COOPERATION WITH OTHER ORGANISATIONS

The reports of observers representing the Commission at the following meetings are attached as the Appendices indicated:

Appendix	Meeting	IWC Observer
A	Report from the 2013 activities in ICES	*Tore Haug (Norway)*
B	22nd Meeting of NAMMCO Scientific Committee, Tórshavn, Faroe Islands, 2015.	*Tore Haug (Norway)*
C	2015 Meeting of PICES, Qingdao, China, 14-25 October 2015.	*Tsutomu Tamura (Japan)*
D	22nd Meeting of the Advisory Committee to ASCOBANS, Den Hague, The Netherlands, 29 September-1 October 2015.	*Meike Scheidat (The Netherlands)*
E	24th Annual Council Meeting of the North Atlantic Marine Mammal Commission (NAMMCO), 10 - 11 February 2016, Oslo, Norway.	*Naohito Okazoe (Japan)*
F	34th Meeting of the Scientific Committee for the Conservation of Antarctic Marine Living Resources (SC-CCAMLR), Hobart, Australia, 19 – 23 October 2015.	*Rohan Currey (New Zealand)*
G	Report from IUCN 2016-2016.	*Justin Cooke and Randall Reeves*
H	Expert meeting to support the development of practical options to further enhance scientific methodologies and approaches on the description of areas meeting the criteria for EBSAs, Berlin, 22-24 February 2016.	*Giuseppe Notarbartolo di Sciara (Italy)*
I	Co-operation with IMO.	*Sarah Ferriss (IWC) and Russell Leaper (UK)*
J	32nd Meeting of the Meetings of the Parties to the Agreement on the International Dolphin Conservation Program (AIDCP). 23rd Meeting of the Working Group to promote and publicize the AIDCP Dolphin Safe Tuna Certification System 36th Meeting of the International Dolphin Conservation Program Permanent Working Group on Tuna Tracking 58th Meeting of the International Review Panel, La Jolla, USA, 19-20 October 2015.	*Annette Henry for Lisa Ballance (United States)*
K	Cooperative work between the IWC and the Secretariat of the Pacific Regional Environment Programme (SPREP)	*David Mattila (IWC)*
L	Report on cooperative work between the IWC and the International Committee on Marine Mammal Protected Areas (ICMMPA) and its corollary, the IUCN Task Force on Marine Mammal Protected Areas.	*Lorenzo Rojas Bracho*
M	Work of the Protocol Concerning Specially Protected Areas and Wildlife in the Wider Caribbean (SPAW) of the Cartagena Convention.	*David Mattila (IWC)*

Appendix A

REPORT FROM THE 2015 ACTIVITIES IN ICES

Observer: Tore Haug
Institute of Marine Research, Tromsø, Norway

ICES WGMME

The ICES Working Group on Marine Mammal Ecology (WGMME) met at the Institute of Zoology, Zoological Society of London (ZSL), Regent's Park, London, UK, from 9-12 February 2015.

New information on **distribution** and **abundance** of harbour porpoise available from aerial surveys in the North Sea has been compiled and will be used in project DE-PONS (Disturbance Effects on the Harbour Porpoise Population in the North Sea) to identify areas with high porpoise densities and to predict seasonal distribution and density. New information on abundance and trends available for coastal bottlenose dolphins in Scottish and Welsh waters in the UK, in waters west of Ireland, off the Normano-Breton coast of France, and off the north coast of Spain has been collated as well, together with new information on sperm whales and short-finned pilot whales in the Canary Islands. Updated or new information on distribution and abundance of several cetacean species was available from extensive coastal and offshore surveys off France, mainland Portugal and Madeira. Large-scale cetacean surveys are planned for European Atlantic waters in summer 2016 (SCANS-III). Plans for a Mediterranean cetacean survey continue to be pursued.

New results on **population structure**, available for harbour porpoise and bottlenose dolphin have been compiled. Satellite telemetry and static acoustic monitoring data were used to assign boundaries between populations in the North Sea-Skagerrak, the Belt Sea and the Baltic proper. New results from a genetic analysis of harbour porpoise tissue from Iberia, northern Europe and Turkey indicate a level of differentiation of the Iberian population that may warrant categorisation as a separate subspecies. New results from genetic, stable isotope and diet studies indicate that bottlenose dolphin population structure is hierarchical in the Northeast Atlantic, comprising coastal and pelagic ecotypes. The coastal ecotype comprises a north and south population and there are pelagic ecotypes in the Atlantic and Mediterranean. No new information was available on management frameworks.

