

## **Submission to the Joint Committee of the Department of Housing, Local Government and Heritage in relation to the Marine Planning and Development Management bill, November 2020**

As per the guidelines provided, this submission comprises an introduction, the detailed submission itself and an executive summary which incorporates some specific recommendations.

### **Introduction**

1. I am a Professor at University College Dublin and Director of its Earth Institute for environmental and sustainability research. My expertise is in marine ecology and I have worked for thirty years on impacts of human activities on marine biodiversity and ecosystems and the services and benefits we derive from them. I have edited a book on the topic and over 100 relevant scientific papers and book chapters. I work with national and international colleagues and stakeholders to provide an evidence base for effective environmental policy and management and have advised on its application.
2. I recently chaired the MPA Advisory Group which submitted a report on the expansion of Ireland's network of Marine Protected Areas (MPAs) on 22 October 2020 to Ministers O'Brien and Noonan of the Department of Housing, Local Government and Heritage (DHLGH). The group was launched by the previous Minister in December 2019. It was supported by, but independent from, DHLGH and comprised 20 individuals with expertise in life and ocean sciences, socio-economic and cultural perspectives and legislation and governance. In preparing its report, the group consulted with 100+ key stakeholders in Ireland's marine environment, including representatives of coastal and island communities, environmental NGOs, fisheries, aquaculture, energy, shipping, recreation and tourism and also relevant state agencies and branches of government.
3. My conjecture is that my invitation to make this submission arose primarily from my role in chairing the MPA Advisory Group and from questions relating to the relationship between the Marine Planning and Development Management (MPDM) bill and the proposed process for expanding Ireland's network of MPAs. Although I have been aware of the development of the MPDM bill (and the National Marine Planning Framework (NMPF)), I have not been directly involved in it and was not a member of the NMPF stakeholder advisory group. The report of the MPA Advisory Group is currently being reviewed by the Ministers prior to its publication for public consultation in early 2021. As such, I cannot provide much detail on its contents and specific recommendations, though I can give some broad indications of its structure and key findings. I will also express my own views, some of which may have been shaped by the preparation of the MPA Advisory Group's report.

### **Detailed submission**

4. Ireland has an extensive marine environment, rich in habitats, species and cultural significance. Its ecosystems provide a wide range of ecosystem services which underpin health and well-being, regulate climate and support fisheries, aquaculture, recreation, tourism and biotechnology, all of which are significant contributors to Ireland's economy and essential to many livelihoods, especially in coastal and island communities. It is also an essential link to the wider world through shipping and increasingly hosts diverse energy infrastructure. It is a publicly owned resource under the stewardship of the state and its sustainable management is paramount for current and future generations.

5. Directive 2014/89/EU which establishes the framework for Marine Spatial Planning (MSP) as part of the Integrated Maritime Policy (IMP) of the EU states that “the objective of the IMP is to support the sustainable development of seas and oceans and to develop coordinated, coherent and transparent decision-making in relation to the Union’s sectoral policies affecting the oceans, seas, islands, coastal and outermost regions and maritime sectors, ... whilst achieving good environmental status as set out in Directive 2008/56/EC.” Directive 2008/56/EC is the Marine Strategy Framework Directive (MSFD). It is the MSFD that provides for the designation of MPAs rather than Marine Spatial Planning Directive (Directive 2014/89/EU), which is concerned with governance of sectoral activity.
6. Conservation of nature is not a sectoral activity in the same way as, for example, fishing or tourism or energy are; indeed it focuses on ecosystems that are essential to all sectoral activity and to wider society and can be taken into consideration in all planning and decision-making affecting how we interact with the environment. It is therefore appropriate that conservation and sectoral activities are considered separately and in different ways under different Directives. As such, it is appropriate that the MPDM bill does not encompass MPAs, which should be the focus of a separate piece of legislation. International best practise retains the independence of biodiversity conservation from economic interests and avoids conflict of interest in those decision-making processes. However, the relationship between the two Directives and any related pieces of national legislation and their implementation is clearly very important if sustainable development of seas and oceans is to be achieved.
7. MPAs can be thought of as marine areas that are managed over the long term, with a primary objective of conserving or restoring specified habitats and/or species and other natural features. Objectives may include conservation of biocultural heritage and/or ecosystem processes which underpin ecosystem services and benefits such as productive fisheries, protected coasts and environments for recreation and tourism. MPAs can also play a role in mitigating the effects of climate change and ocean acidification by ensuring that marine ecosystems are healthy and resilient, and by safeguarding the marine environment’s current role as a natural carbon storage system.
8. The Marine Strategy Framework Directive (MSFD) requires that a coherent and representative network of spatial protection measures, including MPAs, is put in place where appropriate as part of Ireland’s programme of measures in order to achieve or maintain the good environmental status (GES) of our national and shared maritime area (Article 13.4). As well as arising under the MSFD, MPAs are among commitments under the National Biodiversity Action Plan, Annex V of the OSPAR Convention, the UN Convention on Biological Diversity and UN Sustainable Development Goal 14 among others.
9. Marine Protected Areas form part of the current Programme for Government – *Our shared future* – in which a commitment is made to increase coverage of MPAs in Ireland’s maritime area to 10% as soon as is practicable and to 30% by 2030. Current designations, primarily as Special Protection Areas and Special Conservation Areas under the EU Birds and Habitats Directives respectively, cover 2.14% of Ireland’s maritime area. A number of species, habitats and ecosystems that are rare, vulnerable and/or important in an Irish context are not explicitly protected under these directives.
10. MPAs can take a variety of forms, ranging from exclusive marine reserves with little to no human activity permitted to areas allowing sustainable use or restricting only a subset of specified activities. Careful planning is needed so that MPAs function as a network to reach

