



Onshore Power Supply for Tankers

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9 November 2023

Vision

**A global marine industry that
causes no harm to people or **the
environment****



Organisational Structure

Environmental Committee



CORE VALUES

RESPECT

ENGAGE

EFFICIENT

DELIVER

A GLOBAL MARINE INDUSTRY THAT CAUSES NO HARM TO PEOPLE OR THE ENVIRONMENT

VISION

Create more opportunities for all members to contribute and learn

500 m

MEMBERS COLLABORATION

Develop/improve best practice publications

PUBLICATIONS

MISSION HUMAN FACTORS

Collaborate with IMO, governments, and industry

ADVOCACY

Deliver integrated programmes

PROGRAMMES

4 PILLARS

- Programmes databases
- Incident databases
- Member/stakeholder feedback

Info/Data

RISK ADVISORY FUNCTION

Expert Groups Reps

Secretariat Reps

Risks and Barriers

Functional Committees Reps

Functional Committees

Expert Groups

EFFICIENCY & EFFECTIVENESS

Clear Priorities



Streamlined Decision Making



Agility



RISKS AND OPPORTUNITIES

Respond Rapidly to Changing Risk Profile in Industry



Improve Offering to Members



APPROVALS



3 x Principal Committees

WHY CHANGE

OCIMF

1970 50 2020

STRATEGY AT A GLANCE



OCIMF
1970 **50** 2020
STRATEGY AT A GLANCE

Onshore Power Supply



Terms of Reference

Onshore Power Supply



Oil Companies International Marine Forum

Onshore Power Supply Work Group Terms of Reference

Type of Project: Information Paper

Version Date: 07/07/2022

Vision: A global marine industry that causes no harm to people or the environment.

Mission: To lead the global marine industry in the promotion of safe and environmentally responsible transportation of crude oil, oil products, petrochemicals and gas, and to drive the same values in the management of related offshore marine operations. We do this by developing best practices in the design, construction and safe operation of tankers, barges and offshore vessels and their interfaces with terminals and considering human factors in everything we do.

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Objective

- To detail standardised practices guidance for the global application of onshore power supply (OPS) alongside the berth for tankers, the terminal, and their interface.
- To complement existing industry guidance, which includes:
 - EMSA Shore-Side Electricity Guidance to Port Authorities and Administrations.
 - IMO Draft Interim Guidelines on Safe Operation of Onshore Power Supply (OPS) service in Port for Ships Engaged on International Voyages.
 - IEC/IEEE 80005-1:2019.

