Proposals for the governance and control of fishing vessels and fishing support vessels operating in the Southern Ocean

Submitted by ASOC
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Abstract
There are a number of steps that CCAMLR and its members can take to improve the governance and control of fishing vessels in the Southern Ocean and thereby enhance safety, ecosystem-based management and environmental protection. These include mandatory requirements for appropriate ice-strengthening and obtaining IMO numbers for all vessels, reports on all vessel incidents, and notification of Maritime Rescue Coordination Centres (MRCCs) when entering or leaving Search and Rescue (SAR) areas. Additionally, it would be valuable for CCAMLR to encourage the IMO to include fishing vessels in the Polar Code at the earliest opportunity. CCAMLR Members should also support efforts to bring the new Cape Town Agreement, replacing the Torremolinos Protocol, into force, which would improve fishing vessel safety globally.

1. Introduction
Concerned at the number of vessel incidents in recent years in the Southern Ocean, ASOC presented information on recent incidents and highlighted the importance of reporting to the XXXV Antarctic Treaty Consultative Meeting in Hobart in 2012\(^1\). The range of vessels involved in incidents is broad and includes a number of fishing vessels. In this paper ASOC focuses on fishing vessels and identifies lessons, some of which should be addressed by CCAMLR and a number of which should be taken forward in the context of an extension to the International Maritime Organization’s (IMO) draft International Code [of Safety] for Ships Operating in Polar Waters (the Polar Code) to include fishing vessels, and the ratification of the Cape Town Agreement of 2012 on the Implementation of the Torremolinos Protocol and its implementation through a CCAMLR Conservation Measure. It is not only reporting on incidents that is important, but thorough investigation into the causes of those incidents, monitoring of any associated pollution and environmental response and restoration actions, and the implementation of recommendations that arise from each investigation means that maritime activities become safer for everyone. To carry out these objectives and effectively implement safety standards, accurate identification of vessels is essential. In this regard, all fishing vessels need to be identified with an IMO number.

2. Learning from recent incidents
As a follow-up to ATCM XXXV IP53, ASOC has developed a Google Earth Interactive map of recent vessel incidents in the Southern Ocean identifying the location of each incident and providing basic details of the incident. Figure 1 shows an example of the Ross Sea region, which includes a number of incidents involving fishing vessels. It is ASOC’s intention to update the map regularly and to make it available on our website\(^2\). From a range of case studies based on the incidents (see below), ASOC also identified several instances where further action by CCAMLR and/or IMO is warranted\(^3\).

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\(^1\) ATCM XXXV IP53 Follow-up to Vessel Incidents in Antarctic waters.
\(^2\) www.asoc.org.
\(^3\) ASOC welcomes the report on the Kai Xin incident submitted to CCAMLR XXXII by the People’s Republic of China, and looks forward to reviewing it.
Case Study: Insung No. 1
The Korean flagged Insung No. 1 capsized and sank in the Ross Sea on December 13, 2010. 21 crew members died in the most deadly incident in the Antarctic in the past decade. A report by the Korean government identifies the cause of the accident as a combination of two factors: an open net hauler shutter than allowed in water when a wave hit the vessel and a faulty water pump that was subsequently unable to pump out the water. Furthermore, the Master made decisions in attempting to right the vessel as it began tilting due to water incursions that caused the vessel to tilt more and eventually capsize. The emergency response and evacuation during the incident were complicated by the fact that the crew spoke multiple languages and could not communicate with each other easily. The report found that this made it difficult for the crew to communicate with each other, and that instructions for safety and emergency equipment (including life boats) were either only in Korean or in Korean and English.

Currently, fishing vessels are not included in the scope of the proposed IMO Polar Code. The Insung No. 1 accident highlights the need to include these vessels, since this and another incident in January 2012 (see below) highlight the risks of operating in the Southern Ocean. In fact, it was noted during the 2012 CCAMLR meeting that human casualties in recent years have been larger than the incidental seabird mortality in licensed CCAMLR fisheries. This is a terrible indictment of CCAMLR Members for the lack of attention given to safety in the design and operation of fishing vessels in the Antarctic. CCAMLR members should be urgently taking all steps feasible to improve vessel safety.

