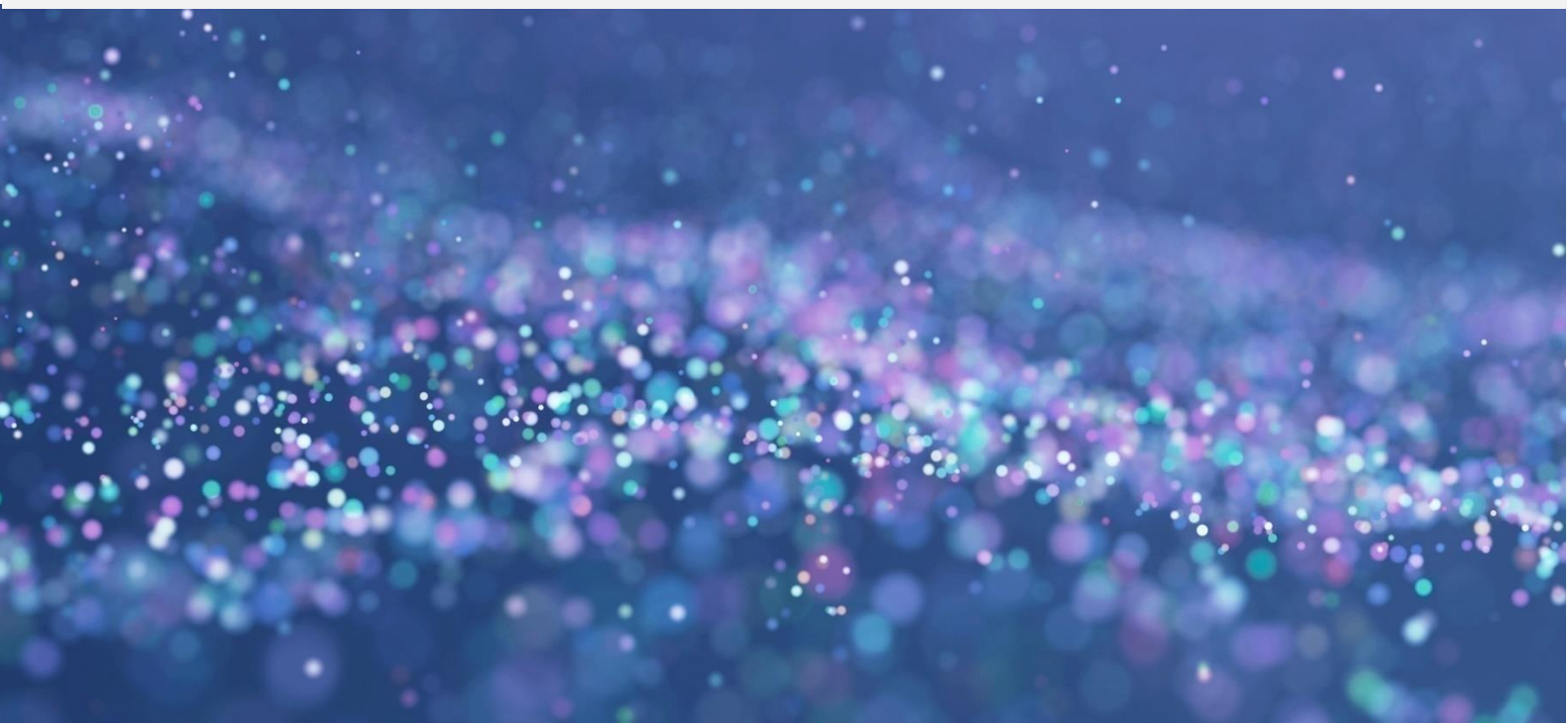
ISSN 1831-9424

Scientific Technical and Economic Committee for Fisheries (STECF) –

Social Data in Fisheries (STECF-24-05)

Ballesteros, M., Kraan, M., Tardy Martorell, M., Virtanen, J., Guillen, J. (eds.).

2024



This document is a publication by the Joint Research Centre (JRC), the European Commission's science and knowledge service. It aims to provide evidence-based scientific support to the European policymaking process. The contents of this publication do not necessarily reflect the position or opinion of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of this publication. For information on the methodology and quality underlying the data used in this publication for which the source is neither Eurostat nor other Commission services, users should contact the referenced source. The designations employed and the presentation of material on the maps do not imply the expression of any opinion whatsoever on the part of the European Union concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Contact information
Name: STECF secretariat
Address: Unit D.02 Ocean and Water, Via Enrico Fermi 2749, 21027 Ispra VA, Italy.
Email: jrc-stecf-secretariat@ec.europa.eu
Tel.: +39 0332 789343.

EU Science Hub
https://joint-research-centre.ec.europa.eu

JRC138977

EUR 32036 EN

PDF ISBN 978-92-68-20279-1 ISSN 1831-9424 doi:10.2760/461821 KJ-AX-24-006-EN-N
STECF ISSN 2467-0715

Luxembourg: Publications Office of the European Union, 2024

© European Union, 2024

The reuse policy of the European Commission documents is implemented by the Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39). Unless otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence (https://creativecommons.org/licenses/by/4.0/). This means that reuse is allowed provided appropriate credit is given and any changes are indicated.

For any use or reproduction of photos or other material that is not owned by the European Union permission must be sought directly from the copyright holders.

How to cite this report: European Commission, Joint Research Centre, *Scientific Technical and Economic Committee for Fisheries (STECF) – Social Data in Fisheries (STECF-24-05)*, Ballesteros, M., Kraan, M., Tardy Martorell, M., Virtanen, J. and Guillen, J. editor(s), Publications Office of the European Union, Luxembourg, 2024, https://data.europa.eu/doi/10.2760/461821, JRC138977.

CONTENTS

Authors:

STECF advice:

BASTARDIE, Francois; BORGES, Lisa; CASEY, John; COLL MONTON, Marta; DASKALOV, Georgi; DÖRING, Ralf; DROUINEAU, Hilaire; GOTI ARALUCEA, Leyre; GRATI, Fabio; HAMON, Katell; IBAIBARRIAGA, Leire; JARDIM, Ernesto; JUNG, Armelle; LIGAS, Alessandro; MANNINI, Alessandro; MARTIN, Paloma; MOORE, Claire; MOTOVA, Arina; NIELSEN, Rasmus; NIMMEGEERS, Sofie; NORD, Jenny; PINTO, Cecilia; PRELLEZO, Raúl; RAID, Tiit; RIHAN, Dominic; SABATELLA, Evelina Carmen; SAMPEDRO, Paz; SOMARAKIS, Stylianos; STRANSKY, Christoph; ULRICH, Clara; URIARTE, Andres; VALENTINSSON, Daniel; VAN HOOF, Luc; VELASCO GUEVARA, Francisco; VRGOC, Nedo.

EWG-24-05 report:

BALLESTEROS, Marta; KRAAN, Marloes; ARIAS SCHREIBER, Milena; AVDIC MRAVLJE, Edvard; BARZ, Fanny; CARPENTER, Griffin; CEPIC, Drazen; COZZOLINO, Maria; DAVIDJUKA, Irina; DELANEY, Alyne Elizabeth; FRANGOUDES, Ekaterini; GOTI, Leyre; GUILLEN, Jordi; HADJIMICHAEL, Maria; HEGLAND, Troels Jacob; JACKSON, Emmet; LASNER, Tobias; NICHEVA, Simona; PERRY, Sarah; PITA, Cristina; TARDY MARTORELL, Montse; TZOURAMANI, Irene; VIRTANEN, Jarno.

Abstract

Commission Decision of 25 February 2016 setting up a Scientific, Technical and Economic Committee for Fisheries, C(2016) 1084, OJ C 74, 26.2.2016, p. 4–10. The Commission may consult the group on any matter relating to marine and fisheries biology, fishing gear technology, fisheries economics, fisheries governance, ecosystem effects of fisheries, aquaculture or similar disciplines. This report is the fifth in a series of STECF reports operationalising the social dimension of the CFP and providing analytical tools. The EWG report addresses three specific areas: the National Fisheries Profiles, Community Profiles and social indicators.

SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (STECF) – SOCIAL DATA IN FISHERIES (STECF-24-05)

Request to the STECF

STECF is requested to evaluate the findings of the STECF Expert Working Group meeting and make any appropriate comments and recommendations.

STECF observations

EWG 24-05 was held online 13-17 May, 2024. The meeting was attended by 19 independent experts, one member of STECF, experts from JRC and 6 observers. The meeting was also attended by DG MARE on a regular basis.

EWG 24-05 produced a report on Social Data in Fisheries. STECF notes that this report is the fifth in a series of STECF reports operationalising the social dimension of the CFP and providing analytical tools. The EWG report addresses three specific areas: the National Fisheries Profiles, Community Profiles and social indicators.

The first topic concerns the National Fisheries Profiles (NFPs). Following the Dutch profile (assessed in EWG 22-04) and the Danish and Spanish profiles (assessed in EWG 23-07) as well as experts' experiences in developing the Greek and German profiles, ten additional profiles were developed under ad hoc contracts for Bulgaria, Cyprus, Croatia, Estonia, France, Ireland, Italy, Portugal, Slovenia and Sweden. The ten new NFPs were evaluated for fitness for purpose. The findings informed the update of the NFPs template to increase usefulness and cross-comparison between NFPs.

The second task for the EWG was to provide an operational definition of fisheries communities, a first partial list of such communities in the EU and an updated template for developing Fisheries Communities Profiles (FCPs). STECF observes that the EWG proposed a definition of Fisheries Community that builds on state-of-the-art research as well as empirical work developed in the Member States.

STECF observes that the heterogeneity and richness of fisheries communities across the EU is well known. Using three criteria (contrast, plurality, policy impact), EWG 24-05 developed a list of 96 fisheries communities covering 16 Member States, all sea basins, and including the Outermost Regions. This list serves as a first selection of communities from which a FCP could be developed. The experience gained with the NFPs and insights from former EWGs served to explore and update the FCP template developed under an ad hoc contract.

The third part of the EWG report addresses the development of a set of social indicators, pointing out the next methodological steps for their integration in an EU data call and providing a list of countries for pilot studies. The indicators have been informed by the policy priorities identified by DG-MARE in 2023 and through stakeholder consultation developed in 2024.

National Fisheries Profiles (NFPs)

STECF notes that EWG 24-05 updated the NFPs template (current version 4) to integrate the potential improvements identified in the assessment of the 13 NFPs so far produced. STECF observes that the template balances the need for a standardized and systematic approach with the capability to accommodate plurality and heterogeneity across and within each MS.

STECF notes that in order to produce new NFPs and to update the current set of NFPs, EWG 24-05 advises to formalize this process. For the production of an NFP EWG 24-05 suggests that the process includes expert(s) ad hoc contract, a peer review, and ideally, a focus group with Member State stakeholders before publishing.

STECF observes that input data required for the NFP can be difficult to obtain as access to non-public data can be restricted and not be accessible for the experts drafting the NFP. STECF notes the importance that the (group of) expert(s) that is tasked to develop the NFP for a Member States is given sufficient access to relevant data sources. EWG 24-05 notes that data sources used in the current NFP did not create confidentiality issues.

STECF notes that EWG 24-05 suggests that an Annual Social Report should be produced. The assessment of the new NFPs and the update of the existing ones would be part of this Annual Social Report on the EU fisheries.

STECF observes that the suggestion of an Annual Social Report is in line with prior discussions on the presentation of the Social Dimension of EU fisheries. As suggested by EWG 22-14, PLEN 23-01, EWG 23-07 and PLEN 23-03 in the long-term preference would be to produce a stand-alone document. However, STECF notes that in the current work programme social data are collected once every three years. Although this may change over time, for now this three-year period will be adhered to. Based on further developments in the NFPs, FCPs and social indicators a structure for a possible Annual Social Report could be developed. For the time being social information will be made available on a tri-annual basis

STECF notes that the issue of publishing the current set of NFPs still needs to be resolved. This will on the one hand require a final editing of the 13 profiles. On the other hand, it will require the establishment of a channel through which the profiles will be made public. As the web-based application, as proposed by STECF, is currently not yet developed, it is suggested to include the 13 edited NFPs as Annex to the EWG 24-05 report.

The potential cross-comparison among NFPs is an asset to support policymaking at multiple levels (regional, MS, sea basin, EU). The current set of NFPs do, to an extent, allow for the comparison across Member States for example at the level of fleet structure, management measures and trends and patterns. However, STECF acknowledges that ensuring cross-comparison of NFPs should not be accomplished at the expense of being able to reflect the plurality and heterogeneity of the national fisheries sector in the EU.

Fisheries Community Profile (FCP)

Concerning the Fisheries Community Profile (FCP) STECF notes that the EWG 24-05 has provided an operational definition for fisheries communities that can provide the basis for the identification of, and elaboration of, FCPs. The definition is presented in Box 5.3.1 below.

> *Fisheries communities pertain to settlements around fishing harbours where the fisheries generate social and economic benefits (e.g., employment), and which enables new generations of fishers, due to shared norms and inter-generational links. Such norms are reflected in, for instance, resource stewardship, notions of shared materialities, cultural heritage, and interests, ways of life, and a sense of belonging. Fisheries communities are place-based but can pertain to wider geographical areas which gravitate towards the harbours, and are likely to include fisheries-based organisations and ancillary industries in aquatic food value chains.*

EWG 24-05 has provided a first partial list of fisheries communities (96 in total) based on different criteria (contrast, plurality, policy impact), that can be used to develop a first set of FCPs throughout the EU. STECF notes that the FCP will enable the elaboration of social impact

assessments of measurements and policies in the fisheries sector. Community profiles rely on NFPs and complement them in their goals.

Social indicators

Concerning the development of Social Indicators, EWG 24-05 identified the five top priority areas for developing social indicators. STECF notes that for these five priority areas the development of social indicators will best advance if a stepwise multi-level approach is taken. STECF notes that a set of social indicators was defined by the EWG, (38 in total) in relation to these priority areas, 12 of which can be collected relatively easy. Other indicators need further development and operationalisation. Some of these indicators could be developed using pilot studies.

STECF notes that EWG 19-03 suggested that for proper socio-economic impact assessments a link should be kept between vessel and social EUMAP variables. Nevertheless, the EWG 24-05 notes that in developing the FCPs new social indicators, there might be indicators that only indirectly can be linked to fleets (via the community).

The EWG 24-05 suggests the need to have an annual EWG on social indicators, where the development of social indicators is the only task on the agenda, allowing for in-depth discussion of methodological aspects. However, STECF notes that also other tasks need to be addressed, such as the evaluation of NFPs and FCPs produced.

STECF reiterates its observation that in order to assess and validate any Member State data, it is required to have national experts available to implement this context specific evaluation. STECF notes that this may be most easily addressed by organising separate EWGs: one EWG for the assessment of data produced, and one EWG for the further development of the social indicators.

STECF conclusions

STECF concludes that EWG 24-05 has addressed the TORs.

STECF concludes that the work completed by the EWG provides the tools required to progress the implementation of the social dimension of the EU fisheries policy. The available NPFs provide for the Member States covered a description of the national fisheries; over time, with an update of the NFP, developments can be described. The FCPs to be developed will add more detail to this analysis and focus on the community level. And the set of social indicators developed so far will allow for an analysis of social impacts of policies and developments.

STECF concludes that version 4 of the National Fisheries Profiles (NFP) template, as presented in the report of EWG 24-05, is now robust enough to be used as standard for the production of NFPs. Having said this, STECF acknowledges that this template is designed as a guiding and living document. It has already been reviewed in previous Social EWGs and is expected to evolve through the learning process of developing new NFPs. In addition, the template offers needed flexibility to be tailored to national specific circumstances.

STECF reiterates the need to develop the NFPs as a web-based application (STECF PLEN 23-01, PLEN 23-03). This would allow for easy reference to further information, such as studies and databases. And, in addition, it would facilitate an easier process of updating sections of the information in the NFP that need updating.

STECF concludes that the issue of the development of the web-based application is closely related to the overall issue of whom to be the custodian of the process of collecting the social data. The Commission, Member States and STECF could play a role in this process. However, specific roles and tasks need to be further detailed along the process of shaping the procedures of developing and updating NFPs, FCPs and social indicators.

Noting the findings of EWG 24-05 in evaluating the additional set of 10 NFPs, STECF concludes that a peer review of NFPs is required in order to guarantee sufficient robustness of the NFPs. This becomes even more important when NFPs are used to implement a cross-comparison across Member States. This peer review can be undertaken jointly by national experts, conversant with the national context, and experts assessing the information with an outside perspective.

STECF concludes that, in line with the findings of EWG 24-05, cross-comparison between Member States is possible in terms of fleet structures, management measures and trends and patterns.

STECF concludes that EWG 24-05 has provided a practicable definition of the concept of Fisheries Community. STECF concludes that his definition is suitable for the foundation of the preparation of a series of Fisheries Community Profiles (FCP).

STECF concludes that the concept of FCP, as prepared by EWG 24-05, which builds on elements of the NFPs and on an earlier iteration of a FCP, is robust enough to be the basis for a first selection of 30 FCPs across the EU.

STECF concludes that EWG 24-05 has made a step in the process of further developing operational social indicators, based on questions and issues raised by the social partners. Out of a set of 38 potential indicators, 12 have been found to be ready for use.

STECF concludes that for 2025 the EWG should be established to evaluate available FCPs and evaluate the template used. In addition, the EWG should further develop the set of social indicators.

Contact details of STECF members

[1] - Information on STECF members' affiliations is displayed for information only. In any case, Members of the STECF shall act independently. In the context of the STECF work, the committee members do not represent the institutions/bodies they are affiliated to in their daily jobs. STECF members also declare at each meeting of the STECF and of its Expert Working Groups any specific interest which might be considered prejudicial to their independence in relation to specific items on the agenda. These declarations are displayed on the public meeting's website if experts explicitly authorized the JRC to do so in accordance with EU legislation on the protection of personnel data. For more information: http://stecf.jrc.ec.europa.eu/adm-declarations

Name	**Affiliation[1]**	Email
Bastardie, Francois	Technical University of Denmark, National Institute of Aquatic Resources (DTU-AQUA), Kemitorvet, 2800 Kgs. Lyngby, Denmark	fba@aqua.dtu.dk
Borges, Lisa	FishFix, Lisbon, Portugal	info@fishfix.eu
Casey, John	Independent consultant	blindlemoncasey@gmail.com
Coll Monton, Marta	Consejo Superior de Investigaciones Cientificas, CSIC, Spain	mcoll@icm.csic.es
Daskalov, Georgi	Laboratory of Marine Ecology, Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences	Georgi.m.daskalov@gmail.com
Döring, Ralf	Thünen Institute [TI-SF] Federal Research Institute for Rural Areas, Forestry and Fisheries, Institute of Sea Fisheries, Economic analyses Herwigstrasse 31, D-27572 Bremerhaven, Germany	ralf.doering@thuenen.de
Drouineau, Hilaire	Inrae, France	hilaire.drouineau@inrae.fr
Goti Aralucea, Leyre	Thünen Institute of Sea Fisheries - Research Unit Fisheries Economics, Herwigstrasse 31, D-27572 Bremerhaven, Germany	leyre.goti@thuenen.de
Grati, Fabio	National Research Council (CNR) – Institute for Biological Resources and Marine Biotechnologies (IRBIM), L.go Fiera della Pesca, 2, 60125, Ancona, Italy	fabio.grati@cnr.it

Name	**Affiliation**[1]	Email
Hamon, Katell	Wageningen Economic Research, The Netherlands	katell.hamon@wur.nl
Ibaibarriaga, Leire	AZTI. Marine Research Unit. Txatxarramendi Ugartea z/g. E-48395 Sukarrieta, Bizkaia. Spain.	libaibarriaga@azti.es
Jardim, Ernesto	Marine Stewartship Council MSC, Fisheries Standard Director FSD, London	ernesto.jardim@msc.org
Jung, Armelle	DRDH, Techonopôle Brest-Iroise, BLP 15 rue Dumont d'Urville, Plouzane, France	armelle.jung@desrequinsetdeshommes.org
Ligas, Alessandro	CIBM Consorzio per il Centro Interuniversitario di Biologia Marina ed Ecologia Applicata "G. Bacci", Viale N. Sauro 4, 57128 Livorno, Italy	ligas@cibm.it; ale.ligas76@gmail.com
Mannini, Alessandro	CNR IRBIM Ancona, Largo Fiera della Pesca, 260125 Ancona ITALY	alessandro.mannini@irbim.cnr.it
Martin, Paloma	CSIC Instituto de Ciencias del Mar Passeig Marítim, 37-49, 08003 Barcelona, Spain	paloma@icm.csic.es
Motova -Surmava, Arina	Sea Fish Industry Authority, 18 Logie Mill, Logie Green Road, Edinburgh EH7 4HS, U.K	arina.motova@seafish.co.uk
Moore, Claire	Marine Institute, Ireland	claire.moore@marine.ie
Nielsen, Rasmus	University of Copenhagen, Section for Environment and Natural Resources, Rolighedsvej 23, 1958 Frederiksberg C, Denmark	rn@ifro.ku.dk
Nimmegeers, Sofie	Flanders research institute for agriculture, fisheries and food, Belgium	Sofie.Nimmegeers@ilvo.vlaanderen.be
Nord, Jenny	Independent consultant	nordjenny@hotmail.com
Pinto, Cecilia (vice-chair)	Università di Genova, DISTAV - Dipartimento di Scienze della Terra, dell'Ambiente e della Vita, Corso Europa 26, 16132 Genova, Italy	cecilia.pinto@edu.unige.it

Name	**Affiliation**[1]	Email
Prellezo, Raúl (vice-chair)	AZTI -Unidad de Investigación Marina, Txatxarramendi Ugartea z/g 48395 Sukarrieta (Bizkaia), Spain	rprellezo@azti.es
Raid, Tiit	Estonian Marine Institute, University of Tartu, Mäealuse 14, Tallin, EE-126, Estonia	Tiit.raid@gmail.com
Rihan, Dominic (chair)	BIM, Ireland	rihan@bim.ie
Sabatella, Evelina Carmen	National Research Council (CNR) – Institute for Research on Population and Social Policies (IRPPS), Corso S. Vincenzo Ferreri, 12, 84084 Fisciano, Salerno, Italy	evelina.sabatella@cnr.it
Sampedro, Paz	Spanish Institute of Oceanography, Center of A Coruña, Paseo Alcalde Francisco Vázquez, 10, 15001 A Coruña, Spain	paz.sampedro@ieo.csic.es
Somarakis, Stylianos	Institute of Marine Biological Resources and Inland Waters (IMBRIW), Hellenic Centre of Marine Research (HCMR), Thalassocosmos Gournes, P.O. Box 2214, Heraklion 71003, Crete, Greece	somarak@hcmr.gr
Stransky, Christoph	Thünen Institute [TI-SF] Federal Research Institute for Rural Areas, Forestry and Fisheries, Institute of Sea Fisheries, Herwigstrasse 31, D-27572 Bremerhaven, Germany	christoph.stransky@thuenen.de
Ulrich, Clara	IFREMER, France	Clara.Ulrich@ifremer.fr
Uriarte, Andres	AZTI. Gestión pesquera sostenible. Sustainable fisheries management. Arrantza kudeaketa jasangarria, Herrera Kaia - Portualdea z/g. E-20110 Pasaia – GIPUZKOA (Spain)	auriarte@azti.es
Valentinsson, Daniel	Swedish University of Agricultural Sciences (SLU), Department of Aquatic Resources, Turistgatan 5, SE-45330, Lysekil, Sweden	daniel.valentinsson@slu.se
van Hoof, Luc	Wageningen Marine Research Haringkade 1, Ijmuiden, The Netherlands	Luc.vanhoof@wur.nl

Name	**Affiliation**[1]	Email
Velasco Guevara, Francisco	Spanish Insitute of Oceanography - National Research Council, Spain	francisco.velasco@ieo.csic.es
Vrgoc, Nedo	Institute of Oceanography and Fisheries, Split, Setaliste Ivana Mestrovica 63, 21000 Split, Croatia	vrgoc@izor.hr

REPORT TO THE STECF

EXPERT WORKING GROUP ON
Social data in fisheries
(EWG-24-05)

Virtual meeting, 13-17 May 2024

This report does not necessarily reflect the view of the STECF and the European Commission and in no way anticipates the Commission's future policy in this area

1 Introduction

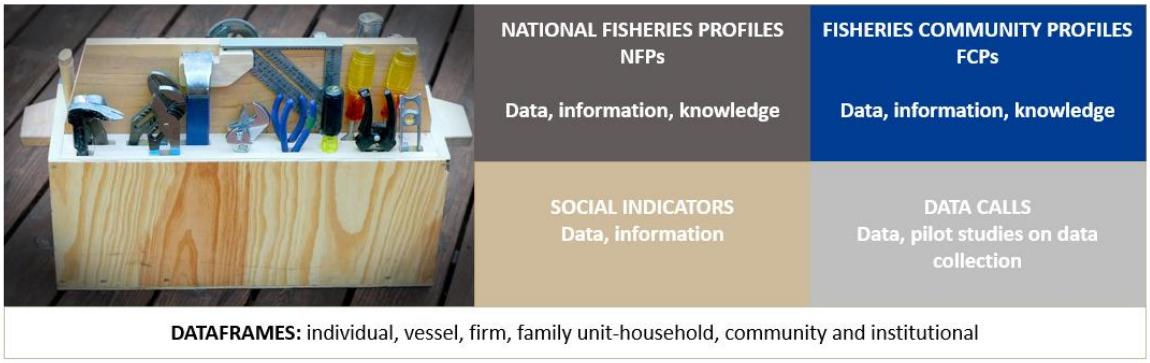
This report on social data in fisheries is the fifth in a series of STECF reports operationalising the social dimension of the CFP and providing analytical tools.

In particular, the report addresses three specific areas. The first is an assessment and update of the National Fisheries profiles. The second provides an operational definition of fisheries communities, including a first partial list of communities and an updated template for developing Fisheries Communities profiles. The third addresses the development of a set of social indicators, pointing at next methodological steps for their integration in a EU data call. It also includes a list of countries for pilot studies on these new indicators. The indicators have been informed by the policy priorities identified by DG-MARE in 2023 and through the stakeholder consultation developed in 2024.

