

International Regulators' Forum Annual General Meeting 4-6 October 2022 Holmenkollen Park Hotel, Oslo Norway

Participants:

Country	Participants	Regulator
Australia	Stuart Smith (Chair) Derrick O'Keeffe Graeme Waters	NOPSEMA NOPSEMA NOPTA
Brazil	Raphael Moura	ANP
Canada	Scott Tessier (Teams) Paul Alexander Stuart Pinks	C-NLOPB C-NLOPB C-NLOPB
Denmark	Bénédicte Crapez Mikkel Laurentzius	DWEA DWEA
Ireland	Ben Browne Paul Nagle	CRU CRU
Mexico (Partly on Teams)	Dieo Armando Torreas (Teams)	ASEA
Netherlands	Theodor Kockelkoren Rob van Elsen	SSM SSM
New Zealand (Partly on Teams)	Donna Ellis (Teams) Nick Dawtry (Teams)	WorkSafe New Zealand WorkSafe New Zealand
Norway	Anne Myhrvold Finn Carlsen Linn Iren V Bergh Tove Østrem	PSA PSA PSA PSA
United Kingdom	Chris Flint Dave Walker Andrew Taylor	HSE HSE OPRED
United States	Bryan Domangue Stacey Noem	BSEE BSEE
Special Guests	Lars Nydahl Jørgensen Olav Skår	IADC IOGP



MINUTES

WELCOMING REMARKS

Stuart Smith (NOPSEMA – Australia), Chair of the Management Committee (Chair), delivered opening remarks and welcomed International Regulators' Forum (IRF) Members to the 2022 Annual General Meeting (AGM). All members were joined in their appreciation of Norway's Petroleum Safety Authority (PSA) in hosting this year's event in Oslo, Norway from 4 to 6 October 2022. The meeting was attended by offshore petroleum health and safety regulatory leaders from each of its 11 member countries – Australia (Chair), Brazil, Canada, Denmark, Ireland, Mexico, the Netherlands, New Zealand, Norway, the United Kingdom, and the United States. (IRF contacts: Country Profiles and Contacts | IRF (irfoffshoresafety.com)).

Although the Covid pandemic had prevented in-person meetings of the IRF in 2020 and 2021, it was noted that communications between IRF members had become more frequent and substantially more effective as a result of the application of virtual technology. Based on this experience, the 2022 AGM included in-person and virtual participation.

The Chair reflected on the opportunity the AGM afforded IRF members to collectively consider evolving regulatory best practices and knowledge in the context of the IRF's focus area of Global Offshore Safety. This would be done through discussion of the challenges faced, sharing of case studies and lessons learned, and the development of initiatives through industry engagement to reduce risks to the offshore workforce.

Members noted the geopolitical and energy security situation in the EU, UK and Norway.

A Safety Moment was provided by NOPSEMA. The events surrounding the survival of all passengers and crew in the Hudson River (2010) ditching incident were discussed in the context of the importance of assessing and understanding underlying factors to develop key learnings. This incident and its learnings could be applicable to our offshore industry where extensive travel over water occurred. The transparency of the investigation, its learnings and the open ability to share this rich information could be a model to improve safety in the offshore industry.

1&2 SESSION 1 & 2 - COUNTRY HIGHLIGHTS

Members provided updates as pre-reading materials, focusing on Country Highlights, and Current or Possible Future Roles in Regulating Offshore Renewables.

Country Highlights

Key discussion topics focused on the core issue of the prevention of harms in the offshore oil and gas industry across the whole asset lifecycle. As a result, IRF members call upon the industry to ensure worker physical and psychological safety, proper ongoing and long-term asset integrity through effective maintenance management, prevention of loss of containment events, and effective and timely decommissioning. Industry is expected to meet all local requirements with respect to the timely planning of well abandonment and decommissioning, safety, environmental protection, and financial responsibility.

Other items of interest included (not necessarily applicable in all jurisdictions):

- The Covid pandemic appeared to be largely controlled in many areas, albeit with monitoring continuing. Consequences of the pandemic are presenting challenges including degraded assets (due to deferred maintenance or inadequate investment), supply chain constraints and the availability of sufficient competent personnel. Industry are expected to anticipate and address these challenges with an oversight role for regulators.
- Themes from the country updates included examples of asset integrity, human factors, executive oversight and
 accountability, energy security, cyber security, offshore renewables, carbon capture and storage, late life assets
 and decommissioning.