A **threat** matrix was completed for the main marine mammal species in each regional seas area. While fishery bycatch is a significant concern, especially for harbour porpoise, common dolphin, coastal bottlenose dolphin and ringed seal, contaminants are also a major concern, especially for harbour porpoise, killer whale and bottlenose dolphin. In the Baltic Sea, contaminants and habitat degradation are a serious concern for all resident marine mammal species. In the Bay of Biscay/Iberian Peninsula and Macaronesia, sonar is a significant threat to beaked whales, and in the former area fin whale and sperm whale are threatened by collisions with shipping. The small population of Mediterranean monk seal in Madeira is threatened by habitat degradation, disturbance and deliberate killing. Text on marine mammals has been provided for the ICES Ecosystem Overviews.

Marine mammals have been included in whole **ecosystem models** (e.g. Ecopath with Ecosim, EwE) and in minimum realistic models (e.g. GADGET), among others, in studies principally focused on trophic relationships, resource competition between fisheries and marine mammals, and consequences for fish stocks. There is the potential to add fishery by-catch mortality of marine mammals to such models although few examples exist where this has been done. Other types of biological interaction (e.g. parasite transmission) have been less well covered. All models have limitations and some kind of validation exercise is essential to confer credibility on the predictions.

ICES WGBYC

The ICES Working Group on Bycatch of Protected Species (WGBYC) met in Copenhagen at ICES headquarters 2-6 February 2015. Since the commencement of WGBYC in 2009, the WG has been collating, storing and summarizing **annual bycatch and monitoring effort data** reported by European member states affected by EC Regulation 812/2004. This has resulted in the development of WGBYC database that currently stores eight

years (2006–2013) of data on cetaceans as reported to the European Commission by member states affected by the regulation. WGBYC continues to cooperate with the ICES Data Centre and make advances toward a more comprehensive database design.

This year WGBYC undertook **an historical review** of Reg. 812 to the extent practicable. A significant limitation in evaluating the magnitude of bycatch mortality since the implementation of the regulation is not having an accurate estimate or census of total fishing effort from relevant European waters. There is considerable uncertainty in the representativeness of total fishing effort reported by member state to the European Commission. In addition, WGBYC has continually reported on the inconsistent submission and content of annual reports by some member states and the shortcomings of the Reg. 812 to accurately reflect the true magnitude of cetacean bycatch in gears affected by the regulation.

Total **observer effort** reported by member states in relation to Reg. 812 was highest in the North Atlantic, followed by the Baltic, Mediterranean, and North Sea. This result generally applies to both gillnets and pelagic trawls. Based on Reg. 812 reporting, common and striped dolphins are taken as bycatch in both gillnet and pelagic trawl gear. Harbour porpoise bycatch is only evident in gillnets and bottlenose dolphins have been recorded taken as bycatch in both gillnet and pelagic trawl gears. For gillnets, harbour porpoise bycatch rates were on average lowest in the Baltic, followed by the North Sea/Eastern Arctic with the highest bycatch rates on average in the North Atlantic. Common and striped dolphin bycatch rates in gillnets were also reported for the North Atlantic regional coordination meeting (RCM) but were lower than harbour porpoise bycatch rates from the same area. For pelagic trawls, the North Atlantic common dolphin bycatch rate was higher on average than bycatch rates reported for bottlenose and striped dolphins from the Mediterranean and Black Sea. Potential significant sources of uncertainty in bycatch rates include missing data and different monitoring duties among regions. Mediterranean bycatch rates for gillnets are expected to be underestimated due to the lack of monitoring requirement under Reg. 812. In addition, North Atlantic and Mediterranean bycatch rates for pelagic/midwater trawls are likely underestimated due to missing data from Finland (since 2008), France (2012–2013), Spain (since 2009) and Sweden (since 2013).

WGBYC continues to develop a **bycatch risk assessment** with the aim of identifying regions that may pose the greatest threat to nontarget species in the absence of reliable data that would be needed to quantify the bycatch of protected, endangered and threatened species in a statistically rigorous manner. The WG applied a bycatch risk assessment to harbour porpoise where a range (high/low) in bycatch levels were estimated for regions within greater European Atlantic waters (i.e. Celtic and Irish Seas, North Sea, and Kattegat and Belt Seas). Data for the Celtic and Irish Sea assessment unit suggest that 1.39% of the harbour porpoise population is being taken if the upper 95% confidence limit bycatch rate is applied. This falls short of the 1.7% limit established by ASCOBANS. The North Sea and Kattegat Seas upper limit mortality estimates fell below 1.00% of their respective abundance estimates. However, many caveats apply to this upper limit, with the effort data reliability and the potential for biases involved. The WG will continue to improve upon and apply the bycatch risk assessment approach to other species/taxa as more data become available.

