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Co-designing opportunities towards the development of Irish offshore wind

Project acronym: EirWind
Collaborative project
Start date: 01st August 2018
Duration: 02 years

Work Package 4: Governance

Deliverable D4.8: Study on State bandwidth for offshore wind

By: Frances Judge, Valerie Cummins, Anne Marie O'Hagan, Jimmy Murphy

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Executive Summary

The aim of this study is to assess the capacity within Government departments and associated State agencies in terms of human resources to deliver Ireland's offshore wind targets (e.g. 3.5GW by 2030), and make recommendations on the investment in human resources required.

Discussions were held with representatives from a number of Government departments and agencies to determine the numbers of people currently engaged in work relating to offshore wind and to gain an understanding of the tasks that must still be accomplished before offshore wind turbines can be installed in Irish waters. The planning and consenting process for offshore wind in Scotland was also investigated to see if there are lessons to be learned by Ireland from the Scottish experience.

It was found that there are a number of potential bottlenecks within the consenting process that must be addressed if Ireland's offshore wind targets are to be met. It is likely that An Bord Pleanála will receive a surge of offshore wind farm applications from Relevant Projects in 2021/2022; therefore, it is recommended that a minimum of 10 staff within An Bord Pleanála should be dedicated to processing these applications. Both the Department of Housing, Planning and Local Government, and the Department of Communications, Climate Action and the Environment will need additional resourcing to ensure efficient marine planning and consenting processes. It is also recommended that resources are fed into the statutory consultees to ensure proper consultation and to prevent challenges on nature conservation grounds creating lengthy delays. For this reason also, the establishment of a coordinated scientific research and data collection programme is recommended to support the marine spatial planning and consenting processes.

List of Abbreviations

AA	Appropriate Assessment
ABP	An Bord Pleanála
CES	Crown Estate Scotland
CRU	Commission for Regulation of Utilities
DCCAE	Department of Communications, Climate Action and the Environment
DCHG	Department of Culture, Heritage and the Gaeltacht
DHPLG	Department of Housing, Planning and Local Government
EIA	Environmental Impact Assessment
ESBN	Electricity Supply Board Networks
FTE	Full time equivalent
HR	Human resources
IWEA	Irish Wind Energy Agency
MAC	Maritime Area Consent
MCCAE	Minister for Communications, Climate Action and the Environment
MLVC	Marine Licence Vetting Committee
MPDM	Marine Planning and Development Management
MPPS	Marine Planning Policy Statement
MS	Marine Scotland
MSP	Marine Spatial Planning
NMPF	National Marine Planning Framework
NPWS	National Parks and Wildlife Service
ORE	Offshore renewable energy
PI	Planning Interest
SID	Strategic Infrastructure Development
SMAZ	Strategic Marine Activity Zone

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1 Background to the study

The aim of this study is to assess the numbers within government departments and associated State agencies that are currently working in areas directly engaged with offshore wind, and to determine what further investment in human resources needs to be made going forward to ensure that Ireland's offshore wind targets are met (e.g. 3.5GW by 2030).

To achieve this, discussions were held with several people in different areas of government and in government agencies. The purpose was to get a clearer picture of the roles of each of these people and their agencies and determine the numbers of people currently directly engaged in work relating to offshore wind. Opinions were sought as to how offshore wind might be dealt with going forward and how capacity might be expanded to deal with the challenges ahead.

Contact was made with the following:

- Department of Housing, Planning and Local Government (DHPLG)
- Department of Communications, Climate Action and the Environment (DCCAE)
- National Parks and Wildlife Service (NPWS), part of the Department of Culture, Heritage and the Gaeltacht (DCHG)
- The Commission for Regulation of Utilities (CRU)
- EirGrid
- ESB Networks (ESBN)
- An Bord Pleanála (ABP)
- Irish Wind Energy Association (IWEA)
- The Marine Institute
- Marine Scotland

In the following sections, an overview of how the development management and consenting system will work under the proposed Marine Planning and Development Management (MPDM) Bill is presented and the roles of each government body under the new regime are identified. Lessons learned from other jurisdictions are discussed and recommendations are presented on where investment in HR should be focused so that Ireland is ready to meet the challenges ahead.

