

30th MEETING OF THE ADVISORY COMMITTEE
Bonn, Germany, 1–3 September 2026
Agenda Item 3.5

**PROGRESS REPORT OF THE INTERSESSIONAL WORKING GROUP ON UNUSUAL
MORTALITY EVENTS (UMEs) AND MASS STRANDINGS EVENTS (MSEs)**

*(Prepared by the Co-Chairs of the Intersessional Working Group on UMEs and MSEs,
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1. The Intersessional Working Group on Unusual Mortality Events (UMEs) and Mass Stranding Events (MSEs) was established by the 29th Meeting of the Advisory Committee (AC29, September 2025), which adopted the Group's Terms of Reference (TOR) and instructed it to report to AC30. The Group succeeds and broadens the earlier Intersessional Working Group on Beaked Whales, whose final report was submitted to AC29 ([ASCOBANS/AC29/Doc.4.2](#)).
2. The TOR direct the Group to identify best-practice approaches for detecting, confirming and responding to UMEs and MSEs; to strengthen data flows and communication between strandings networks; to liaise with the IWC Strandings Expert Panel (SEP) and the European Strandings Database group; and, in the event of a suspected UME or MSE, to facilitate rapid international coordination. The TOR list is in Annex 2.
3. This document reports on the Group's activities during its first, necessarily short, intersessional period, sets out the priorities and guiding principles it has begun to develop, and proposes a plan of work directed towards AC31 (2027).
4. Revision 1 of Doc.3.5a contains edits in Annex 1 paragraphs 2, 4-5, 13, 26, 29, 34, and new paragraphs 6, 11-12, 20-24, 28, 32. Consequently, it amends the paragraph numbers listed under for 'Action requested' below, and introduces a new point e).

Action requested:

5. The Advisory Committee is requested to:
 - a) take note of the progress reported by the Working Group;
 - b) note the draft guiding principles for the identification, investigation and management of UMEs and MSEs set out in paragraphs 26-37, which the Group intends to finalise and adopt internally during the coming intersessional period;
 - c) encourage Parties to support the timely sharing of basic strandings information for key indicator species, as described in paragraphs 4-7;
 - d) note the investigative approaches and capability needs set out in paragraphs 10-18, and the gaps and needs identified in paragraphs 11 and 17; and
 - e) invite Parties to consider, in the light of paragraph 11, whether information on naval and other high-intensity acoustic activity within the Agreement Area might be made available in appropriately sanitised form; and
 - f) endorse the proposed plan of work towards AC31 set out in paragraphs 24-37.

PROGRESS AGAINST THE TERMS OF REFERENCE

Glossary

Mass Stranding Event (MSE): The simultaneous stranding of two or more cetaceans of the same species (excluding a mother–calf pair) at the same time and place, typically while alive. The phenomenon is disproportionately associated with gregarious, socially cohesive odontocetes such as pilot whales, false killer whales, and common dolphins.

Unusual Mortality Event (UME): A formal designation under the U.S. Marine Mammal Protection Act denoting a stranding event that is unexpected, entails a significant die-off of a marine mammal population, and demands immediate response thereby triggering a coordinated investigative protocol:

1. A marked increase in the magnitude, or a marked change in the nature, of morbidity, mortality, or strandings relative to prior records.
2. A temporal change in morbidity, mortality, or strandings.
3. A spatial change in morbidity, mortality, or strandings.
4. A species, age, or sex composition among affected animals that differs from that normally observed.
5. Similar or unusual pathological findings, behavioural patterns, clinical signs, or physical condition (for instance, blubber thickness) across affected animals.
6. Occurrence of morbidity, mortality, or strandings in a species, stock, or population that is of particular concern, for example, one already designated as depleted, threatened, or endangered.
7. Mortality that, although perhaps modest in absolute terms, is nonetheless significant relative to a small or otherwise vulnerable population.

Establishment and initial coordination

1. Following its constitution at AC29, the Group identified co-chairs and held preliminary discussions to set its priorities and to consider practical approaches for implementing its mandate. These discussions have concentrated on developing common principles for the identification, investigation and reporting of UMEs and MSEs, and on strengthening links with existing international initiatives and expert networks.