Several member states continue to design and test various **mitigation methods** to minimize bycatch of protected species. Current mitigation research includes continued development of a porpoise Alarm in German waters, development of fisher brochures of best practices for reducing bycatch in Portuguese waters, continued research on pinger effectiveness in Danish and UK waters, and the development of alternative fishing gears in Swedish waters. WGBYC seeks a continued commitment by its members to support and engage in the development and imple-mentation of mitigation research by seeking funding sources and collaborative re-search proposal ideas.

ICES ASC

The 2015 ICES Annual Science Conference (ASC) was held in Copenhagen, Denmark, 21-25 September 2015. The conference included no particular theme session devoterd entirely to marine mammals. Nevertheless, some sessions were designed with marine mammals included as an integral part – particular relevant sessions were: "Operationalizing ecosystem-based fisheries managemenmt", "Ecosystem monitoring in practice" and "How to hit an uncertain moving target: achieving Good Environmental Status under the Marine Strategy Framework Directive".

More information is available at the ICES web side www.ices.dk.

Appendix B

NAMMCO SC 2015 – ISSUES OF RELEVANCE TO IWC

Tore Haug
Institute of Marine Research, Tromsø, Norway

The 22nd meeting of the Scientific Committee was held in Tórshavn, Faroe Islands from 9-12 November, 2015.

Environmental/Ecosystem Issues
In the Barents and Norwegian Seas, cod abundance has increased, and its range has extended northwards in recent years. One implication of this is a new overlap of feeding grounds with harp seals and minke whales, two other important top predators in the area. Both these mammal species have exhibited declines in body condition in recent years, and competition for food with the increasing cod stock is suggested as a possible explanation.

In Icelandic waters pronounced changes have occurred in the distribution and abundance of several cetacean species and their prey since regular monitoring began in 1987. A northward shift in summer distribution of capelin and a crash in the abundance of sand eel are suspected to be the primary cause of the recent shift in distribution of common minke whales away from Icelandic coastal waters. Continued monitoring of the distribution and abundance of cetaceans is essential for conservation and management of the cetacean populations and as a part of wider studies of ongoing changes in the ecosystem.

Impacts of Human Disturbance in the Arctic
A Symposium organised by NAMMCO "Impacts of Human Disturbance on Arctic Marine Mammals" was held 13-15 October 2015. Concerns were raised at both the Symposium and the SC meeting about a Canadian mining project currently under development in the Canadian Arctic, the *Mary River Project* operated by *Baffinland Iron Mines Corp,* a project that continues expanding, currently with the prospect of year-round shipping through the heavy pack ice in Baffin Bay. It will have severe consequences for the large numbers of marine mammals using the area in summer and winter, including narwhals, belugas and bowheads, with unpredictable consequences for the populations themselves but also for the accessibility to hunting and/or its sustainability. Other industrial activities that were addressed at the symposium as being particularly important as disturbance factors for marine mammals were seismic exploration in Canada, and West and East Greenland.

Cetaceans stocks
Fin whale
The SC recommended a catch limit of 146 fin whales for fin whales that can be taken anywhere in the EG+WI (East Greenland + West Iceland) region as safe and precautionary, and that this advice should be considered valid for a maximum of 2 years (2016 and 2017). This is interim advice because the most recent abundance estimate is almost 10 years old. A new abundance estimate is expected from the extensive NAMMCO sighting survey (NASS2015) conducted in the northeast Atlantic this past summer.

Humpback whale
The SC recommended that the IWC's *Strike Limit Algorithm* (SLA) that has been developed within the Aboriginal Whaling Management Procedure (AWMP) as the best current basis for providing management advice for West Greenland humpback whales. The SC endorsed the advice of 10 strikes per year based on the SLA that was accepted by the IWC. The SC also noted that a higher number may be sustainable because the SLA calculations take into account the Greenlandic *Needs Statement* provided to the IWC of 10 whales. This advice applies up to and including 2017, and with an expected new abundance estimate from the NASS2015, a new calculation by the IWC SLA to provide advice should be straightforward.

