Workshop summary

Technological tools for MCS in ABNJ

Tuesday 10 July 2018, Sciences Po, Paris

Key messages

- Monitoring Control and Surveillance (MCS) will be crucial to ensuring compliance with management measures developed under a future international agreement on Areas Beyond National Jurisdiction (ABNJ).

- Tools for MCS have been drastically extended by a range of new technologies and techniques using previously unavailable or inaccessible data sources, while there is no clear and singular MCS solution.

- A key challenge facing MCS is an excess, not a lack, of data available through the different technologies which is further compounded by potential skills shortages for data interpretation.

- There may be resistance to MCS tools by e.g. the fisheries sector concerned about control over the industry, while some fishers may also view MCS as way to prove that their fish was sustainably caught and provide them with a market advantage.

- The key challenge currently facing MCS tools is a lack of appropriate policy approaches and governance mechanisms for the design and implementation of the available technologies. Any future successful options will need to be co-created with stakeholder to ensure appropriate design and early buy-in amongst different sectors.

Background

Effective monitoring, control and surveillance (MCS) is critical for the success of marine conservation and management. Whereas States have the right to manage the marine resources within their national jurisdiction, the high seas are subject to a complex patchwork of international rules and regulations. As States begin to negotiate a new international agreement concerning areas beyond national jurisdiction (ABNJ), there is growing interest in how MCS tools and policies can be applied to this vast global commons.

The STRONG High Seas project (Strengthening Regional Ocean Governance for the High Seas) aims to strengthen regional ocean governance for the conservation and sustainable use of marine biodiversity in ABNJ, including through enhanced MCS tools and policies. This five-year project is working together with key science and policy actors in the Southeast Pacific and Southeast Atlantic regions to improve regional coordination and provide new lessons and approaches for high seas governance.

This workshop gathered 15 participants representing policy research institutes, fisheries industry, MCS technology providers, environmental organizations, RFMOs and INGOs. Participants engaged in wide-ranging discussions on the opportunities and challenges for effective MCS, taking stock of existing technological tools and considering possible future technological developments (See Annex II). The workshop will feed into ongoing international negotiations on ABNJ, as well as support regional decision makers and stakeholders with the knowledge and options needed for improving MCS in ABNJ. A second workshop planned for late 2018 will build on the results of this workshop and be used to discuss and consider policy options for strengthening MCS in ABNJ.

Workshop summary

The workshop was structured around 4 sessions (see Annex I), covering satellite technologies; onboard monitoring technologies; compliance and control mechanisms; and opportunities in ABNJ. The following sections provide a brief overview of the key themes and issues that emerged during the course of the discussions.

Effective MCS for a strong high seas agreement

Effective MCS will be crucial to ensuring compliance with any management measures developed under a future international agreement on ABNJ. In this regard, participants highlighted the importance of establishing appropriate mechanisms and channels of communication to convey technical information and MCS data to parties. Potential synergies were also noted between MCS and other elements of the negotiations, e.g. MCS technologies

can be used for the collection of ecological data that could contribute to the development of protected areas and impact assessments.

Abundance of technological possibilities

In the last decade, traditional approaches to MCS (such as on-boat observes, log books, or surveillance planes) have been drastically extended by a range of new technologies and techniques using previously unavailable or inaccessible data sources (e.g. SAR and VIIRS, which can provide satellite images of vessels,[1] and automatic identification systems (AIS)[2] and vessel monitoring systems (VMS)[3] that can be used to track vessel activity). However, no one technology is a panacea and a range of factors have to be carefully weighed: costs, access, reliability, coverage, ease of manipulation, and privacy considerations. Furthermore, different data sources will have to be integrated to yield reliable coverage of ABNJ.

It was also highlighted that the most likely problem is not a lack – but an excess – of data, requiring spatial and/ or temporal targeting of observations. The information collected must be sufficient for effective governance, but not exceed interpretation capacities. It was noted that some entities are grappling with skills shortages for MCS data interpretation.

Diverse interests, different concerns

Different actors may prefer different technologies. Much interest has been expressed recently regarding the possibility of using S-AIS data for MCS[4] as it is freely and easily accessible. However, some vessels turn their AIS off at certain times, for example to prevent giving away their position to competitors or pirates. On the other hand, some fisheries operators may be less concerned by the use of VMS data, though this data is generally proprietary and confidential. It will therefore be important for any holistic MCS system for ABNJ to be developed with wide stakeholder engagement.

While the fisheries industry is often portrayed as secretive and opposed to MCS, the discussions exposed this generalization as unproductive and unjust. While some fisheries oppose being controlled by MCS systems, others may understand it as a means to gain control over their own operations. This might yield a market advantage, if it allows a fishery to prove that their fish was sustainably caught.

