i Executive summary

From 30 March 2022 onwards, all Russian Federation participation in ICES was suspended[1]. Although the announcement of the suspension stressed the role of ICES as a "multilateral science organization" this suspension applied not only to research activities but also to the ICES work providing fisheries advice for the sustainable management of fish stocks and ecosystems. As a result of the suspension, it is not possible to run ICES stock assessments or provide ICES advice for the Barents Sea stocks of NEA cod, NEA haddock, capelin, beaked redfish (*Sebastes mentella*) or Greenland Halibut, as management and data collection for these stocks are shared between Norway and Russia. There are therefore no AFWG stock assessments for these stocks this year. Assessment and advice for these stocks are being conducted outside ICES through the bilateral Russian-Norwegian group, the Joint Russian-Norwegian Arctic Fisheries Working Group (JRN-AFWG). The 2022 assessment reports are available via the IMR website:

- Report of the Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG) 2022[2]
- Barents Sea Capelin – Report of the Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG) 2022[3]

The assessments in 2022 occurred outside ICES but were based on the stock annexes previously agreed within ICES, used the same data and models as previously, and were conducted by the same Russian and Norwegian scientists that were involved in the previous ICES assessments. The managing body in the Barents Sea (the Joint Norwegian Russian Fisheries Commission, JNRFC) has endorsed this approach and has used the advice from the JRN-AFWG as the basis of management following the same procedures previously used for ICES advice. There is therefore currently no possibility to produce, and no current management need for, ICES assessments for these stocks.

This year AFWG is therefore providing advice for saithe, coastal cod north and coastal cod south, with golden redfish (*S. norvegicus)* advice next due in 2024. In addition, an assessment has been run for anglerfish, although there is no formal request for advice for this stock. Assessments for NEA cod, NEA haddock, beaked redfish (*S. mentella*), and capelin were run at the JRN-AFWG in 2022 and there are links to the resulting advice below. Greenland halibut was last assessed in 2021 and is due for an assessment in the JRN-AFWG later in 2023.

Stock-by-stock summaries (ICES)

The stock trends for the assessed stocks are as follows:

Cod (Gadus morhua) in subareas 1 and 2 north of 67°N (Norwegian Sea and Barents Sea), northern Norwegian coastal cod; cod.27.1-2.coastN

- The coastal cod north assessment gives an SSB estimate of 71 599 tonnes for 2022 (down from 72 888 tonnes in 2021), and the catch advice is 26 612 tonnes (slightly up from

[1] https://www.ices.dk/news-and-events/news-archive/news/Pages/TemporarySuspension.aspx

[2] https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2022-6

[3] https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2022-8

29 347 t last year). The stock has had a declining trend since 2016, partly due to the weak 2018-year class that is now part of the fishable biomass. There is no B_{lim} for this stock and the status relative to this reference point can therefore not be determined, but SSB is above the biomass limit for which the HCR is valid ($SSB_{lowerbound}$). The fishing mortality is 0.31, well above target F in the management plan (0.176). However, because of better recruitment in 2020–2021, a small increase in the stock is expected in 2023–2025 even under status quo fishing. It should be noted that this stock cannot be directly managed via a quota (as the fish are not visually distinguishable from NEA cod in the same area), and therefore management is based on gear and area regulation.

Cod (Gadus morhua) in Subarea 2 between 62°N and 67°N (Norwegian Sea), southern Norwegian coastal cod; cod.27.2.coastS

- The new ICES advice guidelines for data-poor stocks indicate that advice should be given on a two-year basis. Accordingly, the advice given in 2022 for 2023 is extended to 2023 and 2024, and no new advice is given.

Saithe in subareas 1 and 2 (Northeast Arctic)

- The NEA saithe stock is currently in good status, with the SSB well above B_{pa} at 727 666 tonnes, very slightly up from 715 674 t in last year's assessment. Following the HCR the catch advice is 223 123 tonnes (almost unchanged from 226 794 t last year). This stock, together with the associated North Sea saithe stock, is aiming for a benchmark, likely in 2024.

Anglerfish (Lophius budegassa, Lophius piscatorius) in subareas 1 and 2 (Northeast Arctic)

- Data-limited model results based on length data from the fishery suggest that the biomass seems to be doing well and that the exploitation pattern is appropriate, while the rate might be near/slightly above the level that would lead to maximum yield. Management is based on technical measures rather than a quota. AFWG does not currently give advice on this stock but considers the current assessment of sufficient quality to base catch advice on if requested by the managers.

Stock-by-stock summaries (non-ICES)

Information for the 2022 assessment for the stocks not currently assessed by AFWG can be found via the IMR website.

Barents Sea capelin

- The JRN-AFWG advice from 2022 is available here: https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2022-7

NEA cod

- The JRN-AFWG advice from 2022 is available here: https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2022-3

NEA haddock

- The JRN-AFWG advice from 2022 is available here: https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2022-4

Beaked redfish (Sebastes mentella)

- The JRN-AFWG advice from 2022 is available here: https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2022-5