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Implementation of the Technical Measures Regulation (Article 31 of Regulation (EU) 2019/1241)

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1. INTRODUCTION

Article 31 of the Regulation 2019/1241 of the European Parliament and of the Council[1] ('the Regulation'), requires the Commission to report every three years on the implementation of the Regulation.

This report provides an overview of the implementation of the Regulation over the last three years and builds on the first report adopted[2] in September 2021 as well as on the report on the use of delegated powers adopted in September 2023[3]. It is prepared based on the measures taken and scientific developments, advice from the Scientific Technical and Economic Committee for Fisheries (STECF) and the International Council for the Explorations of the Seas (ICES), and contributions from Member States, Advisory Councils and inputs from other interested stakeholders responding to the public consultation (attached as Appendix I to this report). It also looks at the efforts in place in terms of research and innovation as potential to continue the progress in delivering on the Regulation's objectives.

2. IMPLEMENTATION OF THE REGULATION

The purpose of this Regulation is to contribute to objectives of the common fisheries policy ('CFP') as defined in Regulation 1380/2013 (the 'CFP Regulation') and to contribute to achieving good environmental status as set out in the environmental legislation, while finding the right balance amongst the economic, social and environmental objectives under the CFP. **Fishing at maximum sustainable yield** (MSY) with appropriate technical measures brings an important contribution to a more sustainable activity at seas and a resilient and competitive fishing sector producing quality food[4]. The use of use of more selective and environmentally respectful fishing practices helps to increase yield from targeted fish stocks, while reducing unwanted (by-)catches and impacts on sensitive habitats.

Sustainability of marine resources calls for **protection of the marine ecosystems and for limiting the impact of fishing** thereon. Technical measures effectively contribute to reaching the objectives of the environmental legislation. They are designed and regulated with the aim to limit impacts on sensitive species and habitats protected under the Birds and Habitat Directives, such as the Natura 2000 areas, and to lower impacts on the marine ecosystems as a contribution to the implementation of the Marine Strategy Framework Directive (MSFD). This is particularly relevant in view of the objectives of the EU Biodiversity Strategy[5] and the Marine Action Plan[6].

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[1] Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, amending Council Regulations (EC) No 1967/2006, (EC) No 1224/2009 and Regulations (EU) No 1380/2013, (EU) 2016/1139, (EU) 2018/973, (EU) 2019/472 and (EU) 2019/1022 of the European Parliament and of the Council, and repealing Council Regulations (EC) No 894/97, (EC) No 850/98, (EC) No 2549/2000, (EC) No 254/2002, (EC) No 812/2004 and (EC) No 2187/2005 (OJ L 198, 25.7.2019, p. 105).

[2] The report: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0583 and its Staff Working Document: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD:2021:268:FIN

[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023DC0520

[4] See COM(2024)235final, Communication from the Commission to the European Parliament and the Council: Sustainable fishing in the EU: state of play and orientations for 2025.

[5] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52020DC0380

[6] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023DC0102

The current Regulation carried forward existing essential elements of past technical regulations and provided a possibility for the Commission to define measures needed for coherent implementation. In addition, the Regulation calls on Member States to work together, in the context of the regional groups, to define regionally relevant measures which the Commission may adopt by way of delegated acts and provides scope for the Member States individually to adopt national measures for their waters or fleets.

This Regulation is an important tool to contribute to the mitigation of climate and biodiversity challenges, and hence essential for the implementation of the Marine Action Plan, adopted in February 2023 as deliverable under the EU Biodiversity Strategy 2030 and presented as part of the "Fisheries on Oceans package"[7].

2.1. Measuring progress towards the objectives

This report looks at the regional implementation of measures in view of contributing to the Regulation's objectives: to optimise exploitation patterns, to contribute to minimising incidental catches of sensitive marine species and negative environmental impacts of fishing on marine habitats and to have in place fisheries management measures for the purposes of complying with the environmental Directives[8].

To measure if **exploitation patterns** are optimised, in 2020 STECF revised the most appropriate indicator to be used. This was complemented by the JRC[9] in February 2024, which analysed 34 fish stocks corresponding to the species listed in the Regulation. This analysis showed that in the Atlantic the aggregated selectivity has been improving for the past 20 years. Nevertheless, in 2021 just under half of the ICES assessed stocks exhibited a better selectivity (i.e., higher protection of juveniles) than that corresponding to the maximum equilibrium yield under current fishing mortality. As for the Mediterranean, two out of ten stocks exhibited a better selectivity than that corresponding to the maximum equilibrium yield under current fishing mortality.

