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Development of a New Technical Measures Framework[1]

Following on from the public consultation on the development of a new framework for technical measures two issues have been identified that require further discussion: the development of options for replacing mesh size and catch composition rules, and the review of existing closed areas.

Replacing mesh size and catch composition rules

The new, co-decided technical measures framework regulation will presumably contain a section with a limited number of general rules applicable to all operators and administrations (general prohibition to fish with explosives, for example). This would be complemented by a section with the results-based management logic of the new CFP: objectives and general standards would be set for technical measures, instead of detailed and prescriptive top-down rules set by Parliament and Council. The measures in a fishery/area to meet the objectives and standards would be identified under regionalisation (Member States in consultation with stakeholders).

In this modality, objectives are expressed through baselines. Direct implementation of the results-based approach is impossible in the current technical measures regulations due to the absence of more precise objectives and targets of conservation to which the technical measures and means need to contribute.

This introduces the need to move to the identification of appropriate metrics. These metrics are linked to the baselines and will have to ensure that they meet the policy objectives (i.e. achievement of MSY, stock composition criteria, avoidance/reduction of unwanted catches, ecosystem-related targets). The metrics, by definition, need to be measurable and compliable.

STECF[2,3] have considered several alternatives for a result-based approach that we would like to discuss: the concepts of catch metrics and of selectivity profiles. There may well be other approaches that could be used.

Catch metrics define an output result, for instance a (maximum) proportion of the catch below minimum conservation reference sizes (mcrs). For instance 20 individuals per 10kg or 10kg per 100kg (a proportion of the catch) or alternatively maximum 10% of total catch of the driver species within the total catch (percentage of the overall catch). The output could be measured per individual fishing trip or overall within a pre-defined management period/area.

Catch metrics remove the need for detailed technical rules defining multiple gear parameters in a co-decided act. Focus lies on the catch profile rather than on the gear and the fishing operation. They may also create an incentive to develop technology and drive behavioral change to reduce unwanted catches. It requires robust catch monitoring and documentation

[1] This document is purely for discussion purposes. It does not prejudge the final form of any decision to be taken by the Commission.
[2] http://stecf.jrc.ec.europa.eu/documents/43805/432011/2012-11_STECF-12-20+Defining+selectivity+under+TM+regulation_JRC76897.pdf
[3] http://stecf.jrc.ec.europa.eu/documents/43805/501879/2013-04_STECF+13-04+-+Defining+selectivity+under+TM+regulation_JRC81584.pdf

systems and continued evaluation of targets in light of changes in populations over time (pulses in recruitment).

Example: In the North Sea, based on levels of catches of undersized cod, haddock and whiting with a cod end mesh size of 120mm used in the mixed gadoid fishery, the objective could be to maintain catches below mcrs of cod, haddock, whiting, saithe at or below 10% of the total catch of these species.

Selectivity profiles define a baseline or default gear with a specific selectivity profile in line with the co-legislated objectives. This selectivity profile could be established by taking the mcrs for a "driver" species in the fisheries and link it to the 50% retention length (L_{50})[4] of a specific mesh size. To give a higher level of selectivity the 25% retention lengths (L_{25})[5] could be used instead.

Once established, there would be no need to adjust the target selectivity to account for changes in the underlying population(s). The option would mean flexibility and innovation by fishermen to develop alternative gears in specific fisheries.

"Equivalent selectivity" has to be defined, and STECF or other scientific bodies would need to evaluate and approve gears in this context, including the baseline gear – potentially an intensive process, and not always free of contention. Certification could facilitate compliance and enforcement.

Example: This type of approach was included in the proposal for the introduction of the landing obligation in the Skagerrak[6]. The 50% retention length (L50) for cod was used and the corresponding mesh size that would deliver this 50% retention length determined. This defined the selectivity profile for the fisheries in the region.

For both concepts, **regionalisation** could further determine the details.

The metrics could be regionalised based on known catch profiles for the key species in that region's fisheries. ICES/STECF discard data for the main fisheries and commonly used gears could help to inform the setting of these metrics.

For the selectivity profiles alternative (regionally determined) gears with demonstrated equivalent selectivity patterns could be developed, and fishermen would be free to choose between using the baseline (default) gear or the alternative (regionally developed) gear. Baselines may differ between regions (taking account of the differences in fisheries - i.e. a baseline gear established for the North Sea would not necessarily be appropriate for fisheries in south western waters).

Regionalisation would find its way through:

– more stringent targets (metrics) or more selective gears (selectivity profiles);

[4]The 50% retention length (L_{50}) is the length of fish that has a 50% probability of being retained or escaping after entering the codend.
[5] The 25% retention length (L_{25}) is the length of fish that has a 25% probability of being retained and a 75% probability of escaping after entering the codend.
[6] COM(2012) 417

- specific or new gear options in a given fishery where undersized catches are high (metrics and selectivity profiles);
- mcrs defined in function of the desired catch profile, based on mortality-at-age information (metrics);
- additional measures (e.g. spatial/temporal measures) to complement specific gear options to ensure equivalent selectivity (selectivity profiles);
- additional measures to complement gear modifications e.g. spatial/temporal measures (metrics).