Scope

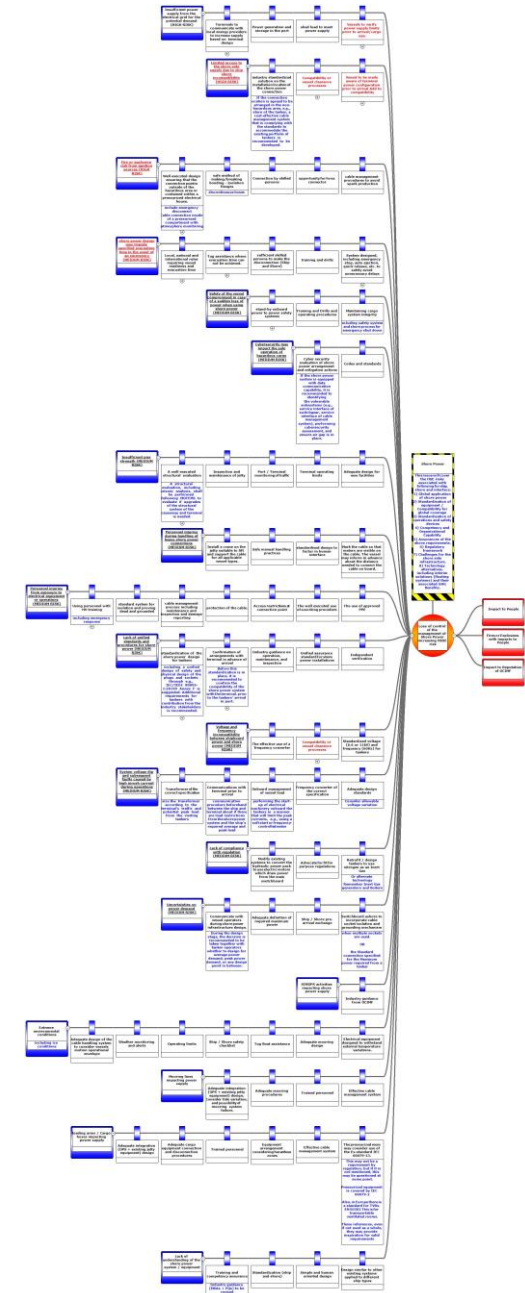
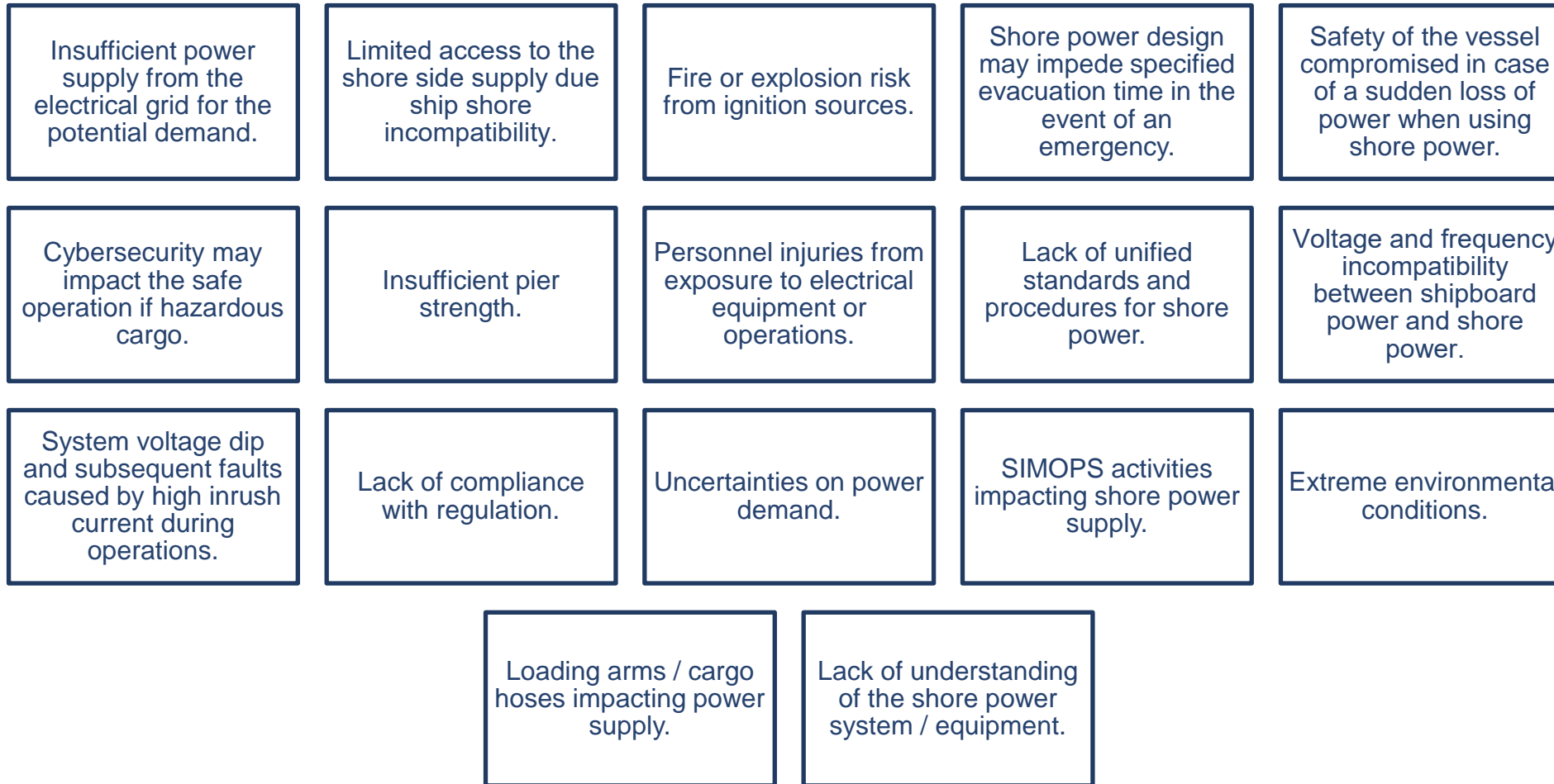
- The focus is on the tanker segment (oil, oil products, and chemical).
- Barges and gas carriers are out of scope.