The report has been produced by a group of experts convened under the Scientific, Technical and Economic Committee for Fisheries (STECF) and JRC experts. The group consisted of 20 independent experts. The list of experts can be found in section 8.

The five social EWGs delivered substantive advances in theoretical and methodological approaches to address the social dimension. When implemented, they will allow EU fisheries policy to be based on sound, integrated scientific advice that effectively deals with the social realm. Compared to the environmental, biological, and economic dimensions, the social dimension has been lagging behind significantly. There are multiple contributing factors that explain this discrepancy. First, social aspects cannot always be translated into quantifiable indicators, making their integration into a data collection system less straightforward. Second, social information is always contextual and therefore requires data collection to take place at the relevant scale level, making them less amenable to standardised administrative data collection calls within the EU MAP. In addition, some social aspects are collected within Member states, but cannot be disaggregated to the relevant level in the context of fisheries policy (i.e. the level of a fisheries community). However, these challenges should not deter from using the best available science and evidence to support policy under conditions of complexity and uncertainty. The EWG 24-05 builds on previous work by EWGs and the marine social science research community through ICES, EU and MS-funded research projects, networks and international initiatives to set up the CFP social dimension analysis toolbox (see Figure 1.1). The toolbox allows the delivery of relevant and timely advice, as well as the identification and analysis of issues of importance, to achieve the goals of the CFP. The tools differ in their target, scope, approach and output.

Figure 1.1. Social dimension Analysis toolbox for the CFP.



Source: own elaboration. Image: Toolbox by Joachim Schlosser under CC BY 2.0 Deed

1.1 Terms of Reference for EWG-24-05

Background information

One of the objectives of the Common Fisheries Policy[1] (the CFP Regulation) is to promote social sustainability. The current legal framework refers to labour conditions, health and safety, as well as to job creation and training, social inclusion and a fair standard of living. Fisheries throughout Europe have undergone major structural changes, leading to important social consequences for both individual fishers as well as for fisheries communities. In a number of fisheries communities and regions of the EU, the social importance of the fisheries sector outweighs its direct economic contribution.

The collection of data for calculating the social indicators for **the EU fishing fleet, aquaculture and fish processing industry** is required under the Data Collection Framework (Regulation (EU) 2017/1004 on the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the CFP). The multiannual program for data collection (Decisions (EU) 2021/1167 and 2021/1168) specifies social variables[2] to be collected every three years from 2018 onwards:

- Employment by gender
- Full Time Equivalent (FTE) by gender
- Unpaid labour by gender
- Employment by age
- Employment by education level
- Employment by nationality
- Employment by employment status
- Total FTE National

This data was last collected for the EU Fishing fleet in the STECF 22-06, for the EU Aquaculture sector in the STECF 22-17, and for the EU Fish processing industry fishing in the STECF 23-14. The

[1] Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013.
[2] For definitions and methodology of existing indicators, see:
https://datacollection.jrc.ec.europa.eu/documents/d/dcf/eumap_guidance_social

data of the different working groups are available in the Final reports section of the STECF website[3].

Four STECF Expert Working Groups (EWG) on social data in fisheries have taken place (19-03, 20-14, 22-14, 23-17). Each one built on the work on the previous EWG resulting in the development of a template for National Fisheries Profile, detailed analysis of Member States' implementation of article 17 of the CFP Regulation, recommendations for community profiles and proposed measurements of specific social issues (through indicators, questionnaires, interviews, focus groups).

As the STECF EWG 23-17 report states, community profiles are an important addition to the National Fisheries Profiles, as they provide an analysis of the social impacts of policy developments on fisheries communities at a local/regional level. Initial work was undertaken in STECF EWG 19-03 on the objective and nature of community profiles and method to compile them[4]. This analysis was completed in STECF EWG 20-14 with a more detailed structure and further guidance on the methodology[5] to develop the profiles. This work now needs to integrate the ICES study on fishing communities (i.e. in the Celtic Sea[6], the greater North Sea[7]) as well as related studies, such as the Seawise project work on community profiles in France (Le Guilvinec community profile)[8].

The objective of the EWG 24-05 was closely related to the work previously implemented by EWGs on the social dimension. **Building upon the conclusion of STECF PLEN 23-03, the EWG 23-17 report, the stakeholder consultation of 2024, the 2021 evaluation report of the EU MAP social data pilot studies and the 2019 Technical Report on socio-economic data collection for fisheries, aquaculture and the processing industry at EU level, the STECF EWG 24-05 is requested to carry out the following tasks:**

1. Perform an assessment review of the 13 National fisheries profiles, evaluating fitness for purpose, potential for cross-comparison, and sources enabling subsequent publication.
2. Based on the ad hoc contract that compiled existing literature and proposed a template for Community Profiles, suggest a definition of community that takes into account accessibility of data and social relevance; and provide a first partial list of fishing communities for a number of selected countries.
3. In order to progress on the inclusion of additional social variables in future EU data calls to Further develop quantitative and qualitative indicators based on the policy priorities identified, including unit of analysis, specific source of data per Member State and collection method. In addition, to suggest next methodological steps for the integration of these indicators in an EU data call and identify countries to be chosen for pilot studies on new indicators.

[3] See https://stecf.jrc.ec.europa.eu/reports/economic.
[4] See pp198-204 of STECF Report 19-03.
[5] See pp 81-93 of STECF Report 20-14.
[6] https://ices-library.figshare.com/articles/report/Celtic_Seas_ecoregion_Ecosystem_Overview/21731615.
[7] https://www.ices.dk/advice/ESD/Pages/Greater_North_Sea_socioeconomic.aspx.
[8] https://seawiseproject.org/.

2 TOR 1 National Fisheries Profiles

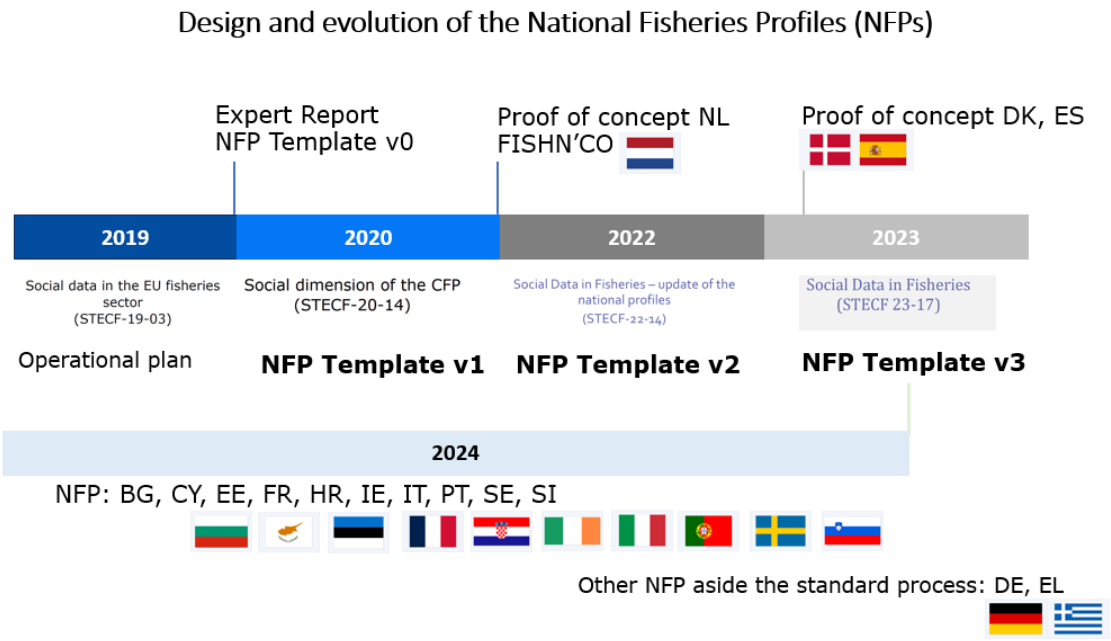
2.1 Introduction

The EWG 24-05 analysed the current status and next steps for the *National Fisheries Profiles* (NFPs), following ToR1: *Analyse the 13 National Fisheries Profiles prepared by experts through ad hoc contracts (FR, CY, HR, BG, IT, SE, SI, EE, PT, ES, NL, DK, IE) and identify:*

a. *To what extent the current 13 NFPs are fit for purpose;*
b. *To what extent the current 13 NFPs allow for cross comparison (common challenges & trends vs. national specificities);*
c. *Potential adjustments to the NFP template to allow for better cross comparison;*
d. *Sources & accessibility of data enabling subsequent publication of NFPs.*

The discussion built on the findings from the process for the design and development of the NFPs started in 2019 (see Figure 2.1). The EWG 24-05 acknowledges DG-MARE in following the advice provided through each step and summarized in the subsequent reports and guidelines to tailor the profiles to their current format.

Figure 2.1. Development and evolution of the National Fisheries Profiles: 2019- 2024.



Source: own elaboration.

The goal of the National Fisheries Profile (NFP) is to provide a comprehensive overview of the fisheries sector, emphasising the social dimension and ensuring that the best available science is used in informing decision-making and societal dialogues (Annex 1 of EWG 23-17[9]). They are considered a key tool to understand the wider social context of fisheries. An overview of the development and evolution of the NFPs is provided in Figure 2.1.

[9] Scientific Technical and Economic Committee for Fisheries (STECF) – Social Data in Fisheries (STECF 23-17).

The ToR 1 requested the analysis of the 13 NFP. However, only 10 NFPs were analysed during EWG 24-05 for the following reasons:

- The NFP for the Netherlands, Denmark and Spain were considered and elaborated as proof of concept. A proof of concept is defined as a process of gathering evidence to support the feasibility of a project. It helps test project viability, identify roadblocks, and gather insights to refine the subsequent process.
- The NFP for the Netherlands was the first to be developed - within the framework of a research project and from the desire of the researchers to advance the development of NFPs for the EU member states (MS). The output was presented and discussed during EWG 22-14 and summarised in the report[10]. This proof of concept informed an update of the NFP template (Version 1, see Figure 1 above).
- Subsequently, NFPs for Spain and Denmark were developed under DG-MARE ad hoc contracts, both using the template developed on the background of the experiences from the NFP for the Netherlands. They were designed to assess the applicability of the template in different MS and the ability to handle complex and plural realities. The output of these two NFP proofs of concept was presented and discussed during EWG 23-17 and summarised in the respective report. This second proof of concept informed the update of the NFP template (Version 2, see Figure 2.1 above), the development of the NFP guidelines and the next steps.
- EWG 23-17 concluded that the work on the NFPs is an important step towards the integration of the social dimension into fisheries management and fisheries advice and should be extended to all MS.
- Subsequently in 2024, an additional 10 NFPs were produced based on a revised template (Version 3, see Figure 1 above) and modified guidelines provided by the STECF in its report. The 10 countries were: Bulgaria, Croatia, Cyprus, Estonia, France, Ireland, Italy, Portugal, Slovenia, and Sweden.
- Whilst the three initial NFP proofs of concept (NL, DK, ES) share common elements, they also diverge from the ten recent NFPs that have been developed based on the findings of the initial NFPs.
- As the structure and underpinning framework for developing the NFPs have evolved based on the lessons learned from the development of the first three, the methodological approach used to assess the most recent NFPs does not allow for a rigorous systematic comparison across all 13 reports. In addition, the exploratory nature of the earlier proofs of concept (particularly for the NL, but also to a significant extent for DK and ES) limits the capability of these to be *'fit for purpose'*. For these reasons, only 10 NFPs were assessed during EWG 24-05.

2.1.1 NFP development in 2024

Following the template provided by in Annex 1 of STECF EWG 23-17, ten new NFPs were drafted in early 2024 based on the following structure: 1) an executive summary containing main findings of the profile; description of the society; fisheries sector structure; governance system; and the social, cultural and economic aspects of fisheries; 2) a brief presentation of methods and data, and 3) the more detailed sections that the executive summary builds directly on.

[10] Scientific Technical and Economic Committee for Fisheries (STECF) – Social Data in Fisheries (STECF 22-14).

In addition, the following specific drafting guidance was provided to authors of the ten most recent NFPs (Annex 1 EWG 23-17 report):

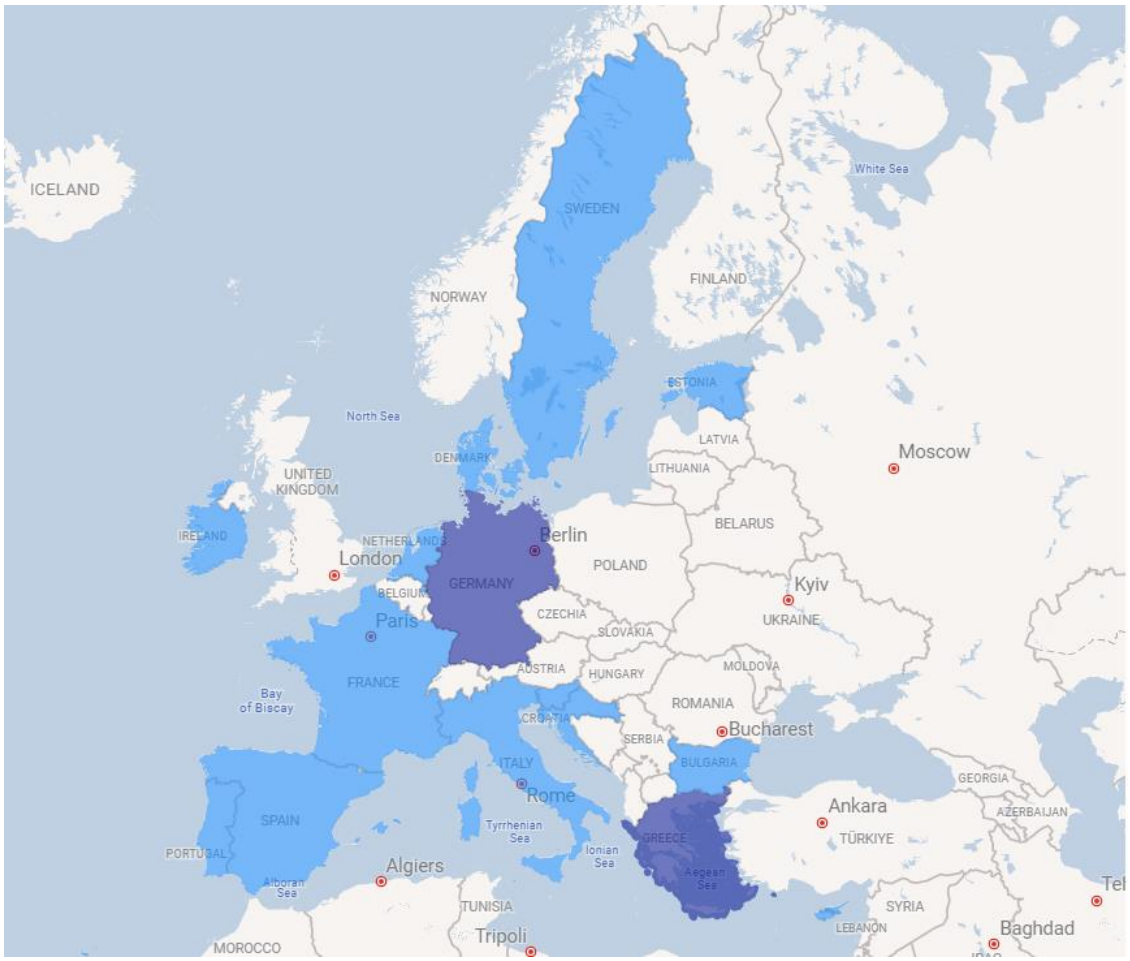
> *The NFP template (see table below) provides the general structure the profiles should take. Given that MS fisheries are heterogeneous with significant differences in terms of fleets, size, history, and social and governance aspects of fisheries (e.g., Malta vs. the Netherlands), the amount of sub-headings should be tailored towards each specific MS case. MS-specific unique aspects not anticipated by the template should be added rather than overlooked. Non-relevant sub-headings should simply be left out. Given the necessary emphasis on the social aspects to complement, for example, the AER, time should be fully allocated for a thorough analysis of the "Social, cultural and economic aspects of fisheries" and "Governance system" sections.*
>
> *Additionally, given that it will take time for NFPs to develop and fully mature, time for reflection on the process should be allocated and prioritized. In addition to the executive summary, infographics could be useful as complementary, explanatory visuals. These are necessary not for summarizing quantitative data per se, but for highlighting key social messages and aspects (e.g. Spain case: fishing communities are dying).*

The development of the NFPs as a stepwise process prompted initiatives at MS level. In Greece, the NFP was an initiative by the Greek team responsible for collecting socioeconomic variables under the DCF. The team tried to combine available information, the team's experience and the research carried out through the years to present the sector's significance. The Greek NFP used the template v.3 (see Figure 2.1). The methodological approach included input-output analysis (to examine the fisheries and aquaculture sectors' linkages with other sectors of the economy) and PESTLE analysis to assess the impact of the external environment on the fishing industry. The lessons learnt from the process have been used in the EWG 24-05. The Greek NFP is available in two languages, Greek and English.

The German NFP was initially scheduled as part of the standard NFPs process. For bureaucratic reasons the Thünen Institut could not accept the ad hoc contract proposed to the experts by DG-MARE. However, the high interest led to the launching of the NFP internally. The profile used the template v.3 (EWG 22-14). However, in the implementation the template showed some limitations (redundancies and prioritization). While half of the profile has been completed, the experts involved are willing to consider the use of the template v4 (proposed here) in order to improve comparability with NFPs of other MS. The NFP is written in English. The authors plan on finalizing it towards the end of the year to complete the compendium of all the NFPs. Publication and availability is to be decided[11].

[11] Currently a "Thünen Working Paper" is discussed (see e.g., Thünen Working Paper).

Figure 2.2. MS with NFP conducted (light blue) and other fishery profile types (dark blue).



Source: own elaboration.

2.2 National Fisheries Profiles fitness for purpose

This section provides an assessment of the ten most recent NFPs (i.e. Bulgaria, Croatia, Cyprus, Estonia, France, Ireland, Italy, Portugal, Slovenia, and Sweden) - all of which having been developed based on the same template and additional explanatory text - and asks to what extent they are fit for purpose based on three sources: short reviews carried out of each of the NFPs by experts at the EWG 24-05 meeting; solicited feedback from the authors on the experience of collating data and information and subsequently drafting the NFPs; various notes compiled from the plenary discussions at the EWG 24-05 meeting supporting the interpretation of the two sources above.

Reviewers of the NFPs were asked to assess these reports according to nine structured questions (as set out in Figure 2.3). The assessment criteria were identified through the previous EWG reports, in which experts stated the goals and applications of the NFPs (EWG 23-17, EWG, 22-14, EWG 20-14, EWG 19-03). The reviewers had the option to select the following answers to the nine questions: *Yes*, *Partially*, or *No* as well as providing *Comments* to support their assessment of the NFPs.

Figure 2.3. Template for the Assessment of National Fisheries Profiles.

ToR1. TEMPLATE FOR THE ASSESSMENT OF NATIONAL FISHERIES PROFILES

Note. The assessment criteria have been identified through the previous EWG reports, in which experts stated the goals and applications of the NFP (EWG 23-07, EWG, 22-14, EWG 20-14, EWG 19-03)

European Commission

EWG 24-05

Social Data in EU fisheries 13-17 May 2024

Please, indicate if the NFP	Yes	Partially	No	Comments
1. Adresses all the items of the NFP template (see sheet 2)				
2. Provides a brief outline of fisheries role in society:				
- structure				
- economic role				
- social role				
- cultural role				
3. Provide social data and knowledge on the social state of the fisheries				
4. provide insights to contextualize social data				
5. provide a brief description of some salient social, institutional and legal elements				
6. provide a deeper socio-economic understanding of how and to what extent fisheries play a role in the Member State at different scales				
7. enable comparison of social variables to identify imbalances in society, addressing questions of well-being and living conditions				
8. enable (if repeated on X year time) for analysis of trends and challenges				
9. allow for comparison of fisheries sectors among Member States, for instance to measure the effects of the Common Fisheries Policy				

Source: own elaboration.

In addition to the results of the assessment templates, written comments were provided by several reviewers. Similarly, some reviewers provided more qualitative accounts during the plenary sessions. All feedback was synthesised into a Summary Assessment Table (Figure 2.4). Overall, the insights from reviewers can be organised as pertaining to either 'high level feedback on the NFPs' or 'specific comments' which is presented below.

The high-level feedback noted that NFPs met most requirements but also that there were some concerns:

- The overall length of NFPs varies widely across the NFPs, ranging from 48 to 172 pages. Feedback included that some of the reports were too long and too comprehensive.
- The length, content and quality of executive summaries were inconsistent across NFPs, ranging from one to 13 pages.
- Reviewers reported that there were missing subheadings or subsections in some NFPs. However, it should be noted that the guidance stipulated that the number of sub-headings should be tailored towards each specific MS case and non-relevant sub-headings could simply be left out.
- Duplication of content was identified in different sections of some NFPs.
- There was consensus that for the most part there was an imbalance of content in terms of the data and information presented in terms of economic and governance data. In general, less content and data were provided for the social and cultural aspects compared to economics and governance.

Figure 2.4. Summary Assessment of the National Fisheries Profiles completed in 2024.

QUESTIONS	BULGARIA	CYPRUS	ESTONIA	FRANCE	CROATIA	IRELAND	ITALY	PORTUGAL	SLOVENIA	SWEDEN
Q1. Adresses all the items of the NFP template (see sheet 2)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q2. Provides a brief outline of fisheries role in society:	Y	Y	Y	P	Y	Y	Y	Y	Y	Y
- structure	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
- economic role	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
- social role	Y	P	Y	Y	Y	Y	Y	Y	Y	P
- cultural role	Y	P	Y	Y	Y	Y	Y	Y	Y	Y
Q3. Provide social data and knowledge on the social state of the fisheries	Y	P	P	Y	Y	Y	P	P	Y	Y
Q4. provide insights to contextualize social data	Y	N	P	Y	P	Y	N	P	Y	Y
Q5. provide a brief description of some salient social, institutional and legal elements	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q6. provide a deeper socio-economic understanding of how and to what extent fisheries play a role in the Member State at different scales	Y	P	Y	Y	Y	Y	Y	Y	Y	Y
Q7. enable comparison of social variables to identify imbalances in society, addressing questions of well-being and living conditions	P	N	P	Y	P	P	P	P	P	P
Q8. enable (if repeated on X year time) for analysis of trends and challenges	P	Y	P	Y	Y	Y	N	P	Y	Y
Q9. allow for comparison of fisheries sectors among Member States, for instance to measure the effects of the Common Fisheries Policy	Y	P	P	Y	P	N	P	Y	Y	P

***Notes**: Y = Yes; P = Partially; N = No*

Source: own elaboration.

Specific feedback was provided based on the Template of Assessment of the National Fisheries Profiles in the form of comments:

- **Q3. Provide social data and knowledge on the social state of the fisheries:** Six of the 10 NFPs provided relevant social data and the other four presented partial social data. This was linked to data availability issues. For example, in many NFPs only quantitative DCF social data was presented and in others, only partial DCF social data was presented.
- **Q4. Provide insights to contextualise social data:** Given the lack of social data presented (as discussed for Q3.), accordingly, limited insights to contextualise the social data were presented.
- **Q 7. Enable comparison of social variables to identify imbalances in society, addressing questions of well-being and living conditions:** It was difficult to evaluate well-being and living conditions based on DCF social data alone or in the absence of any social data.
- **Q 8. Enable (if repeated on X year time) for analysis of trends and challenges:** This requirement will be challenging given the limitations with Q3, 4, and 7 above.
- **Q 9. Allow for comparison of fisheries sectors among Member States, for instance to measure the effects of the Common Fisheries Policy:** There is a need to clarify the social themes that are required to support the CFP or measure the social effects of the CFP.

Insights of the lessons learned from the authors in writing the NFPs were also used in the assessment. The authors of the 10 NFPs were requested to set aside time for reflection on the process (lessons learned from the NL are available in EWG 22-14. Report and for ES and DK in the EWG 23-17 report). In practice, the authors prepared these insights in advance of EWG 24-05. Feedback on their experience was based on the following questions:

1. What is missing from the template?
2. Was the allocated time enough?
3. What was your experience with team/individual work?
4. Any issues on data access and data sources?
5. What was difficult to do?
6. What else do you consider relevant to share?

As in the case of reviewers, some authors provided supplementary qualitative accounts during the plenary at EWG 24-05. It is important to highlight that the authors were *not* asked specifically to comment on whether they considered their NFP 'fit for purpose' but rather on the drafting process (which may constitute a methodological weakness). Some overall, relatively general messages on authors' own perspectives on whether their NFPs were 'fit for purpose' can, nonetheless, be extracted from these contributions from the authors:

Elements not included or not emphasised sufficiently. Several authors noted certain elements were either not included or insufficiently included, reducing the ability of the NFP to provide a full and comprehensive understanding of the social context. Different reasons can be found for why specific elements have been either excluded or included but insufficiently, such as: topics not included in template (e.g. historical development, aquaculture) or not included sufficiently due to lack of data or at least readily available data (e.g. social data, social dynamics, discourses, marginalised groups). According to the drafting guidance, elements not included in the template could/should in fact have been included by the authors, if deemed necessary. However, given the limited time allocated for producing the NFPs, this was most likely in these cases not considered feasible. Similarly, some elements are likely not included as comprehensively as wished for by the authors due to best available science not being *readily available (*e.g. there was not enough time to explore academic journal articles) or datasets were not made available by the data owners within the deadline of the drafting process.

Doubts about quality. Several authors reported a need for a review procedure (through some national process, e.g. peer review, review workshop) for quality assurance and to ensure that the content is based on best available data for the Member State.

Maintaining accessibility while delivering on all points. Some authors highlighted that it was challenging to balance between the need for delivering on all the points whilst maintaining accessibility of the document. Some authors regarded their document as potentially too long and overwhelming. However, at the same time, this was deemed necessary to comply with the template guidance and the limited information of the potential readership of the NFPs made it in any case difficult to prioritise.

The authors' feedback on drafting the 10 NFPs is particularly relevant for **ToR 1.c**, where further analysis of the solicited author responses can be found.

2.2.1 NFP fitness for purpose: main conclusions

The ten recently submitted NFPs are considered largely fit for purpose, although there is scope for improvement. Many of the potential improvements are addressed and described under other terms of reference in this report.

