





Technical Support Information to the CMS Family Guidelines on Environmental Impact Assessments for Marine Noise-generating Activities

The full CMS Family Guidelines on Environmental Impact Assessments for Marine Noise-generating Activities and the stand-alone modules are online at:

cms.int/guidelines/cms-family-guidelines-EIAs-marine-noise

Module F.

Related Decisions of Intergovernmental Bodies or Regional Economic Organizations



F. Related Decisions of Intergovernmental Bodies or Regional Economic Organizations

Margi Prideaux Indo-Pacific Governance Research Centre, University of Adelaide

A series of important intergovernmental decisions have already determined the direction for regulating anthropogenic marine noise through EIAs. The following decisions are the latest from each of MEA.

F.1. CMS

'CMS Resolution 9.19: Adverse Anthropogenic Marine/Ocean Noise Impacts on Cetaceans and Other Biota' encourages Parties to:

'...to endeavour to control the impact of emission of man-made noise pollution in habitat of vulnerable species and in areas where marine mammals or other endangered species may be concentrated, and where appropriate, to undertake relevant environmental assessments on the introduction of systems which may lead to noise associated risks for marine mammals.'

'CMS Resolution 10.24: Further Steps to Abate Underwater Noise Pollution for the Protection of Cetaceans and Other Migratory Species' encourages CMS Parties to:

'...prevent adverse effects on cetaceans and on other migratory marine species by restricting the emission of underwater noise, understood as keeping it to the lowest necessary level with particular priority given to situations where the impacts on cetaceans are known to be heavy" and "[u]rges Parties to ensure that Environmental Impact Assessments take full account of the effects of activities on cetaceans and to consider potential impacts on marine biota and their migration routes ...'

'Resolution 10.24' further articulates that CMS Parties should ensure that

Environmental Impact Assessments take full account of the impact of anthropogenic marine noise on marine species, apply Best Available Techniques (BAT) and Best Environmental Practice (BEP), and integrate the issue of anthropogenic noise into the management plans of marine protected areas. 'Resolution 10.24' also 'invites the private sector to assist in developing ...alternative techniques and technologies for coastal, offshore and maritime activities'.

F.2. ACCOBAMS

'ACCOBAMS Resolution 5.13: Conservation of Cuvier's beaked whales in the Mediterranean' and 'Resolution 5.15: Addressing the impact of anthropogenic noise' reinforces the commitments made in 'Resolution 4.17: Guidelines to Address the Impact of Anthropogenic Noise on Cetaceans in the ACCOBAMS Area (ACCOBAMS Noise Guidelines)' that urges ACCOBAMS Parties to:

'[r]ecogniz[e] that anthropogenic ocean noise is a form of pollution, caused by the introduction of energy into the marine environment, that can have adverse effects on marine life, ranging from disturbance to injury and death.'

This Resolution also encourages ACCOBAMS Parties to:

'... address fully the issue of anthropogenic noise in the marine environment, including cumulative effects, in the light of the best scientific information available and taking into consideration the applicable legislation of the Parties, particularly as regards the need for thorough environmental impact assessments being undertaken before granting approval to proposed noise-

producing activities.'

The ACCOBAMS Noise Guidelines provide further comprehensive detail-specific considerations relating to military sonar, seismic surveys and offshore drilling, shipping and offshore renewable energy developments.

F.3. ASCOBANS

'ASCOBANS Resolution 5.4: Adverse Effects of Sound, Vessels and other Forms of Disturbance on Small Cetaceans', urges ASCOBANS Parties to:

'... develop, with military and other relevant authorities, effective mitigation measures including environmental impact assessments and relevant standing orders to reduce disturbance of, and potential physical damage to, small cetaceans, and to develop and implement procedures to assess the effectiveness of any guidelines or management measures introduced.'

'ASCOBANS Resolution 6.2: Adverse Effects of Underwater Noise on Marine Mammals during Offshore Construction Activities for Renewable Energy Production', further recommends that Parties:

'... include Strategic
Environmental Assessments and
Environmental Impact Assessments
carried out prior to the construction of
marine renewable energy developments
and taking into account the construction
phase and cumulative impacts'

and to:

... introduce precautionary guidance on measures and procedures for all activities surrounding the development of renewable energy production in order to minimise risks to populations ... [that include] measures for avoiding construction activities with high underwater noise source levels during the periods of the year with the highest densities of small cetaceans, and in so doing limiting the number of animals exposed, if potentially significant adverse effects on small cetaceans cannot be avoided by other measures; [to include] Measures for avoiding construction activities with high underwater noise source levels when small cetaceans are present in the vicinity of the construction site; [and] technical measures for reducing the sound emission during construction works, if potentially significant adverse effects on

small cetaceans cannot be avoided by other measures.'

