**European hake**

**NE Atlantic northern stock**

**Fishery:** NE Atlantic northern stock - EU 2a, 3a, 4, 6, 7, Babd, Denmark - Set gillnets (anchored)

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### IDENTIFICATION

**Scientific Name:**
- *Merluccius merluccius*

**Species Name(s):**
- European hake

**Stock Identification:**
European hake is widely distributed over the Northeast Atlantic shelf, from Norway to Mauritania, with a larger density from the British Islands to the south of Spain (Casey and Pereiro, 1995) and in the Mediterranean and Black sea. ICES assumes since the end of the 1970s two different stocks units (ICES, 2013b):

- **The Northern stock** is distributed throughout the Kattegat, the Skagerrak, the North Sea, the English Channel, to the west of Scotland and Ireland and into the Bay of Biscay (EC, 2004)
- **The Southern stock**, in Divisions VIIc and VIIIa along the Spanish and Portuguese coasts.

However, there is still no consensus on the stock structure of European hake in the Northeast Atlantic. Several studies have raised the issue that there is no genetic evidence of multiple populations in the Northeast Atlantic (Roldán et al., 1998, Castillo et al., 2005, Pita et al., 2010). On the other hand, the analyses by Lundy et al. (1999), suggested a differentiation between Bay of Biscay and Portuguese samples, both considered by ICES as part of the Southern stock. In a recent study Pita et al. (2013) found evidence that a large genetic connectivity exists among Atlantic grounds and is mediated by significant migration rates from the Celtic Sea towards its adjacent Atlantic grounds. Therefore, the spawning biomass of the northern hake population could play a crucial role in ensuring the sustainability of southern hake fish grounds. However, the Cap Breton canyon (close to the border between the Southern part of Division VIIb and the eastern part of Division VIIIc, i.e. approximately between the French and Spanish borders) is still considered to be a geographical boundary limiting exchanges between the two stocks (ICES, 2013b).

### ASSESSMENT

#### Strengths
- The spawning stock is at historically high levels, above any possible reference points and considered to be at "Full reproductive capacity".
- Fishing mortality has decreased strongly in recent years (with the exception of 2013) but it is still above MSY levels.
- The assessment was benchmarked in 2004 and ICES advises on the basis of the MSY approach. "A biassing at reference points were defined: FMSY, MSY, BMSY, BMSY and RM.
- Recruitment in 2012 was estimated to be the highest in the time-series.
- Several management measures and changes in fishing technology have been introduced in the fishery to mitigate unwanted bycatch (and further developments are being studied, in particular in trawling).

#### Weaknesses
- The recovery plan CR811/2004 is no longer considered appropriate by the ICES.
- Since 2009 landings have been systematically higher than set TACs.
- Stock discards are substantial (15% of catches) mainly of juvenile hake, particularly in some areas and by certain gear but data on discarding is incomplete (only 75% of the known discards are included in the assessment) and increases occurred in the most recent year both in sampled fleets and non-sampled areas. Additionally, discards of large individuals also have increased in recent years because of quota restrictions in certain fleets.
- More specific information on possible effects of this fishery on endangered, threatened and protected species and habitat is needed.

#### Scores

**Management Quality:**
- Management Strategy: ≥ 8
- Managers Compliance: 7.5
- Fishers Compliance: 8.3

**Stock Health:**
- Current Health: 10
- Future Health: 5.8

**FIPS:**
- No related FIPS

**MSC:**
- DFPO Denmark North Sea & Skagerrak hake and plaice: MSC Certified

### RECOMMENDATIONS

**Retailers & Supply Chain**
- Monitor the progress in closing out conditions placed upon the MSC certification of the fishery and if agreed timelines are met, offer assistance in closing conditions where possible.