

1.6.5.2 NEAFC request on the categorization of stocks requiring different character and level of NEAFC regulations

Advice summary

ICES has reviewed the provisional categorization of deep-sea species adopted by the NEAFC Permanent Committee on Management and Science (PECMAS) and provides confirmation or suggested changes to the categorization as well as necessary clarifications in tables 1.6.5.2.1 and 1.6.5.2.2.

Request

Pursuant to the Interim guidelines on management of deep-sea species, adopted at the 2014 NEAFC Annual Meeting, ICES is requested to evaluate the provisional categorisation of deep-sea species adopted by PECMAS (PECMAS document 2015-01-07 – attached to this request as Appendix) and provide necessary clarification on issues highlighted in the document.*

* Note: partial text included in this document.

Elaboration on the advice

In its original request for advice, NEAFC provided ICES with two tables (bony fishes and chondrichthians) with a proposed categorization into four categories requiring different character and level of NEAFC regulations based on available information. The four NEAFC categories are described in the background section on the basis for the advice.

ICES examined the lists submitted by NEAFC and provide its recommendation in terms of categorization based on consensus expert opinion. In addition to the categorization recommendations, ICES provides comments and/or justification where warranted.

ICES provides its advice on the categorization for bony fishes in Table 1.6.5.2.1 and for chondrichthians in Table 1.6.5.2.2.

Table 1.6.5.2.1 List of bony fishes with the stock information and proposed categorization submitted by NEAFC (first 7 columns) and the recommendations and comments of ICES (last two columns).

Stock (common name)	FAO code	Scientific Name	ICES assessment unit	Possible NEAFC area-specific categorization/ approach	NEAFC cat	Comment/ justification	ICES recommendation	ICES comments
Baird's smooth head	ALC	<i>Alepocephalus bairdii</i>	no advice	I to XIV	4		Change to category 1	Most of the landings are from the NEAFC RA (ICES, 2014).
Risso's smooth head	PHO	<i>Alepocephalus rostratus</i>	no advice	I to XIV	4	By-catch in XII. Significant proportion in RA?	Change to category 1	No data available. Likely to be landed as ALC (<i>Alepocephalus bairdii</i>).
Blue antimora (Blue hake)	ANT	<i>Antimora rostrata</i>	no advice	I to XIV	4	Blue antimora (Blue hake)	Confirmed category	Only minor landings from the NEAFC RA (ICES, 2014).
Black scabbard fish	BSF	<i>Aphanopus carbo</i>	One stock, but TAC advice for three areas	Entire RA	4	Not fished in RA (?)	Confirmed category	84% of landings are from the EEZ. The NEAFC RA landings account for ~16% (2012–2014) (ICES, 2015a).
Greater silver smelt	ARG	<i>Argentina silus</i>	Four stocks	Entire RA	4	Not fished in RA	Confirmed category	(ICES, 2015a)
Alfonsinos	ALF	<i>Beryx spp.*</i>	Entire ICES area	VI, VII, VIII, IX	4	Most catches taken within EEZ.	Confirmed category	(ICES, 2016a)
				Seamounts and ridges in RA (Xa2 , Xa1, Xb, XIIa1,b)	3	Historical catches significant, currently negligible (?)	Confirmed category	ICES considers that the Xa1 and Xa2 in the table provided are typos. They have been replaced. (ICES, 2016a)
				Xa1 Xa2	4	Main fishing area	Confirmed category	ICES considers that the Xa1 and Xa2 in the table provided are typos. They have been replaced. (ICES, 2016a)
Tusk	USK	<i>Brosme brosme</i>	Five stocks	I, II	4		Confirmed category	(ICES, 2016a)
				XIV and Va	4	Unknown catch level in RA	Confirmed category	(ICES, 2016a)
				XII, excl. XIIb (S mid-Atl Ridge) (XIIa, c?)	2	Currently zero catches, but bycatches may occur	Confirmed category	(ICES, 2016a)