2 Marine management reform

The government is currently engaged in reforming the laws governing Ireland's maritime area. Ireland is required by the EU's Maritime Spatial Planning Directive to put in place a Marine Spatial Plan (MSP) for our maritime area by March 2021. Ireland's MSP will be called the National Marine Planning Framework (NMPF) and its development is being led by the DHPLG. The NMPF is a forward plan for the next 20 years setting out how the maritime area will be used and protected. The NMPF, along with the Marine Planning Policy Statement (MPPS) will provide the policy context in which consent decisions will be made in the future.

Simultaneously, a draft Maritime Jurisdiction Bill 2019 has been published and is being progressed by the Department of Foreign Affairs and Trade. If enacted this will revise and consolidate the law of the State in relation to maritime jurisdiction, and specifically make further provision for the rights of the State in its maritime jurisdictional zones in accordance with the UN Law of the Sea Convention. The Bill clarifies that in addition to the State's sovereignty over the territorial sea, property in the territorial seabed and in the natural resources of the territorial sea are also vested in the State. The Bill also makes clear that in addition to the State's sovereign rights over all forms of potential energy, property rights in all those forms are also vested in the State.

No formal process currently exists for authorising development beyond the foreshore (12nm or 22km from high water mark on the shore). The MPDM Bill will introduce a new 'maritime area' comprising of internal waters, territorial sea, Exclusive Economic Zone and continental shelf (see Figure 1) which equates to an area of approximately 490,000 km^2. This legislation will introduce a new marine planning regime including a new single State consent with a new regime for development management and consent. The Bill will bring efficiency and clarity to the process for approving offshore wind developments and other maritime infrastructure projects. It will also restate and update the legislative underpinning for marine spatial planning. Under the MPDM Bill, a number of specific types of ORE related development, including offshore wind farms, will be considered under a new standalone procedure which will be the responsibility of An Bord Pleanála. This regime will be similar in nature to Strategic Infrastructure Development (SIDs). The Bill is still under development and some provisions may change as work on it progresses.