- The NFPs are comprehensive and bring together relevant datasets across economic, social, and cultural spheres.
- According to the guidelines (see annex xx.), the goal of the NFPs is to provide a comprehensive overview of the fisheries sector, emphazising the social dimension and ensuring that the best available science is used in informing decision making and societal dialogues. While NFPs aim to deliver the "best available science", it is important to highlight that the current drafts of the NFPs were constrained by the limited time available, data availability in certain Member States and the extensive breadth of areas to describe.
- The NFPs vary greatly in length, particularly the executive summary, and also vary in quality.
- The NFPs often lack contextual detail and analysis. This is partly due to a lack of time as authors were focused on locating, translating, and describing the relevant datasets.
- The NFPs focus on quantitative data, but this focus can crowd out or otherwise take time away from incorporating qualitative data and a focus on the social aspects (e.g. the inclusion of export and import statistics rather than describing what it is like working in these industries or how these trends impact fisheries culture).
- The NFPs are repetitive, and some sections can be merged, or cross references made.
- The NFPs are lengthy and may discourage reading, particularly the executive summaries.
- The NFPs could benefit from external review (by a relevant expert from the MS in question) and copyediting.
- The NFPs could, in some cases, benefit from the addition of sections on aquaculture, informal structures, and identified data gaps and issues with data quality (see **ToR 1.b and 1.c**).
- The NFPs could be enhanced by comparison between countries and consistency of data sources (see **ToR 1.b and 1.c**).
- The NFPs could be enhanced by having access to information in future Community Profiles that are expected to provide a key source of information by delving into the social context and the governance system (including conflict resolution) at a more appropriate level/scale (see **ToR 2**).
- The NFPs could be enhanced by the collection of more social data than currently exists (see section **ToR 3**).
- The NFPs are likely to become more fit for purpose as future NFPs can build on previous NFPs, thus saving time in the future.
- Periodical updating of the NFPs, combined with the web-based approach for releasing the NFP proposed by EWG 23-17 and supported by EWG 24-05, support the implementation of these improvements.

2.3 National Fisheries Profiles potential for cross comparison

Recognizing the significance of addressing the social dimension, the EWG 24-05 understands the necessity for a comprehensive toolbox. While NFPs might not be considered as the best tools for direct comparison, they still facilitate valuable comparative analysis and the identification of **patterns and trends** at regional, sea basin and EU level.

NFPs can provide essential context for reports such as the Annual Economic Report of the EU fishing fleet (AER). Moreover, by identifying and integrating social tipping points whenever feasible, the explanatory capacity of these reports can be enhanced, providing deeper insights into the social implications of the presented data.

The NFPs are not only able to deliver broad and deep context for the fisheries of the countries, but might also be able to deliver comparisons across MSs with the aim of identifying commonalities in fleets, governance or other social aspects, but also to determine MS-wide trends in fisheries that can then – if harmful- tried to be mitigated. The EWG 24-05 was therefore looking at the comparability of the 10 profiles that have been written according to the same template, as suggested by EWG 23-17.

Several alternatives to assess comparability were discussed and the following approach adopted: (i) from the NFPs template, the components considered crucial (bare minimum) and useful for comparison across MS were selected; (ii) the 10 NFP were used to explore if, how and to what extent the current content is comparable; (iii) the findings informed the development of ToR1c.

The selection included specific sections and transversal topics: Current trends, issues and developments (section 5), fleet structure and interactions across subsectors (section 2), CFP and management systems (section 3), data and definitions.

In general, there are plenty of opportunities for cross-comparisons in the NFPs. To increase the comparability, it needs to be made sure that:

- all elements that should be compared are mandatory in NFPs
- comparable data should be made available in the executive summary already
- follow a clear and similar structure to be comparable
- use resources that ease comparison, e.g. a standardized table with a limited number of common indicators (see also ToR3) or a fact sheet.
- Balance the use of keywords and guidelines with space needed for authors to think, reflect and write about trends, challenges and opportunities.

For the general overview, present in all NFPs, there are differences among the NPFs. There is a great plurality of the paths that MSs provide information on population, GDP, employment, country characteristics, or historical information.

Table 2.1. Assessment of potential for cross-comparison of NFPs.

Topic	**Comparable in general: y/n/partially**	**Which topic in specific are comparable? Additionally: Instructions – how can it be comparable?**
2. Fisheries sector – structure	Y	Clear guidelines to ensure consistent coverage of basic information from all MS.
3. Governance system	Y	Main features of the system (institutions, structures and processes).
5. Current trends, issues and developments	Y	Need clear topics to be comparable; some NFPs describe general trends in fishing, some of the national society. Set a clear timeframe for trends (one year, several years, decades) Challenges need to be included here specifically to be comparable Differentiate between (i) opportunities at hand that will further develop and (ii) opportunities in the future and (iii) theoretical opportunities to be comparable
Data	P	All data sources should be clearly indicated (author's elaboration, official source, etc.) 60% of the data sources are national NFPs use harmonized data sets (e.g. EUMOFA, EUROSTAT, STECF, OECD or GFCM)
Definitions	P	Most NFPs use standard definitions for the indicators, variables and units of analysis available in the AER (e.g. FTE). Definition of the Fleet segment is mostly national while reflecting in the one used in the DCF. Definitions of communities vary, predominantly placed-based. The operational definition set in ToR2 will inform new NFPs and ensure comparison.

Source: own elaboration.

2.3.1. **Comparing the fisheries sector structure**

Understanding and comparing the structure of the fisheries sector across Europe is critical for policy questions, particularly considering that the CFP is designed at EU level combining centralized and regionalized approaches. The NFP template envisaged describing the relevant fleet segments in Section 2.2 on the summary of fleets. It provides an overview of the fisheries sector structure. In addition, it presents a summary of the fleets, geographical areas where they operate, fishing practices/systems, processing, trade and markets, and fisheries communities. The guidelines for 10 NFPs asked for the description of the main marine commercial (SSF, LSF, DFW; include detail on foreign-flagged), recreational (including if, applicable, foreign vessels travelling to the MS areas), and subsistence fleets per MS, but allowed the analysis to group fleet segments according to criteria that are appropriate for the specific Member States (e.g. commercial together, SSF together, etc.).

Several NFPs dedicated special subsections to LSF and SSF: Bulgaria, Croatia, Cyprus, and Slovenia. Other countries included sections to variations of SSF and LSF but adjusted them to local circumstances or divided them into smaller segments:

- Estonia divided LSF into two sections on Atlantic distant water and Baltic Sea trawlers, while SSF was addressed in the Baltic Sea coastal fishery section.
- Portugal included the section on SSF, while LSF was addressed in sections on coastal and long-distance water fishing fleets.
- Italy operates with SSF and LSF terms and summarizes these fleets in general rather than specific sections.
- Sweden divided LSF into sections on the pelagic segment and trawlers and SSF into sections on passive gear.

The third group of NFPs summarised their fleets only using lower levels of granulation based on segments or metiers:

- Ireland: Refrigerated Seawater (RSW) Pelagic segment, Beam Trawler segment, Polyvalent segment (general and potting) which are typical segments recognised by the national fleet in Ireland.

France was the only NFP that summarised the fleet geographically: DWF, NAO area, MBS area, and outermost area.

As for LSF subdivisions:

- The long-distance fleet was addressed in special sections: in Portugal, France, consistent with the relevance of these fleets in the two countries

As for other types of fisheries:

- Recreational fishing was predominantly addressed in special sections, but it is presented only limitedly in some NFPs due to a lack of available information (Cyprus, Ireland, and Slovenia).
- Subsistence fishing was addressed in a special section only in Croatia, and inland water fishery only in Estonia.

Moreover, it is important to mention that all NFPs contain a section on Geographical areas and Fishing practices/systems. The guidelines explicitly instruct authors to provide an understanding of fishing behaviour and strategies at the métier level or within métiers, ideally by presenting métiers used in national science and advisory processes and comparing them to the ones used for the DCF.

Within the Data Collection Framework, there exists an agreed fleet structure utilized by all Member States for reporting data in the Annual Economic Report (AER), Fisheries Dependent Information (FDI) and all other reports. If NFPs contain information pertaining to Small-Scale Fisheries (SSF) and Large-Scale Fisheries (LSF), comparison becomes feasible. However, due to regional differences, data comparability may vary between regions.

It is worth mentioning that NFPs are a unique tool to centralize knowledge often fragmented across MSs and sources, to reflect on the particularities of fleet segmentation at MS level.

Addressing how the fleet is standardized through DCF segments (suitable for comparison) and how it is classified (if applicable) at the country level to capture the richness and complexity of the fleets offers insights unavailable elsewhere.

2.3.2. **Comparing the CFP and the management instruments**

The NFP is also a powerful tool to understand and explain the **implementation, performance and impact of the CFP**. A comparison of the findings in the NFPs, based on the information provided regarding the governance system and management instruments related to the Common Fisheries Policy (CFP) across several countries points to the following:

- The current NFPs depict compliance and management of the CFP. Many countries are aligned with the CFP, providing either essential or comprehensive descriptions of the policy and its impacts. Ireland offers limited information on the CFP but acknowledges its positive effects on fish stocks, market organization, and coastal fishing support through FLAGs.

- Bulgaria, Croatia, Cyprus, France, Italy, Estonia, Ireland and Portugal, all provide some level of description or engagement with the CFP.

- The extent of information varies, with some countries offering essential outlines while others provide more comprehensive details.

- Portugal is the only country marked as "No" for providing information, indicating limited engagement or description of the CFP.

- Italy offers a detailed description of its engagement with the CFP, particularly highlighting its relevance to fisheries management in the Mediterranean and international waters.

The analysis of the management instruments (section 3.3.) allows for the comparison of the plurality of mechanisms operating under the same policy framework, highlighting also institutional change:

- While there are variations in the level of detail provided by each NFP, most offer insights into quota management, institutional changes, and ownership requirements within their respective fisheries sectors.

- Overall, while most countries engage with the CFP to some extent, the level of detail provided varies, with some countries offering comprehensive descriptions of their engagement and management approaches, while others provide more limited information. A concise summary of the extent of engagement with the CFP: Bulgaria has quotas for two species (turbot and sprat) in the Black Sea and applies Article 17 of the CFP; Croatia implements various management instruments such as input controls (gear restrictions, vessel monitoring systems) and output controls (catch limits, quotas); Cyprus primarily relies on effort limitations and technical measures for fleet management, governed by the Fisheries Law and complemented by Fisheries Regulations; Italy adheres to CFP principles, utilizing historical data for quota allocation; Estonia outlines quota systems based on historical landings; and Sweden details a range of management instruments including regulations on licences, gear restrictions,

prohibited areas, and fishing seasons, along with methods for official fisheries statistics collection.

- Regarding quota allocation and management, most NFPs provide information on quota allocation and management, often based on historical catches or vessel characteristics. For instance, Bulgaria, Croatia, France, Italy, Portugal, and Sweden detail their quota allocation processes, including criteria used and the involvement of regulatory bodies like the EU or ICCAT. On the other hand, Cyprus provided limited information, particularly concerning the social criteria for allocating fishing opportunities.

- Significant institutional changes are reported across various countries, such as the introduction of individual transferable quotas (ITQs) in Sweden or the establishment of management plans in Ireland. Changes often aim to enhance sustainability, decrease overcapacity, and adapt to evolving fisheries management policies.

- Ownership varies across MS, both in terms of restrictions (restricted to nationals or entities meeting certain criteria) and regulations governing vessel registration, ownership, and permit issuance. Bulgaria, Croatia, Estonia, Ireland, and Sweden outline ownership rules and specific requirements related to fishing opportunities.

- In some MSs, data on the ownership of fishing vessels is readily available in the national fleet register and can be effectively used as an additional resource for the assessment of generational renewal within the fishing industry. These countries often have transparent and accessible (after a specific request) databases that provide detailed and up-to-date information on vessel ownership. Such data can be invaluable for analysing trends in ownership transfer between generations.

  However, in other MS, accessing data on fishing vessel ownership is far more challenging. Various factors contribute to this difficulty, including lack of transparency, inconsistent data collection practices, and legal restrictions on data dissemination. In such cases, ownership records may be fragmented across multiple local authorities, maintained in non-digital formats, or simply not publicly accessible due to privacy concerns or bureaucratic hurdles (see also ToR3).

  Overall, while some countries might be able to use ownership data effectively to monitor and encourage generational renewal in the fishing sector, others face significant barriers that prevent the use of such data as a reliable source for policy-making and industry assessment.

2.3.3. **Comparing trends, constraints and opportunities**

The analysis of this section in the NFP shows that constraints and opportunities can be compared to a wide extent. However, these topics are somewhat conflated in the current NFPs, also including challenges as another subheading in trends as well as constraints. Therefore, more precise questioning is necessary.

In order to increase comparability, EWG 24-05 suggests the following adjustments to the NFP template.

- **Trends:** It needs to be clarified what trends the NFPs should include. Looking at the 10 NFPs, the following trends were described and deemed interesting from the MS and could be compared in *numbers, using the same unit of analysis*: economic performance (e.g. revenue, operational costs), number of vessels and landings (divided by SSF, LSF, etc.), age of fishers, generational renewal, amount of subsidies, tourism, number of people employed (e.g., in ancillary), days at sea. Additionally, authors mentioned trends that are mostly rooted in case studies. However, if more case studies were be available they could also be comparable, not on a numerical level, but on a more higher *level, referring to a trend*: job satisfaction, well-being, change in values, urbanization/gentrification, ecological issues (e.g. stock depletion, climate change, new species), development of availability of space, consumer awareness.

  So far, short term and long-term trends are included, which are not comparable due to the different timeframes. Depending on what is of interest, a certain time frame should be given for the asked trends, such as 5y, 10y or more.

  Additionally, some trends were mentioned that are very interesting, but seem to capture more current perspectives than trends. These topics can also be very interesting to look at and compare at EU Level: Awareness of environmental impacts, adoption of technology, social conflict.

- **Constraints**: Constraints are mostly understood as challenges in the NFP (as is proposed in the template), which are also sometimes part of the section on trends. The wording needs to be streamlined, maybe complemented with an explanation about what can be understood as a constraint and what can be understood as challenge. Depending on the scientific background of the author, these terms might mean different things. EWG 24-05 propose to separate challenges from trends and constraints. This separation might seem artificial and unintuitively for some authors; however, if they are not separated it will be difficult to compare the NFPs. Alternatively, in this section, it is also possible to ask more or less closed questions that leave no room for misinterpretation, at the cost of narrowing the scope of the author as to what could be mentioned in the section.

- **Opportunities**: NFPs interpret opportunities differently and consider different data sources. Whilst some opportunities seem to be based on the author's expert understanding, others are based on experts 'interviews or SWOT Analysis. It therefore needs to be clarified what type of opportunities are expected in this chapter. Opportunities can be divided into the following categories: (i) opportunities at hand, which have already started and will develop further, (ii) opportunities, which will open up in the near future, (iii) theoretical opportunities. Most NFPs see opportunities in economic areas (e.g., diversifying businesses to link with tourism or science or tertiary sector; increase value of catch), political areas (e.g., participation in fisheries organisation/ political organisations; improvement of working conditions), technology (e.g., development and adoption of new / more sustainable technology, Digitalization), social areas (e.g., changing consumer discourses / values, enhancement of fishermen's capacities for knowledge exchange, consumer trust, increase demand, forging alliances and partnerships, improved training opportunities), ecological areas (e.g., new/untapped resources, preserving and

restoring fish resources, development of mesopelagic fisheries), infrastructural change (e.g., modernising harbours), cultural aspects (e.g., preserving tradition, enhancing knowledge).

One way to structure and streamline – and therefore make it comparable - this last section would be to apply a **PESTLE analysis** (USYD, 2023rence), a strategic analysis tool, as has been used by Greece to conduct their NFP (Agreri, 2023a). This approach analyses opportunities and constraints looking at political, economic, social, technological, legal and environmental aspects. All these aspects have also been identified in the NFP.

Figure 2.5. Greek NFP: PESTLE Analysis.

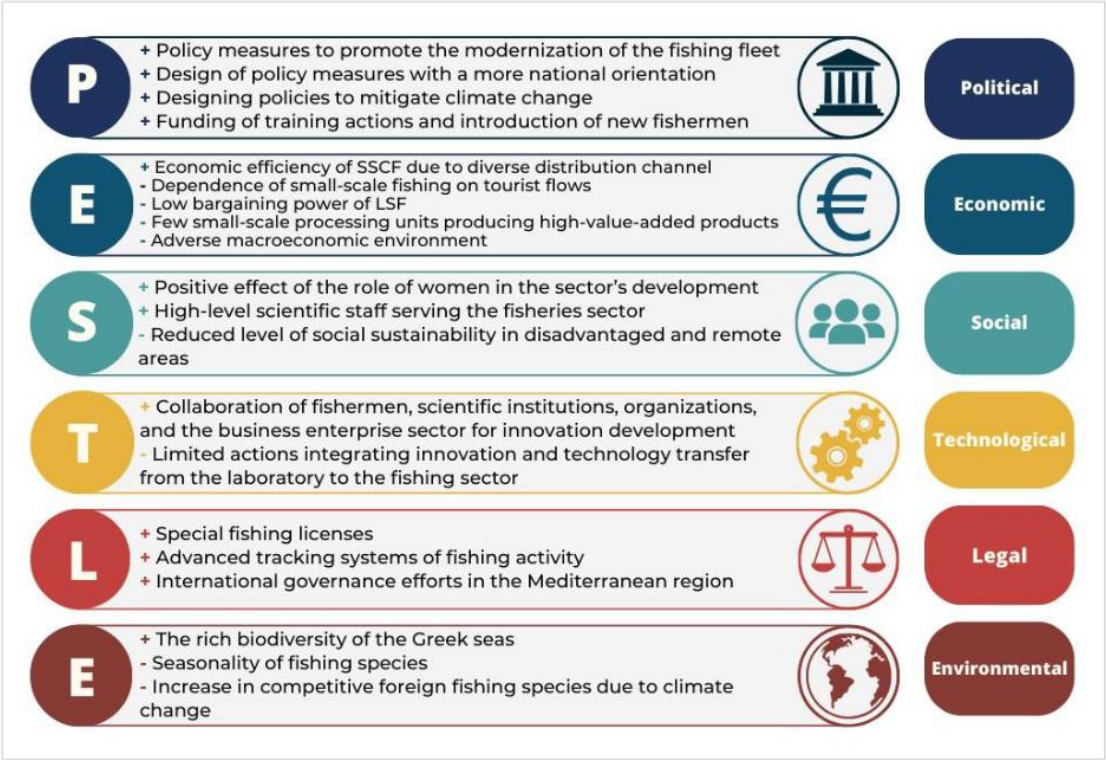


Figure 42. PESTLE analysis. Source: AGRERI, 2023a.

Source: Agreri, 2023a

Conclusions on the NFPs potential for cross-comparison

- Ensuring cross-comparison should not be done at the expense of being able to reflect the plurality and heterogeneity of the fisheries sector in the EU in the NFPs.

- The NFP allows for the cross-comparison of fleet structures. This is facilitated in cases that use the division of sections on LSF and SSF but is not possible in other NFPs. Due to the same specificities, cross-comparison could be easier at the regional level. While utilizing DCF standardized segments facilitates comparison, NFPs should clarify MS specific characteristics regarding segments or fleets, offering insights unavailable elsewhere.

- Comparison across CFP and management measures is feasible, with potential gains coming from ad hoc data collection, e.g. regarding quota allocation (art. 17; see reports EWG 23-17 and EWG 22-14). NFPs also make it possible to address topics that affect the CFP performance across MS, for instance in terms of institutional changes or ownership.

- Understanding trends and patterns is a core asset of the NFPs. Providing streamlined guidance on main concepts (e.g., trends, opportunities) and agreeing on a common

approach will reinforce the capability to compare and track trends at MS, regional, sea basin and EU level

2.4 Potential adjustments to the NFP template to allow for better cross comparison

In proposing potential adjustments to the NFP template, EWG 24-05 considered the following:

- The template is designed as a guiding and living document. It has been already reviewed in previous Social EWGs and is expected to evolve through the learning process of developing new NFPs.
- To avoid endless reviews and discussions, as well as increasing the potential for comparison, the web-based approach detailed in EWG 23-17 (design and implementation) is paramount.
- In selecting the bare minimum components of an NFP, consideration should be given to address MS specificities and allow for authors' reflective thinking.
- Cross-comparison calls for standardisation and harmonisation, while NFPs need to accommodate plurality and heterogeneity across MS:

In light of the above, the proposals tackle three distinct areas: (i) reduce redundancy, (ii) set the bare minimum content to be common across NFPs and (iii) increase comparability. Table 2.2 summarises the rationale for the proposals.

Table 2.2. Identification of improvement areas in the NFP template v4

Improvement area	**Rationale**	**Action**
Redundancy	Assessment (1.1.2) and authors feedback pointed to doubling in the NFP	Streamline the headings and subheadings in order to avoid redundancies. Delete sections that are not relevant. Simplify presentation.
Essential NFPs components	Gaps in the content of some NFPs that limit the comprehension and analysis of the social dimension, in particular the social system.	Incorporate historical context, conflicts, and marginalized groups in the template guidelines.
		State in the guidelines that authors should address activities and subsectors relevant for the fisheries in a given MS (e.g. aquaculture when connected to marine fishing or recreational fisheries, if applicable).
		Integrate ecological topics to connect with social aspects (e.g. invasive species)
	Unbalanced data approaches	Use quantitative and qualitative analysis.

Improvement area	Rationale	Action
Cross-comparison	Identification of comparable items across NFPs is time consuming and not always easy	Providing pre-set tables/figures for organized data sets with clear source citation guidelines.

Source: own elaboration.

In practice, those actions introduce the following changes in the NFP template (see EWG 23-17 for comparison with the NFP template v3):

A. **Background to the NFP.** A useful section to inform the proof of concept for the first NFP, it has lost value as the process advanced. EWG 24-05 suggests to use this part as an introduction to all the NFP in the web-based approach in order to give context, which is the same for each MS though.

B. **Executive Summary**. This section should be structured according to specific questions to provide a good comparable overview of the key points and limited to a maximum of 4 pages:

1. What role does fisheries play in the country? Please, refer to the economic role but focus on the **social role.**

2. What are they key features of the relevant fleet segments/sectors? number of registered vessels, number of people employed (FTE), Age category and gender of people employed in fisheries [max. 2 paragraphs].

3. What are the main fishing grounds with most important species (high level; detailed info will be provided in the corresponding section Number and main ports.

4. Where are the main fisheries communities located and why ((only use keywords: heritage, economic, infrastructure, tourism, community based around fishing, etc.).

5. What makes fisheries unique in that country? Any particular feature of the governance system, any organization, any remarkable trend, etc.

C Methods and data will now include specific assessment of data quality and data related issues, as well as any limitations associated with the methodological approach used.

Building on previous template review, lessons learned, and assessment, the content of Sections 1-5 is condensed and streamlined. EWG 24-05 discussed the essential content that makes a NFP fit for purpose, concluding that the social dimension (including cultural dimension) and the governance dimension are the core pillars that need to be systematically and specifically addressed. Authors may benefit from explicit indications to complete the governance dimension, focusing minimum on institutions, structures and processes, both formal and informal. In particular, attention should be paid to the use of informal channels to address operational issues and facilitate collective action (e.g. Facebook groups and WhatsApp groups, to find crew members).

Section 2 Fisheries sector structure sets the scene with general fisheries information in a mainly descriptive chapter. The description of geographic areas (2.3) gives a general short

introduction of the basin(s), but is not specific about harbours, as this information will follow in the chapter about fisheries communities (using a place-based approach; see ToR2). This should be complemented by information about 2.4. Processing, trade and markets as well as 2.5. fisheries innovation. As this description will focus mostly on non-social data, it should be kept relatively short.

Section 3 Governance system. A general description of the CFP can be moved to the annex or be made available on the website for those readers that are not familiar with the topic. This section should focus on how the CFP "is lived" in the specific MS and how its implementation affected former systems. As a novelty, Marine Spatial Planning (MSP) (3.4.) as a policy process can be described and discussed here already, if MSP has a notable impact on the social aspects of fisheries. Reports on 3.5. fighting IUU fishing and 3.6. the Landing Obligation can focus on social science knowledge in relation to the topics, e.g., (but not only) on compliance.

Section 4 Social, cultural and economic aspects of fisheries shall then contain all further social, cultural and economic aspects of fisheries. The section of fisheries communities can possible be divided into: A) fisheries communities - placed based approach, looking at harbours and geographical areas according to (i) number of vessels and (ii) landings B) (alternative) livelihoods C) Case Studies that exist on social aspects such as tradition, cultural heritage, sense of place, identity, etc.

Section 5 Current trends, issues and developments (containing trends, constraints and challenges) will be restructured according to PESTLE Analysis, an assessment of the impact of the external environment on the fishing industry in terms of political, economic, social, legal, technological, environmental aspects. In this manner, the negative outputs of the analysis can be identified as constraints / challenges. The positive outputs on the other hand can be identified as opportunities. However, to do justice to the flexibility that the NFPs should have, authors should be encouraged to also add to the chapter if they feel the PESTLE is not capturing a certain issue important to their national fishery.

Concluding with **references** and **additional information / annexes**. As mentioned previously, general descriptions that are the same in each MS, as the outline of the CFP, should be moved to the annex, if they do not appear on a website.

During the debates, several guidelines to authors were mentioned:

1. To the extent possible, avoid including tables that are not referenced in the text.

2. Whenever data is not available, please highlight important data gaps and make a strong case to request data.

3. It may be relevant to add a section on "other social data", where results from social science case studies can be gathered, that do not readily fit in any other categories. This could cover for example, awareness of environmental impacts, adoption of technology, as has been stated by some MS in the NFPs.

4. One aim of the NFP can be to capture the most relevant social science literature on fisheries in the MS, making it more of a review chapter.

Table 2.3. NFP Template v4.

