

## Submission(s) Relating to Cetaceans and Marine Mammals

On Friday, September 3, 2010, Anthony Brogan gave evidence that dolphins and whales have not been given due regard in the EIS and gave an extract from Appendix A of the Addendum relating to the Intervention Pit which read "the visitation of any cetacean species has yet to be confirmed within the Sruwaddacon estuary". Mr Brogan then showed a short video relating to dolphins recorded in Broadhaven bay.

The presence of pinnipeds and potential presence of cetaceans within the Sruwaddacon estuary is clearly described in section 14.3.6 of the EIS which summarises the collation of extensive studies carried out on marine mammals in the Broadhaven and Sruwaddacon bay areas in 2001, 2002, 2003, 2005, 2007, 2008, 2009 and ongoing in 2010. These datasets include a multitude of different techniques carried out by several leading specialist cetacean survey groups. A summary of marine mammals known to frequent Broadhaven Bay is contained in Table 14.8, along with the survey years in which they were recorded.

When referring to small cetacean species, the EIS clearly states that "although no cetaceans were recorded within the Sruwaddacon or Curraunboy Bays, an occasional foray into these areas by this species cannot be ruled out". Consequently in section 14.4 of the EIS, impacts to marine mammals were addressed in detail with particular attention paid to impacts upon the Harbour porpoises and Bottlenose dolphins, both listed as "rare" for potential occurrence within Sruwaddacon Bay (Table 14.9 of the EIS). Potential impacts to these species were assessed for both the proposed tunnelling operations and the very unlikely event of an intervention pit. For the latter, mitigation procedures relating to standard national guidelines relating to the "Code of Practice for the Protection of Marine Mammals during Acoustic Surveys in Irish Waters" will be applied and these were included in the section 14.6.1. (Monitoring Cetaceans/Marine Mammal Observers) in the EIS.

Mr Brogan then went on to show a short video sequence which purported to demonstrate "the applicants less than comprehensive assessment". This video was stated to have been taken on the 15<sup>th</sup> August and was intended to show inappropriate vessel behaviour of the boats used during the site Investigation works, in contravention of the DCENR marine notice no 15 of 2005. Mr. Brogan cited several breaches of the code based on reporting, vessel speed and minimal approach distances. Specifically, his evidence alleged that the vessels approached within 100m of the dolphins, that it 'dissected' the pod of dolphins, and that the sighting had not been reported to NPWS. SEPIL has established a Code of Conduct to protect marine mammals given in the Environmental Management Plan Appendix II. This is summarised in slide 1.

On receipt of a copy of this video on 7<sup>th</sup> September, 2010, I undertook an assessment of this encounter from both the footage and through the following sources.

- A statements from the vessel master (Evie Rose);
- A copy of the radio transcript from all vessel movements within the Bay monitored on the 15<sup>th</sup> August from the Ballyglass Pier Radio Room;

- A statement from the Coastal Marine Research Centre (CMRC) cetacean biologists who were operating on a separate vessel and cliff top in the bay on the same day.

Close inspection of the video combined with statements made by the vessels Masters, the independent radio logs and a statement from the CMRC have led me to question the purported sequence of events shown in the video.

The video supplied was 6min and 51 seconds (411 seconds) of which only 65 seconds of footage indicated the presence of vessels and dolphins in the same shot. The sequence shows a series of shots of both adult and sub-adult Bottlenose dolphins playing within the bay, followed by the Evie Rise (a 8m catamaran) passing the pod at approximately 17 knots heading east into Sruwaddacon, followed by a rigid inflatable boat (Daithioig) passing in the same direction. The footage then changes to a number of vessels coming out of the Sruwaddacon in the afternoon (with two RIBs Blue Eagle and Explorer) passing further dolphins at approximately 20 knots, followed by the Evie Rose and the MacBel and ending with the same two vessels heading towards Ballyglass followed by another aesthetic shot of the bay.

Careful observation of the video shows that the footage of dolphins was recorded after the morning vessels had passed. The video footage showed no evidence of vessels changing course or speed erratically nor of any vessel dissecting the pod.

The judging of distances at sea is difficult due to the lack of reference points within the field view. However, the distance between objects can be calculated in video footage where the height of the observer, the distance to the vessel and the size of the vessel is known. Slide 2 shows the passing of the Evie Rose and dolphins (ca 08:20 15/08/10) between Rinroe point and a Glengad house, which was recorded in the foreground. This allows the viewer to identify the location of the camera (along with its height above sea level) and locate the vessels position along the corridor. This was applied for two other examples within the video logs and the positions plotted to calculate the distance between subject and camera (slide 3).

By carefully reviewing the video, I noted that the afternoon observations were undertaken at a different location which was positioned closer to the sea and at a lower altitude above sea level. Slide 4 shows the passing of the RIB Daithioig in front of some dolphins. The height difference is scaled using the height of a man on the deck (ca. 1.8m) and the separation of the two subjects calculated through simple trigonometry (slide 5). This showed that the vessel, which was travelling just below 20 knots (well below its full speed), remained on a straight path well outside the 100m criteria outlined by the Code. The estimated true distance was 220m. The same calculation was applied to the Evie Rose (slide 6) and an approximate distance of 225m, whilst a shot of two RIBs in the afternoon (Island Diver and Marina Alpha, slide 7) recorded a much greater dolphin separation of over 1km. The latter was much greater than perceived due to the very low angle of view on the shoreline and the use of the telephoto lens. In all cases no deviation from the vessel codes were recorded.

By comparing the radio transcript to the video, I noted that certain events that were recorded on the transcript did not appear in the video, notably the Evie Rose returning to Ballyglass pier. I confirmed these events with the vessel's master whose

vessel was recorded by the video leaving the Sruwaddacon and then jumping to footage disappearing south towards Ballyglass pier along with the MacBel. The video failed to show that the Evie Rose was approached by the dolphins noted in slide 7, initially recorded at a range of 6-700m to the north. The vessel master's recollection was that when animals appeared within close proximity of the vessel (i.e. within 100m), the vessel slowed whilst maintaining a constant heading and the dolphins remained near the vessel. Once clear of the animals, the master contacted the radio base at Ballyglass pier and reported the incident before proceeding at normal speed (ca. 18knots) back to the pier, with this very last section, once again, shown on the video. All radio transmissions kept at Ballyglass pier confirmed this event, along with all other communications from the vessels relating to the presence of dolphins in the bay made during that day.

It should also be noted that two CMRC cetacean biologists were present in the bay for most of that day. The first, located onboard the An Gearoidín between 07:20 and 10:00 recorded the presence of 45 dolphins and the passing of several RIB craft. They reported that there was no avoidance behaviour observed from the dolphins (a fact confirmed by the video) and that they did not witness any breach of the vessel Code of Conduct as these boats passed. A second CMRC observer, who was located up on the cliff top at Doonanieran between 1230 and 1650, also monitored the same animals and recorded no interaction with any of the project utility boats or the RIBs whilst present.

Based on the above it is my opinion that no breach of SEPILs code of conduct, as outlined in their Environmental Management Plan (App 2), was recorded at any time. Having reviewed the evidence as described above, I can only conclude that the video footage has been used to misrepresent the sequence of events that actually occurred that day including miss-sequencing the chronology of the video (slide 8), or removal of sequences where the code was clearly observed. This misinformation was subsequently used in an inaccurate way by other parties, including other observers and appears to be the only basis of complaint.