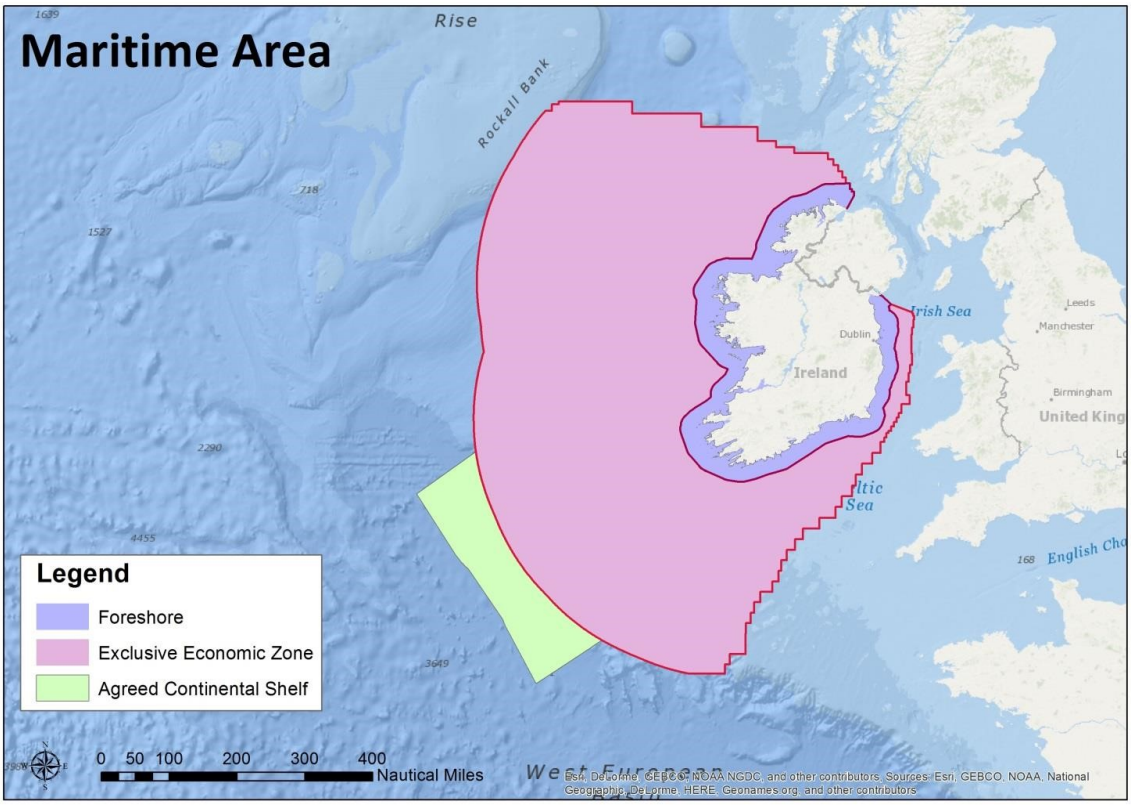


Figure 1 Maritime Area proposed under MPDM Bill (Source: www.housing.gov.ie)

3 The new system for offshore wind

A process flow diagram is presented in Figure 2 that illustrates how the development management and consenting process for offshore wind farm developments will work. Firstly, offshore wind developers must first secure a Planning Interest from the Minister of Communications, Climate Action and the Environment (MCCAE). A Planning Interest is granted if the developer is deemed capable of undertaking and completing the project from the financial, technical, organisational and legal perspectives.

Only when a developer secures a Planning Interest can they then move to apply for planning permission from ABP. Pre- application consultation with ABP will consider, among other issues, whether the development is in line with the NMPF and other government policies. Once an application

is received, ABP will liaise with the statutory consultees, review the EIAs, manage submissions and conduct oral hearings if required. If planning permission is granted, the developer can take part in a competitive process for subsidy support under the RESS to construct and operate an offshore wind farm. Successful bidders can then apply to the DCCAE for a Maritime Area Consent (MAC) which is the property consent and allows the developer the right to occupy the part of the maritime area where the development is located. Once a MAC is received, the grid connection application can be processed, followed by an application to construct a generating station and a licence to generate electricity. Construction of the wind farm can then commence. ESBN will perform the necessary upgrades to the transmission system as instructed by EirGrid.

The body that will oversee enforcement of the planning consent conditions is in the final stages of being determined. An Oversight Body that will facilitate and coordinate the ORE consenting process is referenced in the draft MPDM Bill; however there is not yet clarity on who will perform this role.

Under the transitional protocol in the MPDM Bill, projects identified as Relevant Projects (also known as legacy projects) have already been granted a Planning Interest so that they can continue with environmental scoping exercises, site investigations and surveys, liaise with EirGrid on grid connections studies, and finalise their planning application. Relevant Projects are projects that either applied for or were granted a lease under the Foreshore Act 1933, or that are eligible to receive a grid connection offer. Seven Relevant Projects were confirmed on May 19th 2020[1]. EirGrid have been instructed by CRU to engage with these projects in terms of the projects' grid planning matters.[2]

Table 1 provides an overview of the roles of each of the government departments and agencies both now and in the future from an operational perspective once the MPDM Bill is enacted.

