

1.6.6.1 OSPAR request on common indicator assessments of seals

Advice summary

ICES advises that the data analysis for determining trends in abundance of seals is relatively mature and well developed. ICES advises that the analysis underpinning the assessment of changes in distribution of seals is relatively undeveloped, partly because the purpose of the proposed indicator is unclear, including the scale at which the assessment should be carried out. Decisions around potential future use of the distribution indicator should be made to guide any future development of this indicator. Information on grey seal (*Halichoerus grypus*) pup production is a fundamental input to assessing grey seal abundance, so there is a large overlap and no independence between these two potential indicators. ICES advises that if OSPAR wishes to reduce the analytical effort associated with assessments, either indicator could be chosen.

Request

Using the latest versions of the indicator descriptions/summaries, ICES is requested to support OSPAR in the delivery of common indicator assessments of seals:

ICES is requested to review the draft OSPAR assessment of the abundance and distribution of harbour seals and grey seals and an assessment of grey seal pup production in the Northeast Atlantic. ICES is requested to assess the validity of the data analysis that underpins the assessments and if necessary, to recommend any changes that should be implemented in future assessments.

Elaboration on the advice

Seal abundance

ICES notes that the draft Common Indicator Assessment by OSPAR has changed/added to the assessment units advised by ICES (2014). It is unclear why these unreferenced changes have occurred. Most of the harbour seal (*Phoca vitulina*) assessment units added have very small and relatively variable counts of seals that will be difficult to use as indicators. If the totality of the range of seals is to be included despite this limitation, then the Isle of Man coasts should be added. The draft Common Indicator Assessment by OSPAR combined the two grey seal assessment units as recommended by ICES (2014). This will mean that trends in abundance between OSPAR Regions II and III will not be distinguishable. ICES advises that these two units should remain separate as there is no logic in combining them.

Seal distribution

ICES (2014) advised that “the number of regular sites for grey seal pupping and harbour seal moulting would be suitable for target setting in relation to the distribution of these species.” The draft Common Indicator Assessment by OSPAR has identified a number of issues with the data that would need to be resolved in order to support an indicator of seal distribution. ICES therefore advises OSPAR to carefully consider the purpose of a seal distribution indicator prior to investing in necessary improvements in relevant data collection. Distribution information at other times of the year than the grey seal pupping and harbour seal moulting periods would be particularly expensive to gather systematically. It is unclear why any small-scale change in breeding or moulting distribution within an assessment unit would affect an assessment of good environmental status (GES). If an indicator of seal distribution is retained, assessment for grey seals should be at the same scale (units) as for abundance.

Grey seal pup production

ICES (2014) advised that “the current technique for monitoring grey seal abundance is to survey pup numbers and therefore there is duplication in the currently suggested grey seal targets.” ICES reiterates this advice and considers that OSPAR will gain no extra information for assessing GES by maintaining duplicate indicators. ICES notes the issues on data collection for Shetland and consequently recommends that Shetland be removed from future assessments of this indicator.

Assessment sheet layout

The headings in the standard OSPAR assessment sheet are difficult to follow. For example, the Metrics section does not address the metrics, and there is no obvious place to discuss and issue caveats associated with the results. In some places it was unclear as to why both 'brief' and 'extended' sections were required. ICES suggests that the template is made clearer and a 'discussion' section added. Further guidance on completion of the template could be provided to help in standardization.

It is unclear as to why the complex description of the grey seal abundance model is required in the assessment sheet. ICES suggests that OSPAR considers extracting this part to a separate publication.

ICES has not assembled drafts of the Common Indicator Assessment sheets. OSPAR's draft Common Indicator Assessments for seals, with associated tables and figures, were reviewed and amended by ICES and will be supplied to OSPAR separately. ICES notes that figures C and D in the draft Common Indicator Assessment of seal abundance and distribution, and figure B in the grey seal pup sheet are not usable in their current state. ICES also recommends that the names of all assessment units be standardized and used consistently in the assessment sheets.

Basis of the advice

The advice on seal abundance and distribution is based on a review of the draft Common Indicator Assessment Sheet M-3 Seal Abundance and Distribution plus supporting material provided by OSPAR and ICES response to the OSPAR request on implementation of MSFD for marine mammals (ICES, 2014).

The advice on grey seal pup production is based on a review of the draft OSPAR Common Indicator Assessment Sheet M-5 Grey Seal Pup Production.

Sources and references

ICES. 2014. OSPAR request on implementation of MSFD for marine mammals. *In* Report of the ICES Advisory Committee, 2014. ICES Advice 2014, Book 1, Section 1.6.6.1.

ICES. (in prep.) Report of the Working Group on Marine Mammal Ecology (WGMME), 8–12 February 2016, Madrid, Spain. ICES CM 2016/ACOM:26.