

UNDERWATER NOISE

OSPAR's QUALITY STATUS REPORT 2023 BRIEFING NOTE SERIES

Noise can affect marine animals by interfering with their ability to communicate, navigate, find food, or detect threats; by provoking fleeing or distraction; or by causing injury or death. As yet there is no agreed definition of good environmental status for underwater noise, but OSPAR has committed to reducing noise pollution in the OSPAR Maritime Area.

The dominant source of continuous underwater noise is shipping; other sources include recreational boating, fishing, aggregates extraction, oil and gas activities, and offshore wind turbines. As yet, only the Greater North Sea is covered by an OSPAR assessment for continuous noise. In large areas of the Southern North Sea, and along major shipping routes, the noise exceeds natural sound in the low frequency bands by over 20 dB for over 50% of the time.

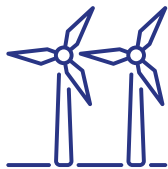
Impulsive noise is produced by seismic air gun surveys, pile driving for offshore wind turbines and other construction, explosions, military activities, and some acoustic deterrent devices. Reported impulsive noise increased from 2015 to 2019, with most activity in the OSPAR Maritime Area occurring in the Greater North Sea. Since data are unavailable for some Contracting Parties and sound sources, the data underestimates this activity. The risk of disturbance to harbour porpoise from reported impulsive noise decreased from 2015 to 2017, then increased to 2019.

For both impulsive and continuous noise, it is not yet possible to establish any definitive long-term trends in noise levels, including since the Quality Status Report 2010 (QSR 2010).

Measures to mitigate impulsive noise have had some impact, but international guidelines on reducing continuous noise appear to have had little effect to date. OSPAR has committed to producing a regional action plan of measures to reduce noise, and to improve the monitoring of noise levels.



Shipping



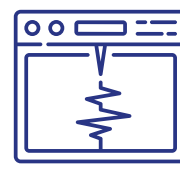
Operational Wind Farms



Tidal Energy



Pile Driving



Seismic activity



Explosions (VXD)

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<https://oap.ospar.org/en/ospar-assessments/quality-status-reports/qsr-2023/thematic-assessments/underwater-noise/>