Table 1 Roles of government departments and agencies in relation to offshore wind developments upon enactment of MPDM Bill

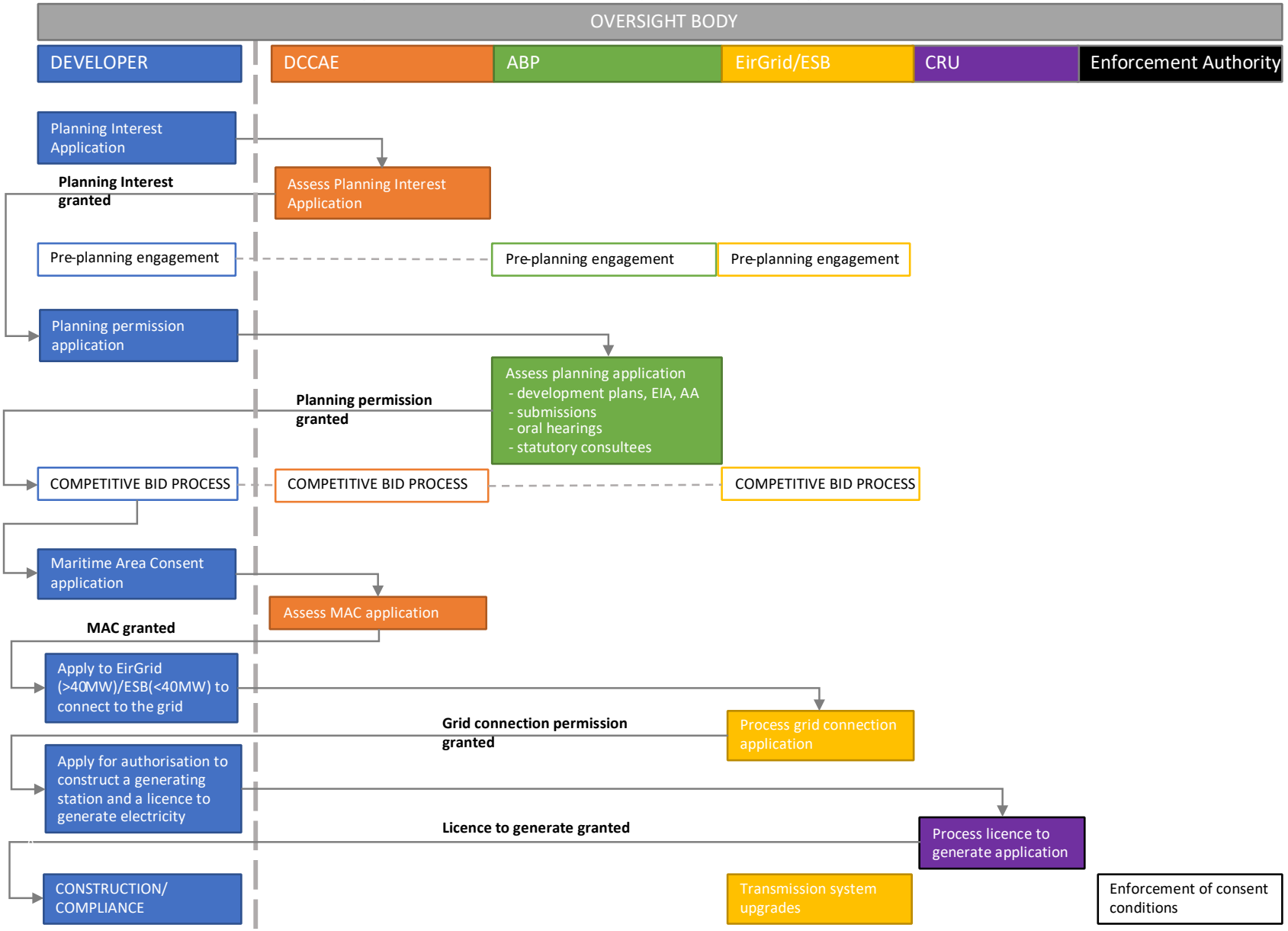
	MARINE PLANNING, POLICY DEVELOPMENT, LEGISLATION AND STRATEGY	CONSENTING AND OPERATIONS
DHPLG	- NMPF delivery - Responsibility for the MPDM Bill - Lead development of Strategic Marine Activity Zones (SMAZ) - Secondary legislation and transition planning associated with MPDM Bill	- Development of planning guidelines - Applications for site investigation under the Foreshore Act for offshore wind projects
DCCAE	- Delivery of Climate Action Plan and OREDP - Ireland's ORE strategy - ORE elements of the MPDM Bill - Secondary legislation relevant to the ORE sector - Establishment of an ORE development body - Design of RESS auctions	- Process Planning Interest applications - Process Marine Area Consent applications - Development of future charging regime - Management of granted Planning Interest and Maritime Area Consents