The current draft of the Polar Code should be strengthened with respect to fishing vessel safety. Ship crews on non-fishing vessels are often multinational as well, and in treacherous polar environments

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5 Ibid.
they must be able to communicate and understand safety instructions quickly. Given the additional challenges and hazards posed by polar environments, enhanced safety and operational standards for all vessels operating in polar waters could help increase the safety of operations and prevent death and injury in the event of accidents. CCAMLR members authorising fishing vessels to operate in the CCAMLR Area should ensure that officers are capable of giving commands in a language understandable by all crew on board and that appropriate and regular training drills have been carried out.

While waiting for the new Cape Town Agreement on fishing vessel safety to come into force and for all CCAMLR members to become parties to it, CCAMLR should act immediately by adopting a Measure that gives effect to the provisions of that Agreement. Likewise, CCAMLR should adopt a Measure that gives effect to the provisions of the new IMO agreement on Standards of Training, Certification and Watchkeeping for fishing vessels that has recently come into force.

Case Study: Sparta
The Russian flagged Sparta was holed by ice on 15 December 2011 in the Ross Sea. A rescue response coordinated by New Zealand and involving Korea, Norway and the United States assisted the vessel, which made repairs and was subsequently escorted from the ice by the Korean icebreaker Araon. The search and rescue effort required a combined 584 hours over a period of approximately three weeks from the four main countries involved7. No serious injuries or fatalities occurred, but some serendipity was involved. The Araon was in port in New Zealand at the time of the incident and the government of Korea accepted the request from Russia to send the icebreaker down to the Ross Sea to escort the Sparta out. Without the Araon’s assistance, the Sparta could have been stranded in ice for much longer, since further travel through the ice without an icebreaker escort would have risked additional hull damage.

At the time of the accident, the Sparta was not sufficiently ice-strengthened for the heavy sea ice conditions typically found in the Ross Sea. The Russian Maritime Register of Shipping lists the vessel as of 2010 as being an “Ice 1 fishing vessel”, which is defined as “independent navigation in small open ice in the non-arctic seas, short period, and in compact ice up to 0.4m thick in a navigable passage astern an icebreaker”8.

This incident again highlights the need to include fishing vessels in the Polar Code as soon as possible so that these vessels will be subject to the strongest safety and environmental regulations. In addition, it shows the need for a comprehensive review of ice strengthening of fishing vessels operating in varying environmental conditions, particularly as some vessels are operating in conditions at the limits of safety and navigability, ice conditions are changing, and there are some areas where multi-year ice may be encountered. Ice classification standard ICE-1C is currently the minimum standard for vessels to operate in the Antarctic Treaty area, however it is considered a minimum and a higher standard is warranted in some regions and circumstances. Recent rescue operations for fishing vessels have been resource-intensive, requiring a multinational response and hundreds of hours of effort. Prevention of these accidents would save resources that would otherwise go towards supporting national Antarctic programmes.

Case Study: Jeong-woo 2
The Korean flagged Jeong-woo 2 caught fire in the Ross Sea on January 11, 2012. 3 crew members died and seven were burned during the fire. The fire started because crew were using a portable electric radiator in their cabin to dry their wet clothes9. The fire spread from the cabin to the other

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areas, including the upper deck, and ignited flammable materials, including one of the life boats. After trying and failing to extinguish the fire, the captain notified the nearby Jeong-woo 3, which came to the rescue along with the Hongjin 707. New Zealand’s Rescue Co-ordination Centre (RCCNZ) also was notified, and coordinated the rescue response, which also involved the icebreaker Araon, the icebreaker Nathaniel B. Palmer and the fishing vessel Argos Georgia. There was some initial confusion because the Jeong-woo 2 did not send out Emergency Position-Indicating Radio Beacon or Inmarsat C Distress Alert. Of the survivors, the burn victims were transported by the Nathaniel B. Palmer to McMurdo station and subsequently airlifted to Christchurch, while the uninjured were taken onboard the Araon and traveled to New Zealand.

