

EU FISHERIES CONTROL COALITION











Small-scale fishers: Facts and benefits of tracking and catch reporting

Small-scale fishers (SSF)¹ make an essential socio-economic and cultural contribution to EU coastal communities, especially in remote regions. They comprise the majority of the EU fleet by vessel numbers (75% of active vessels)², mainly catching fresh fish on a daily basis. However, due to the fragmentation of the sector, the remote location of SSF communities and the diversity of cultural and economic contexts, they are often characterised as having insufficient information on their activities, inadequate management, weak associations to defend their interest and limited financial investment in comparison to the larger scale fleet. As a result, they are often disempowered which contributes further to poor management, including in matters of monitoring, control and surveillance.

With technological developments allowing for tailor-made solutions that are cost-effective and user friendly, SSF recently have come under increased scrutiny facing questions about their exemption from EU catch reporting and monitoring requirements.

In May 2018, the European Commission proposed a reform of the EU Fisheries Control Regulation³ with new obligations for the SSF sector, notably on: (1) the use of tracking devices for the monitoring of vessel position and movement; and (2) electronically reporting catches.

In light of this proposal, there is a need to challenge some long-held myths about the SSF sector and demonstrate the need and the benefits for such control measures to be put in place for the small-scale vessel fleet.

FACT 1: Vessel tracking and catch reporting contribute to safety at sea and to effective management of marine resources

In the current EU fisheries Control system⁴, which entered into force on January 2010, vessels under 12 metres in length are exempt from the obligation to carry a vessel monitoring system (Article 9) to automatically locate and identify them. Vessels under 12 metres are also exempt from the obligation to record their catches electronically and to provide such data to the competent authorities (Article 15). This means that

- 1 Current legislation such as the EMFF defines the SSF as 'fishing vessels of an overall length of less than 12 meters and not using towed gear'.
- 2 The 2019 Annual Economic Report on the EU Fishing Fleet (STECF 19-06), page 23.
- 3 Proposal for a Regulation of the European Parliament and Council amending Regulation 1224/2009, and amending Regulations 768/2005, 1967/2006, 1005/2008, and 2016/1139 as regards fisheries control.
- 4 Council Regulation (EC) No 1224/2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy

49,381 vessels (75% of the total EU fishing fleet)⁵ remain largely off fishing authorities' radars. This not only has implications for maritime safety – e.g. if fishers have an accident at sea, authorities will not have the tools to easily locate such vessels –, but also undermines marine conservation and fisheries management.

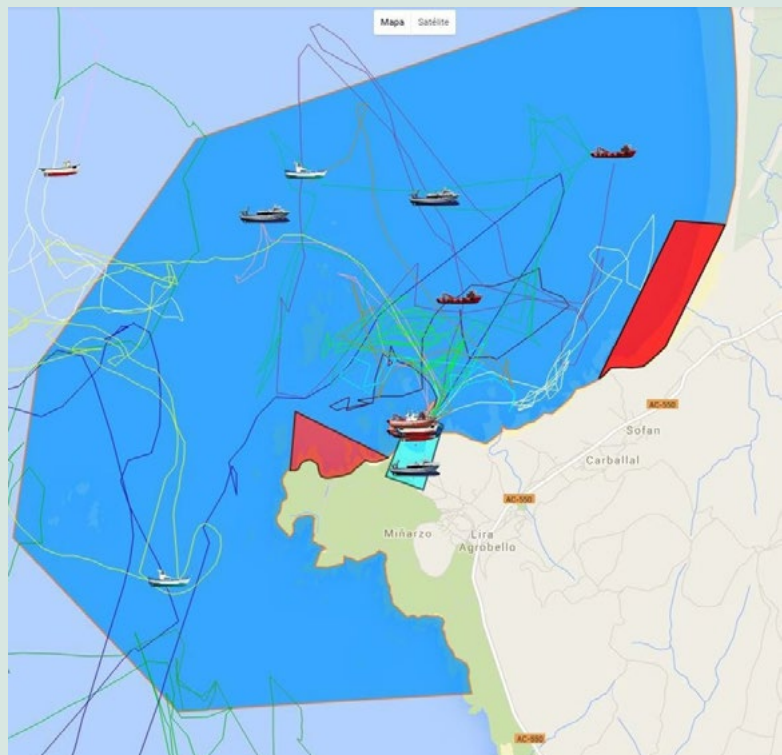
Without sufficient data on SSF operations, it is not possible to assess their impacts, have robust management of fishing grounds or ensure compliance with the rules. It is also important to monitor activities to ensure that fishing activities do not take place in restricted or protected areas.