[1] https://www.housing.gov.ie/planning/foreshore/wind-energy/ministers-english-and-bruton-announcetransition-offshore-renewable

[2] https://www.cru.ie/wp-content/uploads/2020/02/CRU20020-Offshore-Wind-Grid-Delivery.pdf

		- Planning interest and Maritime Area Consent compliance and enforcement
ABP	- Determines applications for strategic infrastructure development (existing) - Determines appeals and certain other matters under the Planning and Development Act 2000, as amended	- Pre-application consultation - Process applications for marine environmental surveys (site investigations) following grant of planning interest. - Process applications for planning permission - Consider submissions - Oral hearings (if applicable)
CRU	- Implement government policy - Oversee the wholesale all-island Single Electricity Market (SEM) - Set network development and connection policy	- Process applications for a licence to generate and authorisation to construct
EIRGRID	- Network, access and scenario planning - Determine necessary grid upgrades - Delivery of RESS auctions	- Transmission System Operator - Preparation of grid connection offers as directed by CRU - Determine grid connection point and infrastructure upgrades required for individual wind farms
ESB		- Build and maintain transmission system including upgrades required for offshore wind developments as directed by EirGrid
STATUTORY CONSULTEES	- Feed into policy development and working groups, e.g. for definition of SMAZ	- Review planning permission applications and EIAs/AAs where appropriate

Figure 2- Process flow chart for the proposed consenting process under MPDM



4 Lessons learned from other jurisdictions

4.1 Scotland

Given the very different starting points as well as the nature of the political landscape, it is not expected that Ireland will follow the path Scotland has taken to exploit offshore wind. However, the lessons learned from the Scottish experience may prove useful here.

Crown Estate Scotland (CES) manages the leasing of the seabed whereas Marine Scotland (MS) is responsible for strategic marine planning, consenting and compliance. MS determines preferred spatial zones for offshore wind developments which are then passed over to CES. After a bidding process, CES awards exclusivity rights for developers to investigate sites and prepare planning applications. These are then processed by MS and if successful, CES grants a lease. Offshore wind policy is determined by the Energy Directorate in the Scottish Government.

Scotland were one of the earliest movers in the offshore wind sector, and the process for consenting evolved out of the land-based consenting system. Processing early wind farm applications threatened to completely overwhelm the licensing team and ministerial intervention was required to provide additional resources to cope with the workload.

The licensing team at MS now has approximately 35 staff, of which 15 are dedicated to renewables (primarily offshore wind). The marine spatial planning team responsible for identifying the zones for offshore wind development consists of 4-6 people. The identification of each zone typically requires spending of ~£0.5million on external consultants (e.g. for specialist services such as socio-economic analysis) in addition to utilising the full resources of the marine planning team. The marine planning team is supported by a scientists from Marine Scotland Science, which runs a Renewables Science programme overseen by the Head Renewables Scientist. This covers planning and licensing research requirements, e.g. filling data gaps, and is informed by ScotMER, the Scottish Marine Energy Research programme which includes representatives from other public bodies and academia, who help identify the key issues to be addressed and generate the necessary work packages.

The Energy Directorate in the Scottish Government has 3 FTE (Full Time Equivalent) staff working on Offshore Wind Policy and another 3 staff working on Energy Supply Chain Initiatives, which cover aspects of offshore wind in addition to other areas.

The key message from Scotland is that the entire system must be resourced, not just the consenting/licensing team. A licensing team for offshore wind must be supported by a team of marine spatial planners and a scientific research team that can provide data for sectoral planning and interpret environmental impact assessments. It is also critical to adequately resource statutory consultees to prevent bottlenecks in the consenting.