Chapter	Subheading	Description
A Executive Summary	Main Findings	The executive Summary shall give a concise and comparable overview on the Fisheries in MS. In contrast to the whole NFP, it focusses on comparable data but will therefore miss out on contextual details. This needs to be kept in mind. - Precise Guidelines / questions that can lead to cross comparison 1. General information on fisheries sector structure (in SHORT) - Information on relevant fleet sectors/segments: number of registered vessels, number of people employed (FTE),Age category and gender of people employed in fisheries - No of harbours - Accessible fishing grounds / basins with most important species 2. Governance System: - List (impact of) most important management tools - Marine Spatial Planning: Main (foreseen) social and economic impacts on fisheries after MSP 3. Social, cultural and economic aspects of fisheries - Listing of (most important) fisheries communities and why (only use keywords: heritage, economic, infrastructure, tourism, community based around fishing, etc.) - Important, or already researched, or under researched topics related to fisheries communities (keywords/topic sentences) - Main tool of social security in MS - meaning of other sectors using the same resource (space for aquaculture and OWF and fish for recreational fishing) and potential conflicts 4. Trends / Challenges - Most important trends and current issues (social!) (max. 2 each - (if available) Future vision/trends on fisheries
B Methods and Data		Reflection on data limitations, data quality, process and methodological approach.
1. General description of the society		Common indicators already existing and harmonized across EU (EUROSTAT, National Statistical Institutes; e.g. population, unemployment rate, migratory balance, average household size, fertility rates, GDP/GVA)
2. Fisheries sector structure	2.1. General overview	Setting the scene - general fisheries information, mainly descriptive. Specifically addresses employment
	2.2. Summary of fleets	Fleet, fishing practises and fishing systems.
	2.3. Geographic areas	general short introduction of the basin(s), not specific about harbours (follows later in fisheries community)
	2.4. Processing, trade and markets	
	2.5. fisheries	

Chapter	Subheading	Description
	innovation	
3. Governance system	3.1. Responsible authorities	
	3.2. National organizations	include: producer organizations (which form, how many, organizational processes), other national organizations, relevant stakeholder groups
	3.3. management instruments	How is the CFP "lived" in the MS? How is the attitude towards it, how is compliance? Government support to fisheries,
	3.4. Marine Spatial Planning	
	3.5. Fighting IUU fishing	focus on social knowledge (e.g., about compliance) available evidence (e.g. improve/worsen), institutional devices (e.g. positive/negative incentives)
	3.6. Landing Obligation	focus on social knowledge (e.g., about compliance) available evidence (e.g. economic and social impacts assessments), social innovations.
4. Social, cultural and economic aspects of fisheries	4.1. Fisheries in the national societal context	Adding social context, discussing the insights from sections 2-3 through a **social lens**
	4.2. Social security systems and other social benefits.	Describe the self-employment system (and what that means) and the social security system (for both crew and owners) Describe other social benefits (fund for training, social workers system, etc.
	4.3. education and training	
	4.4.fisheries communities	A) fishing communities - placed based approach: harbours/geographical areas according to (i) number of vessels, (ii) landings B) livelihood C) Case Studies that exist on social aspects such as tradition, cultural heritage, sense of place, identity, etc.
5. Current trends, issues and development	5.1. PESTLE	Apply the PESTLE framework and present results
SEE 1b	5.2. Others	Other trends, challenges and opportunities that did not result in PESTLE
	5.3. Future research questions	

Chapter	Subheading	Description
6. References		
7. Additional information		Same Annex for everyone - e.g. description of the CFP -> for all profiles

Source: own elaboration.

2.4.1 Conclusions on the potential adjustments of the template to allow to better cross-comparison

- Adjustments to the current template (NFPv3) are needed to improve cross-comparison. EWG 24-05 provides an updated version (NFPv4). The new template is designed to reduce redundancy and increase robustness through the identification of core components and the definition of specific questions to guide NFP authors and future developments.
- The new template provides clear guidelines and structure. However, this will mean a trade-off against certain leeway that should also be part of the NFP to set individual (and based on expert knowledge from the authors) focal points for the individual countries, since NFPs are always written in the context of the MS, their current issues and developments.

2.5 Sources and accessibility of data enabling subsequent publication of NFPs.

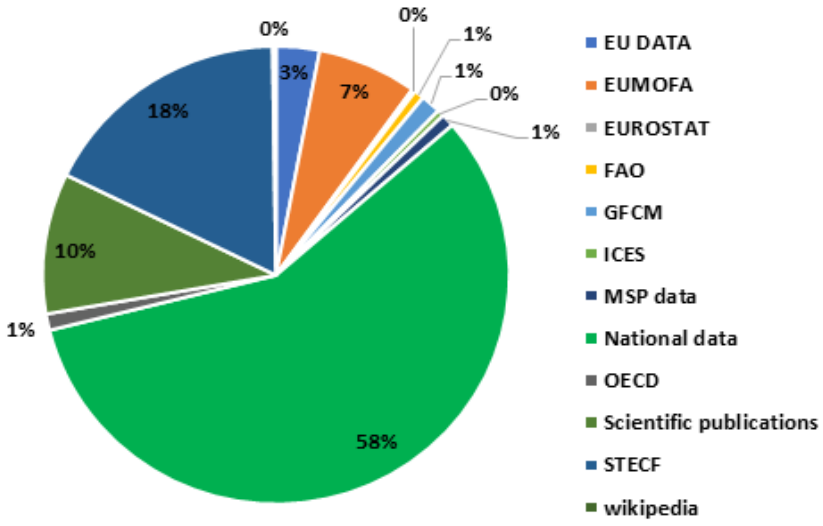
The analysis of the sources used in the 10 NFPs should be understood in the context of the following:

- The selection of sources has been driven by the template provided to develop the NFP (see ToR1a), the constrained time frame for drafting and the attempt to use sources that allow cross-comparison (e.g. STECF, EUMOFA, or OECD).
- Data availability, data access limitations when available and data quality issues shape the final selection included in each NFP.
- The specific features of the fisheries sector (e.g. social, cultural, economic relevance in a given country), and the attributes of the governance system (e.g. centralised vs. decentralised; sectoral policies vs. transversal policies) should be considered when assessing data sources and calling for new data. In this sense, some MS may have -for instance- a highly sophisticated system to account for accidents at sea or to track quota allocation across fishers organisations which would be pointless in others.

The main sources utilised in the NFPs listed by the authors encompass a blend of official data from governmental agencies, general statistical information and data collected under the EU Data Collection Framework (see Figure 2.6). These primary sources include official fisheries data provided by respective national agencies or ministries, economic and social data, import and export statistics sourced from Eurostat, and consumption data from market intelligence tools such as EUMOFA. Additionally, countries often rely on secondary sources such as reports from STECF, ICES and GFMC, scientific publications, and grey literature to supplement their primary data. This

comprehensive approach ensures a robust understanding of each nation's fisheries sector, encompassing aspects affecting the socio-economic dynamics.

Figure 2.6. Comparative analysis of data sources in the NFPs.



Source: own elaboration from NFPs for BG, CY, EE, FR, HR, IE, IT, PT, SE, SI.

The data sources utilised to create the tables, figures, and charts in the 10 NFPs were examined by STECF EWG 24-05. The national data used represents 58% of all sources used, followed by data from STECF reports and scientific publications. This was done in order to determine whether it is preferable to have a reference to the official reports where the end user can read them, or if it is better to have the corresponding tables or numbers as part of the NFP.

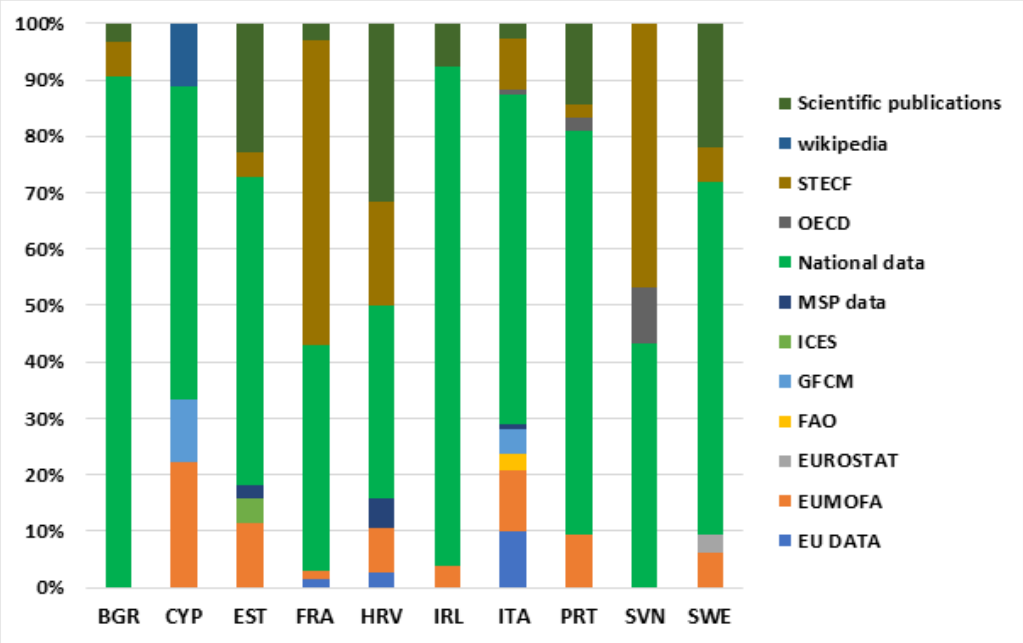
The use of different data sources varies greatly amongst the MS, which may be explained by regional variations in the data that is accessible, the MS's participation in various organisations (such as GFCM, EUMOFA, etc.), or available national data (see Figure 2.7).

For the majority of the MSs, national data was the most favoured data source, which may indicate that data provided in the NFPs is not available elsewhere and/or provide a more comprehensive view of its specific features (e.g. structure of the fleet, see section 1.1.3). The EWG 24-05 noted, that even though some of the sources could be assigned to the group of national data, e.g. tables, figures or text from the Annual report on efforts to achieve a sustainable balance between fishing capacity and fishing opportunities or other documents, which are developed at national level, but are following the same guidance, which means that the data is homogenised between the different MSs. In the majority of the NFPs there are authors' elaborations, which are not available in other

documents, but the data that is used exist in each MS, so in principle the same or similar elaborations could be developed for all the MS and they will be comparable.

The analysed NFPs used data available in the EUMOFA, EUROSTAT, STECF, OECD or GFCM reports, but it should be noted that the information comes from various reports issued by these authorities during the years. While in the assessment of the NFP (see section 1.1.2) the added value of repeating tables available elsewhere was discussed, it will be easier for the end user to read the information without having to flip between several different documents, so EWG 24-05 agreed that it is better to keep these sources in the NFP, rather than only making a reference to the original reports. Setting a Website to publish the NFPs provides a more functional and user-friendly approach, using links to navigate through different documents and reducing considerably the length of the NFPs.

Figure 2.7. Comparative analysis of data sources used in the 10 NFPs



Source: own elaboration.

Data source: NFPs. Note: the label "EU data'' indicates data sources like regulations, studies financed by the European Commission and information from the European Parliament.

Several good practices came out of the assessment of the data sources regarding:

- How the sources should be provided under different figures or tables (PT NFP). Under each figure, there is additional information if it is the author's elaboration, if the data is based on expert knowledge, etc.
- Some of the sources that were assigned to STECF, national data, or other sources are indeed author elaborations based on those data, which make them unique; hence, it will be useful if in future NFPs the authors include information if there is elaboration of the data.

- Some of the tables used as sources of data for the text were listed as annexes, which could be a good solution for the heavier tables to be easily accessible by the end user and still not be in the main text body.
- Even if the official source is, for example, EUMOFA, in some of the NFPs there is a note that the source for EUMOFA is national data. Using data coming from publicly available data sources that are common to all Member States can be seen as an advantage for potential data comparison, taking into account that this data is already harmonised and standardised.

During the EWG 24-05 all the authors of the 10 NFPs presented their experience in gaining data. France, Ireland, Bulgaria, Slovenia, Germany and Cyprus reported no major problems with accessing the existing data, although Cyprus noted time constraints for follow-up data requests. Italy also encountered no significant issues with data access or sources, with collaboration with key entities helping to overcome potential obstacles. Some of the data in Portugal was not being publicly available, but it was readily provided upon request to the responsible authorities.

Authors not affiliated with a national institute tasked with data collection, found accessing the necessary data challenging. This difficulty may arise due to data not being publicly accessible or not being available at the required level of aggregation, which can occur if the data is deemed confidential. As a result, the authors may encounter obstacles in drafting the NFP, potentially compromising its quality and relevance. The letter of introduction, which was kindly provided by DG MARE to the authors of the NFPs allowed them to request access to specific data to cover the different topics, but there is a need to find an additional mechanism to assist authors in cases where a letter is not sufficient.

The authors of the NFPs and EWG 24-05 concur that despite having access to existing data, there remains a notable lack of systematically gathered social data. This absence poses challenges in comprehensively understanding various social phenomena and their implications. This underscores the importance of implementing such systematic approaches to social data, which is essential for informed decision-making and effective policy formulation.

The analysis of data sources and the inclusion of data quality and availability as a specific topic for the new NFPs (template NFPv4 described above) shed light on the complementarity of the analytical tools. The NPFs have the ability to **give extensive context to the Social Indicators** collected in MS (see ToR3), whilst so far it is not possible to elucidate social indicators from the NFPs directly. However, they are a way to understand which indicators are comparable and which not, even if they are collected with the same unit of analysis. For instance: information about the social security schemes in MS and therefore social security contributions that need to be made will set the perspective on the comparability of income of fishers.

2.5 Conclusions on the analysis of data sources and accessibility enabling subsequent publication

- The analysis of the data sources did not identify any concerning issues in the current NFPs regarding confidentiality.
- The absence of statements on data quality issues by NFP (1.1.2) makes it difficult to fully evaluate the adequacy of all the sources used. This shortcoming has been addressed through the adjustment to the template, which explicitly asks for these for future NFP.
- The NFP benefited from harmonised data sources at EU level and provided unique data not

available elsewhere.

3 Community Profiles

Compared to frontrunner countries such as the USA[12] or Australia (Delaney 2024) the EU is lagging behind in developing tools to understand social impact at the level of fisheries communities. Although it has taken initial efforts in 2019 to launch a fisheries community profile system (EWG 19-03), progress has been slow. Such delay hampers the capability to perform social impact assessments.

The European Commission's Better regulation agenda (2015)[13] calls for the mandatory assessment of the expected impacts of policy measures. The guidelines on impact assessment state that the three broad categories of impacts (i.e. economic, social, and environmental[14]) must be covered in a balanced and integrated manner as a contribution to sustainable development. The assessment should list relevant positive and negative impacts, direct and indirect, intended and unintended, one-off and recurrent, including a quantitative assessment of those impacts where possible and proportionate. The available guidelines and toolbox state, for instance, that "regulations fail, i.e. when public policy action appeared justified and was implemented but failed to solve the problem satisfactorily or helped create new problem; or that "Equity/social considerations imply the efficient outcome may not be the most desirable one for the policy in question" (European Commission, 2023).

In light of the above, the FCPs will support proper social impact assessment of EU policies, as well as understanding of the impact that cumulative policies (e.g. MSP, energy transition) or political, economic and social broader context (e.g. Brexit, pandemics, wars or other crises).

The EWG 24-05 developed a definition of fisheries community for the purpose of developing fisheries community profiles (FCP). They are intended to support the potential impact assessment (positive and negative) of policy decisions, management measures or of shocks and crises. FCPs as such are intended as one of the tools at hand to better understand the social dimension of the CFP. It developed a method to have a preliminary list of fisheries communities for profiling and discussed the template for the FCP. It did all this in response to ToR2:

> Based on the ad hoc contract that compiled existing literature and proposed a template for Community Profiles:
>
> a. Suggest a definition of community that takes into account accessibility of data and social relevance;
>
> b. Provide a first partial list of fishing communities for a number of selected countries.

3.1 Definition of fisheries community

An encompassing definition of what a fisheries community is, that captures the many multiple facets and dynamics of these spaces, where humans interact with the marine environment through fishing, is a challenging process. European fisheries communities can be ancient or very modern

[12] https://www.fisheries.noaa.gov/national/socioeconomics/fishing-community-profiles and https://www.fisheries.noaa.gov/national/socioeconomics/social-indicators-coastal-communities

[13]. The Better Regulation agenda (2015) has been updated in 2015, 2016, 2017 and 2021. For detailed information see Better regulation - European Commission

[14] This is consistent with the objective in the Treaty to work for sustainable development (Article 3.3 TEU), described across its economic, social and environmental dimensions: based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment.

conforming to a mixture of characteristics along a spectrum from more traditional to up-to-date social and economic practices. For example, the system of payment of fishers based on a proportion of the value of the landings is a very old practice that is very present in the fisheries sector today while the practice of online seafood sales is very recent and was fostered by the conditions during the Covid-19 pandemic.

The expert group convened and went through brainstorming-discussion exercises covering the following subjects:

- Fisheries communities as places (not geographically narrowly bounded) where individuals have the possibility to grow into/up as a fisher (or into other occupations closely associated with fishing such as becoming a fish seller in a local market).
- To use *fisheries* rather than *fishing* communities, to highlight the linked importance of fishing with ancillary activities and the value chain[15].
- Social and economic relationships are created and maintained.
- Preconditions for a place to be categorised as a fisheries community can be [note this is not meant to be cumulative, but alternative]:
    - Families with ancestors employed in fisheries often go back many generations (increases the chance for generational renewal).
    - Individuals with fishers' "habitus" that are internal and are not motivated purely by monetary objectives.
    - A portion of the individuals may share values, identity, norms, and interests (for example aspirations to keep the community alive, value their identity, imaginaries of the future, etc.).
    - A portion of the population has granted access to extract and land marine resources.
    - The community exhibits material and immaterial cultural heritage.
    - Fisheries communities are dynamic and constantly evolving but can vanish (disappear).
    - Fisheries communities are places where residents have strong social capital that strengthens collaboration. Nevertheless, due to power relations, rivalries and conflict can develop among its members (for example between skippers and crews or external large-scale and small-scale fisheries).

The fisheries communities are place-based, but can pertain to wider geographical areas which gravitate towards the harbours, and are likely to include fisheries-based organisations and ancillary industries in the seafood value chain. A way to identify fisheries communities (in the past or the present) is that they very often exhibit material cultural heritage (a statue or - another artistic expression) referring to a fisher, the wife or mother of a fisher, a fishing vessel or a fishing resource in a central and visible place where "everyone can see it".

Social scientists have hypothesized that not only do fisheries communities depend on and need healthy fishing stocks but – maybe more important - healthy fishing stocks need healthy fisheries communities (see Jentoft, 2001).

Inhabitants of fisheries communities often self-identify with living in a fisheries community, even when they are no longer active in fisheries or its value chain

From literature (Urquhart, Acott 2013) we know that this also is the case for communities where no activity remains whatsoever and are only a historical fisheries community. The fisheries often remain part of the (im)material cultural heritage of the place.

[15] As in previous reports the concept of fishing communities was also used, when referring back we might use that concept as well. Yet in this report we have defined 'fisheries community' and will use this consistently going forward.

After three rounds of plenary discussion, the following definition is suggested for the profiling of fisheries communities:

> *Fisheries communities pertain to settlements around fishing harbours where the fisheries generate social and economic benefits (e.g., employment), and which enables new generations of fishers, due to shared norms and inter-generational links. Such norms are reflected in, for instance, resource stewardship, notions of shared materialities, cultural heritage, and interests, ways of life, and a sense of belonging. Fisheries communities are place-based but can pertain to wider geographical areas which gravitate towards the harbours, and are likely to include fisheries-based organisations and ancillary industries in aquatic food value chains.*

Note:

The proposed definition of fisheries communities represents a trade-off between data availability in EU, applied research, scientific literature, and theoretical discourses in regard of the concepts of place-based communities, sense of place, and communities of practice.

In an attempt to provide an operational, pragmatic definition, it is important to consider, that fishing communities (practicing fisheries) are embedded in and part of coastal communities. Fisheries can be seen as a sub-unit of coastal communities. In some instances, fishers might form the dominant community at a place, which gives the coastal community its distinct character through their way of life. In other cases, fisheries might be just one aspect of diverse practices within a coastal community (e.g. shipping, tourism, renewable energy, aquaculture, agriculture).

Some of these practices are closely linked to fisheries, most of all: recreational fisheries, pesca tourism and aquaculture. The boundaries between these three practices are often blurred, especially when it comes to the harvest or extensive (on-bottom) cultivation of shellfish in Europe. In consequence, experts recommend including recreational fisheries and aquaculture in the NFP (and communities profiles) where appropriate.

3.2 Fisheries communities list

The heterogeneity and richness of fisheries communities across the EU is well known. The ToR2b specifically requests a **partial list** from a number of selected countries. The EWG 24-05 understands the list as a starting point for launching FCPs, following a similar path to the development of the NFPs.

The selection process has been based on the following considerations:

- The alignment with the operational definition of fisheries communities provided under ToR2a
- The need to reconcile the constraints of the ToR's request (partial list) with the comprehensiveness of the list proposed.
- The geographical coverage across MS and sea basins.

- The use of a sound methodological approach to ensure robustness and consistency.

The communities to be included in the list should meet *at least one* of the following criteria:

1. **Plurality:** Communities selected are cases in multi-dimensional terms, e.g., ports presenting technical and economic plurality, meaning the chosen place is used by different types of fisheries (SSF, LSF and/or DWF), fishing metiers (species landed, gears used); or ports presenting social plurality (balanced age structure; different fishers' group identities; multi-used harbours for tourism, fisheries, transportation, offshore wind platforms supply).

2. **Contrast:** Communities selected based on the principle of maximum contrast (Nohl, 2010; Flick, 2014) inside a MS, e.g., places with an active fleet (living fisheries communities) vs places where fisheries is disappearing ("to be lost" fisheries communities); places with a specialised fisheries community (targeting one species with a certain technique) vs. a plural fisheries community (see above).

3. **Policy impact:** Communities selected based on their capability to illustrate the answers to specific policy questions. For instance, what would be the likely impact (positive or negative) of: setting a Marine Protected Areas (MPAs) limiting access to fishing grounds and the exploitation of living aquatic resources; the deployment of Offshore Renewable Energy (OREs) (including cable routes for onshore-connection) restricting access to fishing grounds; the energy transition, etc.

Some communities meet all three criteria. However, selecting cases for fisheries community profiling follows purposive sampling. The sampling is driven by theoretical consideration of the question: What path of development in fisheries does the selected case represent (qualitatively)? EWG 24-05 has documented and justified the initial pool of communities selected (tables 3.2-3.4) according to best social science practice (sampling traceability and comprehensibility).

A detailed list of the 96 EU fisheries communities from 16 MS selected as potential candidates for the short list is provided in Annex I. During the discussions, the criterion of geographical representativeness was considered in light of large/small countries, one/multiple sea basins and including the Outermost regions.

EWG 24-05 acknowledges the shortcomings associated with developing the list in a short-time frame, which hampers effective thinking and consideration of the many trade-offs at play. The fact that the meeting was online, did not help in this process. Being in the same room with the maps, criteria and ranks would have sped up the process and saved time for in depth discussion.

Table 3.1. Pool of fisheries communities selected to inform the elaboration of the partial list.

	Dominant criteria for selection			
Sea basin	**Contrast**	**Plurality**	**Policy**	**Total fisheries Communities**
Atlantic Ocean	22	9	15	46
Baltic Sea	11	3	6	20
Mediterranean	5	17	2	24
Outermost regions			6	6

Total	**38**	**29**	**29**	**96**

Source: own elaboration.

The initial pool of 96 communities was ranked at MS level based on limited resource allocation and alignment with the goals of the FCPs. In doing so, three lists are provided.

Table 3.2. List of 15 fisheries communities.

PARTIAL LIST OF 15 FISHERIES COMMUNITIES	
Contrast	Zeebrugge (BE), Hirtshals (DK), Palamós (ES), Killybegs (IRL), Olhão (PT)
Plurality	Zygi (CY), Kavala (GR), Kali (HRV), Mazara del Vallo (IT), Ijmuiden (NL)
Policy	Neuharlingersiel (DE), Canary Islands (OR), Laseo (DK), Audierne (FR), Viana do Castelo (PT)

Source: own elaboration.

Table 3.3. List of 30 fisheries communities. [New communities in bold].

PARTIAL LIST OF 30 FISHERIES COMMUNITIES	
Contrast	Zeebrugge (BE), **Kröslin (DE)**, Hirtshals (DK), Palamóns (ES), **Séte (FR), Komiža (HR),** Killybegs (IRL), **Zoutkamp (NL)**, **Trzebieżor (PL)**, Olhão (PT), **Simrishamn (SE)**
Plurality	Zygi (CY), **Langø (DK)**, **San Lucar de Barrameda (ES)** Kavala (GR), Kali (HRV), **Dingle (IR)**, Mazara del Vallo (IT), **Marsaxlokk (MT)**, Ijmuiden (NL), **Peniche (PT)**
Policy	Neuharlingersiel (DE), Laesø (DK), Canary Islands (OR), **Guyane (OR)**, **A Mariña (ES)**, Audierne (FR), Texel (NL), **Darlowo (PL)**, Viana do Castelo (PT)

Source: own elaboration.