Although the Jeong-woo 2 incident was not directly caused by ice or weather conditions, it does appear that the ship was not fully prepared for the Antarctic environment. The vessel was renovated specifically for toothfish longlining, but during the renovation process a crew cabin was added that did not have the same heating as other cabins. This is the cabin where the fire started. The portable radiator was evidently the substitute for the lack of other heat sources. Although improper use of the radiator as a clothes dryer is the likely cause of the fire, portable heaters are known to be fire hazards and probably should never have been used onboard the ship. Ideally, living quarters should not have been created in an area not originally intended for that purpose unless they could be similar to the others on the ship. Overall, the SAR response took a total of 356 hours and involved five vessels and 2 aircraft.

Thus, the incident highlights the need to fully consider the requirements of operating in the Antarctic environment, including providing adequate facilities for all crew members. Additionally, since there was some confusion during the initial SAR response, the incident indicates the value of having fishing vessels coordinate more closely with the relevant MRCCs, including notification upon entering/leaving SAR areas, and of contacting MRCCs first in the event of an incident. The Jeong-woo 2’s distress call was relayed to the RCCNZ thirdhand by Antarctic Chieftain, which received it from the Hong Jin 707. It would undoubtedly be more efficient if the MRCC was notified first, and then could coordinate the response from nearby vessels.

This incident shows the need for crew working and living conditions to be adequate and appropriate to the conditions likely to be encountered within the areas where a fishing vessel is authorised to operate. This is an emerging area of concern by the international community and there are, as yet, no specific international agreements covering these concerns. As an immediate first step, all Members, in respect of their responsibilities as flag states, port states or in exercising control of their nationals or in conducting inspections, should ensure that conditions comply with international agreements relating to slavery and trafficking in persons. CCAMLR should also immediately initiate a process to develop non-binding guidelines that meet prevailing good practice norms and standards in the distant water fishing industry that can be converted into a binding Measure as soon as practicable.

Environmental response, monitoring and restoration post-incidents
In ATCM XXXV IP 53, ASOC reviewed a number of vessel incident reports relating to incidents in the Southern Ocean and identified 6 or 7 incidents in which pollution of the sensitive environment probably occurred, however only in one case was there any attempt to report on the pollution. It also appears that there has been no monitoring of pollution impacts, even when it was reported. The potential for oil and other pollution from the three fishing vessels lost in the last 3 years needs to be considered.

10 Ibid.
12 Korea Maritime Safety Tribunal, 2013.
15 New Zealand, 2012.
Polar Code
Antarctic Treaty Parties have already recognised that operating vessels in Antarctic waters poses additional challenges and risks, and have endorsed the draft mandatory International Code [of Safety] for Ships Operating in Polar Waters as a mechanism for helping to ensure safer shipping and to minimize accidents. The Code is due to be adopted in 2014 and it is likely that safety aspects will be delivered through amendment to the Safety of Life At Sea (SOLAS) Convention and environmental measures through amendment to the MARPOL Convention. Also in 2014, a second phase of work is expected to commence addressing non-SOLAS vessels including fishing vessels. Commission Members should seek expansion of the Code to non-SOLAS vessels to ensure appropriate safety and environmental measures are included for fishing vessels operating in polar waters.

The Cape Town Agreement of 2012 on the implementation of the Torremolinos Protocol
In October 2012, the Cape Town Agreement on the Implementation of the Provisions of the Torremolinos Protocol of 1993 (relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977) was adopted. This new legally binding agreement addresses the various technical and legal issues that had made entry into force of the Torremolinos Protocol difficult. It is now 35 years since the first agreement setting safety at sea standards for fishing vessels was agreed and it is very important that this agreement, albeit deficient in comparison to the IMO SOLAS Convention, enters into force as soon as practicable.

The Cape Town Agreement of 2012 will enter into force 12 months after the date on which not less than 22 States the aggregate number of whose fishing vessels of 24 m in length and over operating on the high seas is not less than 3,600 have expressed their consent to be bound by it.

The Agreement is open for signature until 10 February 2014 and thereafter will remain open for accession. All Contracting Parties to the 1993 Torremolinos Protocol can express their consent in a simplified manner, by signing the Agreement. A number of CCAMLR Members are already Contracting Parties to the Torremolinos Protocol. Norway has been the first State to give its consent to be bound by the Cape Town Agreement.