4.2 Other

Under Action 25 of the Climate Action Plan, a working group was established by DCCAE consisting of CRU, EirGrid and ESBN to examine options for offshore grid models. The working group commissioned a study to examine models in other countries for delivering offshore wind, including centralised and decentralised options. The results of the study, which was carried out by Navigant, have been published for consultation by DCCAE in an Options Paper[3].

[3] https://www.dccae.gov.ie/en-ie/energy/consultations/Pages/Consultation-to-Inform-a-Grid-Development-Policy-for-Offshore-Wind-in-Ireland.aspx

5 Potential bottlenecks in the Irish system

5.1 An Bord Pleanála

It is expected that ABP will begin to engage informally with applicants this year and are likely to come under significant pressure in 2021/2022 due to a surge of planning applications from up to seven Relevant Projects and other developers who wish to begin both formal and informal pre-application consultations. Each of these projects will be the equivalent of a large SID, with the added complication of being in a new space for ABP. This will likely be followed by another 5-7 applications from enduring projects[4] that are currently in the pre-planning phase. A large SID can involve two inspectors working full time for at least six months, and significant resourcing will be required to deal with multiple applications at once.

5.2 Marine expertise

At present, ABP do not have in-house marine expertise and tend to rely on consultants when required. NPWS have approximately 0.75FTE of a marine ecologist to deal with all marine referrals and do not have capacity at present for an increased workload.

Marine experts are essential for both the consenting and marine spatial planning process, to interpret EIAs and AAs, advise on appropriate consent conditions, direct research and data collection campaigns, and to advise on environmental issues at an early stage before problems become embedded.

5.3 Data

Ireland has made great strides in recent years with regard to seabed mapping due to the INFOMAR programme run jointly by the Marine Institute and the Geological Survey Ireland; however there are large data gaps relating to habitat locations, populations and trends that will need to be filled. These data are necessary for informed decision making in the marine spatial planning process, as well as being necessary for providing contextual information for interpreting EIAs and AAs.

6 Recommendations on resourcing

Based on the discussions held, the recommendations regarding resourcing are presented in the following sections. It has been assumed that a decentralised model will be adopted by the government for the timeframe of these recommendations. More significant resourcing will be required should a centralised system be adopted.

6.1 Resourcing within the consenting process

The offshore energy division in DCCAE will require additional resources to process Planning Interest and Marine Area Consent applications once the MPDM is enacted, and manage these consents during the wind farm lifetime. This team will also be required to design offshore wind specific RESS auctions. A minimum of five additional personnel is recommended for the DCCAE, as well as access to legal resources (either in-house or outsourced).

Significant resourcing will be required for the consenting team in An Bord Pleanála that will be processing offshore wind farm planning applications. Each application will likely be the equivalent of a large scale SID and ABP may be required to deal with multiple such applications in parallel. It is

[4] Enduring projects are at an earlier stage of development. They have not received planning permission but they have identified potential sites, started seabed and bird surveys, and may have begun to engage with the local community. https://www.iwea.com/images/files/new-horizons-irelands-offshore-wind.pdf

estimated that a minimum of 10 staff dedicated to offshore wind consenting will be required by ABP to avoid lengthy delays in processing applications. ABP must also have access to marine experts within the public service to review EIAs and to ensure appropriate conditions are placed on successful developers.

6.2 Marine spatial planning expertise

Resourcing is required in the DHPLG in the first instance to complete the NMPF, legislation associated with the MPDM and provide planning guidelines; and going forward to lead the development of Strategic Marine Activity Zones (SMAZ), including those for offshore wind development. Further expertise in marine spatial planning is required in the short- to medium-term to ensure proper planning in relation to the relevant and enduring projects, and in the longer term (post 2030) to develop SMAZ that expand Ireland's offshore wind potential, for example, off the west coast. Therefore, it is recommended that additional resourcing of 1-5 personnel is provided to the DHPLG.

