

JOINT ANALYTICAL CELL



Data, Intelligence and Tools to Combat Fishing Crime

June 2022

Overview

Illegal, unreported and unregulated (IUU) fishing is a global threat whose solutions begin with collaboration across the international community. Costing States billions of dollars in lost revenue each year, it is pushing overexploited fish stocks toward collapse, causing untold damage to marine ecosystems, and perpetuating conditions that facilitate slave labor and human rights abuses.

New tools and technologies, like satellite tracking and data analytics, are enabling us to monitor fishing activities in ways that would have been impossible just a few years ago. This presents new opportunities to transform the way we govern our ocean and unlock ways to close the net on illegal fishing. But the international cooperation required to achieve such results is lacking, and too many countries do not yet have the information they need or the capacity to act upon it.

The Joint Analytical Cell, or JAC, aims to change that. By opening up access to data, technology and analytics at scale, this unique collaboration will strengthen fisheries management worldwide and support effective action to end the scourge of IUU fishing.

The problem: **untapped potential**

With fish stocks and marine ecosystems under ever-increasing pressure from human activity, clamping down on IUU fishing has never been more important—a seemingly impossible task perhaps a decade ago. But the emergence of new technology offerings—many of which are inexpensive or free of cost and based on open, publicly available data—means that truly effective monitoring, control and surveillance (MCS) of fisheries is becoming more possible and more affordable.

Satellites and other remote surveillance techniques allow vessels and their activities to be monitored in near real time, even far from shore. Databases contain a wealth of information about the global fishing fleet and the companies behind it. Machine learning and data analytics provide insights and intelligence that can support investigations and targeted enforcement against those acting illicitly.

But information is only good when it is put to use and, right now, the knowledge being created by various tools and technology is not being used to its utmost potential, creating lost opportunities for those in charge of managing our ocean. Most authorities rely on expensive proprietary systems for monitoring fishing vessels and managing data. This limits possibilities for sharing information and intelligence internationally, which is crucial for combating IUU fishing. In developing regions, which often face the greatest challenges from IUU fishing, few States have access to the latest data and technology and often lack the capacity to analyze and act upon the information they do have.



Our solution: **complementary efforts**

The JAC aims to transform ocean governance by facilitating collaboration, information sharing, intelligence-led MCS, and capacity building. We seek to enable access to data, technology and analytics at scale, with a particular focus on supporting developing coastal States that are responsible for overseeing vast areas of the ocean but may not have the capabilities to do so.

Founded in 2022 by the International Monitoring, Control and Surveillance (IMCS) Network, Global Fishing Watch and TMT, the JAC harnesses innovative technology and the complementary expertise and resources of its wider collaborating organizations, including State actors, nongovernmental organizations and technology providers. It will serve as a hub for sharing intelligence, making sense of the multiple technology and data offerings, and providing operational support and training to enable collaborative action to combat IUU fishing worldwide.

“We believe that the whole is greater than the sum of its parts. By combining our different strengths and areas of expertise, as well as our existing initiatives, tools and partnerships, we can amplify their impact.”

Tony Long, Chief Executive Officer,
Global Fishing Watch.

Founding members

IMCS Network is an intergovernmental organization that supports information sharing, collaboration and capacity building between fisheries law enforcement professionals. An informal, voluntary network, its members include more than 70 national fisheries administrations and regional fisheries organizations.

Global Fishing Watch is an international nonprofit organization dedicated to advancing ocean governance through increased transparency of human activity at sea. Its tools include a freely available open-source global map, powered by satellite technology and machine learning, that enables users to track and analyze fishing vessel activity.

TMT provides national fisheries authorities and international organizations with intelligence and analysis, to assist enforcement actions and broader improvements in fisheries governance. Its Fisheries Analytical Capacity Tool (FACT) supports analysis of the identities and characteristics of the global fishing fleet and the companies that operate it.

Areas of focus



Providing high-quality fisheries intelligence:

The JAC will identify, collect, collate and integrate wide arrays of information and datasets and employ data analytics to provide actionable fisheries intelligence. This will enable maritime authorities to target MSC and enforcement operations where the risks are highest. This could include warning port authorities before the arrival of a vessel suspected of illegal activity or alerting air and sea patrols of suspicious transshipment activities.



Building monitoring, control, surveillance and enforcement capacity:

We will provide fisheries enforcement agencies and other partners, particularly in developing countries, with direct support and training to enable them to use all available technology platforms, datasets and MCS mechanisms effectively. Based on a needs assessment conducted directly with the agency or partner, assistance will target specific technology and knowledge gaps and support improved MCS efficiency and effectiveness. As well as pursuing immediate impact on the water and at an institutional level, we will take a 'train the trainer' approach to build national capacity and expertise for the long-term.



Strengthening access to data and technology:

The JAC will promote collaboration with independent technology providers to apply their tools to fisheries MCS. This will include developing new products and capabilities to deliver useful data, analysis and intelligence, supporting partners to use the tools available, and ensuring they continue to evolve and remain affordable. Agencies and partners are not required to share their data with the JAC to receive direct support from the initiative, although the benefits of data sharing—an important means in addressing IUU fishing—will be both demonstrated and encouraged.



Developing partnerships:

The JAC is built on collaboration. The three founding organizations will draw on the strength of their existing relationships, collaborations and networks to develop new partnerships with government agencies, nongovernmental organizations, technology providers, regional fisheries management organizations and others who share our goals.

Our impact

By providing high-quality intelligence and capacity building to those that need it most, the JAC will tackle IUU fishing cost-effectively and at scale. It will support enforcement authorities to carry out targeted, risk-based and effective MCS and enforcement operations. As well as closing the net on those who do fish outside the law, the Joint Analytical Cell will act as a deterrent to others as illicit activities become harder to hide. The insights and analysis the JAC provides will also support evidence-based policy, regulatory and legal reforms to strengthen ocean governance.

Within the next four years, we want to see:

- More flag, coastal and port States, as well as beneficial owners, taking enforcement action to address illegal fishing.
- More developing flag, coastal and port States using technology platforms and data analytics for fisheries MCS and enforcement.
- More port inspections, investigative actions and enforcement responses that lead to successful prosecutions.
- Better data availability and transparency in fisheries operations in partner countries.
- New policy actions developed or enhanced with JAC support.

“The establishment of the Joint Analytical Cell marks a sea change in fisheries intelligence and analysis. It will set a precedent for a global shift toward greater use of open data, data analytics, and integrated technology to provide greater transparency of activities occurring in the maritime domain and strengthen fisheries monitoring, control and surveillance efforts.”

Mark Young, Executive Director,
International Monitoring, Control and
Surveillance Network.

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About the Joint Analytical Cell

The Joint Analytical Cell, or JAC, provides authorities with fisheries intelligence, data analysis and capacity building to help combat illegal, unreported and unregulated fishing. Founded by the International Monitoring, Control and Surveillance Network, Global Fishing Watch and TM-Tracking, the initiative harnesses innovative technology and the complementary expertise of its collaborating organizations to improve the effectiveness of fisheries monitoring, control and surveillance. By fostering cooperation among State and non-State partners, the JAC seeks to build insights and capacity that will help enhance fisheries management.

Contact: jac-coord@tm-tracking.org

www.imcsnet.org

www.globalfishingwatch.org

www.tm-tracking.org