ASOC recommends:
- CCAMLR review the minimum ice class standard for fishing vessels and upgrade CCAMLR Resolution 20/XXII on ice strengthening standards to a binding Conservation Measure that sets appropriate standards reflecting the extent and severity of ice conditions likely to be encountered in different sub-regions of the CCAMLR Area.
- CCAMLR adopt a Resolution addressing the importance of environmental response and monitoring following an incident that could result in pollution.
- CCAMLR adopt a Conservation Measure which updates the provisions of CCAMLR Resolution 33/XXX to require fishing vessels to notify each relevant MRCC on entering and leaving each SAR area.
- CCAMLR adopt a Resolution urging vessel masters to notify the local MRCC in the first instance in the event of an incident/accident.
- CCAMLR adopt a Resolution on its commitment to engage in the expansion of the IMO’s mandatory Polar Code to address non-SOLAS vessels including fishing vessels and in particular seek provisions on:
  - training for all personnel on vessels operating in polar waters to equip them with basic information about the challenges of operating in polar environments including on-board practices, procedures and use of emergency equipment,
  - strengthened standards for training of Masters and officers in charge of the navigational water, including training in ice-covered waters relevant to the vessels area of operation,
  - environmental pollution including the equipment used in oil spill response, and for the training of crew in the appropriate procedures for oil spill response and the use of response equipment.
• CCAMLR agree a Resolution urging all CPs to become party to and implement the Cape Town Agreement of 2012, encouraging in particular signature of the Agreement before 10 February 2014, and the agreement on Standards for Training, Certification and Watchkeeping for Fishing Vessels, and determining the adoption of a CCAMLR Conservation Measure that gives effect to the provisions of those Agreements.

• Inform the IMO about existing CCAMLR measures, resolutions and relevant initiatives.

3. Search and Rescue

At ATCM XXXVII in Brussels, ATCPs adopted the resolution “Improved Collaboration on Search and Rescue (SAR) in Antarctica”. Point 5 of that resolution recommends that ATCPs “invite the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) to consider appropriate means within its jurisdiction to support SAR efforts and to improve fishing vessel safety within the CCAMLR Convention Area”16. We therefore encourage CCAMLR Members to have a robust discussion on this issue during CCAMLR XXXII, and take action at this meeting to support the ATCM’s work on this issue.

4. Ice Strengthening

Last year, CCAMLR Members failed to adopt a conservation measure on ice-strengthening. ASOC urges that Members will adopt a conservation measure, and recommends that it includes both an overall minimum requirement and additional requirements for areas with greater levels of ice cover.

5. Mandating Participation in IMO Numbering Schemes

CCAMLR showed its commitment to improving the transparency and safety of fishing operations in 2011 by mandating that all toothfish vessels fishing in the CCAMLR Area have an IMO number. This not only contributed to ensuring compliance with CCAMLR measures and to fighting crime at sea more broadly, but also – in line with the advice of CCAMLR Scientific Committee – to ensure that safety standards are met17.

Given the importance of adequate identification of vessels for security and safety reasons, CCAMLR should extend its requirement for mandatory IMO numbers to all vessels authorized to operate in the CCAMLR Convention Area.

At present, all fishing vessels authorized to operate in the CCAMLR Area already have an IMO number. Any new vessels that would not have this number could obtain it free of charge from IHS Fairplay (the organization that administers the scheme on behalf of the IMO) upon request by the vessel owner18.

ASOC calls on CCAMLR to amend CM 10-02 on licensing and inspection obligations to:

• Require all fishing vessels operating in the CCAMLR Area to have an IMO number and require flag states to ensure that the owners of such vessels fully participate in the IMO numbering schemes, thus ensuring that a consistent, best practice fishing vessel management scheme applies to the whole CCAMLR system.

• Require that IMO vessel numbers are used in all communications between the Secretariat, CCAMLR Members and interested States concerning fishing vessel operations, inspections and other relevant matters.

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http://ats.aq/devAS/ats_meetings_meeting_measure.aspx?lang=e

17 See Report of the Twenty-Ninth Meeting of the Scientific Committee, which calls for mandatory registration for an IMO number to ensure that the safety standards of all vessels operating in the Convention Area where observers are deployed are met, SC-CAMLR-XXIX, para 7.16.

18 Requests for an IMO number can be made online at www.imonumbers.lrfairplay.com.