F.4. CBD

'CBD Decisions VIII/28: CBD Voluntary Guidelines on Biodiversityinclusive Impact Assessment'provides detailed guidance on whether, when and how to consider biodiversity in both project level and strategic levels assessments. The document clearly articulates screening, scoping, assessment and evaluation of impacts, development and alternatives; transparency and consultation, reporting, review and decisionmaking. The guidelines urge that environmental impact assessments should be mandatory for activities known to be in habitats for threatened species and activities resulting in noise emissions in areas that provide key ecosystem services. The guidelines further articulate that environment impact assessment should be considered for activities resulting in noise emissions in areas providing other relevant ecosystem services.

'CBD Decision XII/23: Marine and coastal biodiversity: Impacts on marine and coastal biodiversity of anthropogenic underwater noise' encourages CBD Parties and others:

"... to take appropriate measures, as appropriate within competencies and in accordance with national and international laws, such as gathering additional data about noise intensity and noise types, and building capacity in developing regions where scientific capacity can be strengthened."

In 'Decision XII/23' CBD Parties have agreed to a significant list of technical commitments, including gathering additional data about noise intensity and noise types, and building capacity in developing regions where scientific capacity can be strengthened.

The CBD Parties also encouraged Parties to take appropriate measures, including:

'... (e) Combining acoustic mapping with habitat mapping of soundsensitive species with regard to spatial risk assessments in order to identify areas where those species may be exposed to noise impacts, (f) Mitigating and managing anthropogenic underwater noise through the use of spatio-temporal management of activities, relying on sufficiently detailed temporal and spatial knowledge of species or

population distribution patterns combined with the ability to avoid generating noise in the area at those times.

(g) Conducting <u>impact assessments</u>, where appropriate, for activities that may have significant adverse impacts on noise-sensitive species, and carrying out monitoring, where appropriate.'

'Decision XII/23' urges the transfer to quieter technologies and applying the best available practice in all relevant activities.

F.5. IMO

The International Maritime Organization (IMO), through 'Resolution A 28/Res.1061', has requested that the Marine Environment Protection Committee (MEPC) keep under review measures to reduce adverse impact on the marine environment by ships, including developing:

'[g]uidance for the reduction of noise from commercial shipping and its adverse impacts on marine life'

F.6. IWC

The Scientific Committee of the International Whaling Commission (IWC) continues to monitor and discuss the impacts of noise on cetaceans.

F.7. OSPAR

The Convention for the Protection of the Marine Environment of the North-East-Atlantic (OSPAR) has reached agreement on an 'OSPAR Monitoring Strategy for Ambient Underwater Noise'.

The OSPAR Intersessional Correspondence Group on Noise (ICG-NOISE) is currently working closely with the International Council for the Exploration of the Sea (ICES) data team to produce the 2017 OSPAR Intermediate Assessment for impulsive noise. This is the first regional assessment of its kind, and will give policymakers and regulators a regional overview of cumulative impulsive noise activity in the Northeast Atlantic, including the noise source type (e.g. pile driver, explosion) and intensity. The 2017 Intermediate Assessment will serve as a 'roof report' to inform the subsequent 2018 MSFD assessments of EU Member States within the OSPAR region.

F.8. Espoo (EIA) Convention

In 'Decision II/8' Espoo Parties endorsed the Good Practice Recommendations on Public Participation in Strategic Environmental Assessment set out in document 'ECE/MP.EIA/SEA/2014/2', including and requirement that

'... the public to be given an opportunity to comment on draft plans or programmes and the associated environmental reports,'

'[p]eople who are affected by a plan or programme and are interested in participating must be given access to all necessary information and be able to participate in meetings and hearings related to the SEA process'

This applies during the different stages of the assessment, including screening, scoping, availability of the draft plan/programme and environmental report, opportunity for the public to express its opinions and decision.

F.9. HELCOM

The Baltic Marine Environment
Protection Commission - Helsinki Commission
(HELCOM) has two important programmes in
development. The Baltic Sea Information on
the Acoustic Soundscape Project surveyed
national needs and requirements of information
on noise and will recommend monitoring of
ambient noise in the Baltic Sea. A registry of
impulsive sounds project is also being
considered.

F.10. Regional Seas Programmes

Most of the six UNEP administered Regional Seas Programmes including the Wider Caribbean Region, East Asian Seas, Eastern Africa Region, Mediterranean Region, North-West Pacific Region and the Western Africa Region and seven non-UNEP Administered Regional Seas Programmes including the Black Sea Region, North-East Pacific Region, Red Sea and Gulf of Aden, ROPME Sea Area, South Asian Seas, South-East Pacific Region and the Pacific Islands Region suggest some form of impact assessment should be conducted to mitigate threats the marine environment.

