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CMI IWG Workshop MORUs

Floating Offshore Wind Aspects

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Renantis

The Renantis/Ventient combined organisation (soon to be named nadara)

Renantis and Ventient Energy have joined forces to form **one of the largest renewable independent power producers (IPPs) in Europe**. With a **4.2 GW installed capacity** and an **18 GW pipeline**, the newly combined company will rebrand within 2024 under the name **Nadara**.

Total number of employees – **ca. 1,000**

Total number of plants – **Over 200**

Total installed capacity – **4.2 GW**

Total pipeline capacity – **18 GW**

Core countries the combined company operates in – **UK, Italy, Portugal, Spain, France**

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Renantis’ Floating Offshore Wind Projects

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UK PORTFOLIO

Project Information

Bellrock*	1,200 MW
Broadshore*	900MW
Stromar**	1,000MW
Sinclair*	100MW
Scaraben*	100MW
Llywelyn/Petroc*	Round 5 auction will support one project up to 1.5GW

*Projects in Partnership with BlueFloat Energy
** Project in Partnership with BlueFloat Energy and Orsted

ITALY PORTFOLIO

Project Information

Odra*	1,350 MW
Kailia*	1,200MW
Nora*	1,400MW
Minervia*	675MW
Tibula*	900MW

*Projects in Partnership with BlueFloat Energy

TOPICS FOR DISCUSSION

1. The International Legal Uncertainty related to MORUs
2. Potential Disputes Related to MORUs and FOWTs in particular
3. Definition of MORUs
4. Definition of Various types of MORUs
5. What is a FOWT?
6. Defining a FOWT Unit
7. Registration of FOWTs
8. Advantages of Mobility of Floating Offshore Wind Farms
9. Limitation of Liability for FOWTs

INTERNATIONAL LEGAL UNCERTAINTY RELATED TO OFFSHORE RENEWABLE MOBILE UNITS (MORU)

Existing International Convetions

Existing maritime conventions apply to "ships" and "vessels", some with broader and others with more limited definitions. No specific definition of MORUs exist.

The **variety of existing international conventions**, with **differing numbers of contracting states**, and **undefined** as to which extent a MORU would apply to each respective convention and how, will undoubtedly lead to a chaotic situation in case of any international disputes related to MORUs.

The example of Floating Offshore Wind Turbines (FOWT)

A FOWT unit may:

- run its lifetime moored, transiting, being assembled, installed and maintained in the **same producing coastal State**;
- most likely, and even more so as the industry develops, that FOWT units will to be towed through and taken to **different coastal States**.

For instance, it can be assembled in one port State, transported to another producing coastal State, while passing through other coastal States. It may have to be towed to another port State for maintenance and repair services, again passing through other coastal States.

The international legal uncertainty of MORUs will affect not only the offshore wind developers but the maritime community as a whole.

POTENTIAL DISPUTES RELATED TO MORU AND FOWT IN PARTICULAR

a. **Enforcement lawsuits/arrests**
b. **Collision of vessels** flying various states occurring in producing states, port states and other coastal states through which floating platforms may be transported;
c. **Collisions/allisions of FOWT units that are snapped from their mooring lines** and float uncontrollably in the high seas (there is very little chance, if any, of that happening when the FOWT, mooring systems and cables are properly engineered and installed, but we cannot guarantee that that will always be the case);
d. **Criminal and civil claims** (i.e. unlawful entry, destruction of property, death and injury of workers or people on board the units etc)
e. **Conflicts of law issues** – private international law
f. **Public international law issues** – different states imposing differing mandatory legal regimes on MORUs in their EEZ/Continental Shelf.

DEFINITION OF MORU

We need a definition of MORU that is internationally accepted and uniform.

It **does not properly fit into the definition of "ship" or "vessel"** in many international conventions and there is uncertainty as to its applicability in others.

The lack of international recognition of a uniform definition of MORUs will surely create conflicts when **different states take different approaches** to MORU definitions (i.e. a flag state may define a MORU as a "ship" or "vessel", and a producing state may define it as an "installation" or something else, not accepting it as a ship, nor the applicability of the flag state law in respect of such MORU).

DEFINITION OF MORU AND VARIOUS TYPES OF MORUS

Even though internationally recognised uniformity of treatment is needed for MORUs, **there will be differences in impacts, benefits and consequences depending on the type of MORU**.