overarching national and international objectives. MPAs can also be proposed and designated for site-specific reasons, for example by local communities. The level and nature of protection conferred through MPA management plans should be linked to the specific objectives of each MPA. Activities that do not interfere with the achievement of a given MPA's objectives can usually be permitted. These can be considered on a case-by-case basis and solutions to enable particular activities can often be found, especially when stakeholders are properly engaged from the outset and throughout the process of selecting and managing MPAs. Decisions around which activities to permit, prevent, restrict or modify should be based on the best available evidence. Where necessary, the precautionary principle should be applied; this was framed in the Convention on Biological Diversity Rio Declaration (1992) as 'Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation'.

11. In developing its recommendations in relation to MPAs, the MPA Advisory Group was very much aware of the development of the MPDM bill and the NMPF. Some members and consultees of the MPA Advisory Group were also involved in the NMPF advisory group and we gave consideration to the interplay between MSP and MPAs.
12. A particular concern raised by a number of MPA Advisory Group members and consultees was that that the NMPF, which relates to development of sectoral activities in specified marine areas, is considerably further advanced than the process for future identification, designation and management of Ireland's MPA network. In other jurisdictions, it is common practise for the two frameworks to be developed at the same time, such that all stakeholder perspectives and potential consequences can be taken into account in decision-making from the outset. In this instance, there is potential for sectoral activities to be authorised in areas zoned for them in the marine spatial plan before the conservation value and sensitivity of those areas has been assessed or any kind of structured consultative process can take place to underpin designation of MPAs. This creates a real risk that some important natural features may be damaged or lost before decisions can be made to conserve them, which may have important ramifications for the environment and for society.
13. One possible solution proposed by members of the MPA Advisory Group and by some of the consulted stakeholders was that a rapid assessment or sensitivity analysis should be made now using available evidence to identify areas of potentially high conservation value so that they can be temporarily protected pending a more formal process of MPA site selection and designation.
14. It should also be noted that some protection is already afforded by existing environmental legislation, for example through requirements for Environmental Impact Assessments and in some cases Appropriate Assessment (which applies only to species and habitats designated under the EU Birds and Habitats Directives). It is essential that such requirements are complied with so that the necessary evidence can be collected and tabled and full consideration given to all of the potential consequences of proposed developments. I note that the MPDM bill specifies that environmental assessment should take place as required as part of the planning process, which is distinct from the provisions of the MPDM bill itself. Environmental assessment can be particularly challenging in the sea as pressures such as contaminants and suspended sediments can spread and act remotely and structures can alter local hydrodynamics, such that the nature and location of impacts can be hard to predict.
15. As a scientist, I have undertaken extensive research to better understand how multiple pressures combine and modify each other's effects on marine ecosystems. Pressures are