Common minke whale
The SC recommended that a catch limit of 224 common minke whales in the CIC sub-area is safe and precautionary, and that this advice should be considered valid for a maximum of 3 years (2016 – 2018). This is interim advice because the most recent abundance estimate is from 2009, which will then be approaching 10 years old. New abundance estimates will be developed from the shipboard survey from the results of NASS2015. However, unusually unfavourable weather conditions seriously affected the aerial survey in coastal

Icelandic waters and it is clear that the data collected are insufficient for any realistic abundance estimation for the Icelandic continental shelf area (CIC) as a whole. A funding proposal has been submitted for a repeat of this aerial survey in the summer of 2016, and the outcome of this funding request is expected in early 2016.

Blue whale
An increasing number of blue whales are reported in the waters around Svalbard including in inner parts of the fiord systems especially on the west coast. The Norwegian Polar Institute has started instrumenting blue whales (and fin whales) with satellite tracking devices and collect biopsies for studies of genetics diet and ecotoxicology. Blue whales were also detected on the passive acoustic listening devices that have been deployed at various sites around Svalbard and thus collecting data on the phenology of arrival and departures to the area.

Bowhead whale
A strip-width survey estimated 100 (95% CI: 32-329) bowhead whales in the North East Water Polynya off Northeast Greenland in 2009. This estimate is considerably higher than observations in the past. Bowhead observations were also made from ship and helicopter in Svalbard on a recent ice-edge survey for polar bears and ice-associated whales including bowhead whales. And finally, a tourist vessel reported a sighting of about 100 whales in the Jan Mayen area. A paper from these Svalbard and Jan Mayen observations are expected in 2016.

Beluga and Narwhal
The SC provided updated the assessments and advice for belugas and narwhals in Greenland and Canada.

Sperm whale
A study in Norway using a whale safari company as a platform from which to conduct a photo-identification study of male sperm whales confirmed the presence of both transient and resident male sperm whales in the Bleik Canyon. The results suggest that the sperm whale group(s) found there are a loose feeding aggregation and not a closed population. No trend in the number of sighted whales was found. The estimated size of the feeding aggregation in the Bleik Canyon also fluctuated between years, from 11 to 116 individuals, with no trend evident.

NASS2015
NAMMCOs whale sighting surveys in the Northeast Atlantic in 2015 (NASS2015) included an intensive survey with the purpose of estimating the abundance of pilot whales around the Faroe Isles, an aerial survey of the coastal waters in East Greenland and a ship-based survey around Jan Mayen following methods developed for the Norwegian minke whale surveys. All the surveys were successfully completed and resulted in valuable data useful for abundance estimation of the target species. In addition to these surveys, national surveys in 2015 covered the West Greenland shelf, areas around Iceland and the Norwegian Sea, providing a satisfactory coverage of these waters. The data collected are now being analysed.

Appendix C

Observer Report on the 2015 PICES Annual Meeting

Observer: Tsutomu Tamura (Japan)

The PICES (North Pacific Marine Science Organization) is an inter-governmental organization that includes Canada, China, Japan, Korea, Russia and United States. PICES has four committees; the Biological Oceanography Committee (*BIO*), the Fisheries Science Committee (*FIS*), the Marine Environmental Quality Committee (*MEQ*), and the Physical Oceanography and Climate Committee (*POC*). In addition, there is one technical committee for data exchange (*TCODE*) and one major research project titled *FUTURE* (Forecasting and Understanding Trends, Uncertainty and Responses of the North Pacific Ecosystems) which was initiated in 2008. PICES meets once a year for its regular business meetings and associated symposium with over 500 participants. Since 1997, PICES has had an interest in marine birds and mammals as ecosystem components from ecosystem and environment view points and has a special working group to assess the feeding impact by marine birds and mammals upon ecosystems (WG11). There is also a marine birds and mammals advisory panel (AP-MBM) under the auspices of the BIO committee to examine coupled climate ecosystem fluctuations *etc.* in the North Pacific Ocean in collaboration with studies in other areas. To incorporate the roles and characteristics of MBMs into ecosystem based management and meet the objectives of FUTURE, the AP-MBM had proposed to focus on MBM spatial ecology and conservation from 2012-2014. In three years (2012-2014), AP-MBM was to 1) synthesize distribution data of MBMs (boat based, tracking and terrestrial surveys) and its temporal change, 2) examine physical and biological factors that correspond to ecological/economic hot spots, and 3) provide information on important ecological areas in the PICES regions to facilitate sustainable use of marine resources.