For the objectives linked to environmental legislation, concrete targets come from the Birds and Habitats Directives, which include specific protection for Natura 2000 areas and for certain species, as well as from the threshold values adopted in the framework of the Marine Strategy Framework Directive (MSFD). In recent years, notable progress has been made on the adoption of such thresholds se, especially for the descriptors to determine whether **seabed habitats** are in good environmental status[10]. The MSFD threshold values linked to the **incidental catches of sensitive marine species** are still to be adopted and concrete targets for this objective are thus not yet available.

While measurable targets are not fully available, scientific advice offers relevant information on the delicate situation of certain species and habitats and hence the elements needed to underpin the adoption of concrete measures.

2.2. Regional implementation

Regional implementation is the cornerstone of this Regulation and it is progressing at a different speed and level and is targeted towards the needs and circumstances of each sea basin. Measures can be

[7] https://oceans-and-fisheries.ec.europa.eu/policy/common-fisheries-policy-cfp_en

[8] Article 3 of Regulation 2019/1241

[9] https://publications.jrc.ec.europa.eu/repository/handle/JRC137030

[10] For an overview of the threshold values please see Commission Notice on the threshold values set under the Marine Strategy Framework Directive 2008/56/EC and Commission Decision (EU) 2017/848 (COM(2024)2078).

adopted as national measures or as delegated act based on a joint recommendation put forward by the Member States concerned.

As for national measures, all Member States informed the Commission on the adoption of measures to be implemented by their fleets to meet concrete objectives in the waters under their sovereignty or jurisdiction.

The report of September 2023 on the use of the delegation of powers under the Regulation highlighted that in the period from 14 August 2019 to 30 June 2023, 12 delegated acts were adopted, and one was in the process of being adopted. Since then, two more delegated acts have been adopted bringing the total now to 14 delegated acts adopted concerning a wide variety of measures.

The approach, speed and content of regional implementation varies greatly due to the rather different circumstances and challenges in each of the sea basins and the scope and potential that the regionalisation process offers. For example, **in the Mediterranean and Black Sea** the most effective approach is that measures are adopted by the General Fisheries Commission for the Mediterranean (GFCM) and hence apply to all states bordering those Seas, ensuring therefore level-playing field. As a result, there is limited need or space for the use of regionalisation under CFP Regulation. Where needed for the transposition of GFCM measures or as a complement, Member States mostly reverted to national measures. For the North Sea and Western Waters, the situation differs. While there is full scope for the use of regionalisation, Member States, as well as relevant Advisory Councils, welcome the ongoing technical work between the EU and the UK on technical measures.

The joint recommendations from Member States may have their basis in both Article 11 of the CFP Regulation and the Technical Measures Regulation which both aim to contribute to the CFP objectives and thereby to the implementation of the environmental legislation and for example limit fisheries impact on sensitive marine habitats or minimis by-catches of sensitive species. With regard to the latter, the Regulation also provides the possibility for Member States to present joint recommendations to implement mitigation measures to protect sensitive species, as has been the case to protect the Baltic harbour porpoise.

In addition, the Regulation offers special protection to some fish species listed in Annex I by prohibiting those to be fished. While the possibility exists to amend the list and add additional species, this has not happened to date.

In response to the consultations undertaken for this report, Advisory Councils contributed with detailed information on the work carried out during this reporting period to show the engagement and commitment both in the adoption of voluntary measures and in the regionalisation process.

Some of the stakeholders indicated that regionalisation is not progressing at the right pace, while others highlighted the complexity of the Regulation.

2.2.1. Baltic Sea

In terms of **selectivity**, the regional cooperation on selective gears to drastically reduce the by-catch of Baltic cod and the adoption of the Delegated Act and the related implementing act are imminent thanks to the close cooperation between the Member States and the Advisory Council (BSAC).

In the area of **minimising by-catches of sensitive species**, work continued in view of better protecting the Baltic Sea harbour porpoise (two joint recommendations were submitted for this purpose) including additional control measures. Working on measures for the eastern Baltic Sea with real time closures is also being contemplated. In addition, some Member States are working on measures aiming to minimise the impact of seal depredation and interaction with fishers and have taken voluntary measures to limit

the impact of fishery on sensitive species. BSAC also informed that their members-fishers are individually taking part in research projects.