Working Group

	Name	Company/Body
1	Antti Kettunen	NESTE
2	Arild Røed	IEC
3	Arvid Longva	Equinor
4	Brian R. McElhaney	Marathon Petroleum
5	Claes Möller	Tarntank
6	Eric Harrier	Conocophillips
7	Filipe Santana (S)	OCIMF
8	Franklin Schurum	Marathon Petroleum
9	Gil-Yong Han	INTERTANKO
10	Henk van der Biezen	ExxonMobil
11	Iwona Anaszewicz	BP
12	Jacob Schmidt	Marathon Petroleum
13	James (Jim) Erickson	Moffat & Nichol
14	Jeff Bayham (C)	ExxonMobil
15	Jeremy Richardson	Shell
16	Joost Bos	Port of Rotterdam
17	Jörgen Wrennfors	Port of Gothenburg
18	Kai Cheong Wong	INTERTANKO
19	Angelo Severi	d'Amico
20	Peter Steinhoff	Chevron
21	Ramesan E	IACS
22	Robert Bridges (VC)	TotalEnergies
23	Sean Crowley	Stolt Tankers
24	Siddharth Barua	IACS
25	Stephen D. Ernst	Marathon Petroleum
26	Thomas Hartmann	DNV
27	Thomas Hoven	Siemens-Energy/IEC

Risk Mapping

Threats being covered:



Initial Key Design Decisions

Position of the shore power connection on board:
Mid-ship vs stern

Standard **maximum power** available for shore power, **number of cables** and **connections.**

Voltage
(6.6 vs 11 kV).

Position of the shore power connection on board

Midship connection

Stern connection

- The group assessed a list of potential safety concerns.
- There are **pros and cons associated with either position.**
- The group decided **not to recommend a single shore power connection position.** Instead, the OPS WG agreed to **develop guidance for both options.**
- **Terminal and vessel owners should work together** to determine the best placements for the CMS equipment and onboard OPS connection points.
- A comprehensive terminal compatibility study and risk assessment are recommended.

A risk assessment is critical, emphasising safety related to hazardous areas.

Voltage, Maximum Power, Number of Cables, and Connections

- OPS WG developed a survey questionnaire to gather actual power requirements onboard tankers, including accommodation and cargo systems, while in port.
- The survey applied to all types of tankers of all different sizes except gas carriers.
- 550 tankers replied to the survey, mostly INTERTANKO members.
- After analysing and comparing all options, a **voltage of 6.6 kV** is to be provided by the terminal.
- The terminal shall provide the power at **60 Hz**. Most tankers operate on 60 Hz.
- The OPS system may have **1 to 3 cables as required to meet the typical design vessel** power demand.
- Additional engineering barriers, such as circuit breakers per cable/connection and interlocks, will be recommended to prevent the threat of live connection ends.
- A specific **standardised plug and socket type will be recommended** later in the Information Paper.

OCIMF will release an interim report with the power survey details and insights on maximum power required, voltage, number of cables, and connections.

Timeline

Interim report – **Q4/2023**

Final guide – **Q3/2024**



Emissions capture and control technologies





Photo: Business Wire

Emissions Capture and Control WG

Emissions Capture and Control



Oil Companies International Marine Forum

Emissions Capture and Control Work Group Terms of Reference

Type of Project: Information Paper

Version Date: 04/08/2022

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- **Objective:** To produce one information paper on the use of Emissions Control technologies.

