

EU request to provide estimates of the likely catches in 2019 of whiting in Division 7.a, based on the TACs set for target stocks in the same area

Service summary

ICES best estimate of the likely catches for whiting in Division 7.a in 2019 is based on the *status quo* fishing mortality scenario from the advice issued on 30 November 2018. This would correspond to catches in 2019 of 1385 tonnes.

Request

EU DGMARE has asked ICES to evaluate the following:

ICES issued a zero catch advice for 2019 for whiting in division 7a. As whiting is an unavoidable by-catch in other targeted fisheries ICES is requested to estimate the amount of whiting in tonnes, that is likely to be caught as an unavoidable by-catch by operators who fish for other species in the area.

ICES is requested to take into account that the other TACs in the same area are set based on the latest ICES advice from 2018, which are reflected in the TACs agreed for the 2019 fishing opportunities.

Basis of the service

The background of this technical service is based on results from mixed-fisheries analysis, where such results were available (ICES, 2018a). For stocks without mixed-fisheries analysis such as whiting in Division 7.a, the relative change in mortality implied by advice for the main target species in an area, together with expert knowledge of the technical interactions, was taken into account to determine whether a fishing mortality other than the *status quo* fishing mortality scenario one might be considered feasible.

Results

Whiting in Division 7.a

There has been no targeted whiting fishery in the Irish Sea since the 1980s. The majority of whiting catches are taken in the *Nephrops*-directed trawl fishery; nearly all of these catches are discarded since they are below the minimum landing size (27 cm). Despite the introduction of several technical measures to reduce finfish catch and discards in the *Nephrops* fishery, the estimated total discards remain high (Table 1), largely due to the *Nephrops* fishery in Functional Unit (FU) 15 occurring in the same area where many juvenile whiting are distributed. These fish are too small to escape from *Nephrops* trawl gears. Whiting catches are sporadic; a small number of hauls are responsible for the majority of the whiting catches.

Table 1 Whiting in Division 7.a. Catch distribution by fleet in 2017 as estimated by ICES.

Catch	Landings			Discards	
	Finfish-directed otter trawls	<i>Nephrops</i> -directed otter trawls	Other gears	<i>Nephrops</i> -directed otter trawls	Other gears
703 tonnes	61%	18%	21%	82%	18%
	36 tonnes			667 tonnes	

ICES has updated the assessment and catch forecast for this stock in 2018 based on a special request from the UK (ICES, 2018b). Fishing mortality shows a declining trend since 2014. The TACs set for 2019 for other stocks in Division 7.a were based on ICES advice. These imply increased fishing mortality or harvest rates for most stocks in this area (Table 2). The fishing mortality for whiting is most closely linked to the *Nephrops* fishery in FU 15. While ICES advice implies a 72% increase in harvest rate compared to 2018 levels, the current TAC management for *Nephrops* in FU 15 is at the same level as for Subarea 7 and fishing mortality in FU 15 has recently been below the advised F_{MSY} levels. For whiting, it is probably more realistic to assume that catches at or below the *status quo* fishing mortality would be taken in 2019. This corresponds to catches of ~1385 tonnes (the option highlighted in bold in Table 3).

Table 2 Fish stocks in Division 7.a. Percentage change in fishing mortality, harvest rate, or advised catch between 2018 and 2019, as implied by ICES advice for the main stocks in the Irish Sea.

Species	Corresponding EU TAC area	Stock code	F ₂₀₁₈	Advised F (2019)	2019 TAC	F consistent with the 2019 TAC	% Change *
Whiting (<i>Merlangius merlangus</i>)	7a	whg.27.7a	0.6	0	727	~0.3	-100%
Haddock (<i>Melanogrammus aeglefinus</i>)	7a	had.27.7a	0.18	0.28	3739	0.28	56%
Cod (<i>Gadus morhua</i>)	7a	cod.27.7a	0.25	0.41	807	0.41	64%
Norway lobster (<i>Nephrops norvegicus</i>)	7	nep.fu15	10.6**	18.2**	19784	#	72%
Plaice (<i>Pleuronectes platessa</i>)	7a	ple.27.7a	0.06	0.169	3075	0.147	182%
Norway lobster (<i>Nephrops norvegicus</i>)	7	nep.fu14	2.9**	11**	19784	#	279%
Common sole (<i>Solea solea</i>)	7a	sol.27.7a	0.0165	0.154	414	0.154	833%

* % change in fishing mortality, harvest rate, or catch advised by ICES for 2019 relative to 2018.

** Harvest rate.

Unable to provide value due to mismatch between management and assessment area.

Table 3 Whiting in Division 7.a. Annual catch scenarios (ICES, 2018b). All weights are in tonnes.

Basis	Total catch (2019)	Wanted catch (2019)	Unwanted catch (2019)	F total (2019)	F Wanted catch (2019)	F Unwanted catch (2019)	SSB (2020)	% SSB change *	% TAC change **	% Advice change ^^
ICES advice basis										
MSY approach	0	0	0	0	0	0	2989	+70	-100	
Other scenarios										
F _{MSY} = F _{pa}	585	96	490	0.22	0.0106	0.21	2404	+37	+20	
F = 0	0	0	0	0	0	0	2989	+70	-100	
F _{lim}	928	150	778	0.37	0.0178	0.35	2073	+18	+88	
SSB ₂₀₂₀ = B _{lim} [^]										
SSB ₂₀₂₀ = B _{pa} = MSY B _{trigger} [^]										
F = F₂₀₁₈	1385	221	1164	0.60	0.03	0.58	1649	-6.1	+176	

* SSB 2020 relative to SSB 2019.

** Landings in 2019 relative to TAC in 2018 (80 tonnes).

[^] The B_{lim}, B_{pa}, and MSY B_{trigger} options were left blank because B_{lim}, B_{pa}, and MSY B_{trigger} cannot be achieved in 2020, even with zero catch.

^{^^} Advice value for 2019 relative to advice value for 2018. This is not provided because the advice value in 2018 was zero.

Sources and references

ICES. 2018a. Mixed-fisheries advice for divisions 7.b–c and 7.e–k (Celtic Sea). In Report of ICES Advisory Committee, 2018. ICES Advice 2018, mix-cs, <https://doi.org/10.17895/ices.pub.4481>. 10 pp.

ICES. 2018b. UK request on updated advice for whiting (*Merlangius merlangus*) in Division 7.a (Irish Sea). In Report of ICES Advisory Committee, 2018. ICES Advice 2018, sr.2018.29, <https://doi.org/10.17895/ices.pub.4638>. 9 pp.

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