purpose and vision of the Subsea Committee is to improve HSSE (Health, Security, Safety, Environment) and contribute to value creation with a focus on two priority areas with two supporting themes:

Priority area: HSSE

- Supporting theme: performance improvement including production efficiency / lifetime extension

Priority area: SSI (Simplification, Standardisation, Industrialisation)

- Supporting theme: technology qualification

Chair's Message

It is time for the subsea industry to look into, explore and harvest from the possibilities Subsea Digital can provide for the industry. On this basis, the Committee arranged a workshop with the main EPC+I (Engineering, Procurement, Construction, Installation) contractors in October focusing on topics like field planning tools, automated surveying and condition monitoring, digital twin and documentation.

We believe these new tools and ways of working will aid in simplifying, standardising and industrialising the way the industry works enhancing our Health, Environment and Safety standards while improving our business proposition.

Work items for 2020

- Guideline for Qualification Test Methods for Polymer Materials used in Flexible Pipe Structures**
Recommended practice for the large-scale qualification methods for polymer materials used in flexible pipe structures
- Flexible Pipe Integrity Blind Spots Workshop**
Collaborate with industry on integrity management and inspection techniques for the flexible pipe locations that we cannot easily inspect
- Thermo-Composite Pipe (TCP) Technology Workshop**
Review and assess technology qualification gaps in DNV-ST-F119 for Thermo Composite Pipes
- Digital strategy for Subsea**
Map out what work has been carried out in the digital word regarding subsea and identify possible areas of collaboration or areas of focus
- HSE lessons learned database**
Set up a database for capturing the lessons learned and take measures to prevent and mitigate
- Emergency Preparedness**
Monitor the development and potential use of subsea emergency response equipment and procedures in close dialogue with the WEC's Subsea Well Response & Source Control Subcommittee
- JIP33 Phase 3**
Support any Subsea Specifications which are in the JIP33 Phase 3 Program