Stock (common name)	FAO code	Scientific Name	ICES assessment unit	Possible NEAFC area-specific categorization/ approach	NEAFC cat	Comment/ justification	ICES recommendation	ICES comments
				IV, VII–IX, and in Divisions IIIa, Vb, VIa, and XIIb	4	Unknown catch level in RA, but probably minor compared with EEZ (XIIb catches missing in advice, why?)	Confirmed category	Less than 2% in the NEAFC RA.
				Vib (Rockall)	1 or 4	Unknown catch level in RA	Category 4	Most landings reported to ICES are from the EEZ (ICES, 2015a). An average 11% of the catch is taken in the NEAFC RA.
Conger eel	COE	Conger conger	no advice	I to XIV	4	Conger eel	Confirmed category	Most official landings are from the EEZ (10–14 thousand tonnes annually after 2000).
Roundnose grenadier	RNG	Coryphaenoides rupestris	Four stocks	IIIa	4	Roundnose grenadier	Confirmed category	(ICES, 2016a)
				Xb and XIIc, IIIa1, XIVb1, and Va1	1	Bulk of catch taken in RA, excl. Va1 which is Icelandic EEZ	Confirmed category	(ICES, 2016a)
				I, II, IV, VIII, and IX, XIVa, and XIVb2 and Va2	4	Small catches, primarily in EEZs	Confirmed category	(ICES, 2016a)
				VI and VII, and Vb and XIIb	1 or 4	Main fishing areas, proportion in RA unknown but substantial	Category 1	A substantial portion of the catch is taken in the NEAFC RA (ICES, 2015a).
Black (Deep-water) cardinal fish	EPI	Epigonus telescopus	no advice	I to XIV	4		Confirmed category	Very low landings (~9 tonnes; ICES, 2015) probably from the EEZ, but this cannot be documented.
Bluemouth (Blue mouth redfish)	BRF	Helicolenus dactylopterus	no advice	I to XIV	4		Confirmed category	Most of the landings from area 10 come primarily from the EEZ (ICES, 2015a). The FAO common name is blackbelly rosefish.

Stock (common name)	FAO code	Scientific Name	ICES assessment unit	Possible NEAFC area-specific categorization/ approach	NEAFC cat	Comment/ justification	ICES recommendation	ICES comments
Orange roughy	ORY	<i>Hoplostethus atlanticus</i>	One stock	VI, VII	4		Category 2	Note: Historical landings were from the EEZ (ICES, 2015b).
				X	1		Confirmed category	Some catches from the NEAFC RA.
Silver roughy (Pink)	HPR	<i>Hoplostethus mediterraneus</i>	no advice	I to XIV	4		-	Zero tonnes in 1950–2010 (official landings submitted to ICES catch statistics). No basis for categorization.
Silver scabbard fish (Cutless fish)	SFS	<i>Lepidopus caudatus</i>	no advice	I to XIV	4		Confirmed category	The bulk of the catches are taken within area 10 (ICES, 2015b).
Eelpout	ELP	<i>Lycodes esmarkii</i>	no advice	I to XIV	4		-	No official landings reported to ICES.
Roughhead grenadier (Rough rattail)	RHG	<i>Marcrourus berglax</i>	One stock	IV, XII, and XIV (main area with reported catches)	3	Significant in RA. ICES advises no direct fishery, and reporting together with RNG.	Change to category 2	Species with ICES advice (...no direct fisheries...) (ICES, 2015b)
				other areas	4		Confirmed category	Minor bycatches, primarily within the EEZ
Blue ling	BLI	<i>Molva dypterygia</i>	Three stocks	XIV and Va	4		Confirmed category	(ICES, 2016a)
				I, II, VIII, IX, and XII, and Divisions IIIa and IVa	2	Advice is for no directed fishery, minimize bycatch and maintain spawning closures	Confirmed category	(ICES, 2016a)
				Vb and Subareas VI and VII	2	Advice is for no directed fishery, minimize bycatch and maintain spawning closures	Change to 4	Catches mostly within the EEZ (ICES, 2015b). Recent advice is no longer for “no directed fishery”.
Ling	LIN	<i>Molva molva</i>	Four stocks	Va	4		Confirmed category	(ICES, 2015a)
				Vb	4		Confirmed category	(ICES, 2015a)
				I and II	4		Confirmed category	(ICES, 2015a)