For instance, a Floating Measurement Unit (floating lidars) may be simpler to regulate, may have easier logistics than a FOWT, or a floating solar module, or floating energy converters etc. The evolution of each market will also differ.

The definition of MORUs needs to be precise and take into account the specificities of each type of MORU. There will be commonalities in many respects, but they will also differ in usage and in physical and practical ways.

I will limit my discussions to FOWT units, but many aspects may impact and benefit all types of MORUs.

WHAT IS A FOWT?

A FOWT can be comparable to a **barge** in many ways.

It is an **unmanned, unpowered barge** when it is being towed, and an **anchored barge** when it is *in situ*.

*Pictures are of the WindFloat®, at Kincardine Wind Farm, courtesy of Principle Power

DEFINING A FOWT UNIT

In many ways, for regulatory and maritime purposes, FOWT units are currently being treated as barges.

However, many times the specificities of a FOWT unit are not taken into account.

One of these differences is the existence of a **turbine** on top of the **floating offshore wind platform**. Unlike a barge, the floating offshore wind platform does not carry cargos, but a turbine. The turbine is as an intrinsic and integral part of the floating offshore wind platform. The floating offshore wind platform is designed specifically for a turbine size and particularities.

Therefore, the definition of a Floating Offshore Wind Turbine Unit needs include **the platform and the turbine**. Even if the turbine can be detached from the platform, for the purposes of legal treatment they should be considered as a single unit.

REGISTRATION OF FOWTS

International maritime law should regulate the registration of MORUs, preferably with an internationally recognised centralised public registry for MORUs in general, including, obviously, FOWT units. The **advantages** of registration and its **international recognition** are clear:

a. Secure and **clear title to ownership** of the MORUs
b. Possibility to **create a leasing market** (a secondary market for MORUs)
c. MORUs **offered as collateral in financing structures**.
d. Clear **title to security interest for lenders** throughout the lifetime of the asset and the possibility create priority demand
e. Provide clean title to the purchaser in the event a **judicial sale** is needed (arrest scenarios)
f. Certificate that they are **stable and seaworthy**
g. Ability to **obtain conventional marine insurance** instead of bespoke (read: expensive) policy for FOWts.

ADVANTAGES OF MOBILITY OF FLOATING OFFSHORE WIND FARMS

Owners, lenders and lessors will need to consider the **logistical and engineering** aspects (complexities) of moving not only a whole array of FOWT units forming a floating offshore wind farm, but also those relating to even a single FOWT unit. The costs can also be very high.

However, all the advantages and usage of the mobility of the FOWTs are possible, and it creates **clear benefits that fixed-bottom offshore wind farms cannot enjoy**.

ADVANTAGES OF MOBILITY OF FLOATING OFFSHORE WIND FARMS

For instance, FOWT units may be **sold and used in different floating offshore wind farms**. A **whole array of FOWT** units (effectively, a floating offshore wind farm) may be detached and **moved from one State and installed in another**.

Older floating offshore wind farms with less value in advanced offshore wind markets may also be **sold to countries where the offshore wind industry is not yet as well developed** and, due to the lack of sufficient technical and financial resources, have more difficulty to develop greenfield floating offshore wind projects.

However, the advantages of mobility will not be fully realised without an internationally recognised public registration system.

LIMITATION OF LIABILITY FOR FOWTS

Ship owners have long had the ability to limit their liability on a pre-casualty basis under existing international maritime conventions. Clarity and definition of a limitation of liability is **vital for the expansion and bankability of the floating offshore renewable industry**.

Without a limitation of liability benefiting FOWT owners/operators, which gives a **quantifiable certainty on maximum risk**, insurance against third-party risks may be extremely expensive, if available, and could make the financing process more complex.

Equally, a limitation of liability **tied to mandatory insurance** up to such maximum limitation secures the rights of affected third parties, who will have the guarantee of recovery in case of damages.

LIMITATION OF LIABILITY FOR FOWTS

Some positive impacts: (i) it will benefit the **expansion of the FOWT industry**; (ii) **reduction of LCOE to consumers**; (iii) viability of **large commercial scale arrays worldwide**; (iv) **protection of third parties** if tied to mandatory insurance.

Calculation method: it should be based on **units of account per mass tonnage**, similar to a ship limitation of liability, not on the value of the asset.

Thank you

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