7 General recommendations

7.1 Access to marine expertise

Considered input from marine experts is essential for a robust decision making process in both the marine spatial planning and consenting processes so that potential issues are identified and understood at an early stage.

ABP must have access to marine experts for the interpretation of EIAs and AAs. ABP typically hire consultants to do this work, but as consultants are expensive and consistent quality across applications cannot be guaranteed, access to expertise within the public service is strongly recommended.

Under current legislation, the Marine License Vetting Committee (MLVC), chaired by the Marine Institute, considers the implications of a development in the foreshore from a number of perspectives, including environmental, and provides recommendations on conditions for development in the event of a development consent being granted. Upon enactment of the MPDM Bill, the MLVC will only operate under the auspices of the Department of Agriculture, Food and the Marine, and Development Management for offshore wind developments will be carried out by ABP. It is therefore vital that expertise of an equivalent level available to the MLVC is available to feed into the development management and consenting process to ensure that appropriate conditions, e.g. relating to environmental monitoring, are included in a maritime area consent granted to offshore wind developers.

7.2 Scientific research and data collection

A coordinated programme of research and data collection is recommended to ensure that adequate data are available for interpretation by scientists that can then be communicated to planners so that the MSP process and designation of SMAZs is as robust as possible.

Such data (e.g. habitats, populations and trends) are necessary in order to make informed decisions on zoning, ensure compliance with the Habitats Directive and other relevant legislation, and to provide contextual information for interpreting environmental impact studies. The establishment of new funded research programmes could potentially provide the required datasets. Alternatively, the scope of existing research projects such as SeaRover and ObSERVE could be expanded.

The Marine Institute are ideally placed to conduct the required research and lead data collection campaigns, but there must be coordination between all relevant stakeholders to ensure that the right data and research outputs are available in a timely manner to feed into the MSP process.

7.3 Statutory consultees

Additional resources must be made available to the statutory consultees, in particular the NPWS, to ensure that it can discharge its responsibilities in relation to ORE development and its potential to affect nature conservation interests in particular. NPWS has insufficient resources to deal with its current workload, and a significant increase in resourcing and specialist expertise will be required if there is a substantial increase in the numbers of offshore energy proposals being brought forward.

8 Conclusions

Ireland is on the right track in terms of reforming the laws governing the maritime area and creating a structure to facilitate the development of offshore wind in our waters. However, without adequate resourcing to implement government policy, our targets for decarbonisation will not be met and an opportunity to exploit our remarkable wind energy resources and reap the economic rewards will be missed. Recommendations have been made in this report as to where resourcing efforts should be concentrated to ensure Ireland's offshore wind targets are met. It should be noted that these recommendations assume a decentralised scenario; should Ireland ultimately seek to implement a centralised model for delivering offshore wind, resourcing requirements will increase significantly.

Adequate resourcing of the development management and consenting process is essential to adequately deal with applications which are on a par with large-scale strategic infrastructure developments. While resourcing of An Bord Pleanála is key, resources must also be fed in immediately across the entire process from marine spatial planning to the statutory consultees to avoid bottlenecks and potential delays. It is particularly important that at all stages in the process, proper consultation takes place and procedures are followed to reduce the risk of projects being stalled by judicial reviews.

Scientific expertise, backed by data, must be accessible by policy makers, planners and consenting authorities to ensure that the maritime area is managed to meet the long-term needs of the economy, the natural environment and the people of Ireland.

While there is an up-front cost to the State to provide the proposed additional resourcing, the economic benefits of offshore wind have the potential to far outweigh the initial investment, as outlined in the EirWind Socio Economic Study (D4.10). A recent report by the Carbon Trust commissioned by IWEA indicates that the offshore wind industry could create 2,500 jobs over the next ten years and attract over €42 billion in investment if strategic investments are made in our ports and in developing the supply chain[5]. Therefore, if resourced and managed correctly, offshore wind can play a vital role in Ireland's post-COVID economic recovery.

[5] https://www.iwea.com/images/files/final-harnessing-our-potential-report-may-2020.pdf