SAFE WAVE

STREAMLIING THE ASSESSMENT OF ENVIRONMENTAL EFFECTS OF WAVE ENERGY

# DELIVERABLE 5.1
# Legal and institutional review of national consenting processes

Co-funded by the EMFF programme of the European Union

WP 1

Deliverable 5.1 Legal and institutional review of national consenting processes

**Lead partner for deliverable:**

MaREI, ERI, UCC


**AUTHORS**

A.M. O'Hagan

E. le Bourhis

T. Soulard


**SUBMISSION DATE**

14| July| 2021

**DISSEMINATION LEVEL**

| | | |
|---|---|---|
| PU | Public | X |
| CL | Classified – EU classified (EU-CONF, EU-RESTR, EU-SEC) under Commission Decision No 2015/444 | |
| CO | Confidential, only for members of the consortium (including Commission Services) | |

**DOCUMENT HISTORY**

| Issue Date | Version | Changes Made / Reason for this Issue |
|---|---|---|
| 10/06/21 | 1 | Delayed waiting on new Irish legislation |
| 06/07/21 | 2 | Reviewed by French partners and SER and edited following comments received |
| 14/07/2021 | 3 | Reviewed by project coordinator (Juan Bald, AZTI) |

**CITATION**


O'Hagan, A.M., Le Bourhis, E. and Soulard, T., 2021. Deliverable 5.1 Legal and institutional review of national consenting processes. Deliverable of the SafeWAVE Project co-funded by the European Union, Call for Proposals EMFF-2019-1.2.1.1 - Environmental monitoring of ocean energy devices. DOI: http://dx.doi.org/10.13140/RG.2.2.22919.68009. 37 pp.





This Project is co-funded by the European Union.

# CONTENTS

# 1. SAFE WAVE project synopsis

The Atlantic seaboard offers a vast marine renewable energy (MRE) resource which is still far from being exploited. These resources include offshore wind, wave and tidal. This industrial activity holds considerable potential for enhancing the diversity of energy sources, reducing greenhouse gas emissions and stimulating and diversifying the economies of coastal communities. As stated by the European Commissioner of Energy, Kadri Simson, during the Energy Day in the framework of the climate conference (COP25) held in Madrid (2-13 December 2019), "the European experience shows that the benefits of clean energy go beyond reduced greenhouse gas emissions and an healthier environment. Clean energy transition boosts the economy and creates jobs. The European Green Deal is also a growth strategy". In the same framework of COP25 and during the Oceans Day, the European Commissioner for environment, oceans and fisheries, Virginijus Sinkevičius explained that "fighting climate change and protecting marine life biodiversity is a centrepiece of the EU's ocean policy. Due to climate change, our oceans are facing serious challenges, which require an urgent and comprehensive response. But oceans are also a part of the solution". Therefore, ocean energy is one of the pillars of the EU's Blue Growth strategy. Ocean energy could provide clean, predictable, indigenous and reliable energy and contribute to the EU's objective of reaching a share of renewables of at least 32% of the EU's gross final consumption by 2030. As it was underlined by Virginijus Sinkevičius, "Marine renewable energy has an incredible potential. The offshore wind sector is growing strongly enough to compete with traditional energy sources. The emerging technologies such as wave and tidal energy will take the same pathway".

The nascent status of the Marine Renewable Energy (MRE) sector and Wave Energy (WE) in particular, yields many unknowns about its potential environmental pressures and impacts, some of them still far from being completely understood. Wave Energy Converters' (WECs) operation in the marine environment is still perceived by regulators and stakeholders as a risky activity, particularly for some groups of species and habitats.

The complexity of MRE licensing processes is also indicated as one of the main barriers to the sector development. The lack of clarity of procedures (arising from the lack of specific laws for this type of projects), the varied number of authorities to be consulted

and the early stage of Marine Spatial Planning (MSP) implementation are examples of the issues identified to delay projects' permitting.

Finally, there is also a need to provide more information on the sector not only to regulators, developers and other stakeholders but also to the general public. Information should be provided focusing on the ocean energy sector technical aspects, effects on the marine environment, role on local and regional socio-economic aspects and effects in a global scale as a sector producing clean energy and thus having a role in contributing to decarbonise human activities. Only with an informed society would be possible to carry out fruitful public debates on MRE implementation at the local level.

These non-technological barriers that could hinder the future development of WE in EU, are being addressed by the WESE project funded by EMFF in 2018. The present project builds on the results of the WESE project and aims to move forward through the following specific objectives:

1. Development of an **Environmental Research Demonstration Strategy** based on the collection, processing, modelling, analysis and sharing of environmental data collected in WE sites from different European countries where WECs are currently operating (Mutriku power plant and BIMEP in Spain, Aguçadoura in Portugal and SEMREV in France); the SafeWAVE project aims to enhance the understanding of the negative, positive and negligible effects of WE projects. The SafeWAVE project will continue previous work, carried out under the WESE project, to increase the knowledge on priority research areas, enlarging the analysis to other types of sites, technologies and countries. This will increase information robustness to better inform decision-makers and managers on real environmental risks, broad the engagement with relevant stakeholders, related sectors and the public at large and reduce environmental uncertainties in consenting of WE deployments across Europe;

2. Development of a **Consenting and Planning Strategy** through providing guidance to ocean energy developers and to public authorities tasked with consenting and licensing of WE projects in France and Ireland; this strategy will build on country-specific licensing guidance and on the application of the MSP decision support tool developed for Spain and Portugal in the framework of the WESE project; the results

will complete guidance to ocean energy developers and public authorities for most of the EU countries in the Atlantic Arch.

3. Development of a **Public Education and Engagement Strategy** to work collaboratively with coastal communities in France, Ireland, Portugal and Spain, to co-develop and demonstrate a framework for education and public engagement (EPE) of MRE enhancing ocean literacy and improving the quality of public debates.

# 2. List of acronyms

AA – Appropriate Assessment [Article 6 EU Habitats Directive]

CRU – Commission for the Regulation of Utilities [IE]

DHLGH – Department of Housing, Local Government and Heritage [IE]

DSF – Maritime Spatial Planning Documents (*Documents Stratégiques de Façade)* [FR]

EC – European Commission

EIA – Environmental Impact Assessment

EIAR – Environmental Impact Assessment Report

EIS – Environmental Impact Statement

EMFF - European Maritime and Fisheries Fund

EU – European Union

LTECV – Law on Energy Transition for Green Growth (*Loi de Transition Energétique pour la Croissance Verte)* [FR]

MAP – Maritime Area (Planning) Bill [IE]

MPDM – Marine Planning and Development Management Bill [IE]

MRE – Marine Renewable Energy

MSFD – Marine Strategy Framework Directive [EU]

MSP – Maritime Spatial Planning

NECP - National Energy and Climate Plans [EU]

NIS – Natura Impact Statement [IE]

NMPF – National Marine Planning Framework [IE]

ORE – Offshore Renewable Energy

OREDP - Offshore Renewable Energy Development Plan [IE]

PPE - Multi-annual Energy Plan (*Programmation pluriannuelle de l'énergie)* [FR]

SEA – Strategic Environmental Assessment

SEAI – Sustainable Energy Authority of Ireland [IE]

SNML – National Strategy for the Seas and Coast (*Stratégie nationale pour la mer et le littoral)* [FR]

UNFCCC – United Nations Framework Convention on Climate Change

WFD – Water Framework Directive [EU]

WP – Work Package

# 3. Executive summary

Consenting remains one of the often cited barriers to the offshore renewable energy development. This deliverable outlines the current EU policy context for offshore energy development and wider environmental management. It then looks at the policy basis in two SafeWAVE project partner countries: namely France and Ireland. In relation to these Member States, their national progress on EU policy is presented together with their current consenting processes. This complements an earlier report by Bald and Apolonia (2020), which focused on the consenting processes in Spain and Portugal, as part of the WESE project. This deliverable will form the basis for the remaining work to be carried out under Work Package 5, focusing on risk-based approaches and feasibility of Adaptive Management.

