

ECOREGION Celtic Sea
SUBJECT EU request to ICES on the effect of increased quota flexibility for 2014 – 2015 on Celtic Sea herring and Western horse mackerel

Background

To mitigate the effects of the Russian ban on the import of certain fisheries products, the European Commission has been asked to allow for an increase in the proportion of the 2014 quotas of Celtic Sea herring and Western horse mackerel that can be carried over to 2015.

Request

ICES is asked, as a matter of urgency, to assess the level of risk (in terms of the fishing mortality exceeding F_{msy}) to those stocks if the amount of the 2014 TAC that will not be fished in 2014, and may be carried over to 2015, is increased from the current limit of 10% to either:

- a) 20%, or
- b) 30%.

This arrangement is exceptional and would apply only for one year; i.e. from 2014 to 2015.

For the purpose of this calculation, ICES should assume that the long-term management arrangements currently in place regarding the fixing of TACs for these stocks will be adhered to unchanged in 2015.

ICES response

ICES has, in addressing the current request; applied the same methodology as used earlier when providing technical service on a similar request on quota flexibility (Technical service 11.2.1.2).

Currently ICES does not evaluate risk or probability of catch options resulting in F_s that exceed F_{MSY} , rather ICES gives deterministic catch options and gives the most likely outcome in terms of values of F and SSB . For this request, ICES examined the current estimated SSB and potential changes in SSB for the two stocks. These are not expected to be of any concern for Celtic Sea herring (herring in Divisions VIIa (South of 52°30'N) and VIIg,h,j,k). An examination of stock–recruitment plots supports the view that, for Celtic Sea herring in its current state, the flexibility of 20% or 30% banking of TAC in 2014 and borrowing of TAC in 2015 will not impact the expected mean recruitment for 2015. For western horse mackerel SSB is forecasted to fall below $MSY B_{trigger}$ and any previous observed SSB levels in 2015. The proposed flexibility, if utilized, is expected to result in a negligible change to stock biomass at spawning time and is unlikely to impact the expected mean recruitment for 2015.

To evaluate the impact of changes in target F due to the suggested flexibility ICES examined yield-per-recruit curves and concluded that these curves are generally linear, close to the values of F_{MSY} . Thus, a reduced yield followed by a balanced increase in yield is unlikely to substantively change the mean F over the period.

In the context of the request ICES makes the following observations:

- The proposed flexibility would, if utilized, result in reduced F in 2014. The change in F will be of a similar order as the proposed level of flexibility of either –20% or –30%. The transfer of fishing possibilities to 2015 will result in an increase in F in 2015 of a similar magnitude (approximately +20% or +30%) if these are fully utilized. For both stocks, the assumed F_s for 2014 used by ICES in the advice for 2015 are above F_{MSY} . If the proposed quota flexibility is utilized, it is expected that F in 2014 will be lower than assumed in the ICES advice, and that F in 2015 will have a greater than 50% probability of being above F_{MSY} . It is expected that the mean F over the two years will be similar to the mean F that would result from 100% of each annual TAC taken in its respective year.
- The proposed flexibility, if utilized, is expected to result in a negligible change to the biomass of the two stocks at the end of 2015 compared to what would be the result from 100% of each annual TAC being taken in its respective year.
- The flexibility described is likely to have a slightly positive, but effectively negligible impact on precautionary considerations defined by the probability of $SSB < B_{lim}$ or B_{loss} , during the two years.

In order for ICES to give appropriate advice for 2016 it would be useful to know the effective TACs that result from the flexibility allowed for these stocks for 2015.