The case of Os Miñarzos, Galicia, Spain: fishers choose to install a Vessel Monitoring System (VMS)

- Os Miñarzos is a marine area in Galicia designated as a Marine Reserve where fishing is allowed, formally established in 2007 (in blue).
- With NGO support, a co-management committee was created by the relevant fisher associations, public administration and scientists to adopt a management plan and control the activities in the area. The plan includes two “no take” zones (in red), where no fishing or commercial activity is allowed.
- Since 2015, all 120 of the small-scale vessels allowed to fish in the area have installed a tracking device using 3G technology.

- Nearly all vessels (excepting a few SSF boats from Lira that cannot fish in other areas) have a maximum amount of time allocated to fish in the marine reserve. The tracking device automatically detects when the vessel enters the marine reserve and registers the amount of fishing time spent there. The information is sent to the co-management committee and regional authorities to verify that vessels are complying with the rules.

- Primitivo Pedrosa, captain of one of the SSF boats and member of the co-management committee, considers that *“it is still difficult to ensure that third vessels without any tracking device do not enter in the area and, therefore, the measure should be extended to all vessels in the region”*. He further recognises that *“today, there is practically unanimity within the sector that the declaration of the marine reserve, the adoption of a co-management committee and the installation of tracking devices have contributed to an increase in the number of species and to improving the fishery resources, with positive impacts both for the sector and the marine environment.”*⁶ This is why we are asking to extend the marine reserve from the current 2,100 hectares up to 49,000 hectares.”



Source: Marine Instruments, Os Miñarzos, Presentation “Sistema integral de gestión de las actividades pesqueras”, 2016

5 The 2019 Annual Economic Report on the EU Fishing Fleet (STECF 19-06), page 23.

6 Fundació Laxonet, Samdura Report N° 53 “Becoming Proactive Agents. Galicia, in the northwest of Spain, has initiated a bottom-up implementation and shared governance scheme for marine protected areas for small-scale fisheries management”

In addition, vessels under 10 metres in length are not required to keep a fishing logbook or to submit a catch report. The total amount of fish caught in the EU by the SSF sector is currently not known, but conservative estimates indicate that they represent 12.5% of the total value of the EU catches⁷, this number can increase significantly in some regions. For example, in Italy, SSF account for 85% of the national fleet and 23% of the total catches.⁸ Also, the total catch volume in some specific fisheries and the impact on some species and areas can be significant. The lack of accurate data on these vessels severely undermines the quality of fish stock assessments and thus the scientific advice for sustainable fisheries management, compromising sound management decisions.

Exceptions for larger vessels with the current Control Regulation

In the current Control Regulation, vessels up to 15 metres in length can be exempt from obligations to both carry a vessel monitoring system and to report catches electronically if the vessel operates exclusively within the territorial waters or if it spends less than 24 hours at sea. Up to 79% of EU vessels between 12 and 15 metres in length fulfil these requirements and are therefore exempt from these obligations.⁹ This means that, overall, almost 90% of the total EU fishing fleet is not required to have a tracking system or an e-logbook system in place, further exacerbating issues of effectiveness of fish stock assessment and management.