- Of particular note was the potential expansion of the IRF's remit to include engagement over offshore renewables safety, plus the viability and implications of transitioning offshore petroleum assets into carbon capture and storage or renewables projects.
- It was noted that the HSE UK have published a cyber security guideline on their website which may have application in other jurisdictions: https://www.hse.gov.uk/eci/cyber-security.htm
- The Netherlands also noted that it is hosting a virtual session on well abandonment which is open to IRF members. This opportunity was welcomed and the value of additional virtual information sharing events between IRF members and other industry groups was highlighted. It was recognised that the global response to Covid had significantly improved virtual communications, resulting in opportunities for more regular and more valuable exchanges of information that could make a difference. Whilst face-to-face meetings were seen to be of enormous value, there is also a place for more frequent virtual engagements which help to build productive relationships.
- <u>Current or Possible Future Roles in Regulating Offshore Renewables:</u>
 It was noted that renewables will be an important regulatory role for many IRF members into the future.

3 SESSION 3 – IRF PERFORMANCE INDICATORS

- C-NLOPB (Canada) presented the results from the IRF Performance Indicators 2021.
- Key points raised:
 - The data included a comparison of the 2021 data to previous years since 2007 when the project first began.
 The statistics presented included a 3-year moving average in addition to the KPI and Linear trend.
 - All IRF members had submitted some data, however not all IRF countries were able to submit full data sets.
 - It was noted that there are issues with inconsistent or under-reporting from industry or the timing of reporting. As such, whilst the data may contain some variability in quality it was seen as helpful in communicating safety issues and the identification of longer term trends.

The opportunities and challenges of leading indicators for safety was discussed.

4 SESSION 4 – DECOMMISSIONING AND LATE LIFE ASSETS

- A presentation was delivered by BSEE (USA) regarding decommissioning in the USA to prompt a discussion of comparisons with other jurisdictions.
- The key points raised included:
 - Industry rationalization, issuance of decommissioning orders, the current backlog of decommissioning obligations and the merits of stepping up enforcement.
 - While industry has made progress in recent years to address decommissioning obligations, there is a large amount of infrastructure remaining to be decommissioned.
 - Discussion was held on the challenges with transitioning existing oil and gas infrastructure to new services for renewables or carbon capture and storage. It was noted that there are delays in the plugging and abandonment of wells which can be partially addressed through industry collaboration.

5 SESSION 5 – TRANSITIONING OF OFFSHORE ASSETS

- Discussion during this session related to issues such as the viability and implications of transitioning offshore
 petroleum assets into carbon capture and storage or renewables projects.
- The key points discussed included:
 - Existing standards are being used to assess the merits of using pre-existing oil and gas platforms with renewables. Those standards will need to be updated along with the regulations to better define the process.



- There are challenges related to
 - legacy wells where depleted fields are to be used for carbon capture and storage. Wells that have been
 plugged and abandoned, for example, may have cement that degraded from exposure to CO2.
 - It is important to assess the quality of the preexisting wells and understand challenges related to using depleted gas fields for storing carbon dioxide.
 - Industry and regulators need to have a long-term perspective with regards to transitioning of offshore
 assets into carbon capture and storage or renewables assets. In the case of carbon capture and storage,
 for example, the reinjected carbon dioxide needs to be trapped in perpetuity as liability will often rest with
 governments.
 - Going forward, it was proposed to use the IRF forum to share experiences related to using preexisting facilities for transportation and storage of carbon dioxide.
 - It was noted that there might be a need for establishing a technical IRF sub-group for sharing experiences
 related to carbon capture and storage.

6 SESSION 6 – INTERNATIONAL FORUM UPDATES

- IRF Members provided updates from the International Upstream Forum (IUF), International Offshore Petroleum Environmental Regulators Forum (IOPER), and the Global Offshore Wind Regulators Forum (GOWRF).
- There was substantial commonality in the topics discussed in the different forums (such as decommissioning, renewables and carbon capture and storage) but the perspectives often differed according to responsibilities of the relevant forum.
- It was noted that the IUF and IOPER have scheduled their AGMs to be held in Perth during 2023 to coincide with the IRF AGM and Conference. Both Forums showed interest in attending the IRF Conference and holding a joint session together with IRF on Monday 2 October 2023.

7 SESSION 7 - POTENTIAL REMIT EXPANSION INTO OFFSHORE RENEWABLES SAFETY

Discussion was held on the merits and implications of expanding the IRF remit following a presentation by NOPSEMA. A paper had been provided to IRF members as a pre-read. This contained a discussion and options for the meeting to consider.