F.11. European Union Legislation and Implementation

A number of pieces of EU legislation on environmental impact assessment and nature protection are relevant and contain specific references to the marine environment and wildlife and noise.

Recital 12 of Directive 2014/52/EU of the European Parliament and the Council, which amends Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment, specifically mentions the marine environment and gives the example of one source of noisegenerating activity:

'With a view to ensuring a high level of protection of the marine environment, especially species and habitats, environmental impact assessment and screening procedures for projects in the marine environment should take into account the characteristics of those projects with particular regard to the technologies used (for example seismic surveys using active sonars).'

In addition, Recital 33 of this Directive also requires that:

Experts involved in the preparation of environmental impact assessment reports should be qualified and competent. Sufficient expertise, in the relevant field of the project concerned, is required for the purpose of its examination by the competent authorities in order to ensure that the information provided by the developer is complete and of a high level of quality.'

The marine environment is mentioned in Annex III paragraph 2 (ii) related to legal article 4(3) and noise and vibration are listed in Annex IV paragraphs 1 (d) and 5 (c) among information to be supplied according to Article 5 (1).

The EIA Directive applies to all Member States and requires that, for certain types of projects listed in its Annexes, public and private projects likely to have significant effects on the environment by virtue inter alia of their size, nature or location are made subject to an assessment of their environmental effects.

Under the EIA Directive "project" means 'the execution of construction works or of other installations or schemes' and 'other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources'.

For projects listed in Annex I of the EIA

Directive an assessment should always be carried out, whereas for projects listed in Annex II, Member States have to determine whether an assessment is to be carried out through a case-by-case examination or according to thresholds or criteria set by the Member State.

The so-called EU nature directives (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) and Council and European Parliament Directive 2009/147/EC on the conservation of wild birds (Birds Directive) are also relevant. For the Natura 2000 sites designated for the protection of features such as marine animal species listed in Annex II of the Habitats directive, measures are required under Art. 6(2) to avoid any significant disturbance of those species, while different human activities that are likely to have a significant effect on Natura 2000 sites need to be properly assessed and authorized in accordance with the provisions of article 6 (3) and (4) of the Habitats Directive. This provision also includes the obligation to assess the cumulative impacts of different activities on the conservation objectives of the site. Furthermore, the provisions of Article 12 of the Habitats Directive, which includes an obligation to prohibit deliberate disturbance of strictly protected species, are also particularly relevant in such situation, as all species of cetaceans and a number of marine vertebrates and invertebrates listed in Annex IV(a) benefit from a system of strict protection.

The Commission guidance document on 'establishing Natura 2000 sites in the marine environment' contains a specific section on noise pollution.

There is specific legislation on the marine environment. In 2008 the European Parliament and the Council adopted the Marine Strategy Framework Directive² which requires Member States to achieve or maintain good environmental status of European Union marine waters by 2020, by developing marine strategies. Marine strategies contain 5 main elements: the initial assessment, the determination of good environmental status, the establishment of environmental targets, the monitoring programmes and the programme of measures.

When determining good environmental status, Member States shall determine a set of characteristics on the basis of 11 qualitative

¹ Guidelines for the establishment of the Natura 2000 network in the marine environment: Application of the Habitats and Birds Directives (pp. 94-96)

² Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy.

descriptors. One of these descriptors state:

"Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment."

This is further specified in Commission Decision 2010/477/EU³ which states that:

"... anthropogenic sounds may be of short duration (e.g. impulsive such as from seismic surveys and piling for wind farms and platforms, as well as explosions) or be long lasting (e.g. continuous such as dredging, shipping and energy installations) affecting organisms in different ways."

The following criteria and indicators are laid down in that Decision:

- "11.1. Distribution in time and place of loud, low and mid frequency impulsive sounds
 - Proportion of days and their distribution within a calendar year over areas of a determined surface, as well as their spatial distribution, in which anthropogenic sound sources exceed levels that are likely to entail significant impact on marine animals measured as Sound Exposure Level (in dB re 1µPa2.s) or as peak sound pressure level (in dB re 1µPapeak) at one metre, measured over the frequency band 10 Hz to 10 kHz (11.1.1)
- 11.2. Continuous low frequency sound
 Trends in the ambient noise level
 within the 1/3 octave bands 63 and
 125 Hz (centre frequency) (re 1µPa
 RMS, average noise level in these
 octave bands over a year)
 measured by observation stations
 and/or with the use of models if
 appropriate (11.2.1)."

Within the context of the Marine Strategy Framework Directive, Member States sharing a marine region or sub-region are also encouraged to cooperate to deliver on the objectives of the Directive.

³ Commission Decision 2010/477/EU on criteria and methodological standards on good environmental status of marine waters.