Stock (common name)	FAO code	Scientific Name	ICES assessment unit	Possible NEAFC area-specific categorization/ approach	NEAFC cat	Comment/ justification	ICES recommendation	ICES comments
				All other areas (!!)	4	Unknown, but probably minor proportion of catch in RA	Confirmed category	(ICES, 2015a). Catch in the RA is limited to 6.b. An average 10% of the 6.b catch are from the NEAFC RA.
Common mora	RIB	Mora moro	no advice	I to XIV	4		Confirmed category	54 tonnes from area 10 within the EEZ (ICES, 2015b).
Red (blackspot) seabream	SBR	Pagellus bogaraveo	Three stocks	I to XIV	4	All in EEZs	Confirmed category	(ICES, 2015a)
Forkbeards	GFB	Phycis spp.	One stock, TAC advice	I to XIV	4	Minor catch in RA	Confirmed category	(ICES, 2015a)
Wreckfish	WRF	Polyprion americanus	no advice	I to XIV	4		Confirmed category	216 tonnes mostly from area 10 within the EEZ (ICES, 2015b).
Greenland halibut	GHL	Rheinhardtius	One stock, TAC	I to XIV	4	Minor catch in RA (Hatton, Greenland?)	Confirmed category*,**	ICES has 2 stocks for this species: (a) in areas 1–2, with minor catches in the RA; on average >99% of the catches are within the EEZ; and (b) in areas 5–14, with Insignificant catches in the RA (ICES area 6).
Small redfish (Norway haddock)	SFV	Sebastes viviparus	no advice	I to XIV	4		Confirmed category*	All catches are taken in the EEZs.
Spiny (Deep-sea) Scorpionfish	TJX	Trachyscorpia cristulata	no advice	I to XIV	4		-	ICES has no available data on this species.

Note: the categorization recommendations was assessed by the Working Group on the Biology and Assessment of Deep-sea Fisheries Resources (WGDEEP) unless otherwise indicated.

* Assessed by the North Western Working Group (NWWG).

** Assessed by the Arctic Fisheries Working Group (AFWG).

Table 1.6.5.2.2 List of chondrichthians submitted by NEAFC with their stock information and proposed categorization. ICES does not consider this to be a complete list of the deep-water chondrichthians in the NEAFC area.

Stock (common name)	FAO code	Higher taxon	Scientific Name	ICES subareas	Proposed NEAFC category	ICES recommendation	ICES comments*
Iceland catshark	API	Shark	<i>Apristurus spp</i>	I to XIV	2	Change to 1	Catsharks, including the genus <i>Apristurus</i> , are generally more productive than deep-sea squaliform and hexanchiform sharks.
Gulper shark	GUP	Shark	<i>Centrophorus granulosus</i>	I to XIV	2	Confirmed category	Given taxonomic problems, management should be applied at the genus level.
Leafscale gulper shark	GUQ	Shark	<i>Centrophorus squamosus</i>	I to XIV	2	Confirmed category	Given taxonomic problems, management should be applied at the genus level.
Black dogfish	CFB	Shark	<i>Centroscyllium fabricii</i>	I to XIV	2	Confirmed category	
Portuguese dogfish	CYO	Shark	<i>Centroscymnus coelolepis</i>	I to XIV	2	Confirmed category	
Longnose velvet dogfish	CYP	Shark	<i>Centroscymnus crepidater</i>	I to XIV	2	Confirmed category	
Rabbit fish (Rattail)	CMO	Chimaera	<i>Chimaera monstrosa</i>	I to XIV	2	Confirmed category	Given recent taxonomic revisions, management should be applied at the order level.
Friiled shark	HXC	Shark	<i>Chlamydoselachus anguineus</i>	I to XIV	2	Confirmed category	
Kitefin shark	SCK	Shark	<i>Dalatias licha</i>	I to XIV	2	Confirmed category	
Birdbeak dogfish	DCA	Shark	<i>Deania calcea</i>	I to XIV	2	Confirmed category	
Greater lantern shark	SHL	Shark	<i>Etmopterus princeps</i>	I to XIV	2	Confirmed category	
Velvet belly	SHL	Shark	<i>Etmopterus spinax</i>	I to XIV	2	Confirmed category	
Blackmouth dogfish	SHO	Shark	<i>Galeus melastomus</i>	I to XIV	2	na	ICES does not consider this species as a deep-sea species (ICES, 2013).

