Atlantic cod
Barents Sea

Fishery: Norway/Russia, Russian Federation
Single boat bottom otter trawls

IDENTIFICATION

Scientific Name: Gadus morhua
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.

ASSESSMENT

Strengths

- The stock assessment process incorporates many best practices features.
- Scientific advice is consistent with the management plan, which is regularly reviewed and found to be in accordance with 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 2009.
- Even if not included in the current assessment, bycatch and discarding 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 the Russian and Norwegian EEZ waters.
- Previous concerns with the interaction of the Russian longline fleet with wolffish 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 as one of the best known ecosystems in the world. Sensitive species and habitats’ composition have been determined spatially. Some sensitive areas are identified.
- Longlines, gaffs and lines and gillnets are considered to not cause irreversible harm to the seabed habitat, in temporal 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. Fishing mortality is estimated to contribute to a significant share of total golden redfish catches, 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.

SCORES

Management Quality: 8.1
- Managers Compliance: 8.6
- Fishers Compliance: 10

Stock Health: 10
- Current Health: 8
- Future Health: 8

FIPS: No related FIPs

MSC: No related MSC fisheries

RECOMMENDATIONS

- Press regulators to set the catch limit in line with the agreed harvest control rule.
- Make urgent further efforts (e.g., via additional technical conservation 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.