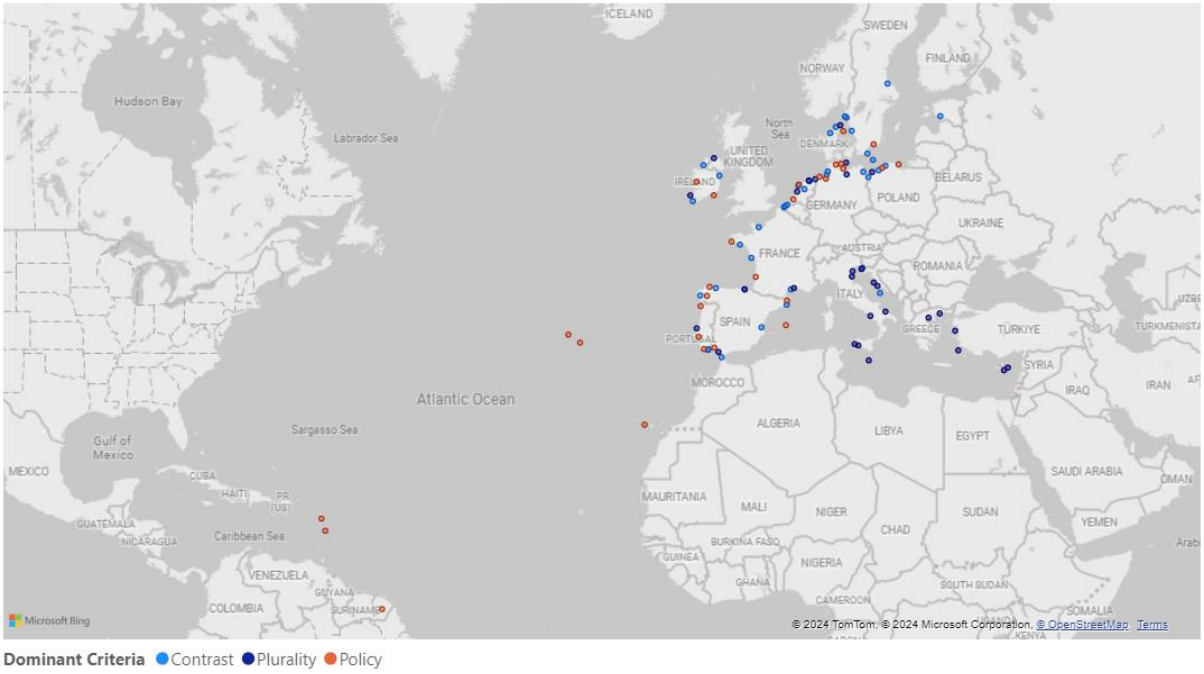
Table 3.4. List of 60 fisheries communities. [New communities in bold].

PARTIAL LIST OF 60 FISHERIES COMMUNITIES	
Contrast	Zeebruge (BE), **Nieuwpoort (BE)**, Kröslin (DE), Hirshals (DK), Palamóns (ES), **Noia (ES), Pärnu (EE),** Séte (FR), **Port-en-Bessin-Huppain (FR), Lorient (FR),** Komiža (HR), Killybegs (IRL), Castletownbere (IR), Zoutkamp (NL), **Urk (NL)** Trzebieżor (PL), **Ustka (PL),** Olhão (PT), Simrishamn (SE), **Izola** (SI)
Plurality	**Ostendee (BE),** Zygi (CY), Langø (DK), San Lucar de Barrameda (ES), **Arcachon (FR)**, Kavala (GR), **Michaniona (GR)**, **Lesvos (Mytilene) (GR)**, Kali (HR), **Tribunj-Murter** (HR), Dingle (IR),**Greencastle (IR)** Mazara del Vallo (IT), **Salerno (IT)**, Porto Garibaldi (Emilia Romagna) (IT), Marsaxlokk (MT), Ijmuiden (NL), **Lauwersoog (NL)**, **Stellendam (NL)**, Peniche (PT).

PARTIAL LIST OF 60 FISHERIES COMMUNITIES	
Policy	Neuharlingersiel (DE), **Heiligenhafen (DE)**, **Maasholm (DE)**, Laeso (DK), Bagenkop (DK), Canary Islands (OR), Martinique (OR), São Mateus da Calheta (OR), A Mariña (ES), **Bermeo (ES)**, Roses (ES), Audierne (FR), **Sables d'Olones (FR)**, **Rossaveal (IR), Dunmore East (IR),** Sciacca (IT), Texel (NL), **Darlowo (PL)**, **Ustka (PL),** Viana do Castelo (PT), **Armação de Pêra (PT), Smögen (SE)**

Source: own elaboration.

Figure 3.1. Locations of the fisheries communities identified by dominant criteria.



Source: own elaboration.

In considering the next steps for the FCPs, the EWG 24-05 advises to:

- Expand the focus beyond EU fisheries communities to include others in the continent (United Kingdom, Norway and Turkey) in which EU fisheries are embedded or highly interconnected, as well as interactions in the Mediterranean Sea with other countries. Fishing is an offshore activity with international interplays that does not stop on inter-continental borders on the seaside (just like fish stocks); although a sole landside perspective (ports) draws us to do so. Ignoring important fishing nations in the direct neighbourhood of the EU might lead to large data gaps and misrepresent the understanding of the socio-ecological complex of fisheries communities.
- Update the systematic comparative analysis across the EU on fishing dependency developed a decade ago (JRC, 2012-2013), as proposed by EWG 23-17. For consistency and , use the fisheries community definition proposed (ToR2a). The analysis will support the development of NFPs, FCPs, the understanding of trends across Europe and inform the selection of communities from the partial and full lists provided.

- Facilitate the mobilisation of resources at EU, MS and regional level to complete FCPs, while promoting the use of the common template (see 1.2.4) and the fisheries community definition.
- Assess the FCPs developed to ensure they are fit for purpose and inform learning and adaptation. This could be done through the Annual Social Report proposed.

3.3 Draft Fisheries Community Profile

Prior to the EWG 24-5, an ad hoc contract was given to develop a first draft of a Fisheries Community Profile. The resulting report in addition discusses community profiling efforts in Australia and the USA. What becomes clear from the developments in these other parts of the world is that in the USA these are backed by legislation and regulations resulting in a robust fisheries community profile system. In Australia profiling has been more related to projects and was rather profiling of fisheries, incorporating looking at communities. Similarities between Australia and USA is the link made with the topics of Seafood and environmental justice and the use and archiving of online data (having web based applications) with the Benefit of profiles (and shorter snapshots) readily available (Delaney, 2024). What was also noted by the EWG 2024-05 was the production of three fisheries community profiles in France, as part of the EU HORIZON 2020 funded SEAWISE project (https://seawiseproject.org/). No 101000318).

From these experiences, it also becomes clear that fisheries community profiling will also most likely require some sort of rapid assessment or ground truthing fieldwork to compile local-specific data from stakeholder and fisheries representatives.

The initial draft developed for a FCP was discussed by the EWG 24-5, which resulted in a number of additions (in red). For the FCP to support evidence-informed policymaking, emphasis should be on placing community context, providing descriptions and data (e.g. 2-10 pages). The NFPs (ToR1) provide the basis (summary tables, fisheries governance setup) that allow FCP to be shortened. Based on the lessons learned with the NFPs it is advisable that the total report length is ca. 20 pages.

FISHERIES COMMUNITY PROFILE

Executive Summary		
Table of Contents		
PEOPLE & PLACES	General Introduction	
	Methods	
	Geography/history	Description of community Including cultural attributes Briefly describe main fishing areas of community members
	Demographics	Labour/income: Avg in community (non-fisheries industries) General description: population, ethnic makeup (composition), age makeup; mean age
		Education level, etc (community overall, not fisheries specific)
	Current economy	General description of community overall (not fisheries specific); main industries (tourism, service, holiday homes, etc), overall outlook (recession, booming, etc)
INSTITUTIONAL LANDSCAPE AND INFRASTRUCTURE	(also, lack thereof—also explain what is missing if critical for the discussion)	
	Government	Government levels (national, regional, local). Centralized/decentralized system Specific fisheries governance bodies (e.g. advisory and/or stakeholder bodies)
	Institutional	Fisheries organizations
		Fisheries assistance centres
		Other fisheries related organizations Fisheries/maritime school e.g., Maritime /fishing health centres, social services
	Physical (ports, etc.)	Airport, ports, school, city hall, supermarkets Public services: General school, social services, health centres, maritime schools
INVOLVEMENT IN FISHERIES (regional, etc.)	Employment	Overall, and also by fleet & métier # of fishers, owners, crew average age; gender; ethnicity makeup (EU/non-EU)

	Fishing grounds *ICES squares*/ GSA GFCM Métier	Seasonality
	Commercial	Quantity of fish landed within the community Value of fish landed within the community Average price by species (main species) Number of vessels registered locally Number of vessels landing locally Number of vessels from outside of the community landing locally Age and size of vessels
	Recreational	Landings by Species
	Subsistence	
	Ancillary industries	Pre- and post-harvest: (e.g., net making factories; electricians/painters/marine engineers; boat suppliers (groceries for boats), etc. Fish shops (market); auctions; processing industry; etc. Employed persons (For all groups above): education levels, # of people, gender, ethnicity
	PO/Coops/etc.	# of Employed persons; gender, ethnicity
Governance (includes Law and Policy)		BRIEF Summary from NFP presenting the institutional, legal, & informal fisheries governance actors And then **contextualize** the local situation (where they fit—co- management, or not, etc.) E.g. explain regional fisheries authorities, how they interact, what other committees they serve on, how they work with the local municipalities, etc.
Cultural Attributes related to fisheries and the Sea		E.g., of Collaboration among fishers, as a part of environmental governance
FUTURE	Trends	Constraints / Opportunities

Source: own elaboration.

3.3.1 Fisheries Community Profile - Explanation

- Executive Summary

The Executive Summary should be somewhat self-explanatory. This section includes the background to the compilation of the profile as well as a summary of the report's key points and findings.

- Table of Contents (ToC)

The inclusion of a ToC helps the reader to understand what is being included as well as makes it easier to jump to specific sections of interest.

PEOPLE AND PLACES

- Introduction

The Introduction sets the tone of the profiles with an overall description of the community and how the work was conducted. For example, from Johnson et al. (2013)[16]

"Commercial fishing is an important economic and cultural element of Maine's coastal communities. Maine fishing communities are suffering from loss of access to fisheries and infrastructure, regulatory impacts and changing resource abundance. Although fisheries managers are required to assess impacts of fisheries regulations on fishing communities, this has proven difficult due to the lack of information regarding the current and historical importance of fishing in these communities and an understanding of how communities respond to change. Vulnerability profiles are a useful tool to gather the comprehensive information necessary to determine cumulative impacts of management decisions on specific communities" (2013:1).

This section could then be followed with a brief description of the research methods: "We conducted five (Bernard, 2005) semi-structured interviews … This profile focuses on common themes from these interviews as well as information compiled from secondary research and analysis of quantitative socioeconomic indicators" (2013:1)

- Methods

A brief explanation of the profiling methods and methodology

- Geography and history, including land and sea areas accessed.

A description of the geography and history is very important as it shows not only how the community has been connected with the sea, fisheries, and maritime industries, but also provides a baseline of how- or how not- things have changed over time. If not already explained in the Introduction, this section could be an ideal section for describing where the community fits in the region and nation. For example, "In recent decades, XX has undergone significant transformation, losing much of its working town character and revitalising itself with a burgeoning service sector economy."

- Cultural Attributes related to fisheries and the Sea

This could also be included in the history/background section, and includes any specific customs and behaviours, which set this community apart as a "fishing" community. For example, they may hold fish festivals, "blessings" of the fleet, annual memorials for those who have died at sea, national cultural festivals but with a fisheries twist (e.g., Danish children beat a barrel filled with candy for "mardi gras"; in the Port of Hirtshals, the fishing organisation holds the event with fishers in their emergency gear in the water, also beating a barrel). The continuation and maintenance of

[16] https://seagrant.umaine.edu/wp-content/uploads/sites/467/2019/03/2013-rockland-vulnerability-profile.pdf

such events provides evidence of the importance—even if it is "only" in identity—of fishing for the community.

- Demographic profile

The Demographic profile could be a separate section, or combined, for example with a general economic summary. The section provides the demographic make-up of each community, overall, as compared to the region and nation. And then more specifically and the fishing sector, by gender, age, ethnicity, educational level, and other demographic attributes deemed appropriate.

Some important findings coming from narratives around demographics could be the make-up of locally employed (e.g., "Hirtshals has the highest number of native Faroese and Vietnamese in Denmark and the Region has the highest number of Greenlanders"). This section tends to be more general, comparing the populace with the region or nation, with more specific fisheries related employment discussions following in another section.

- Social and cultural structure

One of the key reasons for understanding the society and social support structure of the community is for understanding the resilience of the community in the face of change in regulations, management, etc. Communities differ in the degree to which *governmental social support* (social security). Informal social support systems, such as the use of social capital, i.e., networks of people able to lend aid, also varies greatly among communities. The more community support, the better the communities can absorb the impact of the regulation and allow fishing activities to survive change.

INSTITUTIONAL LANDSCAPE AND INFRASTRUCTURE

Knowing the infrastructure available is also quite important, as it facilitates or hinders access to the area impacting fisheries or trade or can be a measure of development, isolation etc. This includes institutional and physical infrastructure, such as logistics (train, highway, airport), coastal (lighthouses, breakwaters) structures, as well as others (museums, etc.)

- Current economy (including employment, incomes)

Employment data compiled and analysed, focusing on each community's dependency and reliance on the fisheries: catching, shoreside, ancillary industries, etc. (this theme can be divided between place (employment in general) and Involvement in Fisheries (employment specifically). Also, occupational pluralism is important.

- Government

Governmental involvement in the fisheries, if any

- Institutional

Fisheries Associations, assistance centres, etc.

INVOLVEMENT IN THE FISHERIES

- Commercial, Recreational, and Subsistence Headings and descriptions

This should include a detailed description of fishing and fishing related activities (e.g., size of fisheries/fleets, including LSF, SSF, recreational, and subsistence; conflicts among fleets, etc.).

Unlike the National Fisheries Profiles, community profiles have the space to show the importance of related industries which may stand alone (e.g., traditional boat making, sail-making), but which often stand together with fisheries. The overall maritime nature and identity is often equally important in these communities, and this could be described here, or in other sections (e.g., cultural attributes or employment).

- Governance (includes Law and Policy)

This section should provide the description of the fisheries governance system: management system, regulatory frameworks, related legal framework, and relevant policies. It should also include a narrative of the organisation of fishing related institutions, such as fishing organizations, unions, producer's organisations, federations, etc., and include relationships and interactions with other levels. Comment on the situation of the various sectors in regards to governance is also relevant here (e.g., SSF). Have there been recent conflicts within the community / in response to management measures?

Some of this could be included in the introduction setting the scene of the profile.

- Cultural Attributes related to fisheries and the Sea

This section would include any specific customs and behaviours, which set this community apart as a "fishing" community. For example, they may hold fish festivals, "blessings" of the fleet, annual memorials for those who have died at sea, national cultural festivals but with a fisheries twist (e.g., Danish children beat a barrel filled with candy for "mardi gras"; in the Port of Hirtshals, the fishing organisation holds the event with fishers in their emergency gear in the water, also beating a barrel). The continuation and maintenance of such events provides evidence of the importance—even if it is "only" in identity—of fishing for the community.

- Trends, Issues and Development

A final section presents the overall picture of the community, which provides and highlights the "Footprint" of the fisheries in the community. It should also emphasise particularly relevant trends, issues and developments.

- Perceptions of challenges and opportunities

Discussion of challenges and opportunities should focus on the environment, including the natural environment, social environment, governance environment (local governance), and economic environment (e.g., markets and trade) and societal challenges.

Constraints

Constraints could include sector restructuring, quota allocation, loss of support industries, gentrification on-land, conflicts at sea (within fisheries and without); COVID-19, etc.

Opportunities

Opportunities could include new, related industries such as fish processing, seaweeds; governmental policies

Reliance/Resilience/Dependence could also be included-- A discussion of the perceived – based on the analysis--Reliance/ Resilience/Dependence

3.4 Conclusions

- The EWG 24-05 concludes that an operational definition for fisheries communities that can provide the basis for the identification of and elaboration of fisheries community profiles is: *Fisheries communities pertain to settlements around fishing harbours where the fisheries generate social and economic benefits (e.g., employment), and which enables new generations of fishers, due to shared norms and inter-generational links. Such norms are reflected in, for instance, resource stewardship, notions of shared materialities, cultural heritage, and interests, ways of life, and a sense of belonging. Fisheries communities are*

place-based but can pertain to wider geographical areas which gravitate towards the harbours, and are likely to include fisheries-based organisations and ancillary industries in aquatic food value chains.

- The EWG 24-05 has provided a first partial list of fisheries communities based on different criteria (contrast, plurality, policy impact), that can be used to develop a first set of FCPs profiles throughout the EU. This partial list totals to 96 communities, prioritised through short lists of 15, 30 or 60. The EWG 24-05 proposes to use, as minimum, the 30 fisheries communities list, ensuring geographical coverage of heterogeneity and plurality. The EWG 24-05 also acknowledges that there were limitations, such as the unavailability of experts from some MS (i.e. Finland); hence, it proposes completing the list through proposals provided by social scientists on those MS.
- As EU fisheries are confronted with many changes (climate change, acceleration of uses of the sea, in particular the development of wind parks at sea, high oil price since the start of the war in Ukraine, Brexit) the EWG 24-05 suggests that creating a baseline of FCPs as soon as possible would be advantageous. On one hand, the FCPs help understand where and how change takes place, supporting the prevention of unintended social consequences of policy choices. On the other hand, it can help MS and fisheries communities to make the most out of the possibilities, tailoring private, collective and public action.
- On the fisheries community profiles template the EWG-24-05 concludes that the information in these profiles will enable the elaboration of social impact assessments of measurements and policies in the fisheries sector (including ancillary activities). Community profiles rely on National Fisheries Profiles and complement them in their goals.
- Building on the experience on developing NFPs, it would be good to have a system in place on developing community profiles. The EWG 24-05 proposes bringing the different experts writing the first fisheries community profiles together (in a working group) in order for them to collaborate where possible and discuss issues that might arise.

4. TOR 3 Social Indicators

In order to progress on the inclusion of additional social variables in future EU data calls and using the results of the stakeholder consultation of 2024 and the previous STECF report 23-17:

a. Further develop quantitative indicators based on the policy priorities identified, including unit of analysis and specific source of data per Member State;

b. Further develop qualitative indicators based on the policy priorities identified, including unit of analysis and collection method;

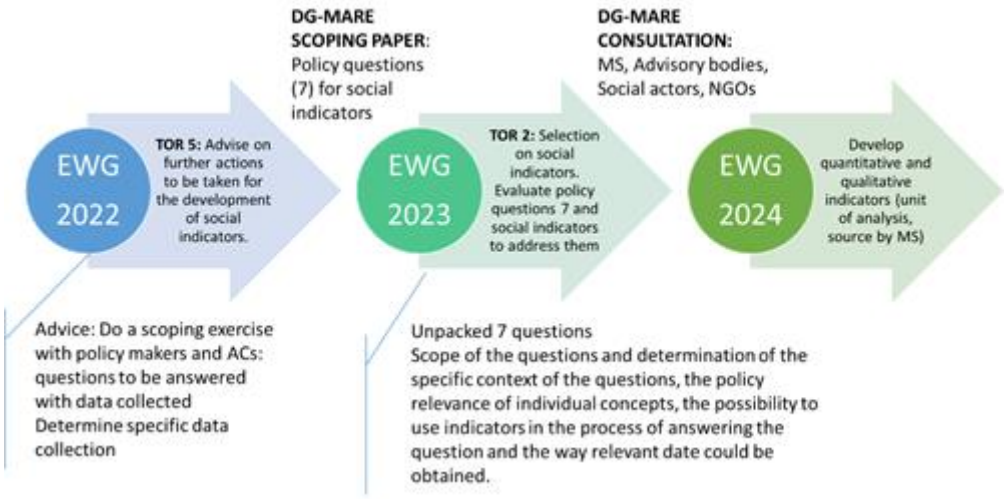
c. Suggest next methodological steps for the integration of these indicators in a EU data call, taking into account, inter alia, the 2021 evaluation report of the EU MAP social data pilot studies and the 2019 Technical Report on socio-economic data collection for fisheries, aquaculture and the processing industry at EU level (WP 6 on social indicators);

d. Identify countries to be chosen for pilot studies on new indicators.

4.1 Determining policy priorities for the development of social indicators

The policy priorities were set as part of an iterative process (see Figure 4.1). In 2022, EWG 22-14, proposed a scoping exercise with policy-makers and advisory bodies (including ACs) to define the questions that need to be answered. These questions will set the policy relevance of the social indicators. In order to facilitate the process, DG MARE took the first step of preparing a scoping paper in 2023. Those questions were evaluated by EWG 23-17 to indicate to what extent social indicators could be developed taking into account existing data available through different Commission sources (DG MARE, DG ESTAT), as well as ways in which NFPs may complement the indicators. The Stakeholder Consultation in 2024 provided feedback on policy priorities from MSs, social actors, ACs, scientific advisory bodies and NGOs.

Figure 4.1. Setting the policy relevance of social indicators (2022-2024).



Source: own elaboration.

While DG-MARE's definition of policy priorities enabled substantive advances in the work of the EWGs, EWG 24-05 acknowledges the shortcomings of narrowing the scope of the stakeholders' reflection to a pre-set of topics, even if the survey welcomed the proposal of additional questions. In this sense, it advices to continue the iteration in the multiple forums available at regional, sea basing at MS level.

To focus effort when developing social indicators, the European Commission sent a survey to stakeholders in February 2024 asking them in the first section to prioritise a list of 17 policy areas (and noting any that were excluded) and in the second section to comment on receiving information from Member States on the implementation of Article 17.

A total of 25 responses were received, with 19 responses commenting on the policy areas in the first section and 17 responses that indicated prioritisation. This is a small number of responses and may not be representative of all stakeholder groups.

Synthesising the prioritisation of stakeholders proved challenging as the respondents did not indicate their prioritisation in the same manner (some using a yes/no, some listing their top priorities, some using a traffic light ranking, some using descriptive text). The EWG 24-05, aided by European Commission expertise, converted these responses into a formalised 0-4 scoring system for each group of stakeholders. In the future, the EWG proposes that:

- surveys related to data collection should be sent directly to national correspondents
- if quantitative synthesis is anticipated, survey design could solicit a quantitative response (e.g. 0-4 scoring)
- a shorter timeframe may solicit a higher response rate

There are many methodological questions that could arise in how to aggregate these scores into prioritised list, however a clear top five policy priorities emerged regardless of whether policy areas that were not mentioned received a blank score or a score or zero (not prioritised) and regardless of whether stakeholder groups were assigned different weightings.

The top five priorities, which received near unanimous prioritisation, are:

- State of play: **Current socio-economic situation of fishers** (working conditions, safety, type & number of contracts over a year, well-being, training & skills, social position in society, income, employment type, age, gender, etc.)
- Dependency: **Vulnerability of fishers** (wages, contracts, social coverage, pension, predictability of business environment, financial position, work safety, etc.)
- Generation renewal: **Number of fishers that have "dropped" or discontinued** the family business, and reasons (safety, income, hardship, family itself doesn't want them to continue)
- Generation renewal: **Attractiveness of the profession for the younger generation** (working conditions and safety for men and women, training & skills, safety, income, social coverage, pension, working hours, time away from home, employment type (self-employed, full time, part time, etc.), level of professionalization, use of IT/technology, integration of environmental concerns, etc.)

- Assessment of management measures: **Impact of EU conservation measures on fishing communities**[17] in terms of employment, working conditions and potential for social conflict.

[17] In previous reports, the concept of fishing communities was also used.

Table 4.1. Policy priorities of stakeholders consulted by the EU Commission showing the top five priority areas.

Policy theme	Policy area	Social partners	Advisory Councils	Advisory Council Members	Attachés / Member States	Environmental NGOs	SSCF representatives	Scientific bodies	Priority score excluding not mentioned	Priority score where not mentioned = not prioritised
A. State of Play	a. Current socio-economic situation of fishers (working conditions, safety, type & number of contracts over a year, well-being, training & skills, social position in society, income, employment type, age, gender, etc)	4	4	4	4	4	4	4	4	4
C. Dependency	a. Vulnerability of fishers (wages, contracts, social coverage, pension, predictability of business environment, financial position, work safety, etc.)	4	4	4	4	4	4	4	4	4
F. Generation renewal	b. Number of fishers that have "dropped" or discontinued the family business, and reasons (safety, income, hardship, family itself doesn't want them to continue)	4	4	4	4	4		3	3.8	3.3
B. Assessment of management measures	a. Impact of EU conservation measures on fishing communities in terms of employment, working conditions and potential for social conflict	4	4	4	4	2	4	4	3.7	3.7
F. Generation renewal	a. Attractiveness of the profession for the younger generation (working conditions and safety for men and women, training & skills, safety, income, social coverage, pension, working hours, time away from home, employment type (self-employed, full time, part time, etc.), level of professionalization, use of IT/technology, integration of environmental concerns, etc.)	4	3	4	4	4	4	3	3.7	3.7
C. Dependency	c. Impact of the employment of non-national fishers (EU and non-EU) on fishing communities	4	3		2				3	1.3
D. Mobility	a. Number of fishers that have tried to work in the fleet of another EU country but couldn't (link to mutual recognition, training)	4	3		1		4		3	1.7
C. Dependency	b. Level of adaptability to current changes (business structure, polyvalence including other non-fishing activities, training & skills, duration of residence (e.g., likeliness to accept moving), working rhythm	0	3		4	3		4	2.8	2
E. Immaterial value	a. Perceived historical and cultural importance of the fishing community in the EU by different categories of the population	0	3		3	3	4	4	2.8	2.4
G. Engagement & compliance	d. Perceived role and impact of these organisations and associations in fisheries management decisions	0	4	2	3		4	4	2.8	2.4
A. State of Play	d. Working conditions of non-EU workers onboard EU vessels fishing outside EU waters (equal treatment, equal training / skills, etc)	4	3		1				2.7	1.1
G. Engagement & compliance	b. Type of representation in local/national decision bodies	0	4	2	3	3		4	2.7	2.3
G. Engagement & compliance	c. Role of producer organisations and fishers' associations	0	4	2	4			3	2.6	1.9
G. Engagement & compliance	e. Influence of fishing communities influence on compliance	0	4	2	2			4	2.4	1.7
A. State of Play	b. Comparison of situation to other sectors (in terms of danger, difficulty, etc)	0	4		2	1	4	3	2.3	2
A. State of Play	c. Level of awareness of sustainability issues (environment, social, economic)	0	3		3				2	0.9
G. Engagement & compliance	a. Level of engagement of fishing communities (through representative bodies)	0	2	2	3			3	2	1.4

Source: own elaboration.

4.2 Further development of quantitative and qualitative social indicators based on policy priorities

The EWG 24-05 discussion was focused on the proposed indicators under each priority.