The 2015 Meeting of PICES was held at Qingdao, China from 14-25 October 2015. Tamura participated in the meeting AP-MBM as an IWC observer. The business meeting focused on the current activities of the AP-MBM, and on preparations for associated projects to begin in 2016. After chairing the 2015 meeting of the AP-MBM, Watanuki (Japan) stepped down as co-chair. Hattori (Japan) became a co-chair of AP-MBM and also a member of the BIO committee which will facilitate a strong connection between the Advisory Panel and the Committee. Hazen (USA) was welcomed as a new member of AP-MBM.

1. Reports from IWC SC members
The following short presentations were made at the AP-MBM Business meeting on 16 October 2015.

Tamura (Japan) presented the observer report of 2015 IWC/SC and some work regarding cetaceans in the North Pacific (*e.g.* Species Distribution Model, IWC/POWER cruise and Grey whale workshop). The AP thanked Tamura for the presentation. Hazen (USA) gave a presentation on scales of oceanographic data for use in habitat models in the BIO session. Vinnikov (Russia) reported on status of marine mammals in the north east of Russia and the results of the Joint Japan-Russian survey around the Okhotsk Sea in the 2015 summer season.

2. AP-MBM leadership - Ream (USA) and Watanuki (Japan) have been co-chairs of the AP since 2012.

3. Change from AP-MBM to Section-MBM after 2015
At the 2015 meeting, the BIO committee suggested to change AP-MBM (Future) to a Section-MBM (BIO) since the AP only lives as long as Scientific Program (FUTURE until 2019) while as a, "Section" the work of the AP will remain. As result of a vote, MBM became a "Section" instead of an "Advisory Panel" from 2016.

The remainder of the meeting was spent discussing and developing a proposal for a new Section-MBM activity plan, and outlining how this new activity plan will relate and contribute to the *FUTURE* Science Plan.

4. Activity plan in 2016 for Section-MBM
One element of the activity plan for the Section-MBM in 2016, to be led by Trites (Canada) and titled "The consumption of North Pacific forage species by marine birds and mammals", is to examine the influence of climate variability and change on trophic linkages and the distribution and abundance of MBMs. To accomplish this, the Section-MBM will synthesize new dietary information and estimate food consumption using a new generation of bioenergetic models. The Section-MBM will also synthesize information of prey quantity, quality,

composition and distribution to predict their impacts of prey by MBMs.

These efforts will be useful to understanding 1) top-down pressures on fish communities and fisheries, 2) spatial shifts in lower trophic levels and, in turn, top predators, and 3) climate effects on top predators.

The plan for the 2016-2019 project was discussed.

It is expected that the study will take 5 years to complete. Activities have been separated into two phases. The first phase will focus on top-down effects (2016-2017), second phase on bottom-up effects (2018-2019). The Section-MBM will:

1) Examine influences of climate variability & change on trophic linkages and MBM distribution and abundance.
2) Synthesize diets and estimate consumption by MBMs (and perhaps other top predators) for use in ecosystem models, and
3) Synthesize information on prey quantity, quality, composition, and distribution to understand and predict impacts from climate variability & change on MBMs.

These efforts will be useful to understanding 1) top-down pressures on fish communities and fisheries, 2) spatial shifts in lower trophic levels and in turn top predators, and 3) climate effects on top predators - thereby contributing to FUTURE.

5. Other matters
The 2016 annual meeting of the PICES will be held at San Diego, USA from 1-13 November. The Section-MBM meeting will be held on 4 November 2016.

The detail is described in http://meetings.pices.int/meetings/annual/2016/pices/scope.

Appendix D

Observers' report on the 22nd Meeting of the Advisory Committee (AC) to the Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS)

Observer: Meike Scheidat (The Netherlands)

The 22nd Meeting of the AC to ASCOBANS, was held in Den Hague, The Netherlands from September 29th to October 1st 2015.

A selection of main topics covered at the AC:

- This AC meeting was the last one before the 8th Meeting of the Parties (MoP) to be held in Helsinki, Finland 30th August to 1 September 2016. On September 28th the North Sea Steering Group for the Conservation Plan for the Harbour Porpoise in the North Sea held its 5th meeting (NSG5). On 2nd October a workshop on Remote Electronic Monitoring with Regards to Bycatch of Small Cetaceans was held.
- As in previous years special attention was given to the subjects:

    - PCBs: Parties will develop a draft Resolution on PCBs to complement the existing Resolution on chemical pollution and are encouraged to support research on the effects on PCBs on small cetaceans to allow assessment at Management Unit level.
    - underwater unexploded ordnance: Parties will develop a draft Resolution on underwater unexploded ordnance and ASCOBANS will facilitate information exchange on methods for environmentally friendly removal of underwater unexploded ordnance and on modelling of effects of explosions on small cetaceans.
    - managing cumulative impacts on small cetaceans: Parties agreed to develop a draft Resolution on managing cumulative impacts on small cetaceans.
    - best practice regarding necropsy and rescue of small cetaceans: both on the subject of necropsy protocols and cetacean rescue and the development of related guidance ASCOBANS will seek to collaborate with ACCOBAMS, IWC and other organizations; Parties agreed to develop a draft Resolution covering best practice regarding necropsy and rescue and to promote effective stranding networks.
    - marine renewables: Parties agreed to develop a draft Resolution on marine renewables.
    - Marine debris: facilitate information exchange and liaise with other bodies dealing with this issue; continuing to monitor this topic through its pollution working group; develop standardized protocols on recording marine debris and cooperate as far as possible with IWC.

- ASCOBANS will update the Recovery Plan for Baltic Harbour Porpoises (Jastarnia Plan), and advance the development of a Conservation Plan for Common Dolphins. Both of these activities might lead to draft resolutions for the MoP8.
- Parties agreed the procedure to finalize the submission of ASCOBANS' position on the requirements of legislation to address monitoring and mitigation of small cetacean bycatch. The final version will be submitted to the Secretariat by 16 October 2015 for forwarding to the European Commission.
- During the 23rd Meeting of the Advisory Committee the Special Species Session will feature the white-beaked dolphin.
- Two workshops were planned for 2016: 1. Conserving Europe's cetaceans through synergy-building between the relevant legislative frameworks (ECS/ASCOBANS/ACCOBAMS workshop 2016 ECS Conference); 2. carrying forward the Agreement's work on management procedures relating to anthropogenic removal of small cetaceans.
- ASCOBANS encourages reporting of any ship strike incident to the IWC database (accessible at https://iwc.int/ship-strikes), promote the database and make use of the IWC PowerPoint presentation on the issue.

The full report of the AC is available via: http://www.ascobans.org/.

Appendix E

Observer Report of the 24th Annual Council Meeting of the North Atlantic Marine Mammal Commission (NAMMCO)

Observer: Naohito Okazoe (Japan)

The North Atlantic Marine Mammal Commission held its 24th Annual Council Meeting from 10 to 11 February 2016, in Oslo, Norway. All of the NAMMCO members (Faroe Islands, Greenland, Iceland and Norway) participated in the meeting. Canada, Denmark, Japan and the Russian Federation were represented as observers at the meeting. The Secretary of the IWC, Dr. Brockington also observed the meeting.

Major items discussed at the Council meeting are as follows;

(1) Marine Mammals as a Food Resources
The planning group identified the main message is to show marine mammal is equal to other food resources, changing the working title from "marine mammals and food security" to "marine mammals as food resources", as food security is only one of the concerns. A draft background document which incorporates ideas from the member parties will be ready in mid-March. The document will refer to indigenous people only in the appendix since, as a general principle NAMMCO does not recognize such differentiation. Communication strategies including target groups and key messages to be delivered and key information to sustain them will be developed with the cooperation of a journalist.

(2) Issues related to the conservation and management of marine mammals
Issues related to the conservation and management of marine mammal resources were reported: for example, increased shipping activities and noise disturbances related to a large scale iron-ore project taking place in important, and until now pristine, areas for marine mammals in the Arctic. It was also reported that Northern shift in prey species is taking place, which could be connected to climate change and affect interactions of marine mammals with fisheries. It was recognized that continued research efforts were necessary to address these issues. Bycatch is also recognized as an important issue to be addressed, and SC re-activated its Bycatch Working Group in 2016.

(3) Scientific activities
Management advices for seals, walrus, and cetaceans were reported by the SC to the Council, based on the best scientific evidence. For the assessment of whale stocks, a series of North Atlantic Sightings Surveys has been the Flag ship of NAMMCO and is of vital importance for the sustainable management of cetacean stocks in the NAMMCO area. Member countries conducted a comprehensive North Atlantic cetacean Sightings Survey (T-NASS) in 2015 and its preliminary results were reported. The survey is expected to provide new abundance estimates to be used in stock assessment of cetaceans by the Scientific Committee.