A question of governance

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[1] Synthetic-aperture radar (SAR) is a form of radar that is used to create images of objects, such as vessels. The Visible Infrared Imaging Radiometer Suite (VIIRS) is a sensor that collects imagery and radiometric measurements in the visible and infrared bands of the electromagnetic spectrum, e.g. it is able to detect light emissions from vessels.

[2] The automatic identification system (AIS) is a tracking system used to track vessels, primarily as an aid to safety of navigation.

[3] Vessel Monitoring Systems (VMS) is a general term to describe systems that are used in commercial fishing to allow national environmental and fisheries regulatory authorities to monitor the fishing vessel activity.

[4] When satellites are used to detect AIS signals, the term Satellite-AIS (S-AIS) is used.

There was a general agreement that technology is not the limiting factor in the creation of an effective global MCS system. Rather, it is the complex and fragmented overall governance framework that present the major barrier. Currently, many different MCS regimes are in place, yet coordination and sharing of information between different actors (flag states, RFMOs, port authorities, etc.) are limited. Moreover, MCS is complicated by so-called "flags of convenience" and illegal, unreported and unregulated fishing (IUU).

Participants were confident that – were there to be strong and unified requirements for MCS – the requisite technical tools can be found. MCS technologies are thus not only necessary to implement a new high seas agreement, but the negotiations themselves could be used to develop a framework conducive to more efficient and effective MCS.

Annex I: Agenda

9h15   **Arrival**

9h30   **Welcome; presentation of IKI STRONG High Seas project; workshop objectives**
- Carole Durussel, IASS; Glen Wright & Julien Rochette, IDDRI

10h   **Session 1: Eyes in the sky**
- Charles Kilgour, Ocean Mind
- Discussant: Peter Horn, Pew Charitable Trusts

11h15   **Coffee break**

11h30   **Session 2: Boats on the water**
- Peter Thompson, Argos Froyanes
- Discussant: Stephanie Winnard, RSPB

12h45   **Lunch**

14h   **Session 3: Compliance and control**
- Adriana Fabra, Tuna Compliance Network; Kim Stobberup, FAO
- Discussant: João Neves, NEAFC

15h15   **Coffee break**

15h30   **Discussion: Opportunities and challenges for MCS in ABNJ**
- Moderators: Julien Rochette and Glen Wright, IDDRI

16h30   **Closure of the workshop**

Annex II: List of participants

Carole Durussel, Institute for Advanced Sustainability Studies (IASS)

Adriana Fabra, Tuna Compliance Network

Peter Horn, Pew Charitable Trusts

Charles Kilgour, OceanMind

Mathilde Kraft, SciencesPo

Dan Laffoley, International Union for the Conservation of Nature (IUCN) World Commission on Protected Areas (WCPA)

Nadia Maaref, Collecte Localisation Satellites (CLS)

João Neves, North East Atlantic Fisheries Commission (NEAFC)

Julien Rochette, Institute for Sustainable Development and International Relations (IDDRI)

Sylvie Giraud Saint-Albin, Collecte Localisation Satellites (CLS)

Isabel Seeger, Institute for Sustainable Development and International Relations (IDDRI)

Kim Stobberup, UN Food and Agriculture Organization (FAO)

Peter Thomson, Argos Froyanes

Stephanie Winnard, Royal Society for the Protection of Birds (RSPB)

Glen Wright, Institute for Sustainable Development and International Relations (IDDRI)

About the STRONG High Seas Project

The STRONG High Seas project is a five-year project that aims to strengthen regional ocean governance for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction. Working with the Secretariat of the Comisión Permanente del Pacífico Sur (CPPS; Permanent Commission for the South Pacific) and the Secretariat of the West and Central Africa Regional Seas Programme (Abidjan Convention), the project will develop and propose targeted measures to support the coordinated development of integrated and ecosystem-based management approaches for ocean governance in areas beyond national jurisdiction. In this project, we carry out transdisciplinary scientific assessments to provide decision-makers, both in the target regions and globally, with improved knowledge and under-standing on high seas biodiversity. We engage with stakeholders from governments, private sector, scientists and civil society to support the design of integrated, cross-sectoral approaches for the conservation and sustainable use of biodiversity in the Southeast Atlantic and Southeast Pacific. We then facilitate the timely delivery of these proposed approaches for potential adoption into the relevant regional policy processes. To enable an interregional exchange, we further ensure dialogue with relevant stakeholders in other marine regions. To this end, we set up a regional stakeholder platform to facilitate joint learning and develop a community of practice. Finally, we explore links and opportunities for regional governance in a new international and legally-binding instrument on marine biodiversity in the high seas.

For more information please contact: stronghighseas@iass-potsdam.de

Partners of the STRONG High Seas project:

Supported by:

based on a decision of the German Bundestag

The STRONG High Seas project is part of the International Climate Initiative (IKI; www.international-climate-initiative.com/en/). The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) supports this initiative on the basis of a decision adopted by the German Bundestag.