Considering the limited time available, the EWG 24-05 used the STECF 23-07 as starting to assess the status of the (potential) indicators. On the one hand, current data collection and available data sources can be used to develop a set of indicators. Social indicators already in the data collection framework (i.e. age, gender, etc.) are not discussed here. Potential indicators that seem to have data sources that can be used or that can relatively easily be gathered are discussed in detail here. Potential indicators that need more work (not used before) have been identified using creative thinking and innovation (sources, approach, etc.), making the most of on-going developments (e.g. massive data gathering for the development of the official Marine Spatial Plans). For those indicators, only preliminary elaboration is presented. How to proceed is discussed under next methodological steps (section 4.3).

The suit of indicators described can be combined to address different topics. Likewise all of them can be included in forthcoming NFPs and FCPs, strengthening comparability and traceability of trends and changes.

For analytical purposes, the EWG agrees to separate the indicators by quantitative and qualitative to determine a further methodological approach for collecting this information. The EWG suggests using a description for the indicators provided in the previous Social Data report STECF 23-17. Additionally, discussion encompassed an exploration of potential data availability at both EU and member state levels. The outcomes of the EWG 24-05 discussions, pertaining to the availability, estimation, and modalities of data collection for the envisaged social indicators, are encapsulated in Table 4.1. The detailed description per each social indicator is provided below. The indicators are organised by categories that fit within the top five priorities (social and financial status, working conditions, assessment of management measures and generational renewal) and are structured in line with Table 4.1.

4.2.1 Social and Financial status

Indicator: **Social status in society/quantitative**

Description: The indicator is proposed in STECF 23-17, defining it in terms of social standing and with regard to whether the sector is able to attract new workers in the community. Furthermore, the metric was proposed to be used separately to measure social status of owners/permit holders/captains vs crew members, and large-scale vs small scale fisheries, with the community where they spend the majority of their time as the main unit of analysis. However, if for the reasons of simplicity the status of fishers is measured at large (without differentiating between captains and crew, LSF and SSF), this is also sufficient and serves the purpose. STECF 23-17 suggested that experts assess the social status of fishers based on a survey questionnaire administered among community members and as part of a community profile. This assessment utilises a 5-point Likert scale, prompting respondents to gauge the perceived social standing of fisher occupations relative to other professions associated with distinct class or status groups (e.g. their status is comparable to the most respected in the community, such as medical doctors, to white collar jobs, to skilled labour jobs, to unskilled labour jobs).

The indicator is well envisaged, but needs to be further developed and adjusted.

While the indicator is highly relevant, there is no existing data from which it can be extracted. Hence generating original primary data would be needed.

Indicator: **Social status in society/qualitative**

Description: In addition to the quantitative measurement of social position in society, which was proposed in STECF 23-17 (see below), we propose to add a qualitative indicator thereof. Similarly to the quantitative indicator, the qualitative indicator was also developed in sociological research of class and social inequalities (P. Bourdieu's concept of symbolic capital, M. Lamont's concept of symbolic boundaries), and pertains to occupational (self-) perception and social status. The primary data can be generated using qualitative interviews. With regard to potential (financial and other) costs of administering survey questionnaires, the qualitative interviews can be easier to conduct, and fit well into the format of community profiles.

Indicator: **Financial position/ quantitative**

Description: Data on the financial situation can be presented with the help of different indicators. Wage (employee), income (self-employed), assets (tangible, financial) for own capital, and credit rating, debts for foreign capital are options to indicate the financial position of a person. In any case, information about personal or business finances is very sensitive data that is difficult to collect. Following a pragmatic approach, existing economic data from EU Data Collection Framework (DCF) could be used and put with national averages in relation, which are usually available in the national (micro) census to estimate the financial position of fishers:

- Financial position *crew* = Compare the average wage of fishing crews (standard calculated indicator in AER expressed in €/year) with the average annual salary of employees in the Member State concerned.
- Financial position *vessels' owner (skipper)* = Divide the DCF variable net profit (€/year) by the total number of owners and compare it with the average annual income of self-employed workers in the MS addressed.

Take this into account, those calculations enable only rough estimations. Some fishing companies might be legal entities and in consequence, the financial position of owners (individuals) might be overestimated (in particular when it comes to LSF and DTS). On the other hand, collected data about national average salaries and income might be based on different data collection or calculation methods. Economic experts should review if such a comparative calculation is feasible to indicate if the financial position of fishing individuals is below or above national averages. If proven technically, further comparison with the average salaries of employees and income of self-employees of other sectors (e.g. aquaculture, white fleet, or agriculture) and/or minimum subsistence level inside the Member State addressed could follow. Taking the results of comparative calculations together at the end, will indicate how attractive fisheries are for people from a financial point of view.

Indicator: **Number of fishers (crew) under SER/working under written contract**

Description: This indicator measures the quantity of fishers employed under Standard Employment Relations (SER) or working under written contracts. "Per country signed ILO/IMO convention" refers to countries that have ratified conventions of the International Labour Organization (ILO) and the International Maritime Organization (IMO), setting international standards for safety, training, working conditions of seafarers, and marine pollution prevention.

"Per nationality, temporal contracts" indicates the use of temporary contracts for maritime workers, which may vary depending on the nationality of the worker. These contracts are governed by international regulations such as the Maritime Labour Convention of 2006 (MLC, 2006[18]) and EU

[18] https://www.ilo.org/international-labour-standards/maritime-labour-convention-2006

regulation COUNCIL DIRECTIVE (EU) 2017/159[19], aimed at ensuring fair working conditions for seafarers and including provisions on employment contracts

Overall, ILO/IMO conventions and temporary contracts in the maritime sector serve as tools to protect workers' rights and promote a safe and regulated working environment internationally.

Indicator: **Number of fishers working for a cooperative under agreement.**

Description: Fishing co-operatives, where vessels are collectively owned, involve the active participation of co-operative members in operational and decision-making processes, thus improving management efficiency and strategic planning. This indicator serves to identify potential changes in the roles of individuals employed in the fishing industry (e.g. self-employed, which are widespread especially in small-scale fisheries), promoting a cooperative approach to management and collaborative strategies for the sustainable exploitation of stocks.

I.e.: In Italy, cooperative fisher members adhere to a specific pension regime, requiring monthly contributions to the INPS even as self-employed fishers. Cooperatives engage in fishing directly or provide ancillary services to members, such as purchasing consumables or marketing and transforming fish products. Maritime fisher cooperatives are regulated by Law No. 250 of March 13, 1958, ensuring social security protection for members, provided they are primarily engaged in fishing activities and registered with the National Register of Cooperative Entities. Example: In Italy, data on the number of fishers working for a cooperative under agreement can be collected through cooperative records or by consulting regulatory authorities such as the National Register of Cooperative Entities.

Indicator: **Number of contracts with social security and working conditions specification.**

Description: This indicator measures the quantity of employment contracts in the fishing sector that incorporate provisions concerning social security and working conditions. It reflects the level of protection and welfare afforded to workers in an industry known for its hazards and risks. Social security specifications may include access to pensions, health insurance, unemployment benefits, and other job-related perks, while working conditions encompass workplace safety, hours of work, rest, accommodation, meals, health protection, and professional training. A high number of contracts with these specifications indicates a commitment to safeguarding workers' rights and promoting a safe and regulated work environment. Conversely, a low number may suggest a need for improvements in safety policies and working conditions within the sector and explain the lack of recruitment in some European fisheries

Indicator: **Number of fishers with contracts through employment agencies**

Description: The indicator tracking the number of fishers with contracts through employment agencies is a vital metric for assessing labour trends within the fishing industry. It sheds light on the prevalence of agency-mediated employment and its adherence to fair labour standards, including job security and social security. This data, especially when broken down by nationality and fleet type, provides a nuanced view of the industry's employment landscape, revealing the effects of fleet management policies and the integration of EU and non-EU workers into the labour market. Ensuring these practices align with international labour standards is essential for the well-being of fishers and the sustainability of the industry.

[19] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2017.025.01.0012.01.ENG

Indicator**: Number of fishers in trade unions.**

Description: The indicator is a significant barometer of social dynamics within the fishery sector. It not only reflects the degree of fishers collective bargaining power, but also underlines the importance of their role in shaping work-related policies. This indicator is a key component in ensuring that fishers views are listened to and that their rights and welfare are considered, thereby supporting the overall sustainability and governance of the fisheries community.

Indicator: **Number of fishers with no social security or deficient coverage.**

Description: This indicator in the professional fishing sector addresses the crucial issue of social security for fishers. The distinction between self-employed and employed workers highlights the diversity of working conditions and the need for inclusive policies ensuring protection for all seafaring workers. The variability of social coverage across EU Member States underscores the importance of a harmonised approach that can provide equity and security for fishers, regardless of fleet size or the distance of waters they operate in.

The indicator highlighting the number of fishers without social security in various fishing fleets is a critical measure of the welfare and protection afforded to those in the fishing industry. It underscores the disparity between small-scale coastal fishers, who often work independently and may not have comprehensive social security benefits, and their counterparts in large-scale, distant water fleets, who typically enjoy the full benefits of employment under national social security schemes. This disparity is not uniform across the board, as it can vary widely based on the regulations of the EU Member State where the fishers are employed, as well as the nature of their employment relationship. Understanding and addressing this gap is essential for ensuring the well-being and financial security of fishers across Europe. Deficient social security coverage of fishers might be also important to understand the lack of generational recruitment in some European fisheries.

4.2.2 Working conditions

Indicator: **Working Conditions**

Description: The STECF 23-17 report emphasised the complex nature of working conditions and well-being in fisheries communities. It suggests several indicators already in use and proposes additional ones for a comprehensive understanding, these indicators are detailed in Annex 3.

The STECF 23-17 report highlighted safety concerns including Fatality Rate and Injuries: High fatality rates and significant accident ratios in the fishing sector, especially noted in the US and Spain. Safety measures include using specific tools and maintaining working conditions to prevent accidents (STECF, 2023); Medical Fitness: Obtaining a medical certificate is a legal requirement in many MS, with varied renewal periods based on international laws. This aligns with the table's indicator of medical certificates; and Safety Training: Mandatory safety training is emphasised.

In relation to Well-Being the report delves deeper into the multi-dimensional aspects of well-being and included possible indicators that looked at: Material Well-Being; Financial security, including turnover in income and food security, especially important for small-scale fisheries; Subjective Well-Being: Emotional connection to the sea, perceived independence, and satisfaction with life quality, indicating the importance of qualitative measures like satisfaction with time at sea; and Relational Well-Being: Contribution to community activities and social relationships, measured through surveys and qualitative interviews, providing a holistic view of community integration and personal fulfilment.

EWG 24-5 assessed the proposed indicators in Annex 3 of STECF 23-17 to create a short list of possible indicators that would measure working conditions. To address this wide-ranging topic, working conditions were split into two main indicators; work safety and well-being both of which have specific measurable indicators. The shortlisted indicators were as follows:

Work Safety:

1. Age of Vessel (Quantitative): Measured in years, indicating the potential risk associated with older vessels.
2. Fatalities & Injuries (Quantitative): Number of fatalities and injuries, highlighting the physical risks involved in fishing.
3. Number of Crew on vessels (Quantitative): The indicator should analyse the trend of reducing the number of crew on vessels with the aim of cutting costs, all of which increases risks of accidents on board. This pertains to LSF, but not SSF.
4. Medical Certificates (Quantitative): Presence and age of medical certificates, ensuring fishers' health and fitness for work.
5. Mandatory Safety Training (Quantitative): Whether safety training is mandatory and its frequency, ensuring ongoing safety education for crew members.

Well-being:

1. Time Away from Home (Quantitative): Measured in days at sea and number of trips, reflecting the impact on personal life. Number of trips allows us to quantify the average trip length (in days).
2. Time Away from Home (Qualitative): Satisfaction with time spent at sea, work mode of the vessel, and well-being while at shore (of both fisher and their family).
3. Material well-being (Quantitative): Average wage comparison with national average and minimum wage.
4. Deprivation Index (Quantitative): Proxy for security and access to services, reflecting broader socio-economic conditions.
5. Social support (Quantitative and qualitative): Different metrics of social capital, relations within community, with work colleagues, social isolation and loneliness.

The indicators identified in the current summary align well with the suggestions and findings in the STECF 23-17 report. Both sources emphasise the importance of comprehensive indicators to accurately capture the socio-economic conditions of fishers, ensuring their safety and well-being.

4.2.3 Assessment of management measures: Impact of EU conservation measures on fishing communities in terms of employment, working conditions and potential for social conflict

One of the questions prioritised by stakeholders was the “Impact of EU conservation measures on fishing communities in terms of employment, working conditions and potential for social conflict”. For this question, EWG 23-17 suggested “to broaden the question to the more broad concept of all EU measures affecting fisheries operations”. Though the question was not reformulated, Annex 2 on the STECF 23-17 report (p 135) provided a list of types of conservation measures.

We understand measures to cover also those associated with key strategies like that of Sustainable Blue Economy and the relevant Directives, such as MSP (e.g., the social impact of offshore renewable energy on fish operators and fisheries communities). In assessing such impact, attention should be paid to how policy agendas and the communications of potential measures affects expectative and behaviour of social and economic actors. For instance, EU Sustainable Fisheries AP (impact on possibility of loans from banks for German demersal trawler fisheries).

We note that the EU Commission is adopting an integrative approach to the management of the marine and maritime spaces. So while acknowledging that there are policies which do not fall under the merit of DG MARE, it is important to be able to link potential impacts to all relevant policies such as the Habitats Directive, the Water Framework Directive, the MSFD, etc. Also, for some of these policies, social impact assessments are required by EU law. In practice, however the required tools and (social) data are not readily available (Notes of the Working Group on Programmes of Measures, Economic and Social Analysis of the MSFD 9-10-2023). The work developed here might also be useful for advancing in that domain.

EWG 23-17 "suggested the collection of systematic qualitative data and broadening the scope of the question to include the assessment of other EU measures as the SIA framework (Colburn and Clay, 2020) as a useful tool". Such SIAs will be key in ensuring that the cumulative impacts of various measures as well as strategies are understood in the same way a cumulative impact assessment[20] is the key process to identify impacts on key habitats. We advise that a cumulative SIA is conducted as a pilot.

Meanwhile, some of these impacts can be explored through the Community profiles. For instance, in the USA community impact assessments are mandatory as a way to support policy. Again, as stated in EWG2317 stated "in order to be able to answer the question on impact of measures under the CFP on fishing communities, it is necessary to first identify the relevant fleets or fleet segments for which certain management measures apply. Only then, with a direct link between measures and fishing actors, can the indirect link be established between measures and fishing communities".

EWG 23-17 Social Data in Fisheries put together 'Table 4.2: Possible indicators, units of analyses, concepts and data sources /types of data that could help understand the social impact of EU measures on the fleet and fishing communities' (see Figure 4.2).

To provide a comprehensive understanding of impacts, EWG 24-05 proposes six groups that can guide specific assessment of the potential impact of management measures on fisheries communities. Hence, the existing indicators can be combined as below:

1. Displacement: While climate change and shifts in stocks are the focus of attention, other marine and coastal uses can lead to the displacement of fishers (at sea in terms of displacement of their fishing grounds) or of fisheries communities (in terms of displacement from the coastal space).

2. Way of life: Based on fisheries communities' definition (ToR2) understanding phenomena as biographical breaks or disruptions (influence of a significant, sudden event or events on the course of an individual's life that cardinally changes its direction and plans; or anomie (social condition defined by an uprooting or breakdown of any moral values for individuals to follow, also refer as normlessness) is critical for a comprehensive understanding

[20] Cumulative impacts according to the EC: The impacts (positive or negative, direct and indirect, long-term and short-term impacts) arising from a range of activities throughout an area or region, where each individual effect may not be significant if taken in isolation. Such impacts can arise from the growing volume of traffic, the combined effect of a number of agriculture measures leading to more intensive production and use of chemicals, etc. Cumulative impacts include a time dimension, since they should calculate the impact on environmental resources resulting from changes brought about by past, present and reasonably foreseeable future actions. (Source: https://www.eea.europa.eu/help/glossary/eea-glossary/cumulative-impacts).

3. Adaptive capacity: The capacity of fishers to adapt following the introduction of management measures, as well as the increase in marine uses linked to the blue economy.

4. Institutional settings: The measures being adopted are likely to impact the existing institutional framework. Considering fisheries governance is multi-level (EU, national, regional, local) some interactions between a given measure and the broader setting may not be apparent or immediately understood.

Table 4.2. Possible indicators, units of analyses, concepts and data sources /types of data that could help understand the social impact of EU measures on the fleet and fishing communities

Social conflict	between fleets	*gear conflicts *Records of disputes or tensions between various fishing fleets (e.g. conflicts over fishing territory	MS expert knowledge Qualitative research (surveys, interviews)
	between ship owners & crew members	*records of legal disputes/ complaints filed by crew members against vessel owners	National data bases Qualitative research (surveys, interviews)
	in/ between communities	*records of legal disputes/ complaints	Qualitative research (surveys, interviews)
	between the fishing industry and other sectors (using the sea)	*records of legal disputes/ complaints *# court cases	National data bases Qualitative research (surveys, interviews)
	fishers and government	*# court cases *# demonstrations (protests) *(lack of) participation in decision-making processes	National data bases Qualitative research (surveys, interviews)
	between countries	*e.g. ban on pulse fishing, bottom-trawling, MSP plans per country *court cases *call for infringement procedures *lack of consensus/ agreements	National data bases MS expert knowledge Qualitative research (surveys, interviews) Regionalisation of TM, if MS cannot agree they refer back to the commission

Source: EWG 23-17 Social Data in Fisheries

5. Legitimacy of the system: beyond the effectiveness of the measure, understanding how it may increase/decrease satisfaction with the governance system is critical for compliance, buy-in and robustness of the governance system.

6. Social conflict: Conflicts in fisheries emerge from, amongst other things, systematic social and policy inequalities, lack of agency, and increased competition for the use of marine and coastal space. Table 2 in STECF 23-17 provides a detailed list of indicators to measure social conflicts arising from EU measures on the fleet and fisheries communities. Social conflicts between fleets, fisheries communities, the fishing industry and other sectors of the coastal economy are likely to increase due to new uses of the marine space.

EWG 24-05 suggests a slight change in scope to include conflicts between the fishing industry and other sectors (using the sea and *the coastline).* Other potential conflicts (not in Table 2 of the STECF 23-17) could be inter-generational conflicts, and conflicts within fishing organisations.

EWG 24-05 emphasises that the indicators below can be used to cover several of the above. It is noted that the indicators proposed below are new and require maturation through further discussion and study:

Indicator: **Uses of the marine space**

Description: The indicator is new, and is defined as the allocation of marine spaces to other uses (e.g. aquaculture, renewable energy, tourism, other forms of management conservation OMFC, etc.). The metric is the percentage (%) of the marine space stated in the official Marine Spatial Plans approved under MSP Directive (2014/89/EU; noting some countries did not yet write their MSPs) for uses other than fishing. It is important to note that this indicator will be a proxy, as other uses does not mean fisheries are excluded (i.e. shipping lanes can be crossed, and MPA's can be open to particular fisheries), but it does signal that potential displacement or conflicts might be in order. Furthermore, some countries do not include coastal areas in their MSP and only include offshore waters leaving out important fishing grounds for SSF in Marine Spatial Plans.

This indicator can be unpacked into several sub-indicators because the percentage can be calculated in comparison to the total EEZ or to the territorial sea, the latest allowing for instance to zoom in SSF. The unit of analysis is existing statistical units such as ICES rectangles or GFCM GSA. The findings provide a descriptive overview.

According to the specific features of each plan, related metrics can be developed. For instance, some MSP plans to allocate priority areas for fishing, while others consider fishing takes place everywhere and does not need specific allocation. The methodological steps should guide how to address this plurality.

On the other hand, data is already available, and existing tools such as the EmodNet data layer on MSP harmonised across EU countries may provide support for visualisation.

Indicator: **Additional income to support fishing continuity**

Description: The indicator builds on existing indicators about complementary activities (combining fishing with others), expanding it to cover not only fishers but also spouses and life partners and relatives living in the same household. Hence the household is the unit of analysis and the metric is the percentage of work (paid or unpaid) of the household coming from fishing and fisheries-related activities, and the one coming from other activities.

The data is not consistently available at the household level and will require surveys[21].

Indicator: **Impact on social resilience.**

Description: The indicator is new and is defined as how management measures may affect the capability of fishers and/or fisheries communities to function and/or cope with change. The impact can be positive or negative.

Metrics:

- expected changes in gear (e.g. due to restrictions in the use of gears, due to reduced profitability) and fishing effort.

[21] In Japan, the fisheries survey (every 5 years) gathers both revenue from fisheries and not fisheries at household level. The survey is done online and if fishers do not respond then the fisheries administration phone them.

- expected limitation in the capacity to move (e.g., due to the lack of resources in other areas, the cost of reaching them, the legal constraints to move across areas, etc.
- expected changes in the species portfolio (species landed)
- expected changes in market supply, market demand and prices.
- household income

Indicator: **Institutional change**

Description: This indicator is new and is defined by how the proposed measure affects the existing institutional setting. By institutions we refer to rules and norms, formal and informal (Ostrom, 1990). The unit of analysis is the rule/norm (e.g. operational rules to allocate resources among fishers organisations' members or constitutional rules to allocate management rights to fishers, ITQs, etc.) and the potential metrics (not exhaustive list) are as follows:

- Number of fishers accessing a given quota/stock/fisheries grounds
- Number of new restrictions for a given gear/fleet segment/metier/time at sea
- Number of the target species affected by the measure
- Number of positive incentives (e.g. additional days of sea) and negative incentives (e.g. captures grading?) generated by the new measure
- Number of new processes/requirements added/eliminated.

EWG 24-05 acknowledges that CSIA will be useful to understand the combination of multiple measures adopted at the same or similar timeframe.

Indicator: **Legitimacy**

Description: How "fair" a process is and whether it considers appropriate values, concerns, and perspectives of different actors (Cash et al., 2003).

- Transparency: access to information
- Participation:
    - consultation before the measure is implemented
    - number of iterative processes

Surveys that can then be compared with EU BAROMETER, assessing increase/decrease satisfaction with the governance system.

Indicator: **Impact of measures on /from lens of RISK ASSESSMENT**

Description: This indicator is new and is defined by how the proposed measure affects the perception of other actors (e.g. financial institutions, insurance companies, potential newcomers, management bodies, civic society) about the viability of the fishing activity. For instance, banks curbing access to loans due to the announcement of a new management measure.

Data is not available.

Metrics:

- Number of applications /number of loans granted
- Decommissioning scheme figures

4.2.3 Generational renewal

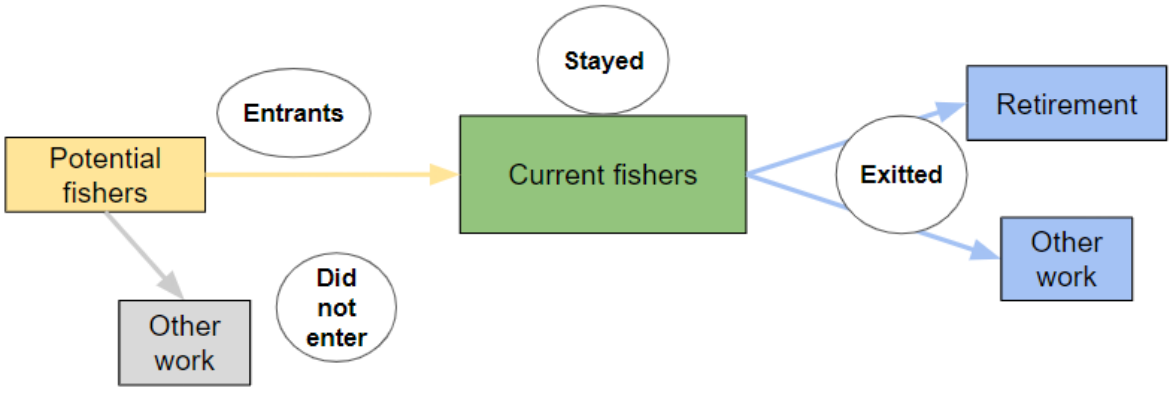
An EWG subgroup considered the two prioritised policy areas on "generational renewal" jointly. These policy areas refer to both entry to and exit from the fishing industry.

In considering the indicators associated with generational renewal (from the stakeholder survey as well as those identified in the STECF 23-17 report), the EWG subgroup determined that most of the indicators associated with these policy priorities are already covered by the other indicators (e.g. income, working conditions, social security) or are more appropriated covered by community profiles (presence of a school or hospital in a fisheries community). Rather, generational renewal refers to a particular process. We would like to collect data on this process (covered in these indicators) and the potential explanatory factors (by developing a survey).

Two exceptions to this are "training and skill" and "level of professionalisation". Regarding training and skills, the general level of education is already a social indicator under the DCF. We propose to wait with further developing the suggestions for social indicators in relation to vocational training (number of certificates, qualifications inside and outside of fishing and frequencies of training) as we are aware of the study currently taking place under a framework contract CINEA/2021/OP/0011 of the commission on "Baseline study on the training and certification requirements for fishers in EU Member States". We propose to, after having taken notice of the report out of this study in 2025, to revisit this topic. Regarding level of professionalisation, the general level of education is already a social indicator under the DCF.

The process of generational renewal can be simplified in the following schematic of people entering and exiting the fishing industry (Figure 4.2). From our current data collection, we know the stock of fishers (green box) but not the flows (yellow and blue arrows). Further, we can define four populations of interest (circles): those who entered, those who did not enter, those who stayed, and those who exited.

Figure 4.2. Simplified schematic of generational renewal in the fishing industry.



Source: own elaboration.

Indicator: **Nr of years working as fisher**

Description: In the EU social data call, we can add a social indicator 'nr of years working as fisher'. This helps understand the level of professionalisation, as this is based on the level of education and the nr of years of experience; assuming that fishing is a job that for a large part requires

'learning on the job'. It is important to assess, however, whether this will provide data on all fishers or a subsection such as owners, as this depends on who responds to the surveys.

Indicator: **Reduced potential for recruitment of fishers**

Description: At EU level we will indicate the number of countries which prohibit children of fishers to joining the vessel for fishing in school holidays because there are rules about: not being allowed to join a commercial fishing vessel without a safety at sea training; not being allowed to join if younger than 18 or not being allowed to bring children on board. Being able to join parents on board in school holidays helps create the interest and pleasure in the job. Rules in member states hindering this option should be identified. This can help understand the generational renewal of the fleet.