France has a legal obligation to reach 40% renewable energy production in the electricity mix by 2030, as contained in the Law on Energy Transition for Green Growth Act (*Loi de Transition Energétique pour la Croissance Verte, LTECV*), adopted in August 2015. The country operates a streamlined system whereby the State conducts certain preparatory activities and the developer applies for the requisite consents and deploys the device(s). It commences with a call for tenders where developers respond with their proposals. A single authorisation incorporating a wáter Resource protection licence, an EIA and an authorisation to generate electricity are processed simultaneously. A concession to occupy the public maritime domain is also required. The developer can propose a 'design envelope' for their project which also a developer to adapt certain characteristics of the development provided there is no overall change in the environmental impacts anticipated and on this basis the consenting authority can grant the required consents.

Ireland is currently reforming their entire marine planning and development management regime. Ireland's first national marine plan was published on 1st July 2021, together with a pre-initiation version of the associated Maritime Area Planning Bill, which provides for the new consenting process. The Bill is anticipated to enter into force later this year. It will streamline the consenting process with developers required to obtain a Maritime Area Consent, before being able to proceed to apply for Development Consent which will incorporate the EIA and AA requirements. The Bill will provide for the creation of a new Maritime Area Regulatory Authority (MARA) that will be responsible for administering the Maritime Area Consents and the enforcement

of the new regulatory regime. The proposed Bill will also introduce a design envelope for the first time in the Irish system.

Both France and Ireland have made and continue to make changes to their legal systems in order to streamline consenting systems for the realisation of offshore renewable energy projects. Both countries are in the process of implementing a design envelope for developers which may assist in embedding risk based and adaptive management principles. This will be the subject of the next project deliverable in the SafeWAVE project.

# 4. Introduction

Efficient and effective consenting processes are one of the critical stages in deploying and operating an ocean energy project. Due to the different governance systems that operate in the EU, consenting systems vary according to location, both in terms of their legal basis and how consenting is administered. As wave energy is still regarded as a relatively new sector, there is often a lack of fit-for-purpose legal and administrative processes that may lead to delay in obtaining consent or seemingly burdensome requirements. There can also be uncertainty around the impacts of wave energy devices on the marine environment, which on occasion can lead to significant monitoring requirements. The use of a risk-based approach by regulators and decision makers is often heralded as one potential approach to streamlining the consenting process and may already be applied implicitly.

This deliverable seeks to provide an overview of the consenting processes that operate in both France and Ireland as two of the participating countries in the SafeWAVE project. This report complements work already undertaken in the WESE project in relation to consenting in Portugal and Spain. It also builds upon and updates previous work carried out under the RiCORE and DTOceanPlus projects (Le Lièvre and O'Hagan, 2015). Ultimately this report together with the report from the WESE project will provide a knowledge base for subsequent tasks in Work Package 5 of SafeWave, where an evaluation of potential risks will be conducted to determine the operational feasibility of a risk-based adaptive management approach in future.

This report follows a similar structure to the earlier WESE report (Bald and Apolonia, 2020). It starts with a brief overview of the current main EU legislation and policy that is driving actions in the renewable energy space along with other policy drivers that could have implications for offshore energy development. This is followed by a section setting out the national policy context in both France and Ireland. From there the various procedures in the consenting process are outlined. This includes those procedures deriving from national (domestic) legislation but incorporates applicable elements from EU law such as the Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA) Directives and Appropriate Assessment process (from Article 6 of the Habitats Directive). Given the time of writing and deadline for submission of coastal Member States first national Maritime Spatial Plans under the EU's MSP Directive (2014/89/EC), the role of this to date in influencing ocean energy

development will be provided where possible and should help inform the work to be undertaken in Work Package 6 on 'Wave Energy development site selection under Maritime Spatial Planning framework.' Special attention is paid to consultation requirements within existing consenting processes, so that this information can act as a starting point for future consideration in Work Package 7 on 'Education and Public Engagement'.

## 4.1 EU policy context

### 4.1.1 Recast Energy Directive (2018/2001/EU)

Overall policy for the production and promotion of energy from renewable sources in the EU was previously governed by the Renewable Energy Directive (2009/28/EC). This was reformulated in 2018 as part of the Clean Energy for all Europeans package. The new Directive sets a new binding renewable energy target for the EU for 2030 of at least 32%, with an option for a possible upwards revision by 2023 and contains measures applicable to different sectors to achieve these objectives. These requirements need to be transposed into national legislation by 30 June 2021, when the 2009 Directive will be repealed.

### 4.1.2 National Energy and Climate Plans

Under the Regulation on the Governance of the Energy Union and Climate Action (EU) 2018/1999, EU Member States are required to draft National Energy and Climate Plans (NECPs) for 2021-2030. These plans detail how they will meet the new 2030 targets for energy efficiency, renewables, greenhouse gas emission reductions, interconnections, and research and innovation. Member States were required to submit their draft NECPs by 31 December 2018. The Commission then reviewed the detail and provided feedback to Member States in June 2019. Based on these recommendations, Member States were then required to submit their final NECPs by 31 December 2019. These Plans, therefore, provide the current national policy basis for action on renewable energy and will be considered in relation to France and Ireland in sections 5 and 6 respectively.

### 4.1.3 EU Offshore Renewable Energy Strategy

In November 2020, the European Commission published its Offshore Renewable Energy Strategy (COM(2020)741 final) (EC, 2020a). This Strategy is intended to set out the pathway for fixed and floating wind energy projects; wave and tidal projects; floating photovoltaic installations; and the use of algae to produce biofuels. Importantly, the Strategy proposes to increase Europe's offshore wind capacity from its current level of 12 GW to at least 60 GW by 2030, and to 300 GW by 2050. This is complemented with an ambition for 1 GW of ocean energy by 2030 and 40 GW of ocean energy and other emerging technologies such as floating wind and solar by 2050.

The strategy recognises that to achieve this level of growth a change in pace is required, which also involves overcoming a number of obstacles. Key areas where action is required are identified as:

- Maritime spatial planning for sustainable management of space and resources,
- A new approach to offshore renewable energy and grid infrastructure,
- A clearer EU regulatory framework for offshore renewable energy
- Mobilising private-sector investment in offshore renewables: the role of EU funds,
- Focusing research and innovation on supporting offshore projects, and
- A stronger supply and value chain across Europe.

