

## Appendix E: Identification of Potentially Co-located Industries

(Cross reference with Section 3.2.5 in Report)

A spatial overlap assessment was undertaken to identify marine developments which exist within or closely adjacent to the rMCZs and rRAs. This assessment included marine aggregate extraction sites, subsea cables and pipelines, oil and gas licence areas, port and harbour developments, power stations, offshore wind farm sites and coastal outfalls. Up-to-date spatial data were sourced from the Crown Estate (<http://www.thecrownestate.co.uk>), who is responsible for licencing the aggregate extraction industry and offshore renewable energy developments, DECC (<http://og.decc.gov.uk>) who is responsible for licencing the oil and gas industry as well as some of the larger renewable energy and port developments, Kingfisher Information Service (<http://www.kisca.org.uk/>), who provide subsea cable information to the commercial fishing industry and the DEAL gateway (<https://www.ukdeal.co.uk/dp/jsp/DealSummary.html>) which holds a register of wells, licences, surveys and infrastructure relating to the oil and gas industry, and a catalogue of ports and harbours supplied by the MMO (<http://www.marinemanagement.org.uk/>). The MAGIC database (<http://magic.defra.gov.uk/>), which was created as part of a partnership project involving six government organisations (Department for Communities and Local Government (DCLG), Department for Environment, Food and Rural Affairs (Defra), English Heritage, Environment Agency, Forestry Commission and Natural England) provided the locations of power stations and Environment Agency WIMS Database provided the project with the locations of coastal outfalls. The DEAL gateway was used under licence by MPC who are part of the Gardline Group of Companies. The spatial data obtained through these sources was imported into the project GIS along with any available attribute data e.g. the developer, the year of development, the licensing round, operational use of port etc. All spatial data used in the overlap assessment are summarised below in **Table E.1**.

Industry	GIS Layer	Source
Aggregate Extraction	Active and non-active licence areas and exploration areas	The Crown Estate <a href="http://www.thecrownestate.co.uk/marine/aggregates/">http://www.thecrownestate.co.uk/marine/aggregates/</a>
Aquaculture	Current aquaculture lease sites	The Crown Estate <a href="http://www.thecrownestate.co.uk/marine/aquaculture/">http://www.thecrownestate.co.uk/marine/aquaculture/</a>
Cables	Active Cables and Leases	Kingfisher <a href="http://www.kisca.org.uk/">http://www.kisca.org.uk/</a>
Oil and Gas	DECC Licence Blocks	DECC <a href="http://og.decc.gov.uk/en/olgs/cms/data_maps/data_maps.aspx">http://og.decc.gov.uk/en/olgs/cms/data_maps/data_maps.aspx</a>
Oil and Gas	Gas Leases	DECC <a href="http://og.decc.gov.uk/en/olgs/cms/data_maps/data_maps.aspx">http://og.decc.gov.uk/en/olgs/cms/data_maps/data_maps.aspx</a>
Power Stations	Developed nuclear sites	MAGIC <a href="http://magic.defra.gov.uk/">http://magic.defra.gov.uk/</a>
Power Stations	Power plants (non-GIS, map figure only)	<a href="http://www.deloitte/energy">www.deloitte/energy</a>
Pipelines		UK DEAL Oil and Gas Data 2012
Port and Harbour Developments	All ports, harbours and marinas	MMO <a href="http://www.marinemanagement.org.uk/index.htm">http://www.marinemanagement.org.uk/index.htm</a>
Wind Farms	All development rounds and current licences	The Crown Estate <a href="http://www.thecrownestate.co.uk/energy/downloads/">http://www.thecrownestate.co.uk/energy/downloads/</a>
Oil and Gas Surface Structures	Locations of current and historic offshore developments	DECC <a href="http://og.decc.gov.uk/en/olgs/cms/data_maps/data_maps.aspx">http://og.decc.gov.uk/en/olgs/cms/data_maps/data_maps.aspx</a>
Oil and Gas	Current and	DECC

Wells	Historic well sites	<a href="http://og.decc.gov.uk/en/olgs/cms/data_maps/data_maps.aspx">http://og.decc.gov.uk/en/olgs/cms/data_maps/data_maps.aspx</a>
Coastal Outfalls	Discharges to estuarine and marine waters	Environment Agency WIMS Database

**Table E.1.** Summary of the industry data sources acquired for the purpose of identifying developments that are co-located with the rMCZs and rRAs.

Spatial overlaps were identified in ArcGIS 9.3 between the industry areas and rMCZs / RAs. A resulting shapefile (layer) was created to show only those areas for each industry that overlapped with rMCZs / RAs. developments.

The percentage overlap between development sites and the rMCZs / RAs was calculated within the project GIS. These results were exported to Excel to assess those industry sites of most interest to the project, i.e. to facilitate data sourcing. Where industries were represented by a single point, a 3km buffer was added to allow the overlap calculations to be made; this represents the minimum area likely to be covered by an EIA or similar environmental assessment.

Once the list of marine developments that are co-located with the rMCZs and rRAs was finalised it was cross-checked against the evidence supplied by the RPs to remove any evidence that had already been reviewed. Environmental Statements relating to these developments were then sourced from the MMO, DECC, the EA and private developers, where they were not freely available on the internet. Environmental Statements were reviewed by the project team and raw data or interpreted habitat maps were then requested where they were thought to add significant evidence to the presence, extent or condition of any ENG features identified within the rMCZs or rRAs. Any habitat maps or point data sourced through this route were included in the project geodatabase and were interrogated during subsequent confidence assessments.

Estuarine and marine outfalls were selected from the consents data received from the Environment Agency's Water Information (WIMS) database and plotted in GIS from OS grid references. Of the outfalls that overlap with the rMCZs and rRAs, those listed as having no discharge or an unquantified discharge, were excluded from the search as it was deemed unlikely that these developments would have environmental data associated with them. Data was requested from the utilities companies.

A total of 309 port developments were found to overlap with the rMCZs and rRAs but due to the time constraints imposed by the project, only those belonging to the United Kingdom Major Ports Group (UKMPG) were researched further, with a view to identifying and obtaining any associated environmental data. This group was chosen on the basis that it represents most of the larger ports in the UK and its members account for over 70% of the tonnage handled in UK ports. Since larger ports are most likely to have had environmental assessment work undertaken in association with the development, concentrating on these ports was thought to be the most effective use of time. There will nevertheless be data associated with other port developments that has not been included in our assessment.