Detection, confirmation and response

2. During the initial reporting period, no unusual mortality event requiring coordinated action by the Group was identified within the ASCOBANS Agreement Area, and there has accordingly been no need to activate the rapid exchange and response mechanisms envisaged under the TOR. Between the first submission of this report and the present revision, however, indications of a possible UME involving beaked whales have emerged, with strandings in Ireland (n=2) and England (n=2) and out-of-habitat sightings of northern bottlenose whales in nearshore waters in Scotland. The stranded animals died and investigations are ongoing. Members were notified at the Group's meeting of 11 August 2026, and the co-chairs will follow developments, in liaison

with the IWC SEP, during the coming intersessional period. The Group has noted the increase in beaked whale strandings reported in European waters since mid-2025, which is being examined as a potential UME by ASCOBANS and the IWC Strandings Expert Panel (SEP); this matter is discussed further in paragraphs 19-23. The Group also notes the unusual events involving a stranded humpback whale in the Baltic Sea between March and May 2026 ("Timmy"). As humpback whales are not an ASCOBANS species, coordination of the response to this event was undertaken through the IWC SEP rather than under ASCOBANS.

3. The Group recognises the particular importance of detailed investigations of mass stranding events, both for identifying plausible causes of death and for yielding broader ecological and population-level information - including insights into animal health, prey availability, environmental change and other pressures on marine ecosystems. It intends to develop guidance encouraging Parties to undertake comprehensive investigations of MSEs where feasible, while acknowledging that such responses frequently require resources beyond those available through routine strandings programmes.

Strengthening data flows and communication

4. The Group attaches high priority to the timely notification and sharing of basic strandings information – species, location and date – particularly for species that may serve as indicators of unusual mortality events, such as beaked whales. Although the sperm whale falls outside the Agreement's definition of small cetaceans, sperm whale strandings may reflect the same oceanographic and prey-related drivers, and their reporting is therefore also encouraged. Regular epidemiological assessment of strandings incidence records both nationally and regionally can further assist in identifying changes in mortality patterns that warrant additional investigation.
5. As an interim measure to support information exchange, the co-chairs maintain a shared online reporting form and map, which will operate until a longer-term solution becomes available. Ultimately, the aim would be to develop pathways through which these data could be integrated into the developing IWC/ICES/ASCOBANS strandings database. Such a pipeline would provide a basis for annual reporting within the Group and contribute to the early identification of potential UMEs.
6. At its meeting of 11 August 2026 the Group agreed an interim notification arrangement. National networks are asked to inform the co-chairs by email of any stranding of a deep-diving species, including single animals. . Early awareness that an event may be under way materially increases the effort applied to carcasses in advanced decomposition, from which diagnostic material would otherwise not be recovered. A standard template will be circulated for the retrospective submission of records, and the Group will explore hosting shared material through the Secretariat. The Group further notes that reports received through the IWC's emergency-response channel are routinely circulated to the SEP and may be shared with the Group, and that a short periodic enquiry to all national strandings coordinators, including those not represented within the Group, may assist detection..
7. In support of this work, the Group has reviewed the use of strandings records reported by Parties through the National Reports. The Group reviewed the national reports and noted that, while they provide useful summaries of national stranding activities, they do not generally contain the underlying stranding records in a format suitable for incorporation into the database currently under development. The Group therefore recognized the need to better align national reporting with the database to avoid duplication of effort and ensure consistent reporting. The most appropriate mechanism for achieving this, whether through generating reports from the database or populating the database from national reports, remains under discussion.

Liaison with international initiatives and expert networks

8. The Group intends to strengthen its connections with relevant international initiatives, including the emergency response and samples and shipment subgroups of the IWC SEP. Such collaboration will help facilitate access to expertise, support capacity building, and encourage consistent approaches to investigating and diagnosing unusual events. The Group notes the IWC proposed workshops on euthanasia and mass stranding events and would highlight the value of these initiatives for the wider community.
9. The Group also recognises the value of the Global Strandings Network (GSN, <https://globalstrandingnetwork.com/>) as a repository of best practice and will explore opportunities for sharing national protocols and experiences through that platform.