Stock (common name)	FAO code	Higher taxon	Scientific Name	ICES subareas	Proposed NEAFC category	ICES recommendation	ICES comments*
Mouse catshark	GAM	Shark	<i>Galeus murinus</i>	I to XIV	2	Change to 1	Catsharks, including the genus <i>Galeus</i> , are generally more productive than deep-sea squaliform and hexanchiform sharks.
Bluntnose six-gilled shark	SBL	Shark	<i>Hexanchus griseus</i>	I to XIV	2	Confirmed category	
Large-eyed rabbit fish (Ratfish)	CYH	Chimaera	<i>Hydrolagus mirabilis</i>	I to XIV	2	Confirmed category	Given recent taxonomic revisions, management should be applied at the order level.
Sailfin roughshark (Sharpback shark)	OXN	Shark	<i>Oxynotus paradoxus</i>	I to XIV	2	Confirmed category	ICES notes that the related <i>O. centrina</i> also occurs in deep water.
Round skate	RJY	Ray	<i>Raja fyllae</i>	I to XIV	2	Change to 4	<i>Rajella fyllae</i> is a small-bodied species on the continental slope.
Arctic skate	RJG	Ray	<i>Raja hyperborea</i>	I to XIV	2	Change to 4	<i>Amblyraja hyperborea</i> occurs in the EEZs in the northern part of its main distribution range.
Norwegian skate	JAD	Ray	<i>Raja nidarosiensis</i>	I to XIV	2	Confirmed category	<i>Dipturus nidarosiensis</i> is a large body skate and is more vulnerable to overfishing than other skates.
Straightnose rabbitfish	RCT	Chimaera	<i>Rhinochimaera atlantica</i>	I to XIV	2	Confirmed category	Given recent taxonomic revisions, management should be applied at the order level.
Knifetooth dogfish	SYR	Shark	<i>Scymnodon ringens</i>	I to XIV	2	Confirmed category	

Stock (common name)	FAO code	Higher taxon	Scientific Name	ICES subareas	Proposed NEAFC category	ICES recommendation	ICES comments*
Greenland shark	GSK	Shark	<i>Somniosus microcephalus</i>	I to XIV	2	Confirmed category	ICES notes that this species would be better considered as a cold-water species as it is not endemic to deep waters.

* Assessed by the Working Group on Elasmobranch Fishes (WGEF).

Basis of the advice

The advice is based on the expert judgement of ICES expert groups.

Background

[Description of the categories of deep-sea species adopted and provided by NEAFC]

NEAFC's approach to deep-sea fisheries management should aim to place individual stocks into one of the four following categories requiring different character and level of NEAFC regulations:

1. Stock-specific management measures. This should typically be used for stocks for which ICES provides stock-specific catch level advice based on established stock definitions and where the entire or a significant proportion of the catch is taken in the NEAFC RA. Such measures may be of varying nature, but should typically specify catch limits for fisheries in the NEAFC RA.

2. Measures stipulating that directed fisheries are not authorised and that bycatches should be minimised. This could apply to stocks for which the ICES advice statement is "no directed fishery, minimize bycatch" or similar, but for which no specific catch limit is advised.

3. Measures to respond in a timely and adequate manner to new deep-sea species fishing activity within the NEAFC RA. This would apply to developing fisheries targeting previously unexploited or lightly exploited species/stocks. NEAFC should prevent unregulated expansion of deepwater fisheries even before information has been gathered to facilitate ICES assessment and advice. Pending ICES advice facilitating stock-specific measures as in Pt. 1., such fisheries should be regulated with a precautionary catch limit, preferably but not necessarily advised by ICES.

4. Measures for fisheries primarily restricted to EEZs. NEAFC RA measures may in such cases be irrelevant and could at most be complementary to coastal state management. If a NEAFC measure is deemed necessary or useful, the aim of such a measure would be to complement EEZ measures in order to ensure that total catches remain within e.g. catch limits advised by ICES.

Sources and references

ICES. 2013. EU request for opinion on modification to the list of deep-sea sharks. In Report of the ICES Advisory Committee, 2013. ICES Advice 2013, Book 11, Section 11.2.1.1.

ICES. 2014a. Report of the Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources (WGDEEP), 4–11 April 2014, ICES Headquarters, Copenhagen, Denmark. ICES CM 2014/ACOM:17. 862 pp.

ICES. 2015a. NEAFC request to ICES on the catch by stock and year, inside and outside the NEAFC regulatory area. In Report of the ICES Advisory Committee, 2015. ICES Advice 2015, Book 11, Section 11.2.5.

ICES. 2015b. Report of the Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources (WGDEEP), 20–27 March 2015, ICES Headquarters, Copenhagen. ICES CM 2015/ACOM:17. 738 pp.

ICES. 2016a. Report of the Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources (WGDEEP), 20–27 April 2016, ICES Headquarters, Copenhagen. ICES CM 2016/ACOM:17.

ICES. 2016b. Report of the North-Western Working Group (NWWG), 27 April–4 May, 2016, ICES Headquarters, Copenhagen. ICES CM 2016/ACOM:08.

ICES. 2016c. Report of the Arctic Fisheries Working Group (AFWG), 19–25 April 2016, ICES HQ, Copenhagen, Denmark. ICES CM 2016/ACOM:06.