Points for discussion

Regionalisation and simplification requires introduction of concepts that change the character and outlook of the technical measures regulations. Catch metrics and selectivity profiles are two possible options. They should not be considered mutually exclusive, and may well co-exist in different regions under different conditions.

Are there other approaches or different metrics that could be used instead? Could components of the two concepts be combined into a third one?

Is a move to catch metrics, selectivity profiles or other metrics feasible in the pursuit of simplification and regionalization?

Can they be devised to ensure achieving the objectives?

Contribute these concepts to fisheries that are more selective and adapted to the objective of selectivity and reduction/avoidance of unwanted catches?

Reviewing closed areas

Technical measures regulations have included a considerable number of closed and restricted areas and closures to protect vulnerable marine ecosystems (see annex). A review of these areas should contribute to simplification and rationalisation of these areas to ensure they correspond to a clear conservation objective. We also need to consider whether in the future rationalisation and the creation of new areas should be enacted under the co-decided act or through regionalisation. At this stage, the review can concentrate on spatial and temporal closures to protect spawning and juvenile fish.

Closures to protect vulnerable marine ecosystems (NATURA 2000 areas) are not covered here as they are derived from another set of policy instruments. Closed areas in non-EU waters are excluded as these form part of third-country/RFMO agreements and are reviewed regularly within the context of such agreements.

Points for discussion

Are their current closed or restricted areas that could be deleted on the basis that they are clearly redundant? Are there others that should be rationalised?

Should all (permanent or temporary) closures be decided under co-decision or regionalisation?

ANNEX

LIST OF CLOSED AREAS BY REGION

North Western Waters

Restrictions on fishing for herring in Celtic Sea and Irish Sea (Art 20 Reg 850/98)

Closed area for the conservation of mackerel (Art 22 Reg 850/98)

Rockall haddock box in ICES zone VI (Art 29c Reg 850/98)

Closed area to protect cod off the coast of Ireland in Area VIa (Art 29e(11) Reg 850/98

Closed area for the conservation of cod in ICES zone VIa (Art 29d Reg 850/98)

Closed area for the conservation of cod in ICES zone Vllf and g (Art 29e (12) Reg 850/98)

Closed areas for protection of blue ling in Va and VIa (Art 29f, Reg 850/98)

Closed area for the conservation of cod in Irish Sea (Art 34a Reg 850/98)

Restrictions on fishing for Nephrops on the Porcupine Bank (Art 11 Reg 43/2014)

Restrictions on fishing for herring in Area VIa (Annex IA to Reg 43/2014)

Restrictions on using gillnets below 200m (Art 34b Reg 850/98)

Restrictions on fishing for hake (Art 5, Reg 494/2002)

South Western Waters

Restrictions on fishing for Norway Lobster (Art 29b Reg 850/98)

Closed areas for the conservation of hake (Art 28 Reg 850/98)

Restrictions on fishing for hake (Art 5, Reg 494/2002)

Restrictions on using gillnets below 200m (Art 34b Reg 850/98)

North Sea, Skagerrak and Kattegat

Restrictions on fishing for herring (Art 20 Reg 850/98)

Closed area for the protection of herring in ICES zone IIa (Art 20a Reg.850/98)

Closed area for sprat to protect herring (Art 21 Reg 850/98)

Closure of an area for Norway pout to protect other roundfish (Art 27 Reg 850/98)

Closed area for the conservation of plaice (Art 29 Reg 850/98)

Closure of an area for sandeel fisheries in ICES zone IV (Art 29a Reg 850/98)

Restrictions on using gillnets below 200m (Art 34b Reg 850/98)

Baltic

Closed area to active gears (Art 16 Reg 2187/2005)

Seasonal closures for salmon and sea trout (Art 17 Reg 2187/2005)

Closed area for cod (Art 8 Reg 1098/2007)

Closed area for cod (Art 9 Reg 1098/2007)

Seasonal closed area for flounder and turbot (Art 18a Reg 2187/2005)

Mediterranean

Restrictions on trawling within 3 nm or 50m depth (Art 13 Reg 1967/2006)

Management zone around Malta (Art 26 and Annex V Reg 1967/2006)

Black Sea

Seasonal Closure to protect turbot in the Black Sea (Annex to Reg 24/2014)

Natura 2000/VMEs

Darwin Mounds (Art 30.4 Reg 850/98)

Closures around Maderia, Canaries and Azores (Art 30.5 Reg 850/98)

Closed areas in NEAFC Regulatory area (Art 34d Reg 850/98)

Closures to protect vulnerable deep-sea habitats in VIIc,j,k (Art 34e Reg 850/98)

Closure to protect vulnerable deep-sea habitats in VIIIc (Art 34f Reg 850/98)

Prohibitions on gears to protect marine habitats in the Mediterranean (Art 4 Reg 1967/2006)