The following items were reviewed:

- Option 3 was agreed which involves retaining the existing scope and membership requirements for the IRF and
 establishing a Sub-Committee to enable input from regulators that have offshore renewables responsibilities but
 no offshore oil and gas industry.
- It was noted that health and safety responsibilities for renewables was broadly interpreted to include consideration of issues such as design, construction, operations, executive oversight and accountability, process safety, the impact of organisational culture and, ultimate decommissioning as they relate to safety outcomes.
- An Implementation Plan should be developed for the Sub-Committee which should be brought back to IRF members for approval.

Action: NOPSEMA–The existing offshore renewables safety working group (and any additional volunteers from the IRF) should develop an Implementation Plan for the Sub-committee.



8a SESSION 8a –INTERNAL DISCUSSION ABOUT PROBLEM STATEMENTS AND ENGAGEMENT WITH INDUSTRY

- The IRF Problem Statement Strategy Questionnaire Results were presented.
- The questionnaire was conducted during August September 2022 to seek feedback on IRF members' experiences on the problem statement strategy, process and implementation to date.

Key points raised:

- IRF members continue to support the Problem Statement approach and would like increased engagement on progress.
- Consideration should be given to inviting additional members onto the Problem Statement Oversight Working Groups.
- More details regarding the Problem Statements would increase involvement and ownership.
- Industry should retain responsibility for providing solutions to manage risks identified by the Problem Statements.
- The IRF should continue to provide oversight for the Problem Statements and follow up work done by the industry.
- It was noted that an increased emphasis on establishing structured workplans will be required in future.

8b SESSION 8b –INTERNAL DISCUSSION ABOUT PROBLEM STATEMENTS AND ENGAGEMENT WITH INDUSTRY

Discussion was held over future Problem Statement opportunities and the selection methodology

- Suggestions for new Problem Statements included:
 - o Asset integrity and aging FPSOs
 - Risk awareness / risk management
- It was noted that these topics need to be further matured and new Problem Statements should only be added when existing ones move into implementation phase.
- Feedback from the IOGP Environment, Spill Response & Safe Operations Workshop
- Raphael Neves Moura, ANP provided feedback from a two-day workshop on "Environment, Spill Response, and Safe Operations" held in Rio de Janeiro, Brazil on 13th and 14th June 2022.
- This workshop explored how risks are responsibly managed by industry. A session on the IRF Problem
 Statement was also held with participation from the International Oil and Gas Producers (IOGP) and the
 International Association of Drilling Contractors (IADC).

9 SESSION 9a – DISCUSSION WITH INDUSTRY ASSOCIATIONS

Representatives of the International Oil and Gas Producers (IOGP) and the International Association of Drilling Contractors (IADC) joined sessions on 5 October 2022, where industry trends in safety were discussed. The IRF noted that more frequent and effective engagements with IOGP and IADC had developed in recent years as a result of the IRF strategy to address risk focus areas (see IRF website <u>Problem Statements (irfoffshoresafety.com)</u>). As a result, industry has developed targeted guidance designed to reduce the risk of well control incidents resulting from uncertainties in subsurface pressures. The focus areas of investigations and learning from incidents, and the growing area of digitalization are noted as programs under development. Further opportunities for safety risk reduction were discussed.

- The Problem Statements and future actions were also discussed with key points raised including:
 - o The prevention of well control incidents has progressed well and is now in the implementation phase.
 - Investigation quality / sharing, and application of learnings has progressed according to the plan.
 - o Digitalization is also progressing. This Problem Statement has been narrowed down following input from



IRF members and industry.

- It was noted that the good progress has been made on the Problem Statements which should be communicated on website.
- lt was noted that we need to have an increased emphasis on establishing structured workplans in future.
- o It was suggested that the term 'Problem Statement' should be changed to 'Opportunity Statement' as this is more in line with the language used by the industry and promotes a more positive tone.
- It was noted that competence needs to be reflected in plans for tackling challenges related to improving investigations and learning.
- Action IRF Oversight Groups are to provide briefing packs for each of the three Opportunity Statements (as posted on the IRF website). These should be updated and submitted to Stuart Pinks, C-NLOPB (stuart.pinks@gmail.com) by 24 October 2022.
- Action: Finn Carlsen/Linn Bergh PSA to update the Digitization Opportunity Statement and submit to Stuart Pinks, C-NLOPB (<u>stuart.pinks@gmail.com</u>) by 24 October 2022, for subsequent Management Committee approval.
- **Action**: Stuart Pinks CNLOPB to circulate the updated Digitization Opportunity Statement for comment and then post it on the IRF website during November 2022.
- Action: Stuart Pinks, C-NLOPB / Derrick O'Keeffe, NOPSEMA to draft and present Terms of Reference for IRF the Oversight Groups for approval at the IRF mid-year meeting during May 2023.
- Action: Stuart Pinks, C-NLOPB / Derrick O'Keeffe, NOPSEMA to draft and present a process for identifying and selecting future Opportunity Statement topics for approval at the IRF midyear meeting during May 2023.
- **Action**: Olav Skår, IOGP / IADC to provide an overview of relevant topics related to digitalization and cybersecurity in following-up the Digitization Opportunity Statement
- Action: Olav Skår, IOGP should establish a common meeting plan to strengthen follow-up regarding the Opportunity Statements