In what concerns the **wider contribution to the environmental objectives and seabed habitats**, Baltic Sea Member States are implementing certain national restrictions to bottom fishing and static nets use in Natura 2000 areas. In addition, some Member States have prepared a joint recommendation to protect the seabed in the German part of the Baltic Sea (delegated act in preparation based on a joint recommendation to protect 6 marine protected areas (MPAs) in the German EEZ of the Baltic Sea).

Member States are currently working on 2 joint recommendations suggesting conservation measures for around 25 Natura 2000 sites or MSFD areas of the North Sea and the Baltic Sea (short, medium and long term).

2.2.2. Western Waters

As a contribution to **selectivity**, Member States have been implementing measures to minimise the by catch of cod in the Celtic Sea and, linked to similar results in the North Sea, discussions are ongoing to increase the mesh size in the squid fishery (from 40 mm to 80 mm or 90 mm depending on the fishing area). Additional measures have been implemented via Delegated Acts to increase the protection of red seabream in the Bay of Biscay (increase the minimum conservation reference sizes and closures).

As regards the need to **minimise by-catches of sensitive species in the Bay of Biscay,** France and Spain adopted national measures in 2021 to protect the common dolphin, using acoustic deterrent devices in the Bay of Biscay for certain trawlers. In addition to the use of pingers on trawlers, France is increasingly using cameras on board and other monitoring measures to improve the knowledge on the dolphin population in the Bay of Biscay. France is also working on several projects on technical measures to avoid that dolphins are by-caught in gillnets. Portugal and Spain are working on technical mitigation measures, such as pingers, for gillnets in the framework of the Project Cetambicion[11].Nevertheless, more progress is needed, as the adoption of regional measures across all areas would improve the conservation of the common dolphin.

Member States are also organising courses and trainings for the fishing industry aimed at better understanding and recognising by catch associated with certain fisheries.

On future projects to protect sensitive species, several Member States are involved in the Cibbrina[12], and in different research activities aimed at the protection of sensitive species in fisheries governed by Regional Fisheries Management Organisations, such as International Commission for the Conservation of Atlantic Tunas. Some Member States also reported on a project that will include Deoxyribonucleic acid (DNA) surveys and passive acoustic monitoring.

In the field of contributing to the **environmental protection**, Member States have extended current MPAs and are working together with environmental authorities towards the elaboration of management plans for several MPAs under Natura 2000.

[11] https://www.cetambicion-project.eu/?lang=es

[12] Funded under the LIFE programme: https://webgate.ec.europa.eu/life/publicWebsite/project/LIFE22-NAT-NL-LIFE-CIBBRiNA-101114301/coordinated-development-and%E2%80%AFimplementation-of%E2%80%AFbest-practice-in%E2%80%AFbycatch%E2%80%AFreduction%E2%80%AFin-the%E2%80%AFnorth-atlantic-baltic-and-mediterranean-regions

2.2.3. North Sea

North Sea Member States have implemented several **selectivity** measures to complement the exemptions from the landing obligation. Recently, the Commission adopted a closed fishing season during the spawning peak of Atlantic halibut[13]. In addition, Member States have been implementing other measures on their fleets, which go beyond current mandatory provisions (e.g., using Flemish panel in beam trawlers targeting shrimps, additional co-sampling programme to monitor by catch of species subject to quotas in shrimp fishery).

North Sea Member States reported several national measures aimed at decreasing the **impact on sensitive species**, such as spatial temporal measures in MPAs or limitation of certain gears. Increased observer coverage to count on robust and reliable data was also reported.

North Sea Member States participate in the CiBBrina project (which also includes Poland, Portugal and Spain) whose main aim is to reduce mortality of incidental by catch of sensitive species. This project started in December 2023 and will run until 2029.

In the field of contributing to the **environmental protection**, two delegated acts were adopted based on 5 joint recommendations suggesting conservation measures for 18 Natura 2000 sites or Marine Strategy Framework Directive areas in the North Sesa: Delegated Regulation (EU) 2022/952 and Delegated Regulation (EU) 2023/340.

Current discussions by Member States are focused on four joint recommendations. One submitted by Germany and the Netherlands for the Dogger Bank (recently evaluated by STECF in Spring plenary meeting-PLEN 24-01[14]), another under preparation by the Netherlands for 6 MPAs in the Dutch part of the North Sea (Cleaver Bank, Southern Dogger Bank, Central Oyster Grounds, Frisian Front MSFD, Brown Ridge and Borkum Reef Grounds), one under preparation by Belgium for three management areas in the Belgian part of the North Sea and one under preparation by Denmark for five sites Natura 2000 in the North Sea and Skagerrak.