For each of these policy areas, a number of overarching actions to be taken by the Commission to enable scaling up deployment of offshore renewable energy are identified. In relation to MSP, for example, the Commission will encourage Member States to integrate offshore renewable energy development objectives into their MSPs; produce guidance relating to wind energy development and nature conservation (European Commission, 2020b); and promote dialogue on offshore renewable between public authorities, stakeholders and scientists in the form of a community of practice.

The actions relating to a clearer EU regulatory framework for offshore renewable energy recognise the benefits that a predictable long-term legal framework would bring in terms of providing certainty and mobilising investor financing but the actions

specified tend to focus more on the specificities of newer types of energy projects such as hybrid projects and energy islands, the need for harmonisation of grid codes, and revision of the State aid guidelines on energy and environmental protection so as to facilitate financial support for Offshore Renewable Energy (ORE) projects. These actions are therefore more high-level than actions that may be needed at national levels. Despite this, the need for collaboration between Member States, regions, citizens, social partners, NGOs and all sea users is acknowledged as necessary to scale-up development.

### 4.1.4 EU Atlantic Strategy

The EU's Atlantic strategy aims to support the sustainable development of blue economy in France, Ireland, Portugal and Spain. The Strategy is implemented through a dedicated Atlantic Action Plan which aims to promote innovation, contribute to the protection and improvement of the Atlantic's marine and coastal environment, improve connectivity, and create synergies for a socially inclusive and sustainable model of regional development (EU, 2020c). An Atlantic Assistance Mechanism supports this by strengthening cooperation and coordination between countries and stakeholders. The Action Plan is organised according to four thematic Pillars covering: Atlantic ports as gateways and hubs for the blue economy; Marine renewable energy; Blue skills of the future and ocean literacy and Healthy ocean and resilient coasts. While there is clear overlap between some pillars e.g. ports and MRE, others are more tenuous.

In relation to Marine Renewable Energy, the Action Plan stipulates one specific goal and a number of concrete actions required to meet it, shown in Table 1.

**Table 1.** Actions relating to the Marine Renewable Energy Pillar of the Atlantic Action Plan (COM/2020/329).

| Goal 5: The promotion of carbon neutrality through marine renewable energy |
|---|
| Actions |
| • Set specific **deployment objectives** for marine renewable energy in the Atlantic regions taking into account their environmental impacts<br>• Define **best sites** for marine renewable energy farms (including offshore wind) and adjacent ports across the Atlantic, taking into account potential impacts on the marine environment<br>• Implement **incentives** for deployment of innovative renewable energy installations<br>• Pool together different marine renewable energy **initiatives** covering the EU Atlantic area, based on the philosophy and furthering the objectives of the Strategic Energy Technology plan (SET plan)<br>• Develop **public awareness** using appropriate communication tools on marine renewable energy in the Atlantic<br>• Strengthen **cooperation** in the European ocean energy community |

- Develop a specific ocean energy framework for **EU islands** in the Atlantic

### 4.1.5 EU Biodiversity Strategy

Another part of the EU's Green Deal is the revised Biodiversity Strategy (COM(2020) 380 final) to 2030. This acknowledges the deteriorating status of biodiversity globally and also the role of nature in fighting climate change. The overall ambition of the strategy is to put Europe's biodiversity on a path to recovery by 2030. This requires increasing the coverage of protected areas on land and at sea each to 30% (EU, 2020d). The Strategy also notes that there should be a specific focus on areas of very high biodiversity value or potential, which are most vulnerable to climate change. Such areas require strict protection[1] and should correspond to one third of protected areas (10% of EU sea). The additional designations required to reach these targets can be under the Natura 2000 network or national conservation legislation and should have defined conservation objectives and measures. The Commission has committed to agree the criteria and guidance for additional designations with Member States by the end of 2021.

To address other inadequacies in EU biodiversity protection, the Biodiversity will put forward a proposal for legally binding EU nature restoration targets in 2021, with the aim of restoring degraded ecosystems, particularly those with a role in reducing the impacts of climate change. The restoration plan will also comprise of targets to ensure no deterioration in conservation trends and status of all protected habitats and species by 2030. A set of policy options for the restoration targets was put forward in an impact assessment that was open for public consultation between November and December 2020. The Commission is currently collating the submissions with a view to adoption in Q4 of 2021.

[1] The Strategy does not define strict protection though it is term with a specific meaning in the context of the Habitats Directive, where Annex IV lists plant and animal species that need 'strict protection'. In the Strategy it is noted that "strict protection does not necessarily mean the area is not accessible to humans but leaves natural processes essentially undisturbed to respect the areas' ecological requirements" (EU, 2020c, p.4).

# 5. Consenting process in France

## 5.1 National policy context

France has a legal obligation to reach 40% renewable energy production in the electricity mix by 2030, as contained in the Law on Energy Transition for Green Growth Act (*Loi de Transition Energétique pour la Croissance Verte, LTECV*), adopted in August 2015. This legislation sets out medium- and long-term targets for reducing GHG emissions, reducing energy consumption, energy performance and the share of renewable energies. It also provides for the drafting of a National Energy Research Strategy (SNRE). The SNRE aims to identify the R&D challenges and scientific obstacles in the energy sector that need to be addresses so that the legal targets can be achieved. The focus in policy, however, has been primarily oriented towards offshore wind energy with objectives and targets for ocean energy limited to available public incentives for prototypes and pilot farms.

Since then the Law on Energy and Climate (LEC), promulgated on 9 November 2019, amends the French targets and the approaches required to ensure their achievement along with specific measures designed to reduce greenhouse gas emissions. This legally recognises the climate and ecological emergency and creates a 'High Council on Climate' who is responsible for independent assessing France's climate strategy and the policies implemented to achieve the goals. This provides for a five-year term for France's energy and climate targets.

In terms of offshore renewable energy, focus to date has been on offshore wind energy, though France has a long history with hydropower sometimes in combination with nuclear power plants. Four pilot projects are also underway for floating wind technologies. Since 2012, seven offshore wind farm projects have been awarded under competitive calls for tenders (3,5 GW). The 2021 call relates to a 1000 MW offshore wind farm on the East Channel - North Sea coast with the successful party expected to be announced in 2022, following a public debate.[2] The latest call for tenders is for a 250 MW floating wind farm on the North Atlantic - Channel West coast, in the south of Brittany, which is currently underway (results expected in 2022).

[2] More information on this process is available at https://www.ecologie.gouv.fr/eolien-en-mer-0#scroll-nav__2

### 5.1.1 Multi-annual Energy Plan (PPE)

The Multi-annual Energy Plan (*Programmation pluriannuelle de l'énergie*, PPE), sets out the Government's priorities for energy over a 10-year period. This covers all types of energy as well as management of energy demand, promotion of renewable energy, safeguarding security of supply, energy costs, and network development. The PPE contains a target of significant increase in the development of renewable energies by 2028, necessitating a doubling of installed renewable electricity capacities by 2028 compared to 2017 (Ministère de la Transition Écologique et Solidaire 2019).

The PPE contains a calendar of the tenders that will be launched and allocated by the State in relation to offshore wind in the coming years. It sets out, on a yearly basis, the tenders to be allocated, specifying the technology (fixed/floating), the location (Channel, Mediterranean Sea etc.) and a target price. It also specifies targets for fixed and floating offshore wind together with their expected costs per MWh.