(4) Improving hunting methods
An Expert Group meeting was held in November 2015 to assess time to death data in the large whale hunts in member countries as well as Japan, Canada and the US. In the meeting, conclusions and recommendations for further improvements suggested from available data were made for different types of operations. It was confirmed that positive development in quick and efficient kills was made and continuous development of hunting methods contributes to improving animal welfare.

(5) Inspection and Observation
NAMMCO has an international observation scheme to monitor whether national legislation and decisions made by the Commission are respected. Observers are appointed to report on hunting activities in member countries. In 2015 two observers carried out the observations in pilot whaling in Faroe Islands in accordance with the provisions of the Scheme and no violations were reported to the Secretariat. The effort of the control scheme for the 2016 season is minke whaling in Norway.

(Press Release - NAMMCO 24th Annual Council Meeting) http://www.nammco.no/about-nammco/press-releases/

Appendix F

Observer's Report from the 34th Meeting of the Scientific Committee for the Conservation of Antarctic Marine Living Resources (SC-CAMLR), Hobart, Australia, 19 – 23 October 2015

Observer: Dr. Rohan Currey (New Zealand)

The 34th Meeting of the Scientific Committee for the Conservation of Antarctic Marine Living Resources[1] (SC-CAMLR-XXXIV) took place at the CCAMLR Headquarters in Hobart, Tasmania, Australia, from 19 – 23 October 2015 and was chaired by Dr. Christopher Jones (USA). The meeting was preceded by the annual meeting of the Working Group on Fish Stock Assessment (WG-FSA-15) and was followed by the 34th Meeting of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR-XXXIV).

The meeting was attended by representatives and delegations from 23 member countries and the EU. The meeting was also attended by observers from two acceding states, from intergovernmental organisations ACAP, CCSBT, CEP, IUCN, IWC, SCAR (including SCOR), SPRFMO and UNEP, and nongovernmental organisations ARK, ASOC, COLTO and Oceanites.

The meeting discussed 63 papers and reports[2], including the reports of the Subgroup on Acoustic Survey and Analysis Methods (SG-ASAM-15) and the Working Groups on Statistics, Assessments and Modelling (WG-SAM-15), Ecosystem Monitoring and Management (WG-EMM-15), and Fish Stock Assessment (WG-FSA-15).

The main topics discussed at the meeting were:

- Advances in statistics, assessments, modelling, acoustics and survey methods
- Harvested species (krill, toothfish and icefish)
- Fish and invertebrate by-catch
- Incidental mortality of seabirds and marine mammals associated with fisheries
- Spatial management of impacts on the Antarctic ecosystem (MPAs and VMEs)
- IUU fishing in the Convention Area
- CCAMLR Scheme of International Scientific Observation
- Climate change
- Cooperation with other organisations (including IWC)

The remainder of this report will focus on aspects of the meeting relevant to the IWC Scientific Committee; including efforts to encourage collaboration between IWC and CCAMLR as well as information relating to whale interactions with fisheries in the Southern Ocean.

Collaboration between IWC and CCAMLR

Joint IWC-SC and SC-CAMLR workshop

The IWC SC held a joint workshop with CCAMLR in 2008 to review input data for Antarctic marine ecosystem models[3]. Over the past two years, IWC SC and SC-CAMLR have begun planning for a second joint workshop (see details in SC/66a/COMM/1 Rev 3, Appendix C). At SC-CAMLR, the Convener of WG-EMM, Dr So Kawaguchi,

[1] The report of the SC-CAMLR-XXXIV meeting is available here: https://www.ccamlr.org/en/sc-camlr-xxxiv.
[2] The documents discussed at SC-CAMLR-XXXIV are listed here: https://www.ccamlr.org/en/sc-camlr-xxxiv and can be accessed by contacting the CCAMLR Secretariat: ccamlr@ccamlr.org.
[3] International Whaling Commission and CCAMLR. 2010. Report of the Joint CCAMLR-IWC Workshop to Review Input Data for Antarctic Marine Ecosystem Models, 11-15 August 2008, Hobart, Australia. J. Cetacean Res. Manage. (Suppl.) 11(2):541-86.

presented the terms of reference for a joint SC-CAMLR and IWC SC Workshop as agreed by the workshop steering group. Due to another major workshop happening at the same time, it was necessary to defer for one year and hold the workshop during 2017. Additionally, two days was considered insufficient to address a multi-species model, therefore a proposal is detailed for a larger workshop in 2018. SC-CAMLR endorsed the terms of reference for the workshop (see separate working paper submitted to this meeting).