2.2.4. Mediterranean and Black Sea

In the area of **selectivity**, Member States with fishing interests in the Black Sea implement the measures adopted at the level of the General Fisheries Commission for the Mediterranean (GFCM), by way of GFCM recommendations, including trawl closures to protect juveniles and the use of monofilament gillnets.

In the Mediterranean, Member States have implemented a wide array of national technical measures to protect commercial species, such as spatial and temporal measures to protect key species (hake, Norway lobster) spawning areas, limitations of bottom trawling, following GFCM recommendations or in accordance with the management of the WestMed MAP[15], and stricter rules on gear specifications (some Member States implement bigger mesh sizes to target small pelagics), banning of round straps and lifting straps and minimum codend length of 3 m.

In 2022-2024 Member States started conducting trials to develop more selective and efficient gears, those trials will deliver results in the next reporting period. These surveys include testing different

[13] Delegated Regulation (EU) 2024/1060, on technical measures for Atlantic halibut.

[14] STECF plenary meeting 24-01

[15] Regulation (EU) 2019/1022 of the European Parliament and of the Council of 20 June 2019 establishing a multiannual plan for the fisheries exploiting demersal stocks in the western Mediterranean Sea and amending Regulation (EU) No 508/2014

configurations on mesh sizes in demersal gears and static nets, or even, completely new innovative gear. Increased observer coverage and use of information provided by REM/CCTV cameras is also envisaged.

In what concerns **sensitive species**, GFCM has adopted several recommendations regarding cetaceans, elasmobranchs, seabirds and turtles, planning pilot projects, the adoption of mitigation measures and the adoption of a regional action plan to monitor and mitigate interactions between fisheries and vulnerable species in the Mediterranean and the Black Sea[16]. This plan aims at developing adequate monitoring systems as well as testing mitigation measures for incidental catch of vulnerable species and depredation activities of marine megafauna in fishing gear.

In addition, Black Sea Member States have put in place several national measures to minimise the impact of fishing on harbour porpoise, such as the use of monofilament gillnets in the fishery targeting turbot, which aims at reducing the bycatch of cetaceans and that has taken 2 years of progressive implementation, awareness raising campaigns for the protection of Black Sea Harbour Porpoises. Several MPAs are also being implemented in national waters in which the use of gillnets for turbot fisheries will only be authorised when such nets are equipped with pingers. However, it should be noted that all measures aimed at this objective should be put in a regional context, notably ongoing GFCM work, to ensure a level playing field with other riparian countries.

To protect sensitive species in the Mediterranean, Member States are progressing with national legislation to protect species at higher risk (such as the Balearic shearwater, including management measures for fisheries and identification of Natura 2000 sites as well as the ZEPAS (areas for special protection of birds) and now are in process of setting up management measures for these areas.

Complementing the measures adopted by GFCM and the Member States, stakeholders and Member States are involved in by-catch awareness- raising projects, disseminating good practices among fishers, developing and translating good practice guides on reducing by-catch, testing bird scaring devices (kites and buoys), research on bird scaring lines used in UK vessels fishing for Hake in Gran Sol[17].

As for the contribution to **environmental protection** in the Mediterranean and Black Sea, various Member States implement a ban on bottom trawling and dredging in MPAs and through the GFCM 10 fisheries restricted areas (FRAs), an area of more than 1.75 million km2 of sea habitats are protected in the Mediterranean and the Black Sea. Around 31 000 km2 of benthic sea habitats are protected in the Mediterranean Sea, complemented by one large deep-water FRA, representing around 60% of the total Mediterranean seabed in which the use of towed dredges and trawl nets in all waters deeper than 1000 metres is banned to protect deep-sea benthic habitats. Trawl nets in all waters deeper than 1000 metres are banned to protect deep-sea benthic habitats.

Work is ongoing to establish new FRAs, as well as on reviewing the depth limit of the deep-water FRA to 800 m in the future, based on the results of a GFCM pilot project. In parallel, efforts are being made to build coherent and effective networks of MPAs and GFCM has launched an internal assessment in view of delivering on the UN Convention on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction (BBNJ).

[16] Resolution GFCM/46/2023/4

[17] MedBycatch project.