Investigative Approaches and Capability Needs

10. A cetacean Unusual Mortality Event is historically defined by three cumulative characteristics: unexpectedness, significance for the affected population, and the demand for immediate response. Drawing on this well-established practice, the Group proposes to develop criteria appropriate to the ASCOBANS context, addressing what constitutes a UME, what it signifies, and how Parties might best respond.
11. The Group notes that no register of naval or other high-intensity acoustic activity is available for the Agreement Area. Assessment of sound exposure can therefore proceed only from what may be established from the stranded animals themselves, which is a material constraint on the investigation of suspected acoustic causation. The Group recognises that national security considerations will properly limit what can be disclosed, and that partial disclosure carries its own risk of bias, since an increasing proportion of naval activity comprises operations rather than exercises and it is the latter that are the more readily released. It nonetheless considers ASCOBANS an appropriate forum in which to invite Parties to explore a mechanism for the release, in appropriately sanitised form, of information sufficient to permit the retrospective association of acoustic activity with stranding events. The benefit of such a mechanism would be largely prospective, in establishing over time a record against which future events could be assessed.
12. The Group acknowledges the progress made by the University of Padova, Italy and the German Institute for Terrestrial and Aquatic Wildlife Research (ITAW) on the diagnosis of acoustic injury: on analysis of the inner ear (M. Morell), and on the auditory pathways of the brain, including markers of apoptosis and oxidative stress and an associated sampling protocol (K. Orekhova). Sampling extends to the acoustic nerve and the cochlear nucleus and requires tissue to be taken as fresh as possible, with material placed in 4% paraformaldehyde or 10% neutral buffered formalin; the markers concerned have been validated in several species, but not yet in beaked whales. It is recommended to use 4% paraformaldehyde to fix the ears (or 10% neutral buffered formalin if the former is not available). Because the approach is confined to fresh carcasses, the Group strongly encourages sampling in accordance with these protocols whenever the opportunity arises, and will circulate the current protocols to members. Recommended fixation and sampling procedures are set out in paragraph 16.

The Group proposes to:

13. Define recognition thresholds based on the established criteria into temporospatial clustering and departure-from-expected measures calibrated to ASCOBANS species and the transboundary nature of the Agreement Area, and adjusted for known seasonal patterns of stranding, so as to distinguish routine local response from an event warranting notification of the Group;

14. Articulate what a UME signifies as potential sentinels of wider marine ecosystem change;
15. Promote a multidisciplinary standard of investigation. Determining the cause and significance of a UME or MSE rarely rests on a single line of evidence. Robust investigation draws on complementary disciplines e.g.: gross, histological and ultrastructural examination, microbiology, toxicology, and the assessment of environmental and anthropogenic causes, including underwater noise. A clear understanding of these is needed both to guide national capacity-building and to identify the expertise required when an event occurs.
16. For certain species, notably beaked whales, the differential diagnosis should include the direct and indirect impacts of anthropogenic noise, whose assessment requires both pathological examination and correlation of strandings with acoustic monitoring and noise-registry data. It is recommended to collect samples of the melon and acoustic fat around the lower jaw and fix them in 10% neutral buffered formalin, to collect and fix the ears with 4% paraformaldehyde (preferable, or 10% neutral buffered formalin, De Vreese and Morell, *in review*) and fragments of the brain (vestibulocochlear nerve, cochlear nuclei and inferior colliculus) in 10% neutral buffered formalin or 4% paraformaldehyde (Orekhova, 2023). The Group adopts and carries forward the former Intersessional Working Group on Beaked Whales' recommendations on improving the scope and accessibility of such data.
17. Set out proportionate response expectations. Investigative capability depends on practical foundations that are frequently the limiting factor in mass stranding response: welfare assessment and, where necessary, humane euthanasia of live-stranded animals; carcass access, recovery, refrigeration, transport and disposal; protection of responders against zoonotic risk; and harmonised sampling, an agreed minimum dataset and tissue archiving to permit comparable and retrospective analysis. Much of this expertise can be accessed through the IWC Strandings Expert Panel rather than duplicated, and the Group will frame its response and capability-building around that connection, while recognising that comprehensive investigation often demands resources beyond those of routine strandings programmes (see paragraph 33)
18. The Group proposes to develop these criteria during the coming intersessional period and present a consolidated statement to a future meeting of the Advisory Committee.

