

Comments on IOSEA-1 Draft Report

General Comments

1. Seasonal constraints may be put in place where sufficient data on peaks in whale migration within the area exists.
2. There needs to be a plan for the long-term monitoring of cetacean activity in areas of oil exploration and development.
3. There needs to be a commitment to a minimum of 12 months pre- and post-development cetacean monitoring in any development reaching the EIS stage. In addition there should be a requirement for an MMO to be present during the installation and drilling phases of development.
4. A workshop on Passive Acoustic Monitoring (PAM) should be held within the next 6 months, involving the relevant stakeholders, experts and statutory bodies, to examine current technology and best practice in implementing PAM on board seismic vessels.

Chapter 3

Table 3.1.4 + 3.1.5

1. Change the key for the white boxes from 'none' to 'none/no data'.

3.6.1 (Annexe)

1. Fin and humpback whales migrate along the west coast but some are seasonally resident in Irish waters while others are thought to reside in Irish waters year-round (IWDG database).
2. It's not true to say that strandings reflect distribution and relative abundance of cetaceans. This may be true for some inshore species but generally not so for offshore types.
3. Ship surveys run by IWDG do estimate relative abundance (Wall et al. In Press).
4. Baleen whales feed on Krill (rather than plankton) and small schooling fish (e.g. herring and sprat) – more commonly in Irish waters.

Chapter 5

5.2.6

1. Fin and humpback whales migrate along the west coast but some are seasonally resident in Irish waters while others are thought to reside in Irish waters year-round (IWDG database).
2. Baleen whales feed on Krill (rather than plankton) and small schooling fish (e.g. herring and sprat) – more commonly in Irish waters.

3. Whale distribution may vary with a number of factors including bathymetry, underwater habitat (e.g. coral mounds) water temperature, etc... Distribution is not explained by just one factor.

Chapter 7

7.2.2

1. Zone of responsiveness – for beaked whales may include the risk of rapid ascent and the 'bends' (*Nature* **425**, 575-576)
2. Common dolphins have been observed maintaining a distance of c750m from single air guns during seismic surveys in Irish waters.

7.2.6

1. Would prefer if reference was made to cetaceans rather than just to baleen whales as it implies other cetacean species are not affected. Effects on all cetacean species should be mentioned.

7.2.7

1. Application for approval for a seismic survey should include a risk matrix for marine mammal mitigation.
2. Is it better to have consecutive or concurrent seismic surveys?

7.2.8

1. Again baleen whales are not the only species affected, there are effects on beaked whales and dolphins.
2. Effects on marine turtles should be considered.

Table 7.3

1. Should also present data for beaked whales and dolphins/porpoises if available.

Chapter 8

8.2.4

1. It is not true to say that only minke whales are recorded in shallow waters over the shelf. Again absence of (scant) evidence is not evidence of absence and we have sightings of humpback from this north-west region.
2. There is not enough data to indicate low numbers of minke whales. Also low numbers of baleen whales is not the same as low numbers of dolphins. A relatively low relative abundance of baleen whales may still represent a population abundance of high conservation abundance as they are typically not as gregarious as small toothed species.

3. No data presented on noise effects on marine turtles.

Table 8.8

1. Cetaceans are susceptible to the physical (toxic) effects of contact with oil.
2. There is data on the effects of oil on otters from the Alaska (Exxon) oil spill and the Braer disaster in Shetland.
3. Marine turtles also occur in the IOSEA area during summer months and should be considered in this section.

Chapter 9

9.2

1. This text must also mention the effects of seismic surveys on beaked whales and other cetaceans.

Chapter 10

10.1.1

1. Draft guidelines should be added as an appendix and referred to in text.
2. Check text against latest copy of draft guidelines.
3. A requirement should be included for MMOs to be present on rigs during drilling operations.

10.3.2

1. This section must include a commitment to ongoing monitoring of cetacean activity in areas developed and at least 12 months of post-development monitoring of sites.

Chapter 11

11.1.1

1. Are all toothed whale species less affected by seismic survey noise? What is the reference for this? Does this theory take into account high frequency noise emitted by air gun arrays?
2. There should be a mention of the effects of seismic surveys on beaked whale species which is thought to be exacerbated by their preference for deep water canyon habitats which may amplify the noise effects.

11.1.6

1. There is a question as to whether it is better to run two surveys in an area concurrently or consecutively. The issue is a balance between degree of noise intensity and duration of noise pollution of an area.

11.2.1

1. There is not enough data collected on the distribution and relative abundance of all cetacean species in many offshore areas.
2. Relative abundance data collected from seismic survey vessels is not valid as it does not reflect the norm for the area.
3. There is a need for additional survey effort in these areas. NPWS has made a 3 year commitment to help fill some of these data gaps.