



IMPLEMENTING ELECTRONIC MONITORING ON INDUSTRIAL FISHING VESSELS

Governance Fact Sheet

A WWF-FAO-GEF Partnership

The lack of insight into activities on long-term industrial fishing vessels, particularly those operating in distant waters where they transfer the catch from one vessel to another—a process known as transshipment—poses significant challenges in global fisheries management. This activity at sea, where fish and crew can move between fishing and "carrier" vessels, heightens the risk of illegal fishing and labor violations. Implementing electronic monitoring technologies presents an effective means to mitigate these risks while enhancing the scientific understanding and management of these fisheries.

Electronic monitoring—known as EM—involves advanced camera systems installed on fishing vessels to continuously record information during trips and monitor fishing activities. When integrated with other technologies, this tool can track vessel locations and identify specific actions, such as net deployment and retrieval.

New guidance for implementing electronic monitoring

Successfully implementing electronic monitoring programs at scale requires well-structured governance tailored to the unique needs of fisheries, particularly those managed across multiple jurisdictions by regional fisheries management organizations—known as RFMOs. There is no one-size-fits-all approach, but consensus is growing that electronic monitoring systems should be adaptable and focus on purpose, performance, and outputs rather than rigid technical attributes that may evolve with advancing technologies.

To support decision-makers in designing and implementing effective, scalable, and fit-for-purpose electronic monitoring programs, WWF has developed a comprehensive technical resource document and two toolkits in collaboration with the UN Food and Agriculture Organization (FAO) through the Common Oceans Project funded by the Global Environment Facility. These resources consolidate current perspectives and guidance to meet the data needs for robust fisheries science, management, compliance, and industry transparency.

The [technical resource document](#) provides detailed guidance on:

- Electronic monitoring governance requirements
- Key program elements for successful design and implementation
- Ongoing management and planning for future technological improvements
- Legal and regulatory considerations

The accompanying toolkits include decision matrices to guide key program design choices, such as:

- [Centralized vs. harmonized decentralized models for regional fisheries management organizations jurisdictions](#)
- [Determining which program elements are best handled in-house versus outsourced](#)

By offering these resources, WWF and FAO aim to equip RFMOs, governments, and the fishing industry with the tools needed to design adaptable electronic monitoring systems that achieve desired outcomes while ensuring long-term success.

Government support for scaling effective electronic monitoring programs

Electronic monitoring technologies have been employed in commercial fisheries for many years to gather scientific data, enhance transparency, and ensure compliance with regulations in various fisheries. With the universal adoption of electronic monitoring standards by all tuna regional fisheries management organizations, the time has come to expand implementation across all industrial tuna fleets lacking adequate monitoring. Governments are already backing voluntary programs.

While electronic monitoring standards provide essential support for the development of electronic monitoring programs, their long-term success depends on the steps taken after implementation. The development of programs can take various pathways, depending on the functions a government agency opts to handle internally, the financing of the program, and whether it involves partnerships with other government entities, private sector technology firms, fishing industry stakeholders, or regional organizations.



**More information and
resources on
electronic monitoring**