Working Group

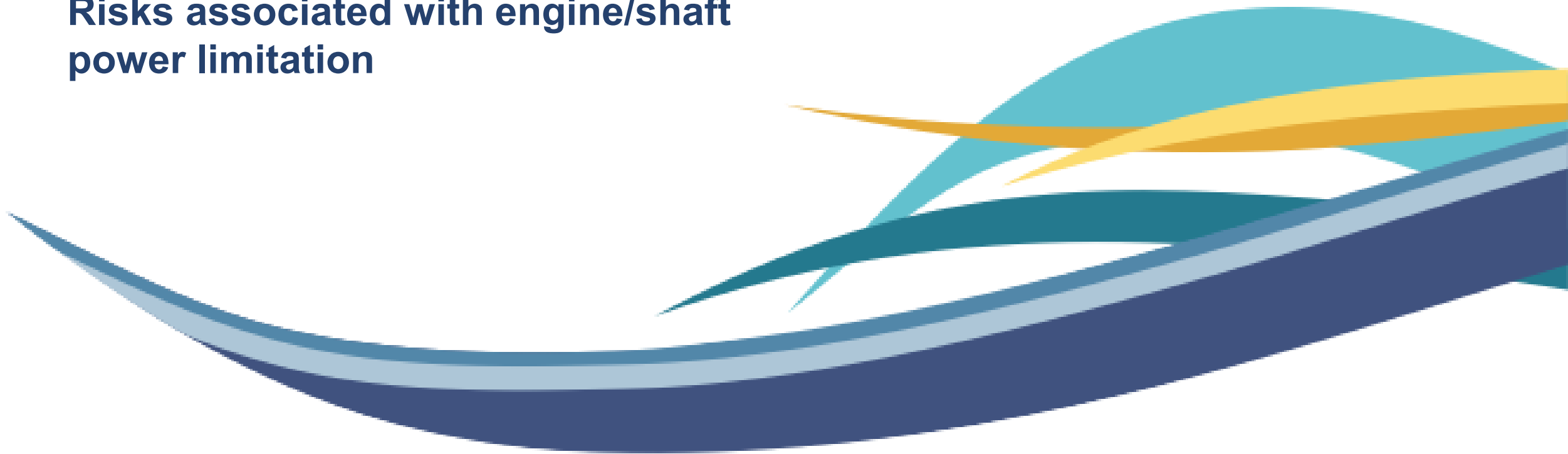
#	Name	Body	Company
1	Nathaniel Fennell	OCIMF / EFC	Chevron
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3	Eric Harrier	OCIMF / EFC	ConocoPhillips
4	Gil-Young Han	INTERTANKO	
5	Kai Cheong Wong	INTERTANKO	
6	John Zeller	OCIMF / SEG	Chevron
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11	Erin M. Mitchell	OCIMF/FSEG	ExxonMobil
12	Jon Are Sørensen	OCIMF/FSEG	AkerBP
13	Carlo Aiachini	IACS	RINA
14	Hamid Etemad	IACS	LR
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17	Erik Frank	OCIMF / BEG	RAIZEN
18	Arvid Longva	OCIMF / EFC	Equinor