Indicator: **Number of people entering the fishing industry**

It is expected that the number of people entering the fishing industry cannot be measured directly, unless Member States record individuals by industry subsector (e.g. for tax purposes), and these records can be accessed by researchers. As such, four potential indicators are identified in this section.

Indicator: **Number of people enrolled and recent graduates of mandatory safety training**

Many MS require fishers to complete mandatory safety training in order to fish commercially. Records of enrolment thus present a promising indicator for the number of people entering the fishing industry, with the caveat that some individuals may complete the mandatory safety training but never actually take the final step to work as a fisher. It is expected that there is no standardised method in which Member State agencies record enrolment and completion in mandatory safety training in different manners. The recent launch of an enhanced training portal by BIM in Ireland provides one promising model to follow (see box below).

> Bord Iascaigh Mhara (BIM), Ireland's Seafood Development Agency launched an enhanced training portal for the seafood sector in 2024. The objective of the training portal is to provide a comprehensive system that allows students to book fisheries and aquaculture related courses, processing payments, recording attendance, marking results, and generating certificates following completion of the training course. An added benefit of this portal is the facility to generate reports on new entrants to the sectors in addition to data on those that are upskilling. Social demographic data captured in the training portal includes the Personal Public Service (PPS) number, address, nationality, age, and gender of the applicant.

Indicator: **Number of people enrolled and recent graduates of fisheries vocational training**

Some individuals are likely to attend fisheries vocational training before entering the fishing industry, thus enrolment figures provide a potential indicator for the number of people entering the industry. This is more likely to be the case for larger vessels.

Indicator: **Number of new entrants in the vessel register**

All MS record the owner of vessels in their official vessel register. This enables an assessment of new entries to the vessel register as a means of assessing entry in terms of vessel owners, but not vessel crew.

Indicator: **Number of new entrants in fishing insurance schemes**

Although Member State records of individuals by industry subsector (where they exist) are unlikely to be made publicly available, fishing insurance schemes provide another means of using 'official records'. These schemes may only cover self-employed crew.

Number of people exiting the fishing industry

Like the previous category on the number of people entering the fishing industry, it is expected that the number of people exiting the fishing industry cannot be measured directly. As such, three potential indicators are identified in this section. Two of the three indicators use the same data sources as the previous category (measured in reverse).

Indicator: **Number of participants in decommissioning schemes**

Some individuals participating in vessel decommissioning schemes are exiting the industry. Many Member States use a criteria that participation in a decommissioning scheme precludes re-entry in the fishing industry for a substantial period of time. Recent schemes (some related to Brexit) provide a timely opportunity to employ this indicator (e.g. Ireland, the Netherlands, France). While this indicator is a means of assessing the exit of vessel owners, it cannot assess the exit of vessel crew.

Indicator: **Entrants no longer in the vessel register**

All MS record the owner of vessels in their official vessel register. This enables an assessment of entries that have dropped out of the vessel register as a means of assessing the exit of vessel owners, but not vessel crew.

Indicator: **Entrants no longer in in fishing insurance schemes**

Although Member State records of individuals by industry subsector (where they exist) are unlikely to be made publicly available, fishing insurance schemes provide another means of using 'official records'. These schemes may only cover self-employed crew.

Preliminary ideas for a survey

The EWG considers that conducting a survey of motivations surrounding entry to and exit from the fishing industry is a particularly promising methodology to deeper understanding of generational renewal in the EU fishing industry. Such a survey could first be tested as a pilot study in one Member State.

In addition to the indicators proposed above, formal or informal records of financial transactions for fishing vessels or fishing licences may, in some cases, provide a method of identifying individuals entering and exiting the fishing industry.

Ideally, such a survey could target, and be tailored to, the four populations identified in the generational renewal schematic, that is: those entering the fishing industry are asked their reasons for doing so, those who are not entering the fishing industry are asked their reasons for not doing

so, those remaining in the fishing industry are asked their reasons for doing so, and those exiting the fishing industry are asked their reasons for doing so. A smaller version would be to target the survey to fishing families which could identify current fishers and their reasons for remaining or considering (potential) exit, as well as a younger generation and their reasons for considering (potential) entry or not.

Regardless of the survey scope, it is important to consider: the target population, the distinction between owner/crew, whether responses are about a potential decision or a decision already made, and whether responses are about themselves or others (e.g. the next generation).

Few 'exit surveys' exist in the literature (see Stewart et al., 2006 for a study in New Zealand), although surveys of current fishers point to interesting and perhaps surprising findings (see Arias Schreiber & Gillette, 2021 for a study in Sweden and Kraan et al. 2023 for a study in the Netherlands discussing reasons for fishers to stay or leave in the context of an announced decommissioning scheme in relation to Brexit).

Table 4.3. Proposed social indicators under the 5 policy priorities, showing category, type (quantitative or qualitative), a short description, unit of analysis, potential data source (at EU or MS level, further indicating whether it is existing (or not) and whether it needs disaggregation) and comments. Forthcoming indicators are coloured in green and potential indicators in grey.

Category	Indicator	Type (Quanti or Quali)	Description	Unit of analysis		Potential data source				Comments
						EU	MS level			
							Existing	Exist need disaggregation	Non existing	
	Social position I	Quanti	5-Likert-Scale (STECF EWG 23-17 p. 27); Owner/crew in SSF/LSF; symbolic capital according to Pierre Bourdieu; perception in the general population!	(Community) Preferred national probably differentiated by NUTS					X	Assessment via fisheries experts, who do a survey/research on community studies
	Social position II	Quali	Self-perception; (assumed) social status in community/society	Part of community profile					X	Qualitative Interview
	Financial position	Quanti	Compare average net income (self-employed/employee) with national averages (Owner/crew in SSF/LSF)			X DCF income, personal costs + national averages	X DCF income, personal costs + national averages			Proof the calculation, if statistical significant
	Number of fishers (crew) under SER /working under written contract	Quanti	Per country signed ILO/IMO convention Per nationality, temporal contracts			Is employment data reflecting this?	yes	Don't know		Social security agencies IF they are covered

Category	Indicator	Type (Quanti or Quali)	Description	Unit of analysis		Potential data source				Comments
						EU	MS level			
							Existing	Exist need disaggregation	Non existing	
	Number of fishers working for a cooperative under agreement	Quanti	Per fishing fleet			No	yes	Don't know		Cooperatives national registers
	Number of contracts with social security and working conditions specification	Quanti	What are the working conditions (working hours, holidays, etc). What SS coverage?			No	Country Unions	yes		Unions registers
	Number of fishers with contracts through employment agencies	Quanti	Per nationality EU/EEE and NO-EU, per fleet				yes	yes		
	Number of fishers in trade unions	Quanti	Per fishing fleet				yes	yes		Trade unions registers
	Number of fishers with no social security	Quanti	Per fishing fleet				yes	yes		Social security agencies

Category	Indicator	Type (Quanti or Quali)	Description	Unit of analysis		Potential data source				Comments
						EU	MS level			
							Existing	Exist need disaggregation	Non existing	
Working Conditions	Work Safety	Quanti	Age of Vessel Fatalities & Injuries	Year(s)		Yes	Yes		?	Are these data confidential. France has these data by vessel type. In GER it is recorded in Insurance records. There is an international office collecting this for >24m. Social security dataset will have sick and accident data but there needs to be social security in place.
Working Conditions	Work Safety	Quanti	Minimum required crew per vessel	Number		Yes	Yes			Single operated vessels can be more unsafe
Working Conditions	Work Safety	Quanti	Medical certificates	Yes/No and/or Age of Certificate		Yes	Yes		?	Are medical certificates mandatory in MSs? FRA and NTL need this annually
Working Conditions	Work Safety	Quali	Mandatory Safety training	Yes/No and/or Age of Certificate			Yes		?	Maybe MS specific. FRA every 2 years.
Working Conditions	Well-being	Quanti	Time away from home	Days at Sea		Yes	Yes			Time away from home not necessarily a bad thing, it can be positive or negative
Working Conditions	Well-being	Quanti	Time away from home	Number of trips		Yes		Yes		

Category	Indicator	Type (Quanti or Quali)	Description	Unit of analysis		Potential data source				Comments
						EU	MS level			
							Existing	Exist need disaggregation	Non existing	
Working Conditions	Well-being	Quali	Time away from home	Work mode of vessel					?	May need to capture vessel operations, rotating crew etc.
Working Conditions	Well-being	Quali	Time away from home	Satisfaction with time at sea					?	Need to assess if they are happy with time spent at sea
Working Conditions	Well-being	Quanti	Financial security	Average wage (in comparison with national minimum wage)		Yes	Yes			
Working Conditions	Well-being	Quanti	Deprivation index	Could be used as a proxy for security and access to services		Yes	Yes			May be available at Nuts 3 ?
Working Conditions	Well-being		Happiness Index	Does this provide a model?		Yes		Yes		Possible Areas for examination. Happiness includes GDP, Social Support, Health life expectancy, life choices etc.
Working Conditions	Well-being		Job satisfaction Index							

Category	Indicator	Type (Quanti or Quali)	Description	Unit of analysis		Potential data source				Comments
						EU	MS level			
							Existing	Exist need disaggregation	Non existing	
	% of sea allocated to other uses/Priority areas for fishing	Quanti		EEZ Territorial sea, marine use zone	ICES rectangle GSA GCMF		MSP platforms (national and EU)			Unpack; uses; aquaculture, Wind farms Displacement, conflict, adaptive capacity
	Restrictions/gear/size/fleet	Quanti		Fleet, Geographical area		Legal documents	Legal documents			Maybe the use of machine learning can support in a first attempt
	Restrictions/gear/size/fleet	Quali		Fleet, Geographical area		Legal documents	Legal documents			Maybe the use of machine learning can support in a first attempt
	Additional income (time allocated to fisheries/total)	Quanti		Fleet			Surveys, Social Security information			Timeline. Unpacking: Women job for men to continue (income) household Men second job to continue session
	Alternative sources of income	Quanti					Surveys			Timeline
	Legal burden	Quanti		Community			Regulation			

Category	Indicator	Type (Quanti or Quali)	Description	Unit of analysis		Potential data source				Comments
						EU	MS level			
							Existing	Exist need disaggregation	Non existing	
				Fleet						
	Legal burden	Quali					Interviews			
EJ: Procedural justice	Legitimacy		**Satisfaction**			Eu Barometer	Surveys that can then be compared with EU BAROMETER			Proxy %
Generational renewal	reduced potential for recruitment of fishers	Quant	**Rules about bringing children / under 18 / people without safety training on board**	Member state			Rules at MS level			By being able to join parents on board in school holidays helps create the interest and pleasure in the job, rules in MS hindering this option should be identified
Level of professionalisation	Nr of years working as fisher	Quant				No				Expansion of the social data call - adding 1 question 'nr of years working as fisher'. To be used together with level of education and the later on to be developed indicator on vocational training

Category	Indicator	Type (Quanti or Quali)	Description	Unit of analysis		Potential data source				Comments
						EU	MS level			
							Existing	Exist need disaggregation	Non existing	
Number of people entering the fishing industry	Number of people enrolled and recent graduates of mandatory safety training	Quant		Number			Most Member States			
Number of people entering the fishing industry	Number of people enrolled in fisheries vocational training	Quant		Number			Most Member States			Would only be partial coverage (mostly larger vessels)
Number of people entering the fishing industry	Number of new entrants in the vessel register	Quant		Number			Most Member States			Would only cover vessel owners (not crew). Being in the registry The register does not mean that the owner is an active fisher.
Number of people entering the fishing industry	Number of new entrants in fishing insurance schemes	Quant		Number			Most Member States			May only cover self-employed crew
Number of people exiting the fishing industry	Number of participants in decommissioning schemes	Quant		Number			Most Member States			Would only cover vessel owners (not crew)

Category	Indicator	Type (Quanti or Quali)	Description	Unit of analysis		Potential data source				Comments
						EU	MS level			
							Existing	Exist need disaggregation	Non existing	
Number of people exiting the fishing industry	Entrants no longer in the vessel register	Quant		Number			Most Member States			Would only cover vessel owners (not crew)
Number of people exiting the fishing industry	Entrants no longer in in fishing insurance schemes	Quant		Number			Most Member States			May only cover self-employed crew

Source: own elaboration.

4.3 Next methodological steps

The EWG24-05 was asked to (Tor 3c) suggest next methodological steps for the integration of these indicators in a EU data call, taking into account, inter alia, the 2021 evaluation report of the EU MAP social data pilot studies and the 2019 Technical Report on socio-economic data collection for fisheries, aquaculture and the processing industry at EU level (WP 6 on social indicators) and to (TOR 3d) identify countries to be chosen for pilot studies on new indicators.

4.3.1 Background literature

The EWG24-05 assessed the two reports mentioned.

The **2021 evaluation report of the EU MAP social data pilot studies** provides and assessment of Member States pilot studies on the collection of social variables: employment by education level and nationality[22]. The report includes: an overview of methodological strategies applied by MSs to implement social pilot studies; results achieved,; and analysis of individual countries' approaches, methods used to collect social indicators, difficulties encountered, and lessons learned during implementation of pilot studies. The report is a valuable resource for coordination of methodological development and harmonisation of the data collection approaches within the EU MAP, as well as for drafting data collection plans at MS level and for Regional Work Plans.

EWG 24-05 used the report as background material and carried out a reading exercise in plenary, where the executive summary and the pilots from most MS were analysed by experts. This reading exercise preceded the debate and work on ToR3.

The **2019 Technical Report on socio-economic data collection for fisheries, aquaculture and the processing industry at EU level** (WP 6 on social indicators) was developed in the framework of the SECFISH project ("Strengthening regional cooperation in the area of fisheries data collection – Socio-economic data collection for fisheries, aquaculture and the processing industry at EU level") funded by DG-MARE. The WP6 focused on end users, possible applications for the data, and linking societal indicators with fisheries and the EU and EU Multi-annual plan for data collection (EU-MAP). It also included investigating relevant international data sources (e.g. EUROSTAT, OECD, FAO) to identify available data and useful variables to assess the feasibility of extracting data already available from these international data sources. The main conclusions [pertinent to ToR3) were:

- EU-MAP is providing only a small portion of the social information that might be needed for end users to get a full social profile of fisheries, fish processing and aquaculture industries.
- MS data collection systems show a variety of approaches taken by MSs to collect social data, beyond the requirements of the EU-MAP.
- It might be useful to consider keeping results of social surveys (as defined in EU-MAP) at a MS regional level and stratifying the population in order to assess regional differences rather than fully follow the DCF segmentation based e.g. on fishing technique.
- For proper socio-economic impact assessment in the future a link should be kept between vessel and social EUMAP variables.

4.3.2 Next methodological steps

The EWG24-05 notes that the development of social indicators will best advance when taking a stepwise multi-level approach. Three steps are foreseen:

[22] According to the EUMAP social indicators must be collected each third year starting 2018.

1. Some indicators can be taken up directly in an EU data call
2. Developing more social indicators
3. Developing indicators by making use of existing sources

The indicators that can be taken up directly in an EU data call are:

1. **Financial position – quantitative - compare average net income (self-employed/employee) with national averages (Owner/crew in SSF/LSF).** Make use of DCF income, personal costs + national averages (EU level) and at MS level (DCF income, personal costs). Proof the calculation, if statistical significant
2. **Nr of fishers in trade unions – quantitative – per fishing fleet** – available at MS level – trade union registers
3. **Working conditions – work safety – quantitative – min required crew per vessel** – single operated vessels can be more unsafe. Number of fishers in the SSSF fleet working on their own with no additional crew onboard.
4. **Working conditions – work safety – qualitative – mandatory safety training** – **yes/no** [and or age of certificate] – MS specific – FR every 2 years
5. **Working conditions – well being – quantitative – time away from home – DAS** – available at EU and MS level – time away from home not necessarily a bad thing, it can be positive or negative
6. **Working conditions – well being – quantitative – time away from home – nr of trips** – available at EU level – needs disaggregation
7. **Working conditions – well being – quantitative – financial security – average wage in comparison with national minimum wage**
8. **% of sea allocated to other uses / Priority areas for fishing – quantitative – EEZ Territoral sea, marine use zone – ICES rectangle GSA GCMF** – MSP platforms (national and EU) Unpack uses: aquaculture, windfarms, displacement, conflict, adaptive capacity
9. **Level of professionalization – nr of years working as a fisher – quantitative – not existing but can 'easily' be expansion of the social data call** - adding 1 question 'nr of years working as fisher'. To be used together with level of education and the later on to be developed indicator on vocational training
10. **Number of people entering the fishing industry - Number of people enrolled and recent graduates of mandatory safety training – quantitative** – nr – most MS
11. N**umber of people entering the fishing industry - Number of people enrolled in fisheries vocational training - quantitative** – nr – most MS - Would only be partial coverage (mostly larger vessels)
12. N**umber of people entering the fishing industry - Number of new entrants in the vessel register- quantitative** – nr – most MS - Would only be partial coverage (mostly larger vessels) - Would only cover vessel owners (not crew). The register does not mean that the owner is an active fisher.

EWG 24-05 suggests that all of these indicators can relatively quickly be developed and taken up in an EU data call. The next step would be to liaise with RCGECON to discuss how to move forward. Once collected, for each of these social indicators, it is important to interpret them in their context (different MS). The NFPs can be useful for this.

Each of these indicators will make use of different data sources. Indicator 1 and 7 require bringing two data sources together. Indicator 2-4, 8, 10, 11 and 12 require access to different data systems (of the MS or sub national organisations). Indicator 5 and 6 are available via logbook data. Indicator 9 is currently non-existent but can be added to the social data call.

The indicators that need more work can be developed on a yearly basis. The EWG-05 advises to have an annual EWG on social indicators, where the development of social indicators is the only task on the agenda.

This allows for more time. It would be good to have close links with RCG ECON. A dedicated EWG can also keep track of all the developments taking place at different levels and in other groups (i.e. WGSOCIAL ICES or in research projects) as well as complementary methodological approaches.

- WGSOCIAL (ICES) is working on a social indicator review. This can be a valuable resource for further development of indicators when it is finished.
- EU project SEAWISE is looking at dependency of fishing communities (using ports of landing as a proxy) to certain fishing grounds and species. It is able to do so by using fleets as a link between community and
- NOAA (USA) is currently working on indicators to assess environmental justice. Environmental justice is a concept that can be central to assessing any potential opportunity or impact from policy measures. While EWG 24-05 did not have time to build a proper indicator, suitable for the EU context, the next steps could be informed by the following.

NOAA's vision for the future includes "resilient communities and institutions that derive goods from ecosystems in a way that does not compromise ecosystem integrity, yet is economically feasible and socially just for future generations" (NOAA Strategic Plan 2010).

EJ science at NOAA investigates how - spatially, temporally, and socially - and why - physically, economically, and socially - environmental conditions are distributed. It created a Community Social Vulnerability Indicators Toolbox, which is comprised of "14 statistically robust social, economic, and climate change indicators that uniquely characterize and evaluate fisheries communities' vulnerability and resilience to disturbances (regulations, extreme weather, oil spills, sea level rise, etc.)" (NOAA Website on social indicators for coastal communities

The notion of social justice – which includes recognitional, procedural and distributive justice concerns - provides useful analytical clarity for conceptualizing the means or processes through which resources and spaces are being reallocated, and the resultant substantive ends in terms of the distribution of benefits and harms to different groups of people.

Recognitional justice refers to the acknowledgement of and respect for pre-existing governance arrangements as well as the distinct rights, worldviews, knowledge, needs, livelihoods, histories and cultures of different groups in decisions. This can be addressed through an understanding of pre-existing / informal governance arrangements, as well as knowledge, worldviews, histories and cultures of different groups who might be impacted by changing fishing governance arrangements but also from the promotion of the Sustainable Blue Economy Strategy for each MS or regional area. These processes can be discussed in the NFPs whilst they can be elements to be explored in the Community Profiles.

Procedural justice refers to the level of participation and inclusiveness of decision making and the quality of governance processes. This can be addressed through an understanding of the governance arrangements and consultation procedures for each MS or regional area. These processes can be discussed in the NFPs whilst they can be elements to be explored in the Community Profiles. Indicators to understand procedural justice can include studies of litigation actions, protests, etc.

Distributional justice can be defined as fairness in the distribution of benefits and harms of decisions and actions to different groups.

EWG 24-05 explored the complementarity of other methodological approaches in developing social indicators and informing the different tools (see Figure 1.1.).

The analysis of the social dimension can build on the findings from the economic dimension. For instance, the Input-Output analysis provides a map of the interdependencies across economic activities linked to the fisheries (see figure 4.3). Input-Output tables use a standardised methodological approach (e.g. common statistical classification of economic activities in the EU) and can inform the development, combination, contextualization and comparison of social indicators. In fact, the Greek NFP has used this analytical approach (see ToR1).

Figure 4.3. Backward and forward sectoral linkages of the fishing sector in Galicia.

BACKWARD LINKAGES		FORWARD LINKAGES
8,4%	FISHING	4,3%
0,6%	AQUACULTURE	2,5%
0,5%	AGRICULTURE, FORESTRY AND MINING	0,0%
2,8%	MANUFACTURE OF FOOD PRODUCTS	72,9%
2,3%	MANUFACTURE OF TEXTILES, WEARING, WOOD AND PAPER	0,0%
33,3%	MANUFACTURE OF PETROLEUM, CHEMICAL, PLASTIC AND OTHER NON-METALLIC PRODUCTS	0,6%
2,1%	OTHER MANUFACTURES	0,0%
10,9%	REPAIR AND SUPPLIES	0,6%
0,1%	CONSTRUCTION	0,0%
8,2%	WHOLESALE AND RETAIL TRADE	0,0%
16,0%	TRANSPORTATION AND STORAGE	0,0%
0,0%	ACCOMMODATION AND FOOD SERVICE ACTIVITIES	18,6%
13,1%	SERVICES TO COMPANIES AND INDIVIDUALS	0,0%
0,0%	ADMINISTRATION AND PUBLIC SERVICES	0,2%
1,9%	OTHER SERVICES	0,3%
% of the intermediate consumptions of fishing sector		% of the intermediate output by fishing sector

Source: Santiago and Suris, 2018

Economic Input-Output Models in Assessing the Downstream Effects on Fisheries Communities

The utilisation of input-output analysis to examine the contribution of the fisheries and aquaculture sector to economies is becoming more widespread, establishing it as a valuable tool for formulating more rational economic and/or environmental policies. Assessing inter-sectoral relations between the fisheries, aquaculture, and other productive sectors can highlight the sector's importance concerning key economic, employment, and environmental indicators. Investigating the inter-sectoral linkages between the fisheries sector and other sectors of an economy may help draw meaningful insights into development strategies and effective growth policymaking.

The input-output approach could be applied to investigate the linkages among the Fisheries and Aquaculture sectors and the industry sectors of the local economy. This approach gives the opportunity. Symmetric Input-Output Tables (SIOTs) provide the necessary framework to conduct such analyses. SIOTs are available from several reputable sources including the OECD Database, the World Input-Output Database (WIOD), and Eurostat. These databases provide comprehensive SIOTs that include detailed information on the economic structure and the relationships between different sectors. While SIOTs offer valuable insights at a national level, examining inter-industry linkages at a regional basis can provide a deeper understanding of sectoral impacts, particularly in regions where specific industries like fisheries and aquaculture might have more pronounced effects. This requires the use of Regional Input-Output Tables (RIOTs). To estimate regional

multipliers today, it would be necessary to construct corresponding RIOTs, by disaggregating national SIOTs. This would allow for a more detailed analysis of how the fisheries and aquaculture sector contributes to regional economies, providing insights into production, employment, and energy consumption linkages at a more localised level.

In the context of fisheries communities, these models are particularly useful for assessing how changes in the fishing industry can impact other economic sectors and the community at large. I-O models represent the flow of goods and services between industries within an economy. They typically consist of a matrix that quantifies the inputs required by each industry from every other industry to produce a unit of output. This framework allows researchers to trace how an increase or decrease in fishing activity affects other sectors, such as processing, retail, and services, as well as broader economic metrics like gross domestic product (GDP) and employment.

I-O models can evaluate the economic contributions of the fishing industry to local and regional economies. This includes assessing direct impacts (e.g., employment within the fishing industry), indirect impacts (e.g., supply chain businesses), and induced impacts (e.g., spending by employees). Studies have shown that fishing activities have significant multiplier effects on local economies, amplifying the importance of sustainable fisheries management. An example of an economic IO model for Ireland is detailed below.

Beyond economics, I-O models can be used to assess social impacts, such as changes in community well-being and demographic shifts due to variations in fishing activity. This holistic approach ensures that all facets of community life are considered in management decisions and provide a useful way forward when considering the social aspects of fisheries communities.

Case studies – Ireland

As an example of downstream impacts in fisheries ports Ireland carried out a study to review the economic impact of the seafood sector at Ireland's main ports (BIM, 2019). The study combined industry data, survey results, and government statistics, adjusting for data gaps with proxy estimates based on comparable geographies to output three core metrics (employment, Gross Value Added, and tax receipts). The economic impact assessment method quantified the total economic benefit created by the seafood sector at the ports through four main channels:

1. Direct Operational Effects: These impacts are the immediate contributions of the seafood sector to the economy, such as employment and GDP contributions directly from the sector's activities.

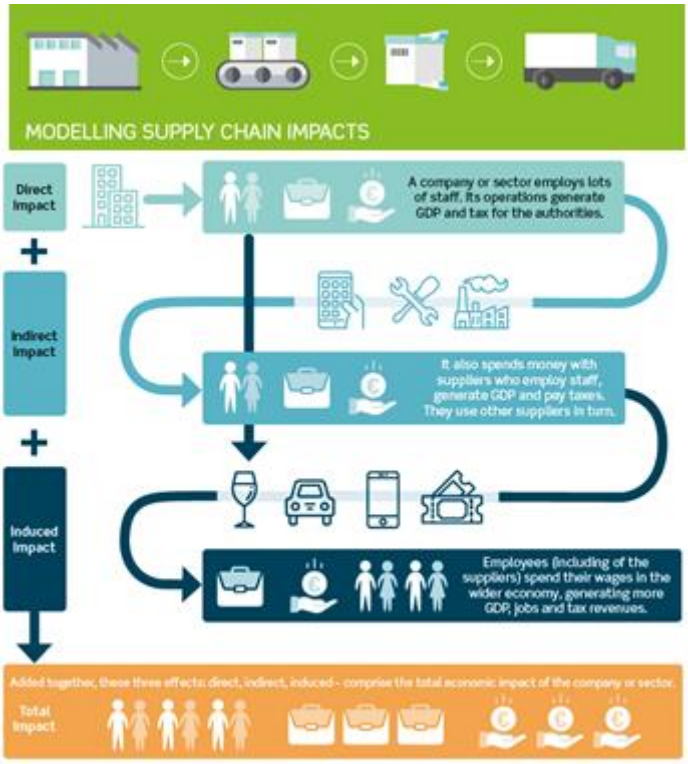
2. Supply Chain Effects: These effects are derived from the sector's demand for goods and services, which creates additional economic activities within the supply chain.