FACT 2: Practical, inexpensive and reliable tracking and logbook technology is widely available

a. Vessel Monitoring Systems (VMS) can easily be installed on small fishing vessels

Nowadays, several simple tracking systems exist that are able to transmit a vessel's position, course and speed to the control authorities, either by satellite or cellular networks. These systems can be easily installed on any boat, regardless of its size. The European Commission's proposal for the future Control Regulation requires larger vessels to have a satellite-based system installed, but vessels under 12 metres would be allowed to simply carry a mobile device whose GPS signal is linked to an electronic navigation chart.



Source: Marine Instruments

b. VMS systems do not require on-board energy supplies

Many of the new tracking systems work with solar energy and have a battery in place. In case of loss of signal reception, data continues to be recorded and is transmitted to the data control centre once the reception is regained.



Source: presentation at the workshop 'digital tools for small-scale fisheries', Brussels, 4-5 December 2018

7 The 2019 Annual Economic Report on the EU Fishing Fleet (STECF 19-06), page 23.

8 European Court of Auditors, "Special Report N° 8. EU fisheries controls: more efforts needed", 2017. Page 42.

9 European Court of Auditors, "Special Report N° 8. EU fisheries controls: more efforts needed", 2017. Page 26.

c. Despite the absence of shelter or a deck, and even in adverse sea conditions, fishers can safely report catches electronically

Electronic reporting can easily take place through applications (apps) installed on smartphones. Most of the new apps are designed to be user-friendly, menu driven, with images of fish species and some fields automatically filled. Data can be easily entered at practically any time, ensuring that fishers are not required to perform an activity when it is unsafe to do so and that data can be entered from all vessel types, including smaller boats which may not have a shelter or a deck.

A two-year transition period is foreseen in the Commission's control proposal, allowing each Member State to implement a system appropriate to their SSF fleets in a gradual and flexible manner with input from fishers and with training provided, especially for older fishers unfamiliar with the use of smart phones.

Electronic reporting in Croatia: M-Logbook and M-Catch Report

- The Croatian fleet is comprised of over 2,000 small-scale vessels, with most still submitting fishing activity data via monthly paper-based reports. This has led to manual input of all fishing logbook data, lack of accurate reporting, missing logbooks and ineffective control procedures.
- In order to address this situation, in July 2018 the Croatian government launched a phone application called "M-Logbook", an easy and intuitive tool to electronically report catches.¹⁰
- M-Logbook was first made mandatory for all professional fishers targeting swordfish, and for recreational fishers targeting bluefin tuna. In October 2018, another 100 small-scale vessels - which had obtained an authorisation to use shore seines and small purse seiners if not targeting small pelagic species - started to use M-Logbook and report their catches electronically.
- More recently, the government launched a new and updated version of the application, called "M-Catch Report". This updated version is being implemented among all fishers that want to sell their products directly to customers, but many fishers are installing the app on a voluntary basis (about 100).
- The government's intention is to extend M-Catch Report to the entire SSF fleet in Croatia in the near future.



Source: presentation by the Croatian Government at the European Commission-led workshop 'Digital tools for small-scale fisheries', Brussels, 4-5 December 2018

FACT 3: Combining tracking systems with electronic reporting of catches provides the greatest benefits to fishers

a. Combining both systems enables more efficient and productive fishing operations, access to markets and greater income.

When vessel tracking and catch reporting have been combined, all the data compiled regarding the areas and fishing grounds where vessels usually go fishing, the time spent at sea, fish stocks targeted and the amount of fish caught provide tremendously valuable information to authorities as well as to fishers themselves, especially in a co-management context.

