Atlantic cod
Barents Sea

Fishery: Norway/Russia, France
Single boat bottom otter trawls

**IDENTIFICATION**

**SCIENTIFIC NAME**
Gadus morhua

**SPECIES NAME(S)**
Atlantic cod

**COMMON NAMES**
Barents Sea cod, NE Arctic cod, Northeast Arctic cod, Norwegian-Russian cod

**STOCK IDENTIFICATION**
Genetic studies support the distinctness of different populations in the Atlantic Ocean (Bradbury et al. 2013), being two stocks identified in the Barents Sea: NE Arctic and Norwegian coastal waters. There is some overlap over the spawning season in the Norwegian coast but the stocks are assessed by ICES separately as Cod in Subareas I and II (Northeast Arctic cod) and Cod in Subareas I and II (Norwegian coastal waters cod). Haddock and saithe are also targeted in this fishery.

**RELATED LINKS:**
- Joint Norwegian-Russian Fishery Commission (UNRFC)
- International Council for the Exploration of the Sea (ICES)

**ASSESSMENT**

**Strengths**
- The stock assessment process incorporates many best practices features.
- Scientific advice is consistent with the management plan, which is regularly revised and found to be in accordance to the Precautionary Approach by ICES, such as the harvest control rule.
- Stock biomass is following a decreasing trend but remains in a good condition.
- Catch rates have been below the set TAC, illegal, unreported and unregulated fishing is considered to have been effectively addressed. Unreported landings are considered zero since 2006.
- Even if not included in the current assessment, bycatch and discard time series are being updated.
- There are several management measures in place: spatial, temporal and closures for the protection of juveniles; technical measures in the fishing measures and also control measures. Some are harmonized within Russian and Norwegian EEZ waters.
- Previous concerns with the interaction of the Russian longline fleet with wolfish are currently addressed.
- The project MAREANO and other annual trawl ecosystem surveys have been providing a deeper knowledge of the Barents Sea, which is considered one of the best known ecosystems in the world. Sensitive species and habitats' composition have been determined spatially. Some sensitive areas are identified.
- Longlines, hauls and areas and gillnets are considered to not cause irreversible harm to the seafloor habitat, intertemporal and spatial terms.

**Weaknesses**
- Several issues – related to survey coverage, catch-at-age data and catches' sampling - contribute to uncertainties in the assessment, especially on the spawning stock and recruitment estimates.
- Fishing mortality has been increasing and is currently at the target. The spawning stock has been showing a decreasing trend.
- The agreed catch limit for 2018 is above the scientific recommendation, like has been happening in the past 3 years. ICES highlights the TAC is not established in accordance to the Harvest Control Rule in place.
- Discarding levels are unknown but assumed to be negligible, below 5%.
- Estimates are contradictory and fragmented.
- There is bycatch of depleted species, such as golden redfish, of particular concern; this fishery is estimated to contribute to a significant share of total golden redfish catch, especially by trawls, and considered by ICES to be far above any sustainable catch level.
- Interaction with harbour porpoise happens in the gillnet fishery but is not totally quantified.
- Trawls are known to impact the hard bottom habitat and the impacts are not well studied.

There is no comprehensive bottom trawl impact assessment or representative network of protected areas.

**SCORES**

**Management Quality:**

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<thead>
<tr>
<th>Management Strategy</th>
<th>Managers Compliance</th>
<th>Fishers Compliance</th>
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**Stock Health:**

<table>
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<th>Current Health</th>
<th>Future Health</th>
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**FIPS**

For related FPs:

**MSC**

- Compagnie des Pêches Saint Malo and Euronor cod and haddock: MSC Recertified

**RECOMMENDATIONS**

**RETAILERS & SUPPLY CHAIN**

- Press regulators to set the catch limit in line with the agreed harvest control rule.

Mackerel fish is not itself targeted; however, it is a bycatch species.

- Make urgent further efforts (e.g. via additional technical conservation measures) to avoid the bycatch of depleted species, such as golden redfish, in the fishery.
measures) to reduce the bycatch of golden redfish and coastal cod.

- Implement an at-sea monitoring programme to improve data on protected, endangered, and threatened species interactions.
- Participate in the ongoing efforts to investigate impacts of bottom trawls on the soft-bottom habitat of the Barents Sea.