### 5.1.2 National Low Carbon Strategy (SNBC)

The National Low Carbon Strategy (*Stratégie nationale bas-carbone*, SNBC) is essentially a roadmap for climate change mitigation. This specifies how France proposes to reduce GHG emissions in the short and medium terms. There is a national ambition to reach net zero emissions by 2050 across all sectors (Ministère de la Transition Écologique et Solidaire, 2020). The PPE covers only metropolitan France, whereas the SNBC also covers the overseas areas.

### 5.1.3 National Energy and Climate Plan

The current NECP for France incorporates sections from the draft SNBC 2 and the draft PPE 2, and derives its contents from these national plans. The NECP re-iterates the targets for offshore wind (that are in MEP 2) as 2.4 GW by 2023 and 5.2-6.2 by 2028 (Government of France, 2020). The Plan recognises the significant potential France has in terms of tidal energy (3 to 5 GW), located off the coast of Raz-Blanchard in Normandy and in the Fromveur Passage in Brittany. It is stated that the Government does not believe that the conditions for launching a commercial call for tenders can be met currently and therefore does not intend having such a call for projects under PPE 2. Wave energy is stated to be at the demonstration stage.

### 5.1.4 Climate Plan

A Climate Plan was published by the French Government in 2017 with the aim of reaching carbon neutrality by 2050, as required by LTECV. The Plan takes a whole of Government approach to stepping up action on implementation of the Paris Agreement (UNFCCC). The Plan also recognises the role of research and innovation in producing clean energy and also the need for continued investment in new technologies. It has a five-year timeframe.

### 5.1.5 Maritime Spatial Planning

MSP is implemented in metropolitan France and overseas territories by means of sea basin strategic documents, also referred to in French as *Documents Stratégiques de Façade* (DSF). Four sea basins have been delimited in the waters around mainland France: Eastern Channel-North Sea, North Atlantic-Western Channel, South Atlantic, and the Mediterranean coast. The competent authority for MSP is the Ministry for the Sea (*Ministère de la Mer*), created in 2020. At the maritime basin scale, the DSF is developed by the State for a period of six years. State representatives are responsible for its development with contributions from associated State services. The "coordinating State representatives" are supported by a consultation body, the Maritime Façade Council (*Conseil Maritime de Façade,* CMF), which brings together 80 different stakeholders from the sea, the coast and the land. The public can make submissions through a "preliminary consultation" (*Concertation Préalable*) process. Local authorities are responsible for various sectors related to maritime activities (*Régions, Départements*) as well as municipalities and their organisational structures. These authorities have planning tools that can be used to implement their MSP objectives locally, within the limits of the territorial sea.

The DSF documents are comprised of two parts. Firstly, the "strategic component" of the DSF consists of a "state of the art", the socio-economic and environmental strategic objectives, the vocation map and the vision of the actors for the sea basin by 2030. These were adopted by the coordinating "State representatives" of the sea basin in 2019 after a phase of consultation with the public and stakeholders. The second component of the DSF is the "operational component" that consists of an action plan and a monitoring mechanism, which must be developed and ready for adoption by 2021. Currently these are open for public consultation, which is open from 20$^{Th}$ May

to 20th August 2021.[3] The DSF are designed so as to deliver the requirements from both the Marine Strategy Framework Directive and MSP Directive and specify the conditions for implementing the National Strategy for the Sea and Coast (*Stratégie nationale pour la mer et le littoral,* SNML) according to local specificities. This is illustrated in Figure 1.

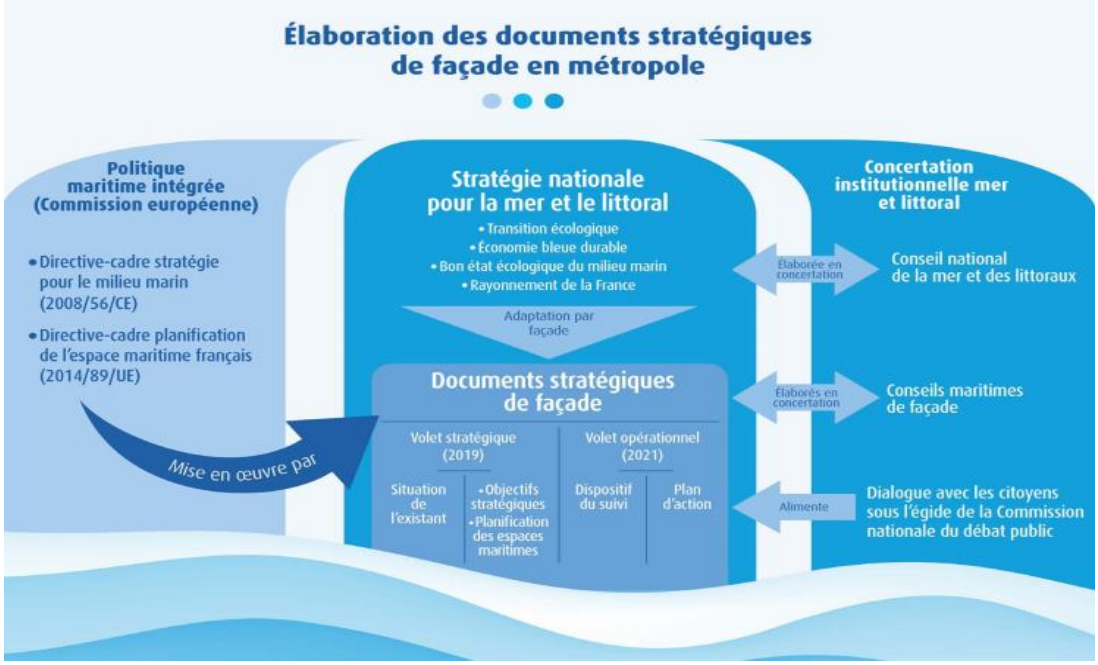


**Figure 1.** Development of strategic facade documents (DSF) in metropolitan France.

The French Environmental Code specifies that other plans and projects (sectoral) at sea and water management (WFD) must be compatible with the DSF while coastal plans and projects (on land) must only 'take them into account'.

ORE projects tend to be explicitly excluded from military zones (for training, navigation, or security operations). Marine protected areas (MPAs) are also heavily protected and this can create additional barriers for the siting of offshore energy projects. For sea basins under the control of the State, through the Ministry for the Ecological Transition, macro-zones (or vocation zones) that could potentially host ORE projects have been identified, based largely on physical environmental conditions, geomorphology, risks to maritime security, etc. (see O'Hagan, 2020). Within the macro-zones, stakeholders

[3] See https://www.merlittoral2030.gouv.fr/

provide input for siting specific projects. Each DSF includes a vocation map. Each vocation map also includes vocation zones dedicated to ORE (either with a number one priority, or balanced with other activities such as fisheries, etc.).