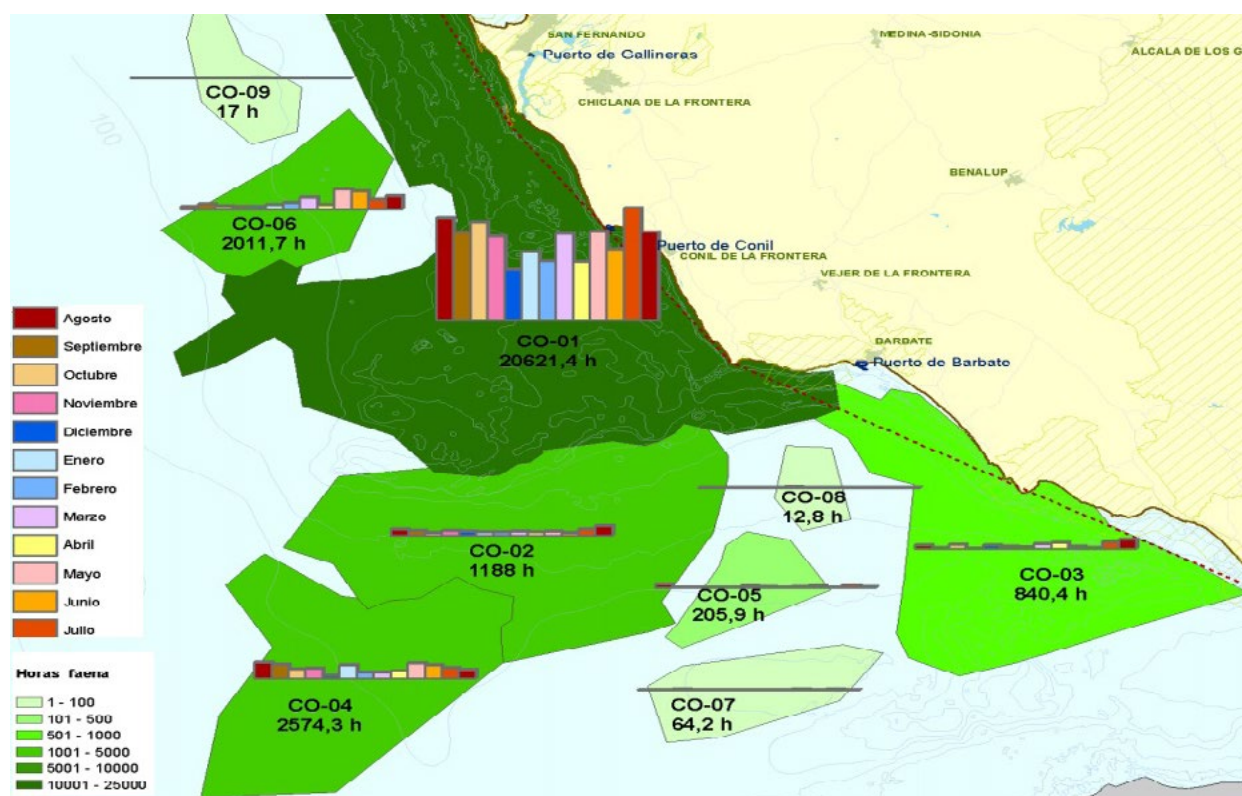
¹⁰ Official website: <http://mobile.ribarstvo.hr/>

After processing all this information, fishers can conduct assessments of fishing grounds and prepare maps to locate valuable fishing resources, different species and the best market prices.¹¹ These maps have facilitated sales, provided market information (e.g. average price per kilogramme of each species), empowered fishers (e.g. enhanced fishers' ability to manage local fisheries), improved business management and boosted effective management of fishing grounds. These tools have allowed fishers to see the productivity of each fishery and identify the grounds of those species with greater commercial interest, improving how fishing efforts is redistributed to alleviate pressure on fish stocks.

Overall, these studies help fishers to promote their products locally, fish less but better (e.g. catch larger fish) and sell at a better price.

Example of a fishing resource study in Conil, Spain, with information on the fishing effort each month and the best-selling prices.

