WORKING GROUP ON ABUNDANCE ESTIMATE
Copenhagen, October 16-18, 2016
REPORT

1. CHAIRMAN WELCOME AND OPENING REMARKS

Daniel Pike welcomed the participants (Appendix 2) to the meeting and thanked everyone for their attendance. He reminded the participants that the WG will review abundance estimates generated from the NASS2015 and any surveys that have occurred since then, for use in assessments by NAMMCO.

2. ADOPTION OF AGENDA

The agenda was adopted (Appendix 3).

3. APPOINTMENT OF RAPPORTEURS

Prewitt was nominated as rapporteur, with help from participants as needed.

4. REVIEW OF AVAILABLE DOCUMENTS AND REPORTS

Pike reviewed the documents available to the meeting (Appendix 4). Six working papers were available, as well as several background documents.

5. FIN WHALES
5.1 Shipboard Iceland/Faroes

Pike presented SC/23/AE/04 which gives abundance estimates for fin whales from the Icelandic and Faroese NASS2015 shipboard surveys.

The Icelandic and Faroese components of the sixth North Atlantic Sightings Survey (NASS) was conducted between 10 June – 10 August 2015 (Gunnlaugsson and Vikingsson 2015). Three vessels covered a large area of the northern North Atlantic, similar to the earlier NASS, but for the first time applying fully independent double platform observer (IO) mode. The fin whale was a target species in all areas. Realized effort and fin whale sightings are shown in Fig 1. In addition to stratum and total abundance estimates, regional estimates, each of which includes a combination of the original strata, were required for population modelling purposes. These included estimates east and west of 18° W, which required the division of stratum FW into W (FW_W) and E (FW_E) sections. A contiguous area north and east of Iceland around Jan Mayen Island was covered simultaneously by a Norwegian vessel as a part of an annual cyclic mosaic survey (see section 5.2). One of the Icelandic survey vessels was conducting coincident fisheries surveys and some observation effort was on transit transects aligned with expected high fin whale density, so analyses were performed both including and excluding these data. Rejecting this compromised effort, the total corrected estimate for the survey area using all fin whale sightings was 40,788 (cv 0.17, 95% CI 28,476 to 58,423). Restricting to high and medium confidence sightings using the same effort reduced the total estimate to 35,605 (cv 0.18, 95% CI 24,615 to 51,505). While overall abundance over the entire survey area is not directly comparable between NASS as coverage has varied between surveys, the numbers seen here are the highest of any NASS in the Central North Atlantic. Compared to the most recent previous survey conducted in 2007, increases were seen in the area between West Iceland and East Greenland