## 5.2 Current consenting process

Since 2017, a more streamlined consenting process has been implemented. It can best be described as a co-construction model whereby the State conducts certain preparatory activities and the developer is responsible for obtaining consents and deploying the device(s). It commences with a call for tenders where developers respond with their proposals (project and price). This is advantageous in that prior to the call, the State bodies will have pre-identified suitable sites, carried out preliminary technical surveys, initial environmental monitoring work, and consulted with the public and other marine users. This front-loaded style of process means that risk is substantially reduced for project developers whilst simultaneously enabling project developers to offer the best price for their project to the State. After the allocation of the tender, the developer is responsible for obtaining an environmental authorisation (based on the EIA) and an authorisation to use the maritime domain. The consenting process of its project, including the realisation of the EIA. The project developer can propose a design envelope for the project and based on this envelope the consenting authority can decide to grant the authorisation. Within the design envelope, a developer can adapt its project specifications, such as the number of turbines, their capacity etc., after the consenting process (without requiring additional authorisations) provided there is no overall change in the environmental impacts anticipated.

### 5.2.1 Environmental Authorisation

This is granted under Article L. 181-1 et seq. of the Environment Code. In this approach, a single authorisation covering environmental issues including an environmental impact assessment (EIA), and if needed, an Appropriate Assessment (sometimes required under the EU Habitats Directive), and one dedicated to protected species is granted by the Préfet (Prefect) where the project is to be located. The single authorisation enables a developer to deposit a single application (or dossier) with a single representative from the regulatory administration covering certain aspects of the Environmental Code and the Energy Code in order to simplify the procedure. This single authorisation includes the Water Resource Protection Licence, the EIA and the authorisation to generate electricity. Within this system, public consultation is

organised by the State. Offshore renewable energy installations are subject to the requirement for an EIA either mandatorily (from the Directive for size specific offshore wind farms ) or on a case-by-case-basis for other technology types (e.g. wave and tidal) (Article R122-2, Environment Code). The Environmental Authorisation includes all elements of the project: the offshore farm, substation on land, export cable (offshore and onshore, to an existing station), construction or public works for maintenance harbour (if needed).

### 5.2.2 Concession to occupy the Public Maritime Domain

If a project is to be located in the territorial sea, a concession to occupy the maritime public domain, which takes into account maritime safety and the use of maritime territories (administered by the Préfet). This is granted in accordance with Article L. 2124-1 of the general code of the property of public persons. This concession requires public consultation which can be combined with the preceding process. A Maritime Domain licence will only be granted if an EIA has been positively assessed (i.e. if there are no significant adverse effects). Decree No. 2016-9 of January 8, 2016, provides that a licence to occupy the maritime public domain can apply to a term of up to 40 years. Currently all planned offshore wind projects are situated in the maritime public domain, part of the territorial sea.

Within the Exclusive Economic Zone (200 nautical miles) a specific permit authorising occupation and covering environmental aspects of the project is required under Article 20 of Ordinance No. 2016-1687 (known as the *ZEE Ordonnance*) of 8th of December 2016, relating to sea space under the sovereignty of the French Republic. Some new projects are planned for the EEZ, for example, an offshore wind tender off Normandy will be allocated in 2022, and another offshore wind tender in the south of Brittany.

### 5.2.3 Authorisation to generate electricity

For ORE developments with an output capacity of more than 50 MW, an authorisation to generate electricity is required from the Ministry of Energy. This is now included in the single environmental authorisation, outlined in section 5.2.1. This authorisation is deemed to be granted for projects up to 1000 MW. The developer at this time will also enter into a grid connection agreement with the French Transmission System Operator (TSO).

## 5.3 Future consenting process

The French Government and TSO responsible for grid connections are currently considering a single permit that would result in an integrated permit (*permis enveloppe*) where developers would not be required to determine all technological choices at the beginning of the project, but would rather define an envelope for some project characteristics. Currently after obtaining the environmental authorisation, and before construction commences, developers will inform the regulatory administration of their technological choices and re-assess its impact on the environment.

# 6. Consenting process in Ireland

## 6.1 National policy context

Consenting for ocean energy in Ireland is currently in a state of flux. It is an exciting time with the country's first national maritime spatial plan, the National Marine Planning Framework (NMPF) due for publication on 17th June 2021. Alongside this, work is continuing to progress on new consenting legislation that will entirely reform the current processes, the geographic scope of application and also create a new regulatory authority with consenting and enforcement responsibilities. This new legislation is expected in Q2 of 2021.

### 6.1.1 National Energy and Climate Plan

In line with the EU Regulation, Ireland's draft National Energy and Climate Plan (NECP) 2021-2030 was submitted to the European Commission in December 2018. The draft NECP took into account energy and climate policies developed up to that point, the levels of demographic and economic growth identified in the National Planning Framework: Project 2040 process and included all of the climate and energy measures set out in the National Development Plan 2018-2027.

In 2019, the NECP was updated to incorporate all planned policies and measures that were identified up to the end of 2019 and which collectively deliver a 30% reduction by 2030 in non-ETS greenhouse gas emissions (from 2005 levels) (DCCAE, 2019a). The Plan includes trajectories for ocean energy production in Ireland of 30 MW by 2030 and 110 MW by 2040.

### 6.1.2 Climate Action Plan 2019

A national Climate Action Plan was published in 2019 and put in place a range of actions, across all government departments, to mitigate the impacts of climate change (DCCAE, 2019b). In terms of renewable energy, the plan largely complements the targets set out in the NECP. Following an election in 2020, the new government increased Ireland's ambitions and committed to achieving a 7% annual average reduction in greenhouse gas emissions between 2021 and 2030. Ireland is currently developing policies and measures to meet this target via an update to the Climate Action Plan and intend to integrate these into a revision of the NECP. In addition,

under the proposed Climate Action and Low Carbon Development (Amendment) Bill, targets to reach reductions in emissions by 2030 will be enshrined in law.

### 6.1.3 Programme for Government 2020

As mentioned above, a new Government in 2020 agreed a new Programme for Government: Our Shared Future (Department of the Taoiseach, 2020). Ireland is committed to achieving a 7% annual average reduction in greenhouse gas emissions between 2021 and 2030. In terms of energy, the Programme for Government commits to holding the first Renewable Electricity Support Scheme (RESS) auction by the end of 2020 (with annual auctions thereafter); finalisation of the Marine Planning and Development Bill so that it is published as soon as possible and enacted within nine months; completion of the Celtic Interconnector to connect Ireland's electricity grid to France; and commence planning for future interconnection with neighbouring countries.

For offshore renewables specifically, the Programme for Government commits to development of a plan setting out a path to achieving 5 GW capacity in offshore wind by 2030 off Ireland's Eastern and Southern coasts and longer term development of at least 30 GW of offshore floating wind power in the Atlantic, whilst supporting ocean energy research, developing and demonstrating floating wind, tidal, and wave power.

### 6.1.4 Offshore Renewable Energy Development Plan (OREDP)

An Offshore Renewable Energy Development Plan (OREDP) was published in 2014 and identifies resources for increasing indigenous production of renewable electricity, contributing to reductions in greenhouse gas emissions, improving the security of energy supply and creating jobs in the green economy (DCENR, 2014). The OREDP set out a number of policy actions necessary to deliver Ireland's ambitions in this area. An Interim Review of the OREDP was published in May 2018 (DCCAE, 2018) and this updates progress made to date and the challenges that have emerged since initial publication. It also identifies the areas that need to be prioritised or require attention. The development of a new Offshore Renewable Energy Development Plan is due to commence in 2021. The new OREDP will set out the Government's policy for the sustainable development of Ireland's offshore renewable energy resources and align with the aforementioned policy drivers.