Beaked Whale Strandings

19. The Group draws the Advisory Committee's attention to the increase in beaked whale strandings, specifically *Ziphius cavirostris* and *Mesoplodon bidens*, in European waters, reported by the IWC Scientific Committee (SC70) and being investigated as a potential UME jointly by ASCOBANS and the IWC Strandings Expert Panel, with review also by the IWC Beaked Whale Intersessional Correspondence Group. A report is to be provided to the IWC Scientific Committee at SC71. The Group considers this an early and illustrative test of the coordination and data-sharing arrangements its TOR are intended to support, and will follow developments closely, in liaison with the SEP, during the coming intersessional period.
20. At the Group's meeting of 11 August 2026 an update was presented on the analysis of beaked whale strandings in European waters over the period 1990–2023, now incorporating records recently supplied by Sweden. The long-term increase in reported strandings continues, but it tracks the trend observed for cetaceans generally and is not disproportionate to it. Strandings remain concentrated in the Celtic Sea and the greater North Sea, with a further concentration along the Bay of Biscay and the Iberian coast, and remain few in the Baltic.

21. Additive and generalised linear mixed modelling of the same dataset, excluding the 2008 and 2018 unusual mortality events, indicates a bimodal seasonal pattern, with a peak in early to mid-February and a larger peak in mid-August. The pattern is driven almost entirely by the most recent period, 2017–2023; it is weakly expressed in 1990–1998 and effectively absent between 1999 and 2016, although the confidence intervals for the intermediate periods are wide and that apparent absence should be treated with caution. The Group considers the finding directly relevant to the recognition thresholds proposed at paragraph 13: a cluster of strandings that would be unusual in spring may be unremarkable in late summer, and thresholds must accordingly be adjusted for season.
22. These patterns must be interpreted against distribution and abundance, which are themselves likely to be influenced by prey availability and, in particular, by the distribution of cephalopods. The late-summer peak coincides with the peak period of live sightings on the shelf and with cephalopod spawning in coastal waters. Relevant work is in progress: the ICES Working Group on Marine Mammal Ecology has assembled aggregated prey catch data for Atlantic Europe, from which relative abundance corrected for fishing effort is being mapped, with outputs expected in early 2027; and an increase in cephalopod consumption, alongside a decline in health status, has been reported in common dolphins in the Irish EEZ. The Group notes, however, that the coverage and quality of the available prey and sightings data may be insufficient to support formal analysis, and that this limitation will require discussion in the resulting manuscript (Brownlow et al., *in prep*).
23. To allow the analysis to be completed, the Group invites Parties and their strandings networks to bring their beaked whale records up to the end of 2025; most national datasets presently extend to 2023. The template used previously will be reissued, together with queries on incomplete records. Completing the 2024 and 2025 data will draw a line under data collection, permit the seasonality analysis to be finalised for publication. The Group further intends to examine live strandings separately, both because live and very fresh strandings appear to have become more frequent over the past decade and because they are the cases from which material of the quality required for the assessment of acoustic injury (see paragraph 16) can be obtained.

Workplan Towards AC31

24. The Group will meet again in the autumn of 2026 to consider the feedback of the Advisory Committee at AC30, progress on the beaked whale analysis and its associated manuscript, and the next steps in its programme of work.
25. The Group further notes that immediate response to a UME or MSE is, by its nature, unfunded under routine programmes, and that the additional costs of comprehensive investigation can be a decisive constraint. The Group does not propose a solution at this stage, but flags for the Advisory Committee's consideration whether any standing or rapid-access funding mechanism might be explored to support response and investigation when an event occurs.

