Monitoring, control and surveillance of Protected Areas and Specially Managed Areas in the Marine Domain

Submitted by ASOC
Abstract

This ASOC Background paper summarises a soon to be published paper, “Monitoring, Control and Surveillance of Protected Areas and Specially Managed Areas in the Marine Domain” that addresses questions on how marine protected areas and marine reserves may be managed in a practical sense using readily available Monitoring, Control and Surveillance (MCS) tools to support management and if necessary compliance enforcement actions and their application. After reviewing the framework required to undertake effective MCS, the authors conclude that CCAMLR already uses many of the tools needed for such a framework. Thus the application of existing MCS provisions under CCAMLR’s system of management can effectively deliver compliance with restrictions on activities and management provisions within a system of MPAs and marine reserves.

Introduction

The following Background Paper provides a summary of a soon to be published paper, “Monitoring, Control and Surveillance of Protected Areas and Specially Managed Areas in the Marine Domain” that addresses questions on how protected marine areas may be managed in a practical sense using readily available Monitoring, Control and Surveillance tools to support management and if necessary compliance enforcement actions and their application. The paper provides a practically-based, MCS action framework to address, key compliance enforcement needs for sustainable fisheries and biodiversity conservation. The framework identifies spatial, temporal, management and practical considerations likely to affect MCS implementation in protected marine areas. The full paper is attached at appendix 1.

Ensuring compliance with marine spatial protection measures

The designation of marine protected areas (MPAs) and marine reserves is a key, yet still under utilised tool for the conservation and management of marine living resources. MPAs and marine reserves are able to:

- protect biodiversity at scales appropriate to maintain its long term viability and integrity;
- protect ecosystem processes, habitats and species, including populations and life-history stages;
- provide scientific reference areas to monitor natural variability, long-term change and the effects of harvesting;
- protect unique, rare or highly biodiverse habitats and features vulnerable to human impact;
- protect features critical to the function of local ecosystems; and
- maintain resilience or the ability to adapt to the effects of climate change.

For MPAs and marine reserves to meet these objectives, it is essential that restrictions placed on activities within their boundaries and overall management provisions are complied with.

Ensuring compliance with marine spatial protection measures

A recent research paper by Denzil Miller, Natasha Slicer and Quentin Hanich reviewed a checklist of MCS techniques that could support the management of protected and specially managed areas at different areal and temporal scales. These MCS techniques are partly determined on whether the MCS is directed at fisheries-related activities in general, or solely focused on biodiversity conservation (i.e. impact mitigation).

As a first step, the paper suggested that any impending activity in a particular area should be assessed in order to minimise the risk from any activity. This precautionary action should mandate that pre-notifications of activities are required by the regulatory authority. Such notification would enable identification of key players who are likely to enter specially managed areas and minimise the risk of any ‘adverse surprises’ from the activities undertaken. The paper identifies ‘likely players’ as those responsible for a particular activity or operation (including the vessel, vessel operator, vessel beneficial owner, vessel master, researcher or commercial enterprise). The paper then identifies the need for sanctioned activities that are linked to specific fishing licence conditions, and/or compliance enforcement requirements.

The paper then notes a number of common fisheries-type MCS approaches that may be usefully applied in marine protected areas and marine reserves (i.e. direct reporting obligations, at-sea observation, at-sea inspection, port control mechanisms, trade monitoring/measures, remote observation, intelligence gathering).

Among other things, the authors emphasise the need for active feedback in an MCS system, to promote adaptability and improve the information available to decision makers: ‘A key feedback element is the need for a robust compliance evaluation process to identify systemic MCS successes, opportunities, weaknesses and strengths’. The authors note that such processes ‘... maximise the potential for voluntary compliance with regulatory provisions, while preserving a reasonable expectation of detection, prosecution and effective deterrence for non-compliant activities.’ It is hoped that the extensive work CCAMLR has directed towards the development of a compliance evaluation procedure will lead to its adoption at this CCAMLR meeting.

Significantly, the paper proposes that the range of potential MCS activities for closed areas is well-covered by available boundary control approaches and suggests that: ‘In some circumstances, there may be cost-benefit arguments for the establishment of no-take areas over multiple-use zones, given the simpler requirements for monitoring and enforcement, particularly in remote areas. Whereas multiple use zones can require sophisticated MCS programmes to determine if activities are compliant with specific regulations, no-take zones only require that MCS arrangements determine if vessels have entered a zone, and if they are fishing.’ The paper suggests that ‘... the lack of any legal fishing activity in a no-take zone makes detection of IUU fishing simpler, as all fishing vessels are immediately suspect if they do not have their gear stowed, have slowed below transit speeds, or are steaming in a less-than-direct route through a no-take zone.’ The authors note that the detection of illegal fishing activities in closed areas does not necessarily require vessels at sea and can be achieved through remote area surveillance options, including: vessel monitoring systems, electronic monitoring systems for gear use, aircraft and satellite surveillance, and passive detection systems.

The paper also suggests that further surveillance options can be incorporated into MCS strategies, particularly port monitoring and catch documentation schemes that ensure that only products from licensed vessels are legally allowed into markets.

Importantly, the paper finds that education and outreach play a major role in ensuring that MCS needs for protected marine areas are well understood, and suggests that widespread cooperation is crucial to maximising MCS cover and effectiveness over large areas.

Concluding remarks

While there is a need for constant review and improvement of MCS tools, CCAMLR already successfully uses MCS tools to significant effect. The application of existing MCS provisions under CCAMLR’s system of management can effectively deliver compliance with restrictions on activities and management provisions within a system of MPAs and marine reserves.