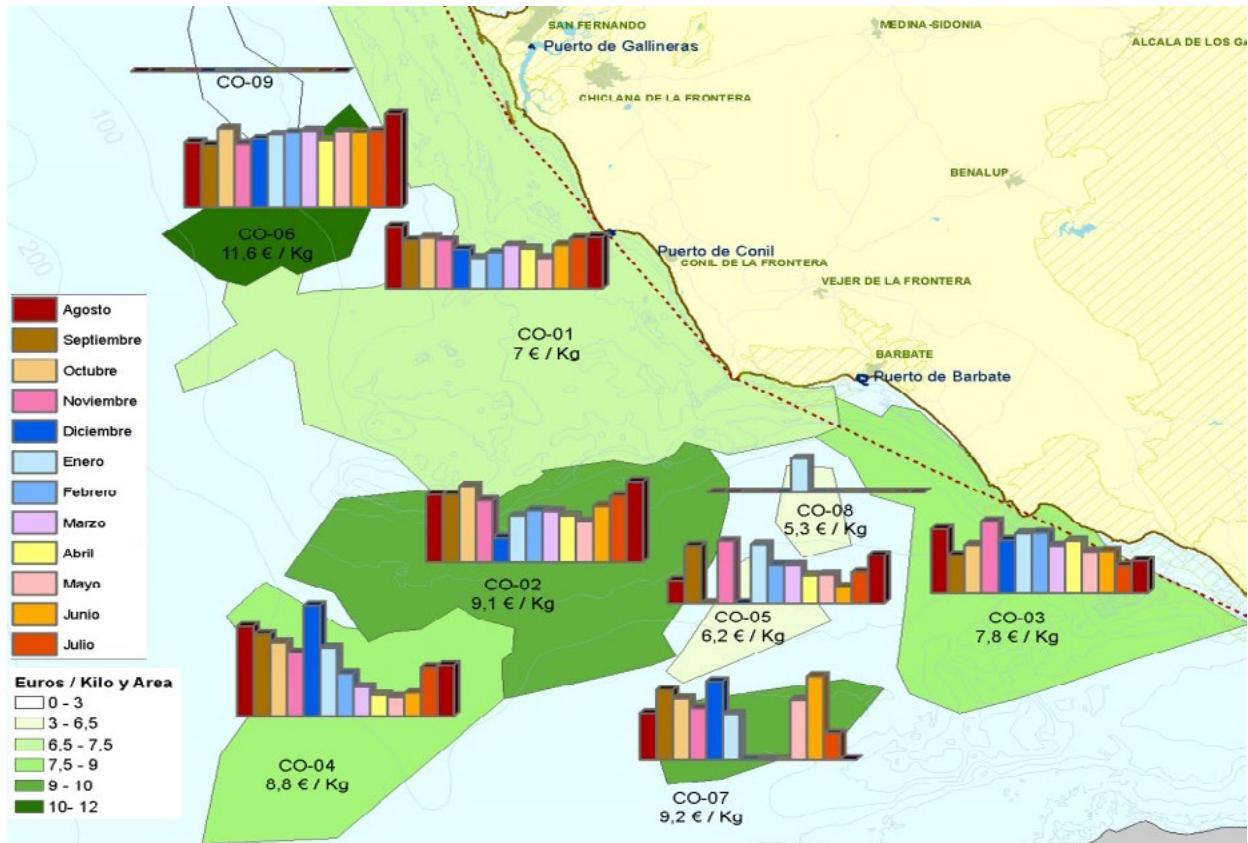
Fishing effort (hours/months)



Source: Presentation "Towards a new fisheries control system in the EU. How to deliver fully documented fisheries in the small-scale sector" Brussels, 7 March 2019

11 Look for example at this example from the regional government of Andalusia, Spain, on the studies and benefits prepared with the catch and tracking data collected from SSF: <https://www.juntadeandalucia.es/export/drupaljda/Presentaci%C3%B3n%20LSEPA%20chirla%202018.pdf>

Average price (Euros/Kg)



Source: Presentation "Towards a new fisheries control system in the EU. How to deliver fully documented fisheries in the small-scale sector" Brussels, 7 March 2019

Better tracking and catch reporting improve the data available for effective fisheries management. This information makes it possible to compare different fishing models by, for example, analysing the consequences of closing one area versus fishing more in another, ensuring the long-term economic and ecologic viability of the stocks targeted by fishers.

b. Benefits of installing tracking devices include:

- **Safety at sea**

Many of the fishers who installed tracking devices did so for safety reasons: most tracking devices can emit an emergency signal which is easily be activated. Real-time visualisation enables control authorities to rescue fishers in case of an emergency.