Marine debris

SC-CAMLR noted a summary of data on marine debris, including entanglement of marine mammals, indicating there was no evidence of trends in the occurrence of marine debris in the CAMLR Convention Area but the data highlighted the continued presence of man-made marine debris in the Convention Area. SC-CAMLR requested that the CCAMLR Secretariat contact other organisations, including IWC to investigate potential collaboration on data collection and analysis of marine debris data.

Whale interactions with fisheries in the Southern Ocean

Incidental mortality

There were no reported incidental mortalities of marine mammals in CCAMLR fisheries in the 2014-15 season. The Working Group on Incidental Mortality Associated with Fishing did not meet in 2015 and has not met since 2011.

Depredation

SC-CAMLR recognised the emerging importance of marine mammal depredation, including developing a plan to address this issue in collaboration with the Coalition of Legal Toothfish Operators (COLTO) Working Group on Depredation. WG-Depredation was formed as one of the outcomes of the COLTO and Science Workshop, held in Norway, from 25 to 26 July 2015, immediately prior to the WG-SAM-15 meeting. Since SC-CAMLR, a COLTO Depredation Workshop was held in Punta Arenas, Chile, from 16 to 18 March 2016.[4] The aims of the workshop were to investigate sperm whale and killer whale depredation on toothfish longline fisheries, including assessment of the socio-economic and conservation impacts of depredation; the impacts on depredated toothfish in a fisheries management context; and the development of mitigation solutions. The SC-CAMLR observer to the workshop, Dr Marta Söffker, will report the results of the workshop to SC-CAMLR in October 2016.

Ecosystem interactions

With regards to the current state of the krill-based ecosystem and the krill fishery, SC-CAMLR endorsed the advice of WG-EMM that krill fishing in areas distant from land may not affect land-based predators but could affect pelagic predators such as whales, pack-ice seals, fish and other predators foraging in those areas. Full implementation of krill feedback management requires that CCAMLR is able to estimate the ecosystem effects of fishing. The CCAMLR Ecosystem Monitoring Program currently only includes land-based predators. Detecting ecosystem effects in pelagic areas may require monitoring of krill predators utilising those areas, such as cetaceans, ice seals and fish.

SC-CAMLR noted discussion of Type C killer whales' long-distance movements between the southern Ross Sea and subtropical New Zealand waters, their site fidelity and the importance of monitoring their prey, Antarctic toothfish, in McMurdo Sound and Terra Nova Bay.

[4] The minutes of the Coalition of Legal Toothfish Operators (COLTO) Depredation Workshop are available here: http://www.colto.org/toothfish-collaboration/2016-chile-workshop/.

Appendix G

REPORT FROM IUCN 2015-16

Justin Cooke and Randall Reeves

Red List updates
The assessments for all cetacean species and selected subpopulations are due to be updated this year. Instead of organizing a global workshop for all cetacean species as in the past, smaller workshops will be held addressing different groups of species. Several updates and assessments of small cetacean species and subpopulations were reviewed at a workshop in San Diego in May 2015 and those are still under revision. An on-line workshop for reviewing the great whale assessments is planned for the end of July 2016. The IUCN Cetacean Specialist Group is preparing updated drafts, in collaboration with the Global Institute of Sustainability at Arizona State University. The current list of all cetacean species and populations that have been assessed for the Red List, and their current Red List classification, is maintained on the Cetacean Specialist Group site at www.iucn-csg.org/index.php/status-of-the-worlds-cetaceans.

Western gray whales
The Western Gray Whale Advisory Panel (WGWAP) met in November 2015 in Moscow where the Panel reviewed *inter alia* the population status, reports of field work, reports of industrial activities conducted in the 2015 season, including three seismic surveys conducted in and near gray whale feeding habitat off Sakhalin. The observation and acoustic data have not yet been analysed to determine whether an effect of the activities on gray whale use of the area can be discerned. A further informal Panel meeting was held at IUCN in May 2016, where the Panel issued a statement of concern about the potential effects on gray whale mothers and calves of an ongoing pier construction project in Piltun Lagoon: http://iucn.org/wgwap/wgwap/public_statements. The next meeting of WGWAP is scheduled for November 2016 in Moscow. A report of WGWAP activities is appended to the report of the subcommittee on Bowhead Right and Gray whales (Annex F Appendix 2).

Cetacean Specialist Group
Updates of other projects in which Cetacean Specialist Group members are involved are posted on the Group's web site www.iucn-csg.org.

A recent letter from the IUCN Director General and the Chair of the Species Survival Commission to the India Minister of Environment