3. Induced Impacts: These arise from the spending of wages by employees from the sector within the broader consumer economy, which supports further jobs and economic activities.

4. Catalytic or Dynamic Benefits: These represent the broader benefits that society or other industries derive from the original economic activity, expanding the scope of the economic impact assessment beyond the traditional measures.

An input-output model was used to trace the flow of economic activity through the economy, adjusted for regional specifics using Location Quotients (LQs) and other parameters to reflect local economic structures and sizes. Figure 4.4 provides an illustrative summary of the methodology.

Figure 4.4. Overview of economic impact methodology.



Source: BIM, 2019: Figure 70[23]

Case studies-Galicia

The input-output approach has been extensively used to analyse Galician fisheries since 1999, providing a powerful analytical tool and a complete picture of the flows and interdependencies in complex, large fisheries sectors. García Negro and Rodríguez-Rodríguez from the USC led the development of the "Galician Fisheries Input-Output tables", funded by the Galician Regional Government (García Negro et al., 2004), which have been periodically updated until today.

The tables provide the basis for multiple research streams, including the assessment of socioeconomic impacts through physical Multipliers (Regueiro and Santiago, 2018). Applications include assessing the socioeconomic impacts of European fisheries quota-based management (Santiago et al., 2018) or the economic impacts of the landing obligation (Rodríguez-Rodríguez et al., 2019). Other Spanish regions have also developed similar studies (e.g. in Asturias, García de la Fuente et al., 2020).

In exploring the different tools to address the social dimension, EWG 24-05 noted the relevance of the historical one to understand past, current and future developments. The Working Group on the History of Fish and Fisheries (WGHIST) brings together researchers to discuss and undertake work on change in marine and fisheries systems over multidecadal to centennial timescales.

WGHIST explores social-ecological change through time from different geographic regions, thematic areas and disciplines. Work from this diverse group clarifies the value and use of historical perspectives and research, as well as its application to contemporary management. The group currently focuses on: ensuring historical metadata and other resources are accessible to the scientific community, expanding knowledge on long-term changes in marine ecosystems and dependent communities, with specific reference to social,

[23] https://bim.ie/wp-content/uploads/2021/03/BIM-Economic-Impact-of-Seafood-Sector-report-main.pdf.

cultural, and economic dimensions, and expanding the visibility of resources and approaches not typically used in marine systems research and management.

Figure 4.5. Estimations of total impacts on employment, Galicia (number of employees, FTE).

Table C.13
Estimations of total impacts on employment, Galicia (number of employees Full Time Equivalents, FTE).

		Shellfish	Artisanal	Coastal	Distant	Long-distant
		Δ FTE[1]	Δ FTE[1]	Δ FTE[1]	Δ FTE[1]	Δ FTE[1]
R01A	Shell-fishing on foot	20.0	0.0	0.1	0.1	0.1
R01B	Artisanal fishing	0.0	34.0	0.1	0.1	0.1
R01C	Coastal fishing	0.0	0.0	16.3	0.0	0.1
R01D	Distant water fishing	0.0	0.0	0.0	9.1	0.0
R01E	Long-distant water fishing	0.0	0.0	0.0	0.0	9.6
R02	Aquaculture	0.2	0.3	1.0	0.9	0.8
R03	Agriculture, forestry and mining	0.0	0.0	0.0	0.0	0.0
R04	Manufacture of food products	1.2	2.3	7.1	5.8	5.2
R05	Manufacture of textiles, wearing, wood and paper	0.1	0.3	0.9	0.7	0.8
R06	Manufacture of petroleum, chemical, plastic and other non-metallic products	0.1	0.3	0.9	0.9	1.2
R07	Other manufactures	0.2	0.3	1.0	0.8	0.7
R08	Repair and supplies	0.3	0.6	1.6	1.4	1.7
R09	Construction	0.4	0.8	2.3	1.9	2.0
R10	Wholesale and retail trade	2.7	5.1	13.6	11.2	12.6
R11	Transportation and storage	0.6	1.4	3.9	3.6	4.6
R12	Accommodation and food service activities	2.7	5.1	15.1	12.3	11.4
R13	Services to companies and individuals	2.1	4.0	10.9	9.0	10.3
R14	Administration and public services	0.1	0.2	0.7	0.5	0.4
R15	Other services	2.2	4.1	10.8	8.7	9.7
	Total Galicia	33.0	58.9	86.1	67.0	71.3

Source: Suris and Santiago (2018)

WGHIST uses unconventional resources and approaches, and interdisciplinary methodologies to interpret social-ecological trends over long periods of time. The group also provides valuable context on the possible outcomes from management strategies, in particular the response of human societies to past development.

For instance, studying the historical ecology in the Northern Adriatic Sea through Naturalists' Descriptions from 18th Century and combining it with old fish market registers (20th Century) of the landings in different ports and old recreational fishing clubs archives and photos provides substantive information about the presence and seasonality of lost species in the area.THese kind of findings are particularly useful for developing suits of indicators as well as for the NFPs and FCPs.

Existing Indicators linked to social exclusion as collected and published in the 2018 Annual Report of the Social Protection Committee (SPC) can be provided at a more disaggregated level for coastal / fisheries communities? The report delivers on the Committee's core task to monitor the social situation in the EU and the developments in social protection policies in the Member States.

- EU social indicators dataset - Employment, Social Affairs & Inclusion - European Commission (europa.eu)
- At-risk-of-poverty rate by accommodation tenure status
- At-risk-of-poverty rate by household type

These indicators cannot easily be linked to EU MAP data. It would be advisable to investigate how this data set can be used, and what the implications are for linking it to relevant scale levels, by working with a case study approach.

Another example of data that can be used from another source are balance indicators. This was pointed out by STECF 22-14: "balance indicators are not specifically social (social indicators existed but were abandoned) some ecological and economic indicators can be useful for social analysis" (page 29). Three (socio-)economic indicators calculated in the balance report relate to the production factors: capital, labour, and resources. Labour productivity (Net value added per FTE) represents how much value the fisheries sector generates for society as a whole in terms of income (in the form of remuneration, profits, and capital gains).

For all indicators it is important to assess what the relevant level is for collecting them. This can be:

- Individual Level
- Fishing Enterprise Level
- Family unit/family business
- Community level
- National level

4.3.3 Pilot studies

The EWG 24-05 used Table 4.4 as the basis for selecting potential pilot studies. The full list of potential social indicators was set across the different coastal member states and the experts indicated whether they envisioned that the particular indicator would be useful to serve in a pilot for one of the member states. Selecting a member state was done because it was envisioned to be rather straightforward to collect that data in the MS (green) or because the MS was seen as a good case to understand certain difficulties with collecting them (which is also useful in a pilot study)(orange).

Table 4.2 shows how some indicators are seen to be particularly difficult (i.e. social position, quant – indicated for Germany, Croatia, Italy, Latvia and Sweden) or more straightforward (i.e. wellbeing – financial security – average wage in comparison with national minimum wage – indicated for Bulgaria, Germany, Greece, France, Italy, Slovenia, Sweden). It is important to understand that this is a first indication, and by no means a guarantee that the data will be available or that the member state will be able to readily provide this information. But it does assist in some initial designing of pilot studies to progress on collecting more social data.

Table 4.4. Potential social indicators vis a vis the EU MS. Green indicates that the EWG 24-05 foresees that this MS can be part of a pilot to collect this indicator, either because it is foreseen to be relatively straightforward (green) or more difficult (orange).

Indicator (right)	social position (quant)	social position (qual)	Financial position	Number of fishers (crew) under SER	Number of fishers working for a cooper	Number of contracts with social	Number of fishers with contracts	Number of fishers in trade unions	Number of fishers with no social	Work Safety	work safety	work safety	work safety	work safety	work safety	work safety	work safety	work safety	well being	well being	well being	well being	% of sea allocated to other uses/P	Restrictions/gear/size/fleet	Restrictions/gear/size/fleet	Additional income (time allocated to	Alternative sources of income	legal burden	legal burden	Legitimacy	reduced potential for recruitment	Nr of years working as fisher	Number of people enrolled and recent	Number of people enrolled in fisherie	Number of new entrants in the	Number of new entrants in fishing	Number of participants in decom	Entrants no longer in the vessel registe	Entrants no longer in in fishing insura
Type (right)	quant	qual	quant	quant	quant	quant	quant	quant	quant	quant	quant	quant	qual	quant	quant	qual	qual	quant	quant				quant	quant	quant	quant	quant	quant			quant	quant	quant	quant	quant	quant	quant
Description (right)	5-Likert-Scale (STECF EWG 23-17 p. 27); Owner	Self-perception; (assumed) social status in	Compare average net income (self-employed/e	Per country signed ILO/IMO convention &	Per fishing fleet	What are the working conditions (working	Per nationality EU/EEA and NO-EU, per	Per fishing fleet	Per fishing fleet	age of vessel & fatalities and injuries	minimum engaged crew	medical certificates	Mandatory Safety training	Time away from home - DAS	Time away from home - nr of trips	Time away from home - Work mode of vessel	Time away from home - Satisfaction with time at	Financial security - Average wage (in compa	Deprivation index - Could be used as a proxy	happiness index	Job satisfaction Index							Satisfaction	Rules about bringing childre n / under 18 /									
Countries (below)																																					
(BE) Belgium																																					
(BG) Bulgaria																																					
DK) Denmark																																					
(DE) Germany																																					
(EE) Estonia																																					
(IE) Ireland																																					
(EL) Greece																																					
(ES) Spain																																					
(FR) France																																					
(HR) Croatia																																					
(IT) Italy																																					
(CY) Cyprus																																					
(LV) Latvia																																					
(LT) Lithuania																																					
(MT) Malta																																					
(NL) Netherlands																																					
(PL) Poland																																					
(PT) Portugal																																					
(RO) Romania																																					
(SI) Slovenia																																					
(FI) Finland																																					
(SE) Sweden																																					

Source: own elaboration.

4.4 Conclusions

- The EWG 24-05 concludes that there was broad consensus amongst the stakeholders consulted by DG-MARE that the state of play, dependency, generational renewal and assessment of management measures are the top 5 priority areas. The EWG 24-05 notes that the development of social indicators will best advance when taking a stepwise multi-level approach. As such, it has unpacked a suite of social indicators (38 in total) in relation to these priority areas, 12 of which can be collected relatively soon. Other indicators need more unpacking and defining. Some of these can be developed further in pilot studies. Also some social indicators can be derived via other initiatives (projects, ICES WGs) or data sources (DG EMPLOY).

- The EWG reiterates the suggestion that was mentioned in the 2019 Technical report on socio-economic data collection, that for proper socio-economic impact assessment a link should be kept between vessel and social EUMAP variables. In that respect the EWG 24-05 notes that in developing the fisheries communities profiles new social indicators might be developed that only indirectly can be linked to fleets (via the community).

- The EWG-05 advises to have an annual EWG on social indicators, where the development of social indicators is the only task on the agenda. This allows for more time. A dedicated EWG can also keep track of all the developments taking place at different levels and in other groups (i.e. WGSOCIAL ICES or in research projects). It furthermore notes that it is good to maintain close links with RCG-ECON. And the EWG 24-05 reiterates the suggestion from the last EWG report (23-17) to organise an intersessional meeting with RCGECON focusing on the advancement of social indicators.

- The EWG 24-05 identified countries that can be chosen for pilot studies on new social indicators. It highlighted per indicator (using the total list) which indicator could serve as a pilot in the different MS; either because it was envisioned to be rather straightforward to collect that data in the MS or to understand certain difficulties with collecting them). The final selection of pilot cases depends on a couple of choices the EWG 24-05 could not make, as input of other fora is appreciated in terms of feasibility linked to expert knowledge on data collection, but also availability of resources.

5 References

Arias Schreiber, M., & Gillette, M. B. (2021). Neither fish nor fowl: navigating motivations for fisheries participation and exit in Sweden. *Society & Natural Resources*, *34*(8), 1019-1037.

Cash DW, Clark WC, Alcock F, Dickson NM, Eckley N, Guston DH, Jäger J, Mitchell RB. Knowledge systems for sustainable development. Proc Natl Acad Sci U S A. 2003 Jul 8;100(14):8086-91. doi: 10.1073/pnas.1231332100. Epub 2003 May 30. PMID: 12777623; PMCID: PMC166186.

Clay, Patricia M. and Colburn. Lisa L. (2020) A Practitioner's Handbook for Fisheries Social Impact Assessment. Seattle, WA, NOAA National Marine Fisheries Service, 80pp. (NOAA Technical Memorandum NMFS-F/SPO-212). DOI: http://dx.doi.org/10.25607/OBP-1637.

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Better regulation for better results - An EU agenda COM/2015/0215 final.

Davidjuka, I. and Motova, A. (2021) EUMAP social pilot studies evaluation report. Ref. Ares(2021)6525282 - 22/10/2021.

Delaney, Alyne E. (2020): Report and Templates for National Fisheries Sector Profiles & Social Economic Profiles of Fishing Communities. Submitted to EUROPEAN COMMISSION DIRECTORATE-GENERAL FOR MARITIME AFFAIRS AND FISHERIES (Expert Report contract STECF, 2069).

European Commission, 2023. Better regulation toolbox. Available at https://commission.europa.eu/law/law-making-process/planning-and-proposing-law/better-regulation/better-regulation-guidelines-and-toolbox/better-regulation-toolbox_en.

Flick, U. (Ed.). (2014). The SAGE handbook of qualitative data analysis. SAGE. https://ebookcentral.proquest.com/lib/kxp/detail.action?docID=1707694.

García-de-la-Fuente, L., García-Flórez, L., Fernández-Rueda, M. P., Alcázar-Álvarez, J., Colina-Vuelta, A., Fernández-Vázquez, E., & Ramos-Carvajal, C. (2020). Comparing the contribution of commercial and recreational marine fishing to regional economies in Europe. An input-output approach applied to Asturias (Northwest Spain). *Marine Policy*, *118*, 104024.https://doi.org/10.1016/j.marpol.2020.104024.

James Stewart, Kim Walshe, Beverley Moodie (2006) The demise of the small fisher? A profile of exiters from the New Zealand fishery. Marine Policy 30 (4)328-340. https://doi.org/10.1016/j.marpol.2005.03.006.

Jentoft, S. (2000). The community: a missing link of fisheries management. Marine policy, 24(1), 53-60.

Julie Urquhart, Tim Acott (2013) Constructing 'The Stade': Fishers' and non-fishers' identity and place attachment in Hastings, south-east England. Marine Policy 37: 45-54. https://doi.org/10.1016/j.marpol.2012.04.004.

Kraan, M. L., Steins, N. A., Verschuur, X., van der Valk, O., van Wonderen, D., Puister-Jansen, L., Klok, A., & Deetman, B. (2023). *Sociale en culturele waarde van visserij voor de visserijgemeenschap en gevolgen van beleidswijzigingen*. (Rapport / Wageningen Economic Research; No. 2023-053). Wageningen Economic Research. https://doi.org/10.18174/629835.

Nohl, A.-M. (2010). Narrative Interview and Documentary Interpretation. In R. Bohnsack, N. Pfaff, & W. Weller (Eds.), Qualitative analysis and documentary method in international educational research (pp. 195–217). Budrich.

Rodríguez-Rodríguez, G., Ballesteros, V. H. M., Valeiras, J., & Bellido, J. M. (2019). Input-output analysis of the economic impacts of the landing obligation: Snap-shot from the trawler fleet in Northern Iberian waters (Spain). *Ocean & coastal management*, *172*, 146-156. https://doi.org/10.1016/j.ocecoaman.2019.02.006.

Santiago, J. L., & Surís-Regueiro, J. C. (2018). An applied method for assessing socioeconomic impacts of European fisheries quota-based management. Fisheries Research, 206, 150–162. https://doi.org/10.1016/j.fishres.2018.05.010.

Santiago, Jose L., Ballesteros, M., Campillos-Llanos,M., Cervera-Núñez, C., LeTissier, M., Menegon, S. 2023. Guidelines for the integration of the Socioeconomic impact of MSP. Produced by Technical Expert Group (TEG) on Data for MSP, Socioeconomic Subgroup. Supported by CINEA and DG MARE (EC). 24p. Doi:10.2926/355892.

Scientific Technical and Economic Committee for Fisheries – 74th Plenary Report (STECF-PLEN-23-03), Rihan, D. and Doerner, H. editor(s), Publications Office of the European Union, Luxembourg, 2023, doi:10.2760/230145, JRC136255.

Scientific Technical and Economic Committee for Fisheries (STECF) – Economic Report on the EU fish processing industry (STECF 23-14), Malvarosa, L., Tardy Martorell, M., Virtanen, J. and Guillen, J. editor(s), Publications Office of the European Union, Luxembourg, 2024, doi:10.2760/81639, JRC136367.

Scientific Technical and Economic Committee for Fisheries (STECF) – Social Data in Fisheries (STECF 23-17), Van Hoof, L., Goti, L., Tardy Martorell, M. and Guillen, J. editor(s), Publications Office of the European Union, Luxembourg, 2024, doi:10.2760/982497, JRC136326.

Scientific, Technical and Economic Committee for Fisheries – Economic Report on the EU aquaculture (STECF-22-17), Nielsen, R., Virtanen, J. and Guillen, J. editor(s), EUR 28359 EN, Publications Office of the European Union, Luxembourg, 2023, ISBN 978-92-76-99317-9, doi:10.2760/51391, JRC132648.

Scientific, Technical and Economic Committee for Fisheries (STECF) - The 2022 Annual Economic Report on the EU Fishing Fleet (STECF 22-06), Prellezo, R., Sabatella, E., Virtanen, J. and Guillen, J. editor(s), EUR 28359 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-56541-3, doi:10.2760/120462, JRC130578.

Scientific, Technical and Economic Committee for Fisheries (STECF) – Social data in the EU fisheries sector (STECF-19-03). Publications Office of the European Union, Luxembourg, 2018, ISBN 978-92-76-09514-9, doi:10.2760/638363, JRC117517

Scientific, Technical and Economic Committee for Fisheries (STECF) - Social Data in Fisheries – update of the national profiles (STECF-22-14), Goti, L., Van Hoof, L., Virtanen, J. and Guillen, J. editor(s), Publications Office of the European Union, Luxembourg, 2023, doi:10.2760/31328, JRC133702.

Social dimension of the CFP (STECF-20-14)., Doering, R., Fitzpatrick, M. and Guillen, J. editor(s), EUR 28359 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-27169-7, doi:10.2760/255978, JRC123058.

Surís-Regueiro, J. C., & Santiago, J. L. (2018). A methodological approach to quantifying socioeconomic impacts linked to supply shocks. Environmental Impact Assessment Review, 69, 104–110. https://doi.org/10.1016/j.eiar.2018.01.003.

Surís-Regueiro, J. C., & Santiago, J. L. (2018). Assessment of Socioeconomic Impacts Through Physical Multipliers: The Case of Fishing Activity in Galicia (Spain). Ecological Economics, 147, 276–297. https://doi.org/10.1016/j.ecolecon.2018.01.020.

Sutton-Grier, Ariana E.; Wowk, Kateryna; Bamford, Holly (2015): Future of our coasts: The potential for natural and hybrid infrastructure to enhance the resilience of our coastal communities, economies and ecosystems. In: Environmental Science & Policy 51, S. 137–148. DOI: 10.1016/j.envsci.2015.04.006.

The 2021 evaluation report of the EU MAP social data pilot studies

BIM. (2021). The Economic Impact of the Seafood Sector at Ireland's Main Ports. https://bim.ie/wp-content/uploads/2021/03/BIM-Economic-Impact-of-Seafood-Sector-report-main.pdf

6 Contact Details of EWG-24-05 Participants

[1] - Information on EWG participant's affiliations is displayed for information only. In any case, Members of the STECF, invited experts, and JRC experts shall act independently. In the context of the STECF work, the committee members and other experts do not represent the institutions/bodies they are affiliated to in their daily jobs. STECF members and experts also declare at each meeting of the STECF and of its Expert Working Groups any specific interest which might be considered prejudicial to their independence in relation to specific items on the agenda. These declarations are displayed on the public meeting's website if experts explicitly authorized the JRC to do so in accordance with EU legislation on the protection of personnel data. For more information: http://stecf.jrc.ec.europa.eu/adm-declarations

Invited experts		
Name	**Affiliation[1]**	**Email**
ARIAS SCHREIBER, Milena	University of Gotenburg. Sweden.	milena.schreiber@gu.se
AVDIC MRAVLJE, Edvard	Fisheries research institute of Slovenia. Slovenia.	edoavdic@gmail.com
BALLESTEROS, Marta	IEO-CSIC. Spain.	marta.ballesteros@ieo.csic.es
BARZ, Fanny	Thünen Institute of Baltic Sea Fisheries. Gemany.	fanny.barz@thuenen.de
CARPENTER, Griffin	Independent expert.	griffincarpenter@gmail.com
CEPIC, Drazen	University of Zadar. Croatia.	drazen.c@gmail.com
COZZOLINO, Maria	Nisea. Italy.	cozzolino@nisea.eu
DAVIDJUKA, Irina	Independent expert	irina.davidiuk@inbox.lv
DELANEY, Alyne Elizabeth	Aalborg University. Denmark.	ad@ifm.aau.dk
FRANGOUDES, Ekaterini	University of Bretagne Occidentale, Brest. France	Katia.Frangoudes@univ-brest.fr
GOTI, Leyre	Thünen Institute of Sea Fisheries. Germany.	leyre.goti@thuenen.de
HADJIMICHAEL, Maria	Cyprus Marine and Maritime Institute. Cyprus,	maria.hadjimichael@cmmi.blue
HEGLAND, Troels Jacob	Centre for Blue Governance, Aalborg University. Denmark.	tjh@plan.aau.dk

JACKSON, Emmet	Bord Iascaigh Mhara (BIM). Ireland.	jackson@bim.ie
KRAAN, Marloes	Wageningen Economic Research. The Netherlands.	marloes.kraan@wur.nl
LASNER, Tobias	Thünen-Institute of Sea Fisheries. Germany.	tobias.lasner@thuenen.de
NICHEVA, Simona	Executive agency for fisheries and aquaculture. Bulgaria.	simona.nicheva@iara.government.bg
PERRY, Sarah	BIM (Ireland's Seafood Development Agency). Ireland.	sarah.perry@bim.ie
PITA, Cristina	CESAM - Centre for Environmental and Marine Studies, University of Aveiro. Portugal.	c.pita@ua.pt
TZOURAMANI, Irene	Agricultural Economics Research Institute - ELGO DIMITRA. Greece.	tzouramani@agreri.gr

JRC experts		
Name	**Affiliation[1]**	**Email**
GUILLEN, Jordi	Joint Research Centre (JRC). European Commission. Italy	jordi.guillen@ec.europa.eu
TARDY MARTORELL, Montserrat	Joint Research Centre (JRC). European Commission. Italy	Montserrat.TARDY-MARTORELL@ec.europa.eu
VIRTANEN, Jarno	Joint Research Centre (JRC). European Commission. Italy	jarno.virtanen@ec.europa.eu

European Commission		
Name	**Affiliation[1]**	**Email**
TARDY MARTORELL, Montserrat	Joint Research Centre (JRC). European Commission. Italy	Montserrat.TARDY-MARTORELL@ec.europa.eu
ROUSSOULIERE-AZZAM, Joan	DG MARE (Maritime Affairs and Fisheries). Brussels, Belgium.	joan.roussouliere-azzam@ec.europa.eu

Observers		
Name	**Affiliation[1]**	**Email**
ALBERTAZZI, Andrea	European Transport Workers' Federation	a.albertazzi@etf-europe.org
KOVSARS, Maksims	Institute of Food safety, Animal Health and Environment "BIOR", Fish resources research department. Latvia.	maksims.kovsars@bior.lv
MINNE, Marie-Dominique	Ministry of agriculture. France.	marie-dominique.minne@agriculture.gouv.fr
PIRON, Marzia	Mediterranean Advisory Council	segreteria@med-ac.eu
TUKKER, Rosalie	Europêche	rosalie.tukker@europeche.org
VIŠNIĆ NOVAKOVIĆ, Svjetlana	Ministry of Agriculture. Croatia.	svjetlana.visnic@gmail.com

7 List of Tables

8 List of Figures

9 List of Annexes

Electronic annexes are published on the meeting's web site on:
https://stecf.ec.europa.eu/reports/economic-and-social-analyses_en

List of electronic annexes documents:

EWG-24-05 – Annex 1 - List of fisheries communities (pool of communities).

Getting in touch with the EU

In person

All over the European Union there are hundreds of Europe Direct centres. You can find the address of the centre nearest you online (european-union.europa.eu/contact-eu/meet-us_en).

On the phone or in writing

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

— by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),

— at the following standard number: +32 22999696,

— via the following form: european-union.europa.eu/contact-eu/write-us_en.

Finding information about the EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website (european-union.europa.eu).

EU publications

You can view or order EU publications at op.europa.eu/en/publications. Multiple copies of free publications can be obtained by contacting Europe Direct or your local documentation centre (european-union.europa.eu/contact-eu/meet-us_en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex (eur-lex.europa.eu).

EU open data

The portal data.europa.eu provides access to open datasets from the EU institutions, bodies and agencies. These can be downloaded and reused for free, for both commercial and non-commercial purposes. The portal also provides access to a wealth of datasets from European countries.

Science for policy

The Joint Research Centre (JRC) provides independent, evidence-based knowledge and science, supporting EU policies to positively impact society

EU Science Hub
Joint-research-centre.ec.europa.eu

Publications Office
of the European Union