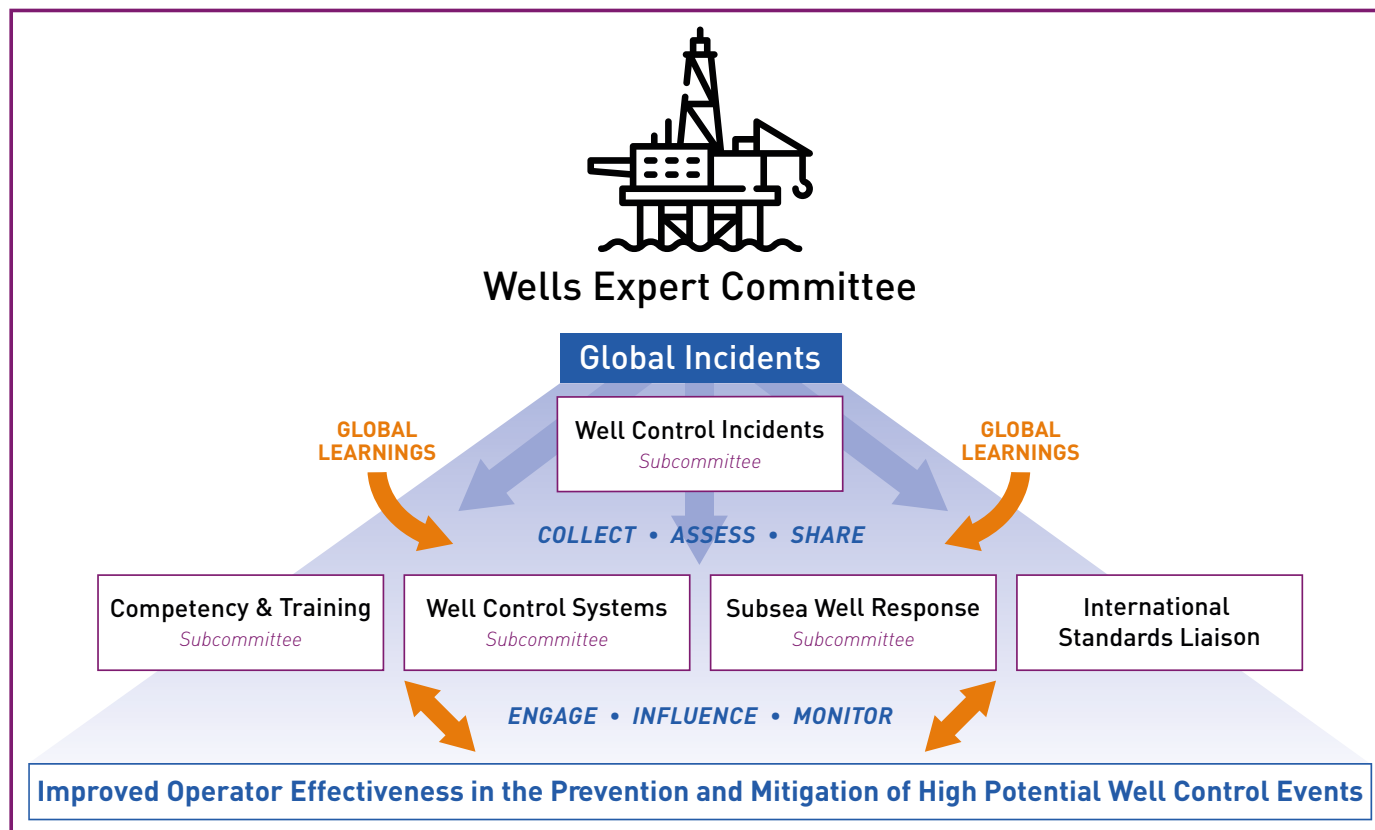
2019 Highlights

The Committee continues to work to achieve sustainable changes and improvements in the industry - operators and supply chain - to further increase efficiencies. Ongoing initiatives will be supported as applicable, and new initiatives may be proposed/supported to further improve the performance of the subsea industry.

The Flexible Pipes Subcommittee provides a forum for international operators to share knowledge and experience of flexible pipe operation, integrity management, and service life assessment to continuously reduce safety & environmental risks and improve overall lifetime costs. IOGP report 623: Lifetime Extension of Flexible Pipe Systems is expected to be published Q42019.

The purpose of Subsea Life Extension is to maximise economic recovery from subsea assets using existing infrastructure whilst maintaining acceptable integrity and risk levels. As our installed subsea infrastructure increases and ages, and there is a greater focus on the verification of fitness for service.

The Committee held a Life Extension workshop and will continue to examine the drivers for Life Extension and evaluate the importance of choice of assessment processes.



Work items for 2020

Well Control Incidents Subcommittee

- Collect, analyse, and capture lessons learned from WCIs and near misses and make recommendations to the WEC
- Bi-Annual Well Control Incidents Workshops for IOGP Members
- Well Control Incidents Videos based on well control event submissions

Competency and Training Subcommittee

- Assess the impact of Emerging Technologies on wellsite competency
- Participation in wellsite Human Performance initiatives

Well Control Systems Subcommittee

- Continued Monitoring of WCI & BOP JIP issues for Learnings
- Subsea Well Intervention Systems reliability project

Subsea Well Response Subcommittee

- Cataloguing of Source Control Exercises
- Knowledge Sharing Workshop
- Guidelines for modeling uncontrolled well flow during blowouts using Computational Fluid Dynamics (CFD) methods
- Response Time Model Peer Review / Assurance
- Review of Training Material
- Source Control Competency

Well International Standards Liaison

- Maintain contact between the WEC and Standards Committee
- Follow up ongoing work in API and ISO

What does the Well Expert Committee do?

The Wells Expert Committee (WEC) was established in July 2011 to be a global voice for well operators and a relevant and effective technical authority on the prevention and mitigation of high consequence well control events.

The purpose of the Wells Expert Committee (WEC) is to improve well operators' effectiveness in the prevention and mitigation of high consequence well control events throughout the well life cycle, but particularly during well construction and well work, recognising that such events pose the highest global risk to safety, to the environment, and to the industry's license to operate.

Chair's Message

IOGP's Well Expert Committee (WEC) enjoys the participation and support of well experts from operators and service providers across the globe. Our focus remains on the prevention and mitigation of high consequence well control events. To achieve this, the WEC continues to analyse well incidents, share lessons and good practices, advocate harmonised risk-based standards, and promote training and systems that enhance competency and equipment reliability. The WEC is constantly evolving to provide value to IOGP members and the industry as activity level, well type, and technology change in our industry. While a strong focus remains on higher risk offshore activity, prevention and mitigation of well control incidents occurring in unconventional land drilling activity is a priority that will shape upcoming work.