### 6.1.5 National Marine Planning Framework (NMPF)

Ireland commenced work on its first national maritime spatial plan in 2016 with formal transposition of the EU's MSP Directive. A Baseline report was published in September 2018 for consultation (DHPLG, 2018). This set out the existing situation is terms of active marine sectors and uses and included identification of future opportunities and constraints for each sector. It also proposed a set of potential high level objectives for Ireland's first National Marine Planning Framework. Responses to this process then informed the development of draft National Marine Planning Framework published for public consultation in November 2019. This was accompanied by a Strategic Environmental Assessment and Appropriate Assessment.[4] Since then the NMPF has been amended and revised to take account of the 225 submissions received on its contents.

The current governing legislation, Part 5 of the Planning & Development (Amendment) Act, 2018 requires that the National Marine Planning Framework (NMPF) is approved by both Houses of the Oireachtas before it can be formally adopted and submitted to the European Commission. It was published on 1st July 2021.[5] The NMPF sets out the Irish Government's long-term planning objectives and priorities for the management of Ireland's maritime area over a 20-year time frame. It will be underpinned by new legislation (see below) and a Marine Policy Statement. The NMPF sets out specific objectives and marine planning policies for all the activities taking place in Ireland's waters. The plan covers sixteen sectors/uses[6] and each of these are contextualised within the pillars of their economic, environmental and social considerations. The NMPF will form a critical basis for future decision-making by marine decision-makers who are legally obliged to implement the NMPF objectives when making decisions. As such, consideration of NMPF policies should shape decisions e.g. content of plans, terms and conditions attached to consents. The competent authority for MSP in Ireland

[4] All documentation is available to download from https://www.gov.ie/en/consultation/bd098b-public-consultation-on-the-draft-national-marine-planning-framework/

[5] See https://www.gov.ie/en/publication/60e57-national-marine-planning-framework/ (accessed 1st July 2021).

[6] Aquaculture; Defence and Security; Energy – subdivided into emerging technologies; natural gas storage; transmission; petroleum; offshore renewables; Fisheries; Mineral exploration and mining; Ports, harbours and shipping; Safety at sea; Seaweed harvesting; Sport and recreation; Telecommunications; Tourism; and Wastewater treatment and disposal.

is the Department of Housing, Local Government and Heritage (DHLGH) with scientific and technical support provided by the Marine Institute.

Energy – Offshore Renewables is one of the sectors included in the NMPF. The policies relating to it in the NMPF support the development of ORE in Irish waters, paying particular attention to areas where there is potential for coexistence / multi-use. The policies re-iterate what is stated in other national policies (Climate Action Plan, NECP, PfG) in terms of the need to expand use of offshore energy resources. As such proposals to do this are supported by the plan. Decisions on ORE developments should be informed by consideration of space required for other activities of national importance described in the NMPF. There is an over-arching duty to demonstrate that projects will, in order of preference, a) avoid, b) minimise, c) mitigate adverse environmental impacts. New ORE development applications will be required to submit a visualisation assessment as part of the consenting process. This needs to demonstrate consultation with communities that may be able to view the proposed development. Guidelines on the visualisation assessment requirement are currently being development and until then the NMPF advises that best practice approaches should be used.

Alongside the NMPF, the DHLGH are working on other statutory guidelines for development management based on the forthcoming requirements of the new/associated consenting legislation (see section 6.2). The NMPF states what needs to be considered but it is the development management guidelines that will put forward how this should be achieved. In relation to ORE specifically, the development guidelines will deal with future zoning policy and visualisation assessments. Work is also progressing on the development of a new NMPF digital tool to ensure spatial data stays up to date. Over time this will become a standalone platform for marine consenting.

## 6.2 Current consenting process

### 6.2.1 Foreshore Acts, 1933-2011

In Ireland all forms of offshore renewable energy device require foreshore consent (i) to investigate/survey the site (ii) to construct the development (and cabling) and (iii) to occupy the property despite the nature, scale and impact these devices might have on the receiving environment. These requirements derive from the Foreshore Act, 1933

as amended. It also partly implements the EU EIA and Public Participation Directives, with additional requirements provided for in secondary legislation. The foreshore covers the area from the high water mark to the 12 nautical mile territorial sea limit. Accordingly, there is no planning or licensing system for developers who want to deploy devices beyond 12 nautical miles. This is one of the reasons why the legislation is being amended and consenting process reformed (see below).

Under the existing system, developers must first enter a period of pre-consultation with the Department of Housing, Local Government and Heritage's (DHLGH) Marine Planning Policy and Legislation division before formally applying for a Foreshore Licence. A Foreshore Licence is required for short-term, non-permanent and non-exclusive use of the foreshore such as for environmental survey work, technical surveys and monitoring. This is the first stage of the consenting process. Successful applicants must lodge a deposit of €100,000 before starting investigation works in the proposed development area. The deposit is refunded if the applicant complies with the terms and conditions of the licence and later applies for a Foreshore Lease. A Foreshore Lease is required for permanent, exclusive use of the foreshore. Holding a Foreshore Licence does not guarantee an applicant will subsequently get a Foreshore Lease but a developer must have completed the requisite site investigation / environmental work prior to applying for a Foreshore Lease.

When an application for a Foreshore Licence or Lease has been made, the applicant is required to have a public notice published in a newspaper circulating in the surrounding locality. This must include information on when, where and how objections on the proposed development can be made. It also contains information on where the application documentation can be viewed, usually the 24 hour Garda Station closest to the proposed works. The documentation associated with the application is also published on the Department's website. The standard public notice period is 21 working days. An application for a Foreshore Licence for site investigation is subject to consultation but usually for a shorter period of time than consultation on a Foreshore Lease application.

At present, the DHLGH is only accepting applications for Foreshore (investigation) Licences. No Foreshore Leases are being granted as the system is being reformed. This deliverable therefore does not consider the Foreshore Leasing process in any more detail.

### 6.2.2 Electricity Regulation Act, 1999

Offshore renewable energy developments are governed by the provisions of the Electricity Regulation Act, 1999 and must be licensed by the Commission for Regulation of Utilities (CRU). The CRU has the power to grant licences to generate and supply electricity (section 14) and to grant authorisations to construct or re-construct generating stations (section 16). The steps in these processes are shown in Table 2. The CRU also oversees the provision of access to the transmission or distribution system to holders of licences or authorisations. Under section 9(4)(e) of the 1999 Act the Commission must promote the "continuity, security and quality of supplies of electricity". For this reason, generating stations that have a greater impact on the security of supply require a more detailed examination when applying for authorisations and licences.