- **Control and fishing inspections**

Real time visualisation is essential to control potential illegal operators and to ensure that everyone, including recreational vessels, respect designated restricted and protected fishing areas and do not commit infringements. Without such monitoring, obtaining evidence of these infringements is difficult and many cases are dismissed due to lack of evidence. The installation of tracking devices has fostered a culture of compliance.

- **Efficiency**

Control authorities can increase their coverage with more effective at-sea patrols and reduced dependence on human resources.

c. **Benefits of e-logbooks include:**

- **Simplicity**

With these systems, it is less likely that fishers will forget to report the amount they have caught. It is a convenient and simple way to report catches soon after weigh-in. It also reduces paperwork and the overall administrative burden.

- **Choosing the optimum catch and weather conditions**

Fishers can easily view their electronic record history in relation to environmental parameters (e.g. water temperature, discharge, weather, etc.) to identify optimal catch conditions. With the data from the electronic catch reports, it is easy to determine which is the best month to go fishing, which type of gear is most appropriate, etc.

- **Fairer distribution of catch quota**

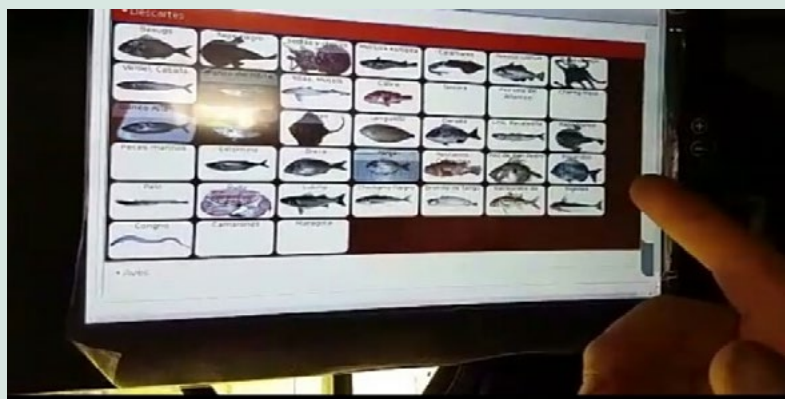
Accurate catch data can help fishers to build up a track record and legitimise their requests for a fair distribution of quota. This is especially valid in co-management committees and for producer organisations which distribute quota to their members.

- **Traceability of seafood**

Accurate electronic reporting supports traceability of seafood products, ensuring their legality and improving access to markets.

EBArtesa: a tool to better understand SSF interactions in the Basque Country, Spain

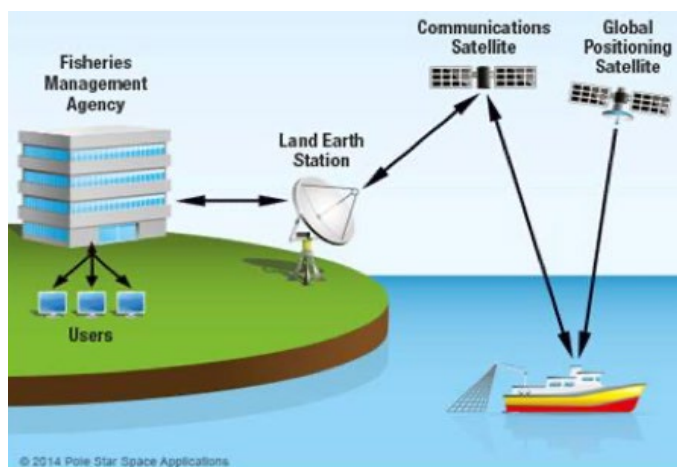
- While the SSF fleet in the Basque Country is rather small (only 80 vessels), the Regional Government and the scientific body AZTI developed a tool to monitor the fleet with the purpose of improving knowledge on catches and the distribution of fishing effort. Ultimately, this tool, named EBArtesa, will give this small fleet more visibility and show their socio-economic importance to all stakeholders.
- EBArtesa is a device similar than a tablet and has been installed on 20 vessels – a number considered to represent a significant sample of the fleet. The device includes a SIM card that monitors the position of the vessel in real time and a touchscreen where fishers can easily submit an electronic report of their catches, discards and bycatch.
- The device already includes images of all the species that fishers could catch depending on the type of gear that is being used. The species shown on the device differs depending on the type of gear the vessel is equipped with. Fishers simply select the gear in use, the image of the species being caught and enter the amount (by weight). For multi-species gear (e.g. gillnets), the device includes the most common species.
- The device was developed to be used even when fishers are wearing gloves.
- The EBArtesa device includes the option to submit the fishing price and the fuel costs of the trip. With this information, the economic aspects of fishing activities can be analysed and those fishing grounds which are more profitable identified.