2.3. Other implementation matters

2.3.1. Implementing rules

In addition to regionalised implementation, the Regulation also grants some implementing powers to the Commission to establish the specific features of certain elements that are relevant or necessary[18] to maintain selectivity standards.

Such detailed rules are in preparation and are important to ensure a level playing field in the implementation of the Regulation between Member State, and to ensure coherent and effective control. These concern specifications on the devices used to avoid juveniles in the catch and the specifications of some devices that are used to prevent the wear and tear of towed gears.

They aim is to re-establish some of the previously applied conditions that are essential for the efficient implementation of the Regulation. In order to count on the most updated scientific advice, and after technical discussions with Member States, STECF has been consulted on certain of these elements and issued its advice on March 2024[19].

Consultations with Member States are ongoing with a view of presenting the draft implementing regulation to the Committee for Fisheries and Aquaculture without delay.

2.3.2. Directed fishing

Another important aspect for the implementation of the regulation is to further define the term of directed fisheries for certain species as set out in Articles 6(3) and 27(7) of the Regulation: "*fishing effort targeted at a specific species or group of species and may be further specified at regional level in delegated acts*."

This is relevant for many fisheries, though not for all. For some fisheries standards are clear and there are no risks that implementation practices would lower selectivity standards for example, by use of a sorting grid or any other selectivity device. For the fisheries where there are no standards or further provisions governing the use of the smallest mesh sizes, the Regulation, in its Article 27(7) asks Member States having a direct management interest in the fisheries concerned to submit joint recommendations, for the first time not later than 15 August 2020[20].

The Regulation sets a baseline mesh size, judged as most appropriate to offer the best selectivity standards, and provides two options to derogate from that baseline mesh-size: Member States may either define selectivity modifications with the (minimum) same selectivity standards as those provided in the current legislation and assessed by STECF, or, for certain fisheries and to the extent that the conditions and catch compositions of the Regulation are fulfilled, define mesh-specific sizes (usually selectivity devices).

Member States regional groups have been working on this topic for and the Commission has consulted STECF several times to help national authorities to progress and following the submission of joint recommendations by 4 of the Member States regional groups. To date however, there are no measures confirmed by science and adopted as legislation.

[18] Arts 8(5) and 24 (1) of the Regulation

[19] Scientific, Technical and Economic Committee for Fisheries (STECF) 75 the Plenary report (STECF-PLEN-24-01)

[20] Article 27 of the Regulation

Another aspect that may impact the overall achievement on the objectives concerns the fact that there are almost no authorisation regimes in place for any mesh-specific sizes in any region. In the absence of authorisation regimes to regulate the use of mesh-specific sizes, all fishing vessels are authorised by default to use any mesh-specific size at any time.

There may be significant conservation consequences of these topics and the Commission therefore encourages Member States to take these issues forward within the context of their regional groups and, for the topic of authorisations, at national level.

3. INNOVATION AND SCIENTIFIC RESEARCH

Current challenges affecting our marine ecosystems cannot be tackled with traditional gears alone. Innovation is key in this respect and the Regulation provides a solid basis for driving this change, as it allows Member States to put in place derogations to test new technology and, subsequently develop applicable measures under regionalisation.

The engagement and participation of all operators that develop their activity in the marine environment is crucial and essential to achieve results. Stakeholders who participated in the consultation (from Member States to Advisory Councils, non-governmental organisations and other associations) have underlined their commitment to participate in research and innovation.

Projects such as Cibbrina (aimed at minimising impact on sensitive species), Marine Beacon[21] (whose objective is to develop and test innovative tools and techniques for better monitoring important species and mitigating risks of bycatch), and DecarbonyT[22] (assessing the use of optimized trawling gears in the Mediterranean and Black Sea to lead to lower fuel consumption) are a good examples of pan-European projects grouping scientific institutions, fisheries organisations and stakeholders.

These projects will show how to improve current fishing techniques (from gear modifications to spatial temporal measures) in order to minimise the impact of the fishing activity on the environment. The results of the projects will be seen during the next reporting period.

3.1. STECF work

Since the adoption of the Regulation, STECF, through a dedicated Expert Working Group, meets yearly to discuss, assess and advice on the implementation of technical measures as a means to build the science base for enhanced implementation.