**Table 2.** Steps in the Electricity Regulation consenting process.

| Section 16 | Section 14 |
|---|---|
| (a) Authorisation to Construct | (b) Licence to Generate |
| 1. *Pre-submission meeting* | 1. *Pre-submission meeting* |
| 2. *CRU Completeness Check* | 2. *CRU Completeness Check* |
| 3. *CRU Assessment and Applicant Updates* | 3. *CRU Assessment and Applicant Updates* |
| 4. *CRU Decision* | 4. *CRU Decision* |
| 5. *Authorisation Conditions* | 5. *Licence Conditions* |

Section 14 of the Electricity Act, 1999 provides the CRU with legal responsibility to grant, monitor the performance of, modify, revoke and enforce Generation and Supply Licences under the Act. Applications for licences must be made in writing and be in such form and contain such information as the CRU may request. Section 16 covers authorisations to construct or reconstruct a generating station. If a proposed generating station has an installed capacity of less than or equal to 1 MW then applicants are exempt from the need to apply to CRU for a Licence or Authorisation. Such generating stations are licensed and authorised pursuant to the Electricity Regulation Act, 1999 (Section 14 (1A)) Order 2008 (S.I No. 384 of 2008) and Electricity Regulation Act 1999 (Section 16(3A)) Order 2008 (S.I 383 of 2008) respectively.

The CRU has issued guidance notes on both the licence to generate and authorisation to construct processes. Joint application forms are used for both Licences and Authorisations, though the forms vary according to whether a proposed development is above or below 40 MW. Applicants must hold an Authorisation from CRU prior to submitting their Licence application. They must also have Planning Permission and/or a Foreshore Lease.

#### *6.2.2.1 Grid connection*

In Ireland, the transmission system (high voltage) is operated by EirGrid, a State-owned commercial company. Development with over 40 MW total export capacity at a single location apply to EirGrid for a transmission connection. The distribution system (medium and low voltage) is operated by the Electricity Supply Board (ESB). Developments with under 40 MW total export capacity apply to ESB Networks for a distribution connection. Proof of a connection agreement or proof of application for a connection agreement from EirGrid or ESB is required as part of the Licence to Generate and Authorisation to Construct consents. The process relating to connection offers does not come under the Electricity Regulation Act, 1999 but is subject to a separate administrative process.

In May 2021, the Irish Government designated EirGrid as the transmission system operator for the offshore wind sector. Under the plan EirGrid will own and operate grid assets for projects around the coast. EirGrid are currently consulting the public on the future of the Irish grid, recognising that more renewable energy generation will require additional grid infrastructure development.

### 6.2.3 Planning and Development Acts, 2000-2020

The Planning and Development Acts, 2000-2020, and Regulations made thereunder, provide the framework for terrestrial development and as such, any ORE development that has an onshore element must have due regard to the relevant provisions of the applicable County Development Plan (local area plan). Onshore elements in this context could include the construction of buildings and other infrastructure linking the offshore development with the grid infrastructure, for example, and as such would require Planning Permission from the local planning authority. Planning Permission is applied for by filling in a planning application form and submitting it together with required documents to the local planning authority, usually the County Council. The

local authority will also be able to advise on compliance with the development plan, other required documentation, the applicable fee and any other requirements including EIA and/or AA.

### 6.2.4 Environmental Impact Assessment (EIA) Directive

The aim of an EIA is to provide the decision-making authority with relevant information to allow a decision to be made on a specific project in the full knowledge of the project's likely impact on the environment. Part X of the Planning and Development Act, 2000 as amended covers EIA together with the associated Regulations. The EIA Directive does not refer to offshore energy development, per se, but it does cover wind energy in Annex II. Under Irish legislation, an EIA must be undertaken for wind farms with more than five turbines or having a total output greater than 5 MW (Planning and Development Regulations 2001, Schedule 5, Part 2, 3(j)). Thresholds also apply to the prescribed classes of development. Proposed projects below the set thresholds are subject to EIA if the competent authority considers they are likely to have significant effects on the environment.

The Planning and Development Regulations 2001, as amended, specify the type of information to be contained in the Environmental Impact Assessment Report (EIAR). The developer is responsible for providing the necessary information in the report, which the competent authority then uses to 'assess' the effects and impacts of the proposed development before making a decision. The EIA process also informs the competent authority on any significant impacts that will require monitoring subsequent to granting of the permission/approval, usually attached as terms and conditions to the consent.

### 6.2.5 Habitats Directive and Appropriate Assessment

The requirement for an Appropriate Assessment (AA) derives from Articles 6(3) and 6(4) of the Habitats Directive (92/43/EEC). The Habitats Directive is transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 as amended (commonly known as the Habitats Regulations). Under Article 6(3), a competent authority cannot agree to a plan or project until it has ascertained that such a plan or project will not adversely affect the integrity of the site concerned. The assessment must be made with reference to the conservation objectives of the site as this is directly related to favourable conservation status. Under Article 6(4) if after an

AA, it cannot be demonstrated that a plan or project will not affect the integrity of the European site, and where it has been demonstrated that there are no alternative solutions, a derogation can be sought but requires the imperative reasons of overriding public interest (IROPI) test to be satisfied, a complex legal test that is rarely used. Generally, every project has to be screened for AA to establish if alone, or in combination with other plans or projects, it will have an effect on a European site. Where necessary, an AA must be undertaken by the competent authority prior to determining an application for consent for a project. The process applicable to AA is described comprehensively in the Guidance on EIS and NIS Preparation for Offshore Renewable Energy Projects in 2017 (DCCAE and SEAI, 2017).

## 6.3 Forthcoming consenting process

Ireland's consenting system for marine development has long been recognised as being in need of reform. This reform process began in 2013 with the publication of the general scheme of the Maritime Area and Foreshore (Amendment) Bill 2013. This aimed to align the foreshore consenting process with the terrestrial planning system, and to provide a coherent mechanism to facilitate and manage development activity in Ireland's Maritime Area including Strategic Infrastructure (a regime specific to large scale development of economic or social importance to the State or a region). Following legal advice to Government, a new version of the Bill published in 2019 as the Marine Planning and Development Management Bill 2019 (MPDM). This version has undergone additional amendments and refinement and has been renamed the Maritime Area (Planning) Bill. A pre-initiation version of the Bill was published on 1st July 2021.[7]

The purpose of the MAP Bill remains to establish a new marine planning system, underpinned by a statutory Marine Planning Policy Statement, guided by the NMPF, and to provide a development management regime for Ireland's maritime area. The term 'maritime area' is defined in the Bill and will encompass the area between the high water and 12 mile limit (foreshore), the Exclusive Economic Zone to 200 nautical miles, and designated areas of the continental shelf. This will therefore enable ORE development beyond 12 nautical miles for the first time in the history of the State. A new consenting system contained in the Bill will streamline procedures by using a single

[7] See https://www.gov.ie/en/publication/a1a65-maritime-area-planning-bill/ (accessed 1st July 2021).

consent principle: one State consent (Maritime Area Consent (MAC)) to enable occupation of the Maritime Area and one development consent (planning permission), with a single environmental assessment.

Pre legislative scrutiny of MAP in November and the subsequent Report of the Joint Oireachtas Committee in February (JOC, 2021) has resulted in some additional changes with the announcement in April that the MAP Bill will also establish a new agency to regulate development in the Maritime Area, to be called the Maritime Area Regulatory Authority (MARA). MARA will be responsible for assessing and granting all Maritime Area Consents (previously expected to be a role for the relevant Ministers) as well as licensing a number of activities in the maritime area. An Bord Pleanála and relevant coastal Local Authorities will still serve as the planning authorities for projects requiring development consent. MARA will also be responsible for compliance and enforcement measures and for managing the existing State Foreshore portfolio of leases and licences.

