





# CALL FOR EXPRESSION OF INTEREST (CEI)

# "Maritime safety for floating offshore wind"

# **Organisers of the CEI:**

#### OCEOLE:

A partnership formed by 3 world experts in renewable energy (EQUINOR, QENERGY France and GREEN GIRAFFE) and candidate for calls for tenders No. 5 and 6 relating to floating offshore wind power projects in France (South Brittany and the Mediterranean)

EQUINOR, with more than a decade of experience, is the leading developer of floating offshore wind projects in the world, with several wind turbines in service. Its offshore experience and expertise in managing complex international projects make it uniquely qualified to effectively pursue the development of floating offshore wind.

Q ENERGY France, formerly affiliated with the RES group, is also a renowned player in offshore wind which has been active in the sector since 2005, having notably taken part in the co-development of one of the first French projects of this sort. With over 23 years of experience, the company has demonstrated its skills in the development of projects taking into account the environment and local challenges. By maintaining close relations with all the players, QENERGY France contributes not only to the development of the local economy but also to the adhesion and coherence of an industrial project in the territory.

An expert in financial advice regarding renewable energy, GREEN GIRAFFE boasts a strong presence on the global offshore wind power market thanks to its involvement in over 100 projects. Its considerable experience makes it a major player in the sector.

# POLE MER BRETAGNE ATLANTIQUE:

A competitive cluster dedicated to the maritime economy, the Pôle Mer Bretagne Atlantique is a facilitator of the maritime ecosystem and a promoter of collaborative innovation in the field of blue growth. With a network of more than 400 players bringing together large groups, SMEs, and centres of research and higher education, it carries out many events and influential activities, including participation in fairs and international operations, as well as the organisation of thematic events. Through such actions, the Pôle Mer actively contributes to the emergence of effective and competitive solutions in all areas of maritime activity. Its main mission is to support these projects towards their approval: advice, expertise, networking, funding, visibility and promotion.







### THE MARITIME PREVENTION INSTITUTE (MPI):

The MPI is an association governed by the Law of 01 July 1901 and is administered by a joint council composed of employer and employee representatives. The MPI has a general mission of occupational risk prevention, the aim of which is to contribute, by any appropriate means, to protecting the health and improving the working and living conditions of professional seafarers.

#### Partners:

- BRETAGNE OCEAN POWER
- NEOPOLIA
- SOLUTIONS & CO

#### **OBJECTIVES AND ORGANISATION**

Risk management and safety represent common and fundamental values of maritime activities and a major challenge for the development of reliable, efficient and sustainable offshore wind energy.

Océole wishes to take advantage of Equinor's expertise in the construction and operation of offshore installations, and in particular the first floating wind farms in operation, in order to mobilise innovative players in the search for solutions adapted to the specificities of offshore wind power and to aid them in defining such solutions.

The purpose of this Call for Expression of Interest (CEI) is to bring about innovative, credible and expert solutions meeting Océole's specific needs for the safe operation of offshore wind farms, as well as any related activities and uses.

After several pilot projects in France and abroad, offshore wind power is now developing on a commercial scale. A number of countries, particularly in Europe, are adopting a roadmap for deploying this technology and the markets are booming. As such, innovative solutions that reduce costs or facilitate the integration of projects into their environment have strong commercial potential.

The CEI has 2 themes: an open one relating to maritime safety for the construction and operation of an offshore wind farm, and a specific one relating to the detection and positioning of wind turbine anchoring elements in order to ensure the safety of fishing vessels. These 2 sections on which the contributions are requested are described in the attached sheets.

Candidates may respond to just one or two both parts of this CEI.







# ELIGIBILITY

Applications may be submitted by all types of companies (microenterprises, VSE, SME, ETI and GE) or organisations (associations, NGOs, training or research establishments, etc.), as well as individuals.

The geographical location of the candidate must be at least partially within the regions of Pays de la Loire, Brittany, Occitanie or Provence-Alpes-Côte d'Azur (candidates based in these regions may be associated with national or international players).

#### **EVALUATION CRITERIA**

The review of the applications will focus on assessing the relevance of the proposed solution with regard to the inherent risks and operational needs of the construction and operation of offshore wind farms, as well as the candidate's ability to lead, develop and finalise its solution. No technical information related to the design of the solution or the implemented technologies is required.

Criteria:

- Relevance of the solution (functionalities, development schedule, innovation) and the candidate's capabilities;
- Consistency of the deliverables;
- Effectiveness/Efficiency: achievement of objectives, cost/benefit ratio;
- Impacts: results for candidates, local results, and other resulting effects;
- Feasibility Durability.

#### SELECTION PROCEDURE

All application files fulfilling the conditions of these regulations will be examined by the selection panel in order to pre-select solutions based on the evaluation criteria. The selection panel will pre-select the files, and the pre-selected Candidates will be contacted to present their Projects orally.

Following these sessions, the Winners will be chosen.

The selection panel will consist of at least one member from each organising entity, and its decisions will not be subject to appeals.







#### SCHEDULE

The schedule shown is subject to change at any time, and the CEI stakeholders will be notified of any changes by the organisers.