10 SESSION 10 - CASE STUDY #2 - Geothermal Power Station Incident

Nick Dawtry from New Zealand delivered a presentation involving a safety incident at a geothermal power station. The presentation included key finding from the investigation and the follow-up from the regulators.

11 SESSION 11 – CAPACITY AND COMPETENCY

- Following a short introduction by the HSE and PSA, discussion was held on future challenges related to the capacity and competency of industry, together with imminent regulatory challenges in meeting future personnel and equipment requirements.
- Experience from inspections and investigations led IRF members to agree that industry capacity and competence are important factors in preventing incidents. These factors are coming under increasing pressure with developments such as competition for talent from offshore renewables.
- It was noted that regulators are experiencing similar challenges with maintaining capacity and competence in traditional industries like oil and gas and new industries like offshore renewables.



12 SESSION 12 – CASE STUDY #1 – FPSO – lessons from a catastrophic tank/hull integrity failure that occurred in 2022.

- A presentation was provided by the ANP outlining lessons from a catastrophic FPSO tank/hull integrity failure that occurred in 2022.
- Other IRF members noted similar issues emerging with regard to FPSO hull integrity and concerns regarding the effectiveness of third party inspections and maintenance as effective control measures.
- The importance of addressing issues systematically was recognized. The reliance on time-based review cycles
 may not be appropriate to the particular risks of an FPSO that become more apparent in later life.
- It was noted that a safety alert is available on the ANP website.

13 SESSION 13 – CARBON CAPTURE AND STORAGE

- The PSA provided a presentation on the Northern Light carbon capture and storage project which was followed with discussion on the associated regulatory issues.
- Carbon capture and storage was seen as an increasingly important issue for IRF members that warrants more structured discussion.
- There was agreement that it should be discussed at IRF meetings, including at the next IRF AGM.
- Carbon capture and storage was also viewed as a topic that would be beneficial to discuss with other forums such as IUF and IOPER.
- Useful links to information from Norwegian Petroleum Directorate (NPD):
 - o NPD CO2 Atlas for the NCS
 - o NPD Fact page

Action: Include carbon capture and storage as a topic for discussion at future IRF meetings including the 2023 IRF AGM.

14 SESSION 14 – COMMUNICATION STRATEGY

- It was noted that some regulators have had positive experience with the use of social media platforms such as LinkedIn to distribute information and improve compliance.
- It was agreed that the IRF should:
 - o Promote more information about Opportunity Statements on the IRF website
 - Republish on the IRF website relevant articles which are produced by IRF members for their own jurisdiction. These articles should be published when available and do not need to follow a monthly cycle
 - Discuss a communication strategy for the IRF at the next AGM.

15 SESSION 15 – 2023 AGM AND CONFERENCE

- Details for the 2023 AIRF AGM and Conference were agreed as follows:
 - o Place: Perth, Australia (The Westin Perth)
 - Date: 1- 6 October 2023 (AGM to be held on 2, 5 and 6 October with the Conference to be held on 3 and 4 October)
- Potential topics for the conference could include: Energy Transition; Late Life Assets; Decommissioning;
 Human Factors; Renewables; Cybersecurity and Risk Management.
- It was suggested that there could be a targeted call for papers from regulators (i.e. not just IRF members).
- Discussion was also held regarding potential new IRF members, recognizing that countries have shown some interest in recent years. It was confirmed that potential members should attend an IRF AGM as an observer before seeking membership and this was best done during those years when the IRF is holding a combined AGM and Conference
- Conference participation is not limited to IRF members with participation from industry and other stakeholders encouraged.



WRAP UP AND CLOSING REMARKS:

- It was noted during the wrap up that future AGMs may be hosted by: o Ireland in 2024, (subject to confirmation).

 - Canada in 2025 (together with the Conference).
 - o Brazil in 2026.