In summary, the Group proposes to:

26. Develop clear criteria for recognising a suspected UME or MSE, including the temporospatial clustering and departure-from-expected thresholds, adjusted for known seasonal patterns of stranding, that distinguish a routine local response from an event warranting notification of the Group;
27. Encourage Parties to share basic strandings data (what, where and when) promptly and in harmonised form, so as to enable the early identification of UMEs; recognising that populations and the pressures upon them are frequently transboundary, such sharing should extend to jointly maintained regional databases rather than remaining confined within national boundaries;

28. Invite Parties to complete their beaked whale strandings records to the end of 2025, using the template circulated by the Group, so that the analysis of long-term and seasonal trends may be finalised;
29. Encourage Parties to undertake regular epidemiological assessment of their strandings data, in order to detect changes in the incidence of strandings of more common species that may be indicative of UMEs, and to examine live-stranding records separately;
30. Encourage Parties to undertake detailed examinations of mass stranding events, sufficient to identify plausible causes of death and to collect wider ecological and population data;
31. Promote a multidisciplinary investigative approach comprising pathology, microbiology, toxicology, epidemiology and, for relevant species, acoustic analysis, ideally supported by a harmonised sampling protocol for an agreed minimum dataset and tissue archiving to enable comparable and retrospective analysis;
32. Invite Parties to consider whether information on naval and other high-intensity acoustic activity might be made available in appropriately sanitised form, so as to permit the retrospective association of such activity with stranding events;
33. Acknowledge that detailed UME and MSE investigation, and the wider ecological information it yields, often requires resources beyond the standard strandings response;
34. Encourage linkages between Parties and the IWC SEP emergency-response and samples and shipment sub-groups in assessing such events and identifying potential causes, so that requesting regional support is not perceived as a barrier;
35. Highlight the GSN as a repository of best practice and encourage Parties to share their own protocols through it;
36. Support coordinated and accurate external communication during events, and independent scientific review of findings before conclusions are made public, so as to safeguard the credibility of investigations;
37. Recognise UMEs as potential sentinels of wider marine ecosystem change -including climate-related shifts, prey distribution and availability, disease emergence and anthropogenic pressures, such as underwater noise -and encourage multidisciplinary approaches that consider both proximate causes of mortality and broader ecological context, including drivers operating well beyond the stranding site itself (for example, oceanographic or prey-distribution changes along the shelf edge that may culminate in strandings of beaked and sperm whales in the North Sea).

The Group proposes to develop these principles during the coming intersessional period, and to present a consolidated statement of them to a future meeting of the Advisory Committee.

References

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TERMS OF REFERENCE

FOR THE INTERSESSIONAL WORKING GROUP ON UNUSUAL MORTALITY EVENTS AND MASS STRANDING EVENTS

(Adopted by the 29th Meeting of the ASCOBANS Advisory Committee, September 2025)

The Interseasonal Working Group on Unusual Mortality Events (UMEs) and Mass Stranding Events (MSEs) will:

1. Identify and agree best practice approaches for detecting, confirming, and responding to UMEs and MSEs, including protocols for outreach to relevant countries and mechanisms to facilitate rapid international coordination.
2. Strengthen data flows and communication by:
 - Reaching out to Member States' strandings networks to explore and establish mechanisms for real-time or near-real-time sharing of strandings data.
 - Liaising with the IWC Strandings Expert Panel (SEP) groups to harmonise approaches for the collection and integration of strandings data relevant to UME/MSE assessment.
 - Collaborating with the European Strandings Database group to develop and refine tools for early detection and identification of potential UME events.
3. In the event of a suspected UME and/or MSE:
 - Members to notify the group at the earliest opportunity, without impeding immediate local response.
 - The group to collate and share available information to assess scale and significance
 - Facilitate communication with national authorities, international bodies and expert networks, in line with best practice.
 - Encourage consistent approaches to data collection and reporting.
4. Reporting and review: The group will report on its activities, outcomes, and any identified gaps or needs to the next Advisory Committee (AC).