- Launch: 09 March 2022
- Notification of the launch: mailing social networks websites
- Launch webinar: A presentation by the organisers about their expectations and the terms of the CEI discussion and Q&A session: **31 March 2022**
- Deadline for submitting files: **15 May 2022** Candidates must submit an application form completed with any document, brochure or descriptive file needed to assess the relevance of their solution with regard to the evaluation criteria...
- Pre-selection by the selection panel: **01 June 2022**
- Interviews between the selection panel and the pre-selected parties: from 15 June 2022
- Selection/Winner(s): from 15 June 2022
- Official announcement of the Winners: **between 15 and 30 June 2022**

#### PRICE:

- Technical review and feasibility study of each Winner's solution by Océole/Equinor;
- At least 3 mentoring sessions with experts in the field over a period of 3 months to continue to refine the development of each Winner's solution;
- Potential integration of the winning solutions in the AO5 Sud Bretagne Project (and future projects) if Océole is the winner of the call for tenders;
- The possible presentation of the winning solutions to Equinor Ventures.<sup>1</sup>

# **OBLIGATIONS OF THE CANDIDATES**

By submitting an Application, you declare that you hold all the intellectual property rights necessary for the development of the solution you are offering; you also declare and guarantee that all the information contained in your submission and any other information that you provide are, to the best of your knowledge, true and complete,

<sup>&</sup>lt;sup>1</sup> Equinor Ventures is Equinor's subsidiary dedicated to investing in ambitious early-stage and growth-stage companies. More information <u>HERE</u>







and that you have the right to submit the Application and that it is being filed by a person authorised to commit you to binding agreements, that you have the right to disclose the information it contains on your behalf or on behalf of the persons and entities specified in the Application, and that your solution (namely, the information used, the content of the solution and the underlying technologies/methods/ideas, whether described or not, which are or will be used):

- is the result of your own original work and is representative of your own abilities, or is offered with the authorisation of the person(s) who prepared it, with the full and proper acknowledgment of such persons;
- does not contain any confidential information or business secrets (neither yours nor those of third parties) that you have no right or intention to disclose to Océole;
- does not violate or infringe, to the best of your knowledge, any patents, industrial design rights, copyrights, trademarks, or any other intellectual property or other rights of any kind belonging to third parties, regardless of the applicable laws;
- does not contain any malicious code, such as viruses, malware, time bombs, cancelbots, worms, Trojan horses or other potentially harmful programs or information;
- does not and will not violate the laws and regulations of any State, nor any applicable confidentiality or other agreements; and
- will not result in any reporting obligations, royalty payments or other obligations vis-à-vis any third party.

The violation of any of the statements and guarantees set out above will invalidate the corresponding Application.

<u>Important Note:</u> Océole/Equinor conducts large-scale research and development activities and may already be working on similar ideas and concepts. To avoid any risk of confusion regarding industrial or intellectual property, do not use or send confidential information or business secrets to Océole/Equinor. Only provide non-confidential information focused on general descriptions. Also note that Océole/Equinor will not be able to sign a Non-Disclosure Agreement (NDA) or this purpose in the context of this CEI.

# **OBLIGATIONS OF WINNERS**

The Winners undertake to mention the organisers of the CEI in any of their communications regarding the chosen solution.

The Winners must undertake to participate with the organisers in any events organised during the stages mentioned in the Schedule.







# SHEET 1

# Open theme: Floating offshore wind safety solutions

#### **Context**

An offshore wind farm is a complex installation generating multiple activities and a large volume of information.

Offshore wind farms are subject to installation, operation and maintenance activities requiring the presence of personnel on site, as well as nautical and aerial means (ships, helicopters, drones). They are also open or partially open to boat traffic and fishing activities. Finally, they are subject to operational monitoring of their electricity production and operating parameters, as well as periodic or permanent monitoring of environmental parameters.

Wind farms are equipped with a large number of sensors making it possible to monitor operational or environmental parameters, as well as the nautical and aerial situation. They are also equipped with lights, signals, radio-communication and CCTV, as well as means or equipment for emergency response and interventions.

Safety management on wind farms is based on a risk management approach and uses operational and technical means to avoid, prevent and reduce risks.

# **Objectives**

Candidates may present any solution providing a risk control option (RCO) adapted to offshore wind.

The solution can focus on any aspect of operational risk management, including (but not limited to):

- Coordination of activities;
- Autonomous and remotely operated systems (drones);
- Safety, rescue or emergency management devices;
- Personal Protection Equipment;

since it entails an innovative solution.







# SHEET 2

# Solution for detecting and positioning wind turbine anchoring elements for the benefit of fishing vessels.

# **Context**

The presence of anchor lines and electrical connection cables in the water column in the area of the wind farm present an obstacle for fishing operations.

The snagging of fishing gear on anchoring devices or cables can result in significant risks for the safety of the fishing vessels and their crews, as well as material damage to such fishing gear and the installations in question.

The snagging of dragged fishing gear (dragnet, trawl) can compromise the stability of the vessel and lead to capsizing.

The snagging of static gear (nets, traps, lines, baskets, etc.) may prevent its recovery and pose risks for the operators of the lifting equipment (trap hauler, net hauler, winches), and it could lead to the degradation or loss of the gear and damage to the anchor lines.

A precise knowledge of the respective positions of the elements of the anchor lines, vessels and fishing gear would thus make it possible to minimise unusable areas for fishing, while ensuring safe operations in the accessible parts of the wind farm, all in accordance with the professions practised in the area.

# **Objectives**

Candidates will present a solution for positioning wind turbine anchoring elements for the benefit of fishing vessels.

This solution will be based on active or passive elements installed on anchor lines, such as transponders, responders or reflectors that can be detected and positioned with sufficient accuracy by fishing vessels.

Compatibility with existing sonar and sounding equipment on board vessels will be sought.

The solution will focus on defining how precisely the fishing gear is positioned on the bottom and in the water column in order to determine the safety margins to be adopted for the operation of the system. It may include a device to improve this degree of precision in order to improve overall performance.







The solution will focus on taking into account the security and confidentiality issues related to information about the positioning of anchors or cables, and it may provide for means of preserving this confidentiality.

The solution may also provide for the development of a demonstration or real-life experiment.