As part of the recommendations from STECF, the work on this field continued to progress on selectivity indicators (see chapter 2.1), while exploring the discrepancy between current and optimal selectivity providing the highest possible sustainable yield. In 2021[23], STECF assessed the population selectivity-at-age of relevant species[24] and compared it to the optimal one (i.e., the one producing the highest long-term yields). In 2022[25] STECF focused on the evaluation of the population selectivity-at-length of those

[21] https://marinebeacon.eu/

[22] https://decarbonyt.eu/

[23] STECF-21-07

[24] Species listed in Annex XIV of the Regulation

[25] STECF 22-19

species, in order to be able to link it with actual size-based fishing gear selectivity and offer optimisation solutions.

STECF is now working on these optimisation solutions, as it is necessary to sketch what changes would be necessary (and feasible) to reach these highest yields. The approach to be followed for the years to come would need to identify the steps required to operationalise a bio-economic assessment on the changes in fishing techniques/patterns that are feasible and what the consequences might be (socio-economic -changes in catches, catch value- and environmental).

3.2. ICES advice on innovative gears

Upon request from the Commission, in 2023, ICES updated its 2020 catalogue of innovative gears[26], provided an assessment of the level of uptake of innovative gears by the EU industry (per sea basin, and fishery). For those innovations not implemented, they identified the main drivers that prevented their use, including the analysis of the socio-economic trade-offs and propose ways to facilitate their implementation. This advice[27] provides very relevant conclusions, especially in what concerns the uptake by the industry. For example, in one third of the innovative technologies presented, the gear requires low investment and leads to a positive return of investment, meaning that it is economically viable.

To evaluate the barriers and opportunities for innovative gears to be systematically used, ICES used the PESTEL[28] framework, looking at:

- **P**olitical factors: level of fishers' support for and perceived legitimacy of policies, top-down regulations, absence of a level playing field when gears are taken up voluntarily.
- **E**conomic factors: cost of purchasing the gear, availability of capital to use for investment, change in running costs and revenues, priority to short-term benefits over longer-term benefits of using the new gear, presence of grants or subsidies, financial resilience.
- **S**ocial factors: reluctance to change, uptake of gear by others, effectiveness of outreach on the new gear, demotivation due to policy developments, different understanding of the problem between fishers and other stakeholders (e.g., discards, bottom-trawl impacts), involvement in decision-making, trust between fishers and other stakeholders (e.g. policy-makers or scientists).
- **T**echnological factors: technical knowledge; gear is difficult to deploy or requires specialist knowledge or training; gear takes time to set up and tweak, so it works effectively; extent of the adaptability of the gear to different vessel designs.
- **E**nvironmental factors: fuel reduction, reduced unwanted bycatch of fish, reduced unwanted catch of other marine species (benthos, marine mammals, seabirds), lower seabed impact.
- **L**egal factors: gear not being currently allowed (e.g., tested under a derogation, regional restrictions), requirements to meet minimal legal gear standards and existence of appropriate enforcement.

While the ICES advice gives important indications, it is evident that the actual level of uptake by the industry remains to be identified. In the replies to the consultation, **Member States and stakeholders signalled the difficulty of adopting innovative technologies**. While agreeing that regionalisation is crucial for this and preferred over voluntary approaches, they consider that the transition to the use of new gears is still too lengthy and complicated. As an average, using regionalisation means two years to

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

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

[28] Political, Economic, Social, Technological, Environmental and Legal (factors).

adopt the gear, including the negotiation process withing regional groups, STECF consultation and adoption process.

3.3. Fishing for scientific purposes

Article 25 of the Regulation provides the possibility for Member States to allow derogations from the rules for the purpose of conducting scientific fisheries. The aim of this article is to incentivise operators to participate in scientific research. While there are other articles[29] in the Regulation that can be used to introduce innovative solutions, Article 25 is the most used.

The research is organised, carried out and concluded by a scientific institution of the Member States. During the last three years, there has been an increased participation of commercial vessels in Member States in scientific research and the Commission organised a technical meeting with Member States on 6 July 2023 to increase the transparency between Member States and to remind them of their obligation to report the surveys to the Commission.

The majority of the projects notified are investigating alternative methods to minimise the catch of juveniles and dedicated to find solutions to mitigate the impact on sensitive species or reduce the negative on environment.

While Article 25 acts as a positive driver to incentivise research and testing innovative technology in derogation from the technical requirements in the Regulation, Member States and stakeholders noted that such possibilities are absent in other CFP regulations which may in some cases hamper the possibilities and delay the introduction of changes. They note for instance, that it is not possible to provide research derogations to the permission to catch, retain on board, or land sea bass below minimum conservation reference sizes, even when this is desired for monitoring programmes.