2019 Highlights

In 2019, the WEC was proud to deliver a number of work products:

- Report 485: Standards and guidelines for Well Integrity and Well Control
- Report 594: Source Control Emergency Response Planning Guide for Subsea Wells
- Report 625: Prevention of Subsea BOP Control Tubing, Hoses, and Fittings Failures
- Report 628: Recommendations for Enhancements to Well Control Drills in the Oil and Gas Industry
- 2 Videos to feature WCI Alerts and promote competency
- 2 Well Control Incident Sharing workshops for IOGP Members

Committee Coordination

[Correct as November 2019]

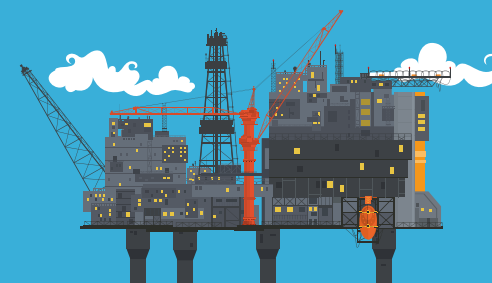
Standing Committee	Committee Chair(s)	Member Company	Secretariat Coordination	
Arctic	Catherine Jahre Nilsen ¹	Equinor	Wendy Brown	Felicite Robertson
Communications	Alessandro Torello	Eni	Ritva Westendorf-Lahouse	Danny Walsh
Decommissioning	Win Thornton	BP	Wendy Brown	Felicite Robertson
Environment	Charles Wood / Peter Oliver	Shell / Chevron	Wendy Brown	Sureiya Pochee
EU	Olav Aamlid Syversen	Equinor	François-Régis Mouton	Christian Schwarck
Geomatics	Frederic Auger	Total	Lucyna Kryla-Straszewska	
Health	To be elected ²		Olav Skår	Mariana Carvalho
Legal	Catherine Marchand Støle	Equinor	Wendy Brown	Felicite Robertson
Metocean	James Stear	Chevron	Lucyna Kryla-Straszewska	
Safety	David Jenkins	BHP	Olav Skår	Mariana Carvalho
Security	Charlie Weeks	ExxonMobil	Olav Skår	Diana Khatun
Standards	Richard Mortimer	BP	Alf Reidar Johansen	Diana Khatun ³
Subsea	Roald Sirevaag	Equinor	Olav Skår	Diana Khatun
Wells Expert	Jason Gahr	ExxonMobil	Olav Skår	Diana Khatun
Management	Fawaz Bitar	BP	Gordon Ballard	Ed Walsingham
Engineering Leadership Council	Graham Henley	Shell	Alf Reidar Johansen	Ed Walsingham

¹ The current Chair is stepping down at the end of 2019. The process for selecting a new chair and vice-chair is underway and those positions will be filled by January 2020

² At the time of press, Health Committee Chair elections were underway. The new Chair is to be appointed by the end of 2019

³ The current Standards Manager position is vacant and being covered by Diana Khatun until further notice

IOGP in Numbers



FORMED IN
1974



3 OFFICES
WORLDWIDE

7 OPERATING
REGIONS



1987

published first report on
**SAFETY PERFORMANCE
INDICATORS**

14
COMMITTEES



Arctic



Communications



Decommissioning



Environment



EU



Geomatics



Health



Legal



Meteorology



Safety



Security



Standards



Subsea



Wells

40+

NUMBER
OF REPORTS
PUBLISHED
IN 2019



35

Subcommittees

39

Task Forces

8

Networks

2010

LAUNCHED GLOBAL
INDUSTRY RESPONSE GROUP (GIRG)



1700+
PARTICIPANTS
ON COMMITTEES

REPRESENTING

80+

MEMBERS
WORLDWIDE

INCLUDING

60+

UPSTREAM
OPERATORS

PRODUCING

40%

OF THE WORLD'S
OIL AND GAS

9

LIFE-SAVING RULES



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