

Appendix 13:
Updated Table 6.1 from
Habitats Regulations
Assessment

Updated Table 6.1 from the Habitats Regulations Appraisal to consider the cumulative effects of offshore wind farm developments (including the Forth and Tay Developments and the Moray Firth projects) on the Moray Firth Special Area of Conservation

Project/ Proposed Development	Description	Approximate Distance to Project [km]	Status	Cumulative effects on bottlenose dolphins
European Offshore Wind Deployment Centre (EOWDC)	Offshore wind demonstrator	10	Consented	Aberdeen Offshore Wind Ltd (2011) predicts behavioural avoidance of bottlenose dolphin to piling at the EOWDC within a range of 8.5 km. Some possible overlap of noise impact ranges with those arising from the current project could therefore occur in the event that these projects are undertaken simultaneously. Piling activity for EOWDC will be limited to a maximum of 24 hours per pile (Aberdeen Offshore Wind Ltd, 2011). As only eleven foundations are planned at the EOWDC, total avoidance over the entire construction period will only occur for a short period of time. Due to the limited duration of the pile installation, the effects on bottlenose dolphins relating to displacement are considered to be no worse than as assessed in the AHEP ES.
Kincardine Offshore Wind Farm	Floating offshore wind farm	12	Application	Installation of approximately 8 floating turbines in 45 to 140 m of water. The installation of floating offshore structures removes nearly all site construction noise as the units are constructed in port, towed to the site then moored in position, with no piling activities required. Construction related noise is therefore either not generated or significantly reduced (Atkins, 2016 ¹). The effects on bottlenose dolphins relating to displacement are, therefore, considered to be no worse than as assessed in the AHEP ES.
Hywind Scotland Pilot Park Offshore Wind Farm	Floating offshore wind demonstrator	51	Application	Installation of 5 floating turbines in waters exceeding 100m depth. As above – construction noise related to the installation of floating offshore structures is either not generated or significantly reduced. The effects on bottlenose dolphins relating to displacement are, therefore, considered to be no worse than as assessed in the AHEP ES.

¹ Atkins (2016) Kincardine Floating Offshore Wind Demonstrator Project: Habitats Regulations Appraisal - Information to inform an Appropriate Assessment. Kincardine Offshore Windfarm Ltd.

Project/ Proposed Development	Description	Approximate Distance to AHEP [km]	Status	Cumulative effects on bottlenose dolphins
Seagreen Alpha Offshore Wind Farm	Round 3 offshore wind farm	64	Consented	<p>These developments are known collectively as the 'Forth and Tay Developments'. An Appropriate Assessment (AA) was carried out in 2014 to assess the cumulative effects of the Forth and Tay Developments. Modelling undertaken by Marine Scotland Science (Thompson et al., 2014²) considered the effects of displacement of bottlenose dolphins resulting from underwater noise generated by the construction of the Forth and Tay Developments, and concluded that the long-term viability of the population is unlikely to be adversely affected by the Forth and Tay Developments in combination with the Beatrice Offshore Wind Farm and Moray Firth Offshore Wind Farm in the Moray Firth (see below). The AA concluded that impacts arising from the offshore wind farms in the Forth and Tay in combination with other previously consented developments will not adversely affect site integrity of the Moray Firth Special Area of Conservation. The AA does, however, identify that it is likely that bottlenose dolphins will experience disturbance as a result of each project independently, and cumulatively, and recommends that the developers take steps to mitigate this where possible by adhering to JNCC guidelines on piling.</p>
Seagreen Bravo Offshore Wind Farm	Round 3 offshore wind farm	64	Consented	<p>As detailed in Chapter 15 of the ES and in the Clarification Notes on Underwater Noise, and Blasting Methodology and Mitigation, a number of mitigation measures have been proposed to reduce the propagation of underwater noise during the construction of the AHEP, including:</p>
Inch Cape STW Offshore Wind Farm	Scottish territorial waters offshore wind farm	65	Consented	<ul style="list-style-type: none"> • Marine impact piling only to take place when there is no direct 'line of sight' to open water • Use of bubble curtains during underwater blasting activities • No night-time impact piling or blasting • JNCC guidance will be adhered to during impact piling activities and blasting activities • Use of Marine Mammal Observers and Passive Acoustic Monitoring during drilling, blasting and marine piling activities
Neart na Gaoithe STW Offshore Wind Farm	Scottish territorial waters offshore wind farm	95	Consented	<ul style="list-style-type: none"> • Where practical, vibropiling to be used instead of impact piling • Soft-start piling procedures over a duration of 30 minutes • Development of a Marine Mammal Monitoring Programme with St Andrews University, in collaboration with Marine Scotland and Scottish Natural Heritage (SNH) <p>The detail of these measures will be developed in the Construction Environmental Management Plan in consultation with Marine Scotland and SNH once a contractor has been appointed and the detailed construction methodology has been developed.</p> <p>Provided that these mitigation measures are employed, the cumulative effects relating to displacement of bottlenose dolphin due to underwater noise propagation during the construction of the AHEP are considered to be no worse than as assessed in the AHEP ES or Habitats Regulations Appraisal.</p>

² Thompson, P.M., & Brookes, K.L. (Jan, 2014) Cumulative bottlenose dolphin modelling for east coast of Scotland renewable developments. Advice commissioned by Marine Scotland Science.

Project/ Proposed Development	Description	Approximate Distance to Project [km]	Status	Cumulative effects on bottlenose dolphins
Moray Firth Eastern Development Area (comprising Telford, Stevenson and MacColl sites)	Round 3 offshore wind farm	130	Consented	<p>As described above, modelling undertaken by Marine Scotland Science considered the effects on displacement of bottlenose dolphins resulting from underwater noise and concluded that the long-term viability of the population is unlikely to be adversely affected by the Forth and Tay Developments in combination with the Beatrice Offshore Wind Farm and Moray Firth Offshore Wind Farm.</p> <p>When the mitigation measures listed above are employed, the cumulative effects relating to displacement of bottlenose dolphin due to underwater noise propagation during the construction of the AHEP are considered to be no worse than as assessed in the AHEP ES or Habitats Regulations Appraisal.</p>
Beatrice STW Offshore Wind Farm	Scottish territorial waters offshore wind farm	135	Consented	