Source: AZTI, functioning of the EBArtesa monitoring system

FACT 4: Only the relevant authorities have access to vessel tracking data

Vessel Monitoring Systems (VMS) or any other type of tracking devices should not be confused with Automatic Identification System (AIS) transmitters. AIS is installed on all large ships (not only fishing vessels) to prevent collisions and accidents. AIS emits a public signal which is electronically exchanged with other nearby ships and authorities, and it cannot be turned off unless there is a legitimate reason (such as operating in areas with high levels of piracy). In contrast, the signal emitted from VMS or tracking devices is non-public data, transmitted exclusively to the authorities for fisheries management purposes.



Source: ©2014 Pole Star Space Applications. Available online at www.afma.gov.au

FACT 5: Vessel tracking systems are inexpensive and public aid is available for their acquisition

The costs of adopting these new technologies should not fall on SSF. Many freely available apps which can easily be installed on smart phones and tablets already exist for catch reporting and tracking purposes. Fishers are only required to pay for the acquisition of a smartphone or tablet (in case they don't already possess one) and internet data usage (which is less than 500kB per logbook).

When a VMS tracking system is required, its acquisition and installation (which can cost €300 for systems like the Greek Pelagic Data System or €700 for the Green Box system in Andalusia) can be covered by the European Maritime and Fisheries Fund (EMFF).¹² The EC's proposal for a new EMFF makes special provisions for SSF and, according to its draft article 19, there will be 85% funding for "the purchase and installation on vessels of the necessary components for compulsory vessel tracking and electronic reporting systems used for control purposes".

MOFI: monitoring the closure of Western Baltic Cod fisheries in Germany

- SSF can be exempted from the closure periods of Western Baltic cod (in subdivisions 22-24) if they use a tracking device and do not fish in areas beyond 20 metres of water depth.
- MOFI (mobile fisheries log) is a mobile application for fisheries compliance monitoring that is certified by the German Control Authority. The software works similarly to VMS and records the route of the vessel.
- Over 100 SSF have now downloaded MOFI and are fishing for Baltic cod, even during this closure season. The app is installed for free in any smartphone, even working on less expensive models.

The main financial burden for public administrations is the potential extra staffing costs. The annual costs to cover licenses, data hosting, maintenance and technical support usually do not exceed €20,000 per year. Once all data is collected, studies and workshops to present results should be organised. Administrations can access the EMFF to cover such costs.

¹² Article 19.2, Proposal for a Regulation of the European Parliament and Council on the European Maritime and Fisheries Fund



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Our Fish

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About the Coalition

The EU Fisheries Control Coalition — The Environmental Justice Foundation, Oceana, Seas At Risk, The Nature Conservancy and WWF, together with Client Earth, The Fisheries Secretariat, Our Fish and Sciaena — is working to ensure that fisheries management in the EU safeguards ocean health and marine life for generations to come. A robust Control Regulation is essential for sustainable fisheries. It will ensure that fisheries activities are fully documented and will bring transparency to our seafood supply chains.

For more information, please visit <http://www.transparentfisheries.org>