As described in section 6.1.5, the NMPF does not set out zones for particular marine uses but the Maritime Area (Planning) Bill will provide for spatial designations for specified areas and uses called Designated Marine Area Plans (DMAP). The DMAP process will enable the development of regional, local and sectoral marine plans and require consultation between Government departments, the public and stakeholders. Hence new zones are expected to cover zones for Offshore Renewable Energy development specifically in the first instance and may also provide for Marine Protected Areas in future (noting expansion of the Irish MPA network is subject to a separate public consultation under 30th July 2021 and that is likely to determine future approaches to MPA including potentially new legislation).

# 7. Conclusions

It is clear from the preceding sections that both France and Ireland have made and continue to make changes to their legal systems in order to streamline consenting systems for the realisation of offshore renewable energy projects. This is already in place in France but under development in Ireland, so it is difficult to determine the effectiveness of the changes at this time.

What is also evident from analysing the policy drivers at EU and national levels, is that whilst the potential contribution of ocean energy is clearly expressed at EU, it is more difficult to see this in national level policies which may have implications for development. In France for example there are specific targets set for offshore wind, but this is not the case for wave or tidal energy. It remains attributable to the TRL status of these respective technologies, but a positive policy signal could also stimulate and focus deployment efforts.

The implementation of Maritime Spatial Planning is likely to have an impact on offshore energy development planning in future. At this time, the first plans are just being published and starting to be implemented so their relative impact on the ORE sector is largely unknown. It is obvious from future policy developments in Ireland that ORE development will become plan-led in future through designated zones for development. To some extent this is already the case in France, where the State pre-selects sites.

This report sets the context for future work in Work Package 5 of SafeWAVE. The marine environment that offshore energy developers work in is dynamic, inter-connected and complex yet legal and consenting frameworks demand certainty. The changing environment means it is often difficult to determine and agree the effects a development will have on the environment with such a high degree of certainty. For this reason, it is important to explore whether approaches, such as adaptive management, could be implemented and how these could provide a solution. This will be the focus of the next deliverable in this Work Package.

# 8. References

Bald, J., and Apolonia, M., 2020. Deliverable 4.2 Review of consenting processes for wave energy in Spain and Portugal focusing on risk-based approach and Adaptive Management. Deliverable of the WESE Project funded by the European Commission. Agreement number EASME/EMFF/2017/1.2.1.1/02/SI2.787640. 58 pp.

Department of Communications, Climate Action and Environment and the Sustainable Energy Authority of Ireland. 2017. Guidance on EIS and NIS Preparation for Offshore Renewable Energy Projects. https://www.gov.ie/en/publication/3d6efb-guidance-documents-for-offshore-renewable-energy-developers/

Department of Communications, Climate Action and Environment. 2018. Offshore Renewable Energy Development Plan (OREDP) Interim Review [May 2018]. https://www.gov.ie/en/publication/e13f49-offshore-renewable-energy-development-plan/

Department of Communications, Climate Action and Environment. 2019a. Ireland's Draft National Energy and Climate Plan (NECP) 2021-2030. DECC, Dublin, Ireland. https://www.gov.ie/en/consultation/105804-irelands-draft-national-energy-and-climate-plan-necp-2021-2030/

Department of Communications, Climate Action and Environment. 2019b. Climate Action Plan 2019 – To Tackle Climate Breakdown. DCCAE, Dublin, Ireland. https://www.gov.ie/en/publication/ccb2e0-the-climate-action-plan-2019/

Department of Communications, Energy and Natural Resources. 2014. Offshore Renewable Energy Development Plan. https://assets.gov.ie/27215/2bc3cb73b6474beebbe810e88f49d1d4.pdf

Department of Housing, Planning and Local Government. 2018. National Marine Planning Framework: Baseline Report. DHPLG, Dublin, Ireland. https://www.gov.ie/pdf/?file=https://assets.gov.ie/100587/b28d0dc5-da56-463e-b341-e9bf444f292d.pdf#page=1

Department of Housing, Planning and Local Government. 2019. National Marine Planning Framework: Consultation Draft. DHPLG, Dublin, Ireland.

https://www.gov.ie/en/consultation/bd098b-public-consultation-on-the-draft-national-marine-planning-framework/

Department of Housing, Local Government and Heritage. 2021. Project Ireland 2040: National Marine Planning Framework. DHLGH, Dublin, Ireland. https://www.gov.ie/en/publication/60e57-national-marine-planning-framework/

Department of the Taoiseach. 2020. Programme for Government: Our Shared Future. https://www.gov.ie/en/publication/7e05d-programme-for-government-our-shared-future/

European Commission. 2020a. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: An EU Strategy to harness the potential of offshore renewable energy for a climate neutral future (COM(2020) 741 final). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A741%3AFIN&qid=1605792629666

European Commission. 2020b. Commission notice: Guidance document on wind energy developments and EU nature legislation (COM(2020)7730 final). https://ec.europa.eu/environment/nature/natura2000/management/docs/wind_farms_en.pdf

European Commission. 2020c. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A new approach to the Atlantic maritime strategy – Atlantic action plan 2.0 An updated action plan for a sustainable, resilient and competitive blue economy in the European Union Atlantic area (COM/2020/329 final). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2020:329:FIN

European Commission. 2020d. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: EU Biodiversity Strategy for 2030 Bringing nature back into our lives (COM/2020/380 final). https://eur-

lex.europa.eu/legal-content/EN/TXT/?qid=1590574123338&uri=CELEX%3A52020DC0380

Government of France. 2020. Integrated National Energy and Climate Plan for France. https://ec.europa.eu/energy/sites/ener/files/documents/fr_final_necp_main_en.pdf

Le Lièvre, C. and O'Hagan, A.M. 2015. Legal and institutional review of national consenting systems, Deliverable 2.2, RICORE Project. 46 pp.

Ministère de la Transition Écologique et Solidaire. 2019. Stratégie Française Pour L'Énergie et le Climat: Programmation Pluriannuelle de L'Énergie 2019-2023 / 2024-2028 (French Strategy for Energy and Climate: Multi Annual Energy Plan). République Française, Paris, France. https://www.ecologie.gouv.fr/sites/default/files/20200422%20Programmation%20pluriannuelle%20de%20l%27e%CC%81nergie.pdf

Ministère de la Transition Écologique et Solidaire. 2020. Stratégie nationale bas-carbone (SNBC) - La transition écologique et solidaire vers la neutralité carbone (National Low Carbon Strategy). République Française, Paris, France. https://www.ecologie.gouv.fr/sites/default/files/2020-03-25_MTES_SNBC2.pdf

O'Hagan, A.M. 2020. Marine Renewable Energy and Marine Spatial Planning. In: Copping, A.E. and Hemery, L.G., (Eds.) OES-Environmental 2020 State of the Science Report: Environmental Effects of Marine Renewable Energy Development Around the World. 2020. Report for Ocean Energy Systems (OES). https://tethys.pnnl.gov/publications/state-of-the-science-2020