derived from human activities and include, for example, inputs of nutrients, pesticides and other contaminants from land-based activities, loss of and changes to habitats caused by construction of artificial structures in the sea, and removal of fish and shellfish and disturbance of the sea bed by fishing. Some combinations of pressures can interact with each other in complex ways, for example exacerbating or ameliorating each other's effects. They are further complicated, and in some cases further exacerbated, by pressures associated with global change, such as increased temperature, rainfall and storminess and changes to ocean chemistry. These effects vary among habitats and vary depending on the intensity of the pressures, such that cumulative addition of pressures in the same area can alter their combined effects, sometimes tipping the system into a new degraded state from which recovery may be very difficult. As such, while some combinations of human activities may actually reduce each other's effects in some areas, others will have particularly negative consequences for ecosystems, and their capacity to provide benefits to society now and into the future. Different human activities are also compatible with each other to varying degrees from a societal perspective. For example, some forms of coastal infrastructure can have positive effects on recreation and tourism, while others can have very negative consequences in a given area. As such, it is essential that a holistic approach is taken to marine spatial planning and governance and that the best available evidence is used for decision-making to find the most widely acceptable and sustainable solutions. It is notable that the MPDM bill does not cover developments relating to fisheries and aquaculture, which will continue to be regulated under the Foreshore Act and under the remit of the Minister for Agriculture Food and the Marine. It will be important that there is a high level of coordination between implementation of the MPDM bill and the management of fisheries and aquaculture.

16. A clear message from the work of the MPA Advisory Group was that extensive and inclusive stakeholder consultation and participation would be key to the ultimate success of an expanded network of MPAs. Time and resourcing would be required, but this approach would enable appropriate compromises to be reached where appropriate and ensure that stakeholders could be better informed about the rationale and objectives for MPAs and feel more invested in them as participants in the stewardship of their environment. Several consultees also stressed that objectives, regulations and restrictions should be as simple and as clearly communicated as possible. These principles may also be applicable in the context of MSP and the interface between MSP and MPA planning and implementation.

#### **Executive summary and recommendations**

17. It is essential that legislation and governance of Ireland's maritime area recognises the need for diverse, clean, healthy, productive seas and oceans, which underpin our well-being and are an important contributor to mitigation of climate change.
18. Marine Spatial Planning for sectoral activities and designation and management of Marine Protected Areas (MPAs) for conservation are mandated under separate EU Directives and should be recognised as being distinct processes. However, the relationship between them is critical and should be given careful consideration such that sustainable development can be achieved while achieving good environmental status, as required under the EU's Integrated Maritime Policy.
19. MPAs constitute one approach to marine conservation and management. They are widely used and are mandated under a number of international instruments, including the Marine Strategy Framework Directive. They can take many forms and may require a range of levels of

protection, which should be tailored to their individual objectives. They should function as part of a network to achieve overarching national and international objectives.

20. At present, 2.14% of Ireland's maritime area is designated for protection. Under the current programme for government, Ireland has committed to increasing coverage by MPAs to 10% as soon as is practicable and to 30% by 2030. New national legislation is required to underpin an effective process of selection and management of MPAs and enable greater flexibility to protect important species, habitats and other features, including those not explicitly protected under EU Directives.
21. The MPDM bill and the National Marine Planning Framework are likely to come into force before planning and designation of MPAs can take place. Sectoral activities should not be allowed to go ahead in a given area without prior consideration of possible impacts on rare, vulnerable or important species, habitats and ecosystems, which may ultimately merit protection with MPAs. This should be facilitated by a sensitivity analysis to allow identification of potential candidate MPAs so that they can be afforded some form of temporary protection. The application of existing environmental legislation, such as Environmental Impact Assessment and/or Appropriate Assessment will also be important for assessing potential impacts of proposed developments and preventing or adapting them if necessary, even within designated Strategic Marine Activity Zones.
22. Multiple local and global pressures can accumulate and combine in complex ways to affect marine ecosystems and the services and benefits they provide to society. Different activities will be compatible to varying degrees in different environmental and socio-economic contexts. A holistic approach to marine planning, governance and conservation is therefore required, encompassing all sectors, interests and potential impacts, both positive and negative. It is therefore important that all available evidence and relevant perspectives are brought together to underpin decision-making for marine stewardship. Although this may not be directly provided for in the MPDM bill, its implementation as part of the NMPF will require coordination among departments with responsibility for governance of different sectors.