Publication target date

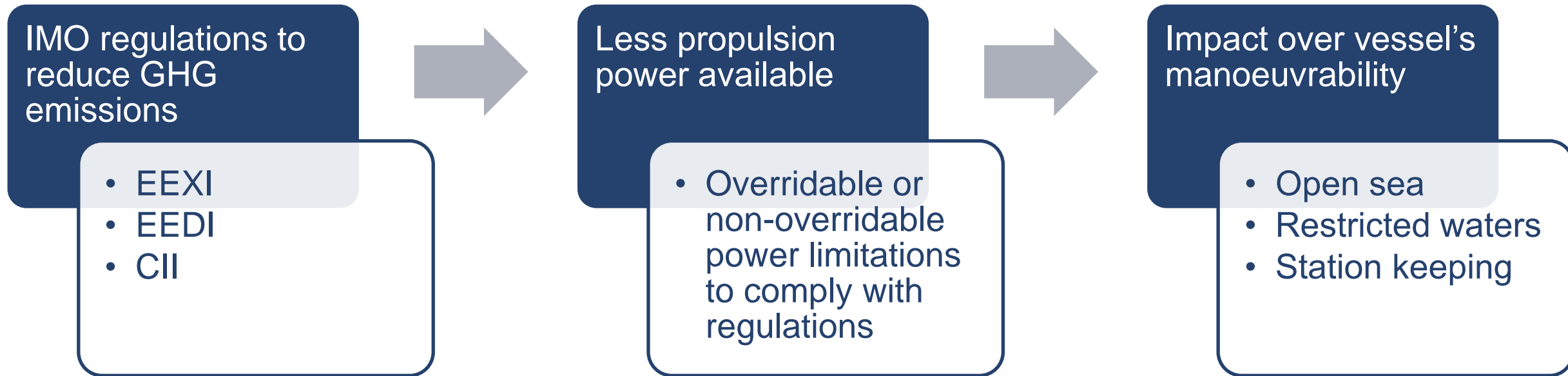
Q3 / 2025



Risks associated with engine/shaft power limitation



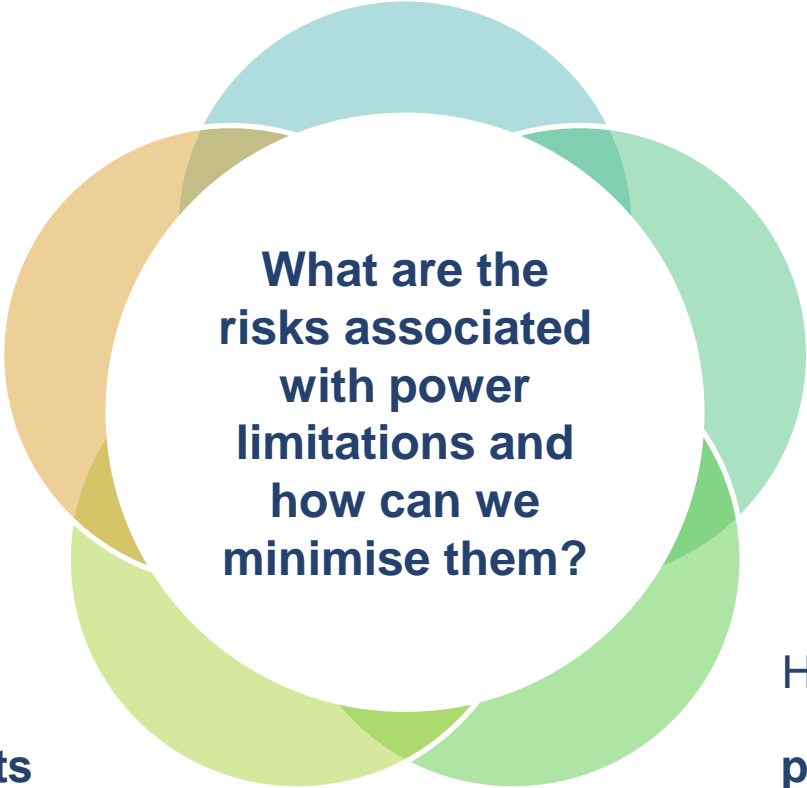
Background



Key Questions

How the EEXI regulation
**impact vessel
operations and
ship/shore interface?**

What **emergency
response** procedures
need to be in place to
ensure the safety of the
vessel and its crew in
case of an incident?



**What are the
risks associated
with power
limitations and
how can we
minimise them?**

What are the different
barriers and controls
that need to be put in
place to **ensure safe
compliance** with the
EEXI Regulation?

What are the
**competency and
training requirements**
for vessel operators
and crew members?

How can we **establish
and maintain
preventive barriers** to
ensure safe vessel
operations?

Risks associated with Shaft/Engine power limitation
Work Group



Oil Companies International Marine Forum

***Risks associated with
Shaft/Engine power
limitation
Work Group Terms of
Reference***

Type of Project: Information Paper

Version Date: 27/05/2022

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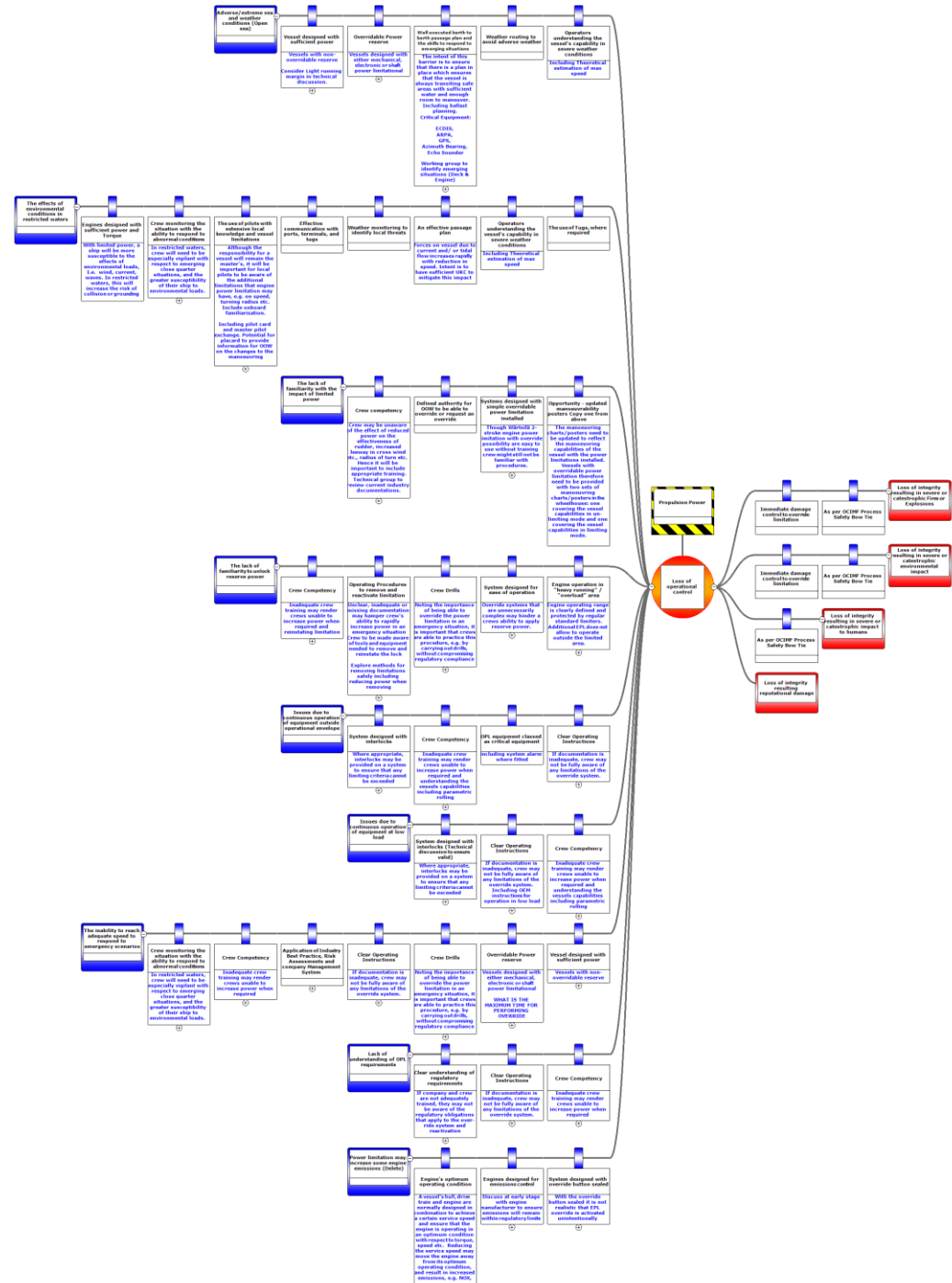
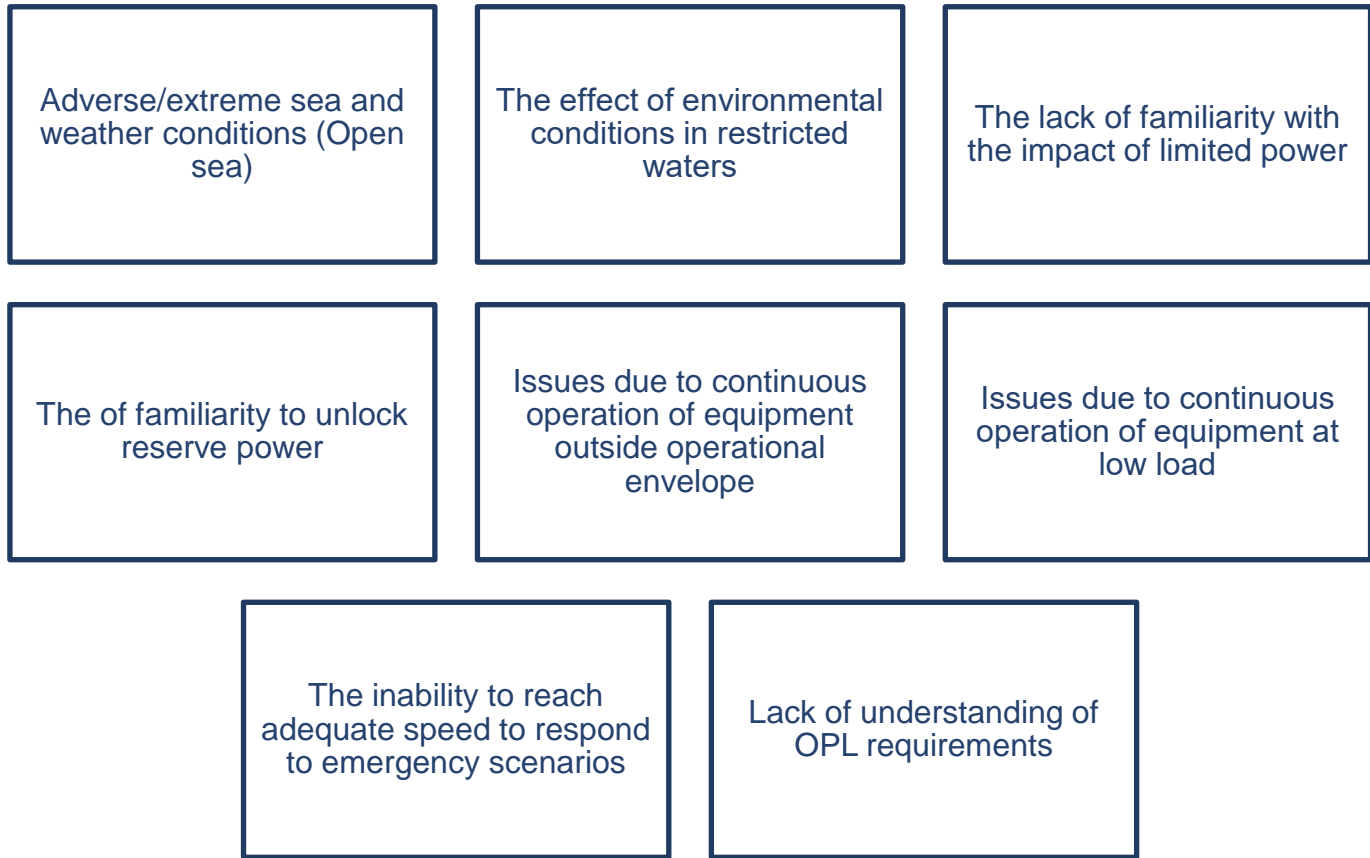
Objective: To produce an information paper to provide best practice guidance for managing the risks associated with the implementation and operation of propulsion power limitation based on identified gaps of the newly introduced EEXI regulation.