In addition, Member States, Advisory Councils and stakeholders noted the cumbersome process that needs to be followed from the moment a new gear technique or technology is developed until its final adoption via legislation.

3.4. Expenditure on innovation

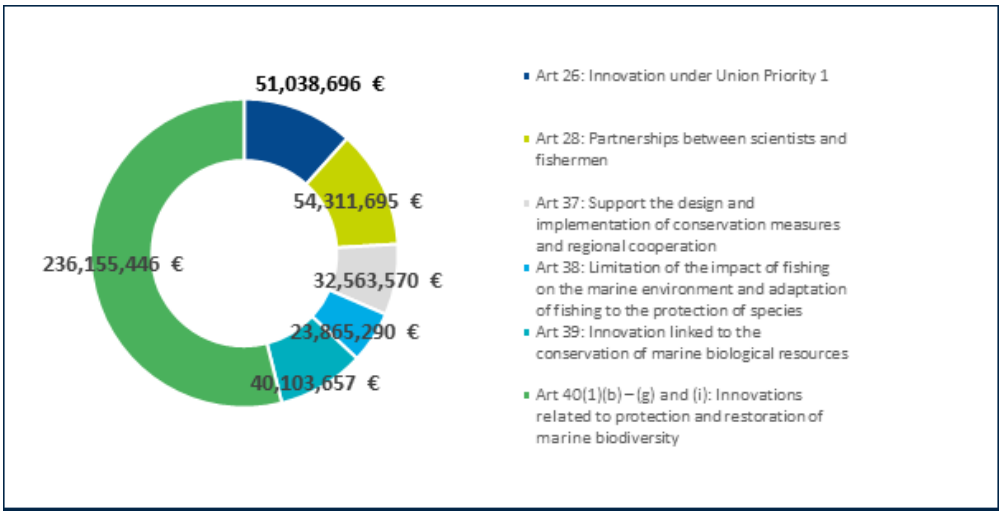
While Article 25 presents how the Regulation can incentivise the participation in scientific research, the use of EU funds provides a wider perspective of projects in which commercial vessels are involved, going beyond the derogation of technical measures. Rather it is linked to the variety of measures that Member States are putting in place as a means to contribute to the CFP objectives and its role in supporting the implementation of the environmental legislation.

Testing research and innovation under the Regulation is currently supported financially under the European Fisheries, Maritime and Aquaculture Fund (EMFAF) and previously under European Maritime and Fisheries Fund (EMFF). These funds contain a variety of opportunities to provide financial support to encourage innovation in the fisheries sector, through innovation projects, support to partnerships between scientists and fishers, by supporting the design and implementation of conservation measures and regional cooperation, and to limit the impact of fishing on the marine environment as well as contribute to the implementation of the environmental legislation (including for Natura 2000 sites).

[29] Article 20, innovative fishing gear, Article 23, pilot projects on full documentation of catches and discards.

The results of these projects will seek to offer new and innovative solutions on how the fishing activity can minimise the impact on the environment.

When looking at the EMFF programming period (2014-2020), a total of EUR 438 038 353 was committed towards fisheries-related innovation measures, comprising 7.87% of all EMFF commitments, with the following sharing:



Overall, under the EMFF, 5 592 projects were supported financially with close to 2000 vessels involved.

Measure (Article)	**No. of operations**	**No. of vessels funded under article**	**EMFF committed (EUR)**
Art. 26 Innovation	336	130	51 038 696
Art. 28 Partnerships	200	128	54 311 695
Art. 37: Conservation measures & regional cooperation	373	1	32 563 570
Art 38: Marine environment, protection of species	1 774	1 545	23 865 290
Art. 39: Innovation linked to conservation	195	66	40 103 657
Art. 40(1)(b) – (g) and (i): Protection and restoration of marine biodiversity	2 714	38	236 155 446
Total:	**5 592**	-	**438 038 353**

To support the preparation of this report, FAMENET also produced factsheets showing some examples of innovation that are under development and directly linked to the objectives of the Regulation[30].

The new Member States EMFAF programmes[31] adopted for the 2021-2027 period offer ample opportunities to support different types of actions aiming at research and innovation and could support

[30] Fisheries innovations under the European Maritime and Fisheries Fund 2014-2020 - European Commission (europa.eu)

[31] EMFAF programmes 2021 - 2027 - European Commission (europa.eu)

the implementation of this Regulation. The Commission therefore encourages Member States to step up their efforts in this regard.