EPL WG Members

#	Name	Body	Company
1	Maria Polakis (Chair)	OCIMF/EFC	BP
2	Rohit Abrol (Vice-chair)	OCIMF/EFC	ADNOOC
3	Florian Badel	OCIMF/EEG	TotalEnergies
4	Roy Trydal	OCIMF/EEG	Equinor
5	Dragos Rauta	INTERTANKO	-
6	Vishal Kumar	INTERTANKO	-
7	GilYoung Han	INTERTANKO	
8	Kai Cheong	INTERTANKO	
9	Matthew Williams	IMPA	-
10	Chris Waddington	ICS	-
11	Sunil Krishnakumar	ICS	-
12	Maria del Agua Sires	IACS	LR
13	Kunal Sharma	IACS	
14	Lefteris Karaminas	IACS	ABS
15	Ken Fernandes	OCIMF/NEG	CEPSA
16	Edwin Pang	RINA	Arcsilea
17	George Mathew	INTERTANKO	Teekay

Risk Mapping

Threats being covered:



Publication target date

Q1/2024



A background image showing a close-up of two hands shaking in a firm grip. The person on the left is wearing a light-colored shirt and a watch. The person on the right is wearing a dark sweater. The image is semi-transparent, allowing text to be overlaid.

Thank you
Please let us know if you have any questions