Complementing the fisheries specific measures, Member States have also looked at other funding opportunities. The **Horizon Europe** research framework programme (2021-2027) supports research and innovation actions for sustainable fisheries and aquaculture. This includes for example the digital transition supporting fisheries inspection and control, aiming at reducing the environmental impact of fishing gears, minimising the climate impact on fisheries and understanding and reducing bycatch of protected species.

The previous Horizon 2020, the EU's research and innovation funding programme from 2014-2020, contributed to improve sustainable fishing. Indeed, the final evaluation of Horizon 2020, adopted on 29 January 2024, mentions that the fund made significant contributions to societal impacts in numerous areas, demonstrating its wide-ranging influence and effectiveness, among which, sustainable fishing by improving fishing methods and reducing discards which has contributed to more sustainable fishing practices, balancing economic interests with environmental conservation.

Finally, the **EU Mission "Restore our Ocean and Waters by 2030"**[32] is supporting research and innovation actions for example in relation to smart and low environmental impact fishing gears, energy efficient small-scale fishing fleets. The Mission work programme 2024, soon to be adopted, will continue supporting *in situ* demonstration activities to reconcile fisheries and marine protection.

4. CONCLUSIONS

In the process of achieving the objectives of the Regulation, Member States have highlighted that they are adopting national measures and the sector indicated that voluntary measures are being increasingly utilised, some stakeholders underlined the need for continued ambition.

Progressing on achieving the objectives of the Regulation does not (and should not) rely only on the adoption of secondary legislation. Increased and shared knowledge, commitment and engagement of the stakeholders and voluntary initiatives remain essential and act as a complement to the adoption of common rules via regionalisation. Moreover, changing and challenging fishing activity needs to be addressed in a dynamic manner therefore continuous discussions and consideration of most suitable measures are indispensable.

Innovation is key, not only to comply with the objectives of the Regulation, but also for a resilient and competitive EU fisheries sector providing European consumers with the highest quality seafood products.

Member States and stakeholders are **investing in the development of new technologies** to meet the objectives of the Regulation. While more remarkable results are yet to be seen in the next period, the Commission, Member States and the stakeholders should continue to work together to find the most effective ways forward to implement and keep supporting research in gear and innovation as well as their rollout and actual use on the ground.

[32] Mission Ocean and Waters service portal | Research and Innovation (europa.eu)

APPENDIX I: SYNOPSIS OF THE CONSULTATION

1. Consultation strategy.

The objective of the consultation was to gather the opinion of relevant stakeholders in the implementation of the Regulation EU 2019/1241 in accordance with the requirements of Article 31(1). To ensure full feedback, the consultation of Member States and Advisory Councils was complemented by an online targeted consultation.

2. Methodology and tools to process the data.

The methodology used was different depending on the typology of the stakeholder consulted.
Member States are the authorities in charge of the implementation and enforcement of the Regulation. Hence, a dedicated questionnaire was sent[33].
Likewise, considering the specific role of the Advisory Councils in the regionalisation process and as main representative bodies under the CFP, a specific questionnaire was sent[34].
The online consultation was carried out using the platform "EUSurvey"[35]. In this case, publicity was made through DGMARE website, newsletter and the DGMARE social networks, such as Twitter.
For all three cases, the consultation was launched on 2 October 2023, and the duration was until 24 November 2023.
In all three cases, the possibility of including supporting documentation was provided.

3. Results

Replies were received from 18 Member States, 5 Advisory Councils and 10 other organizations (via online consultation).
Considering that the purpose of the report, the replies received have been summarised and, to the extent possible, its substance matters included in the report itself. Given that it was not specifically indicated in the letters sent to both Member States and Advisory Councils, the individual replies are not be displayed.
Replies from Member States and Advisory Councils are presented with the specific mention of "MS" / "AC". When the comments come from the targeted online consultation, they are referred to as "stakeholders".

[33] Letter sent to Member States on 2 October 2023 (ARES (2023)6664125))

[34] Letter sent to Advisory Councils on 2 October 2023 (ARES(2023)6664226))

[35] https://oceans-and-fisheries.ec.europa.eu/consultations/targeted-stakeholder-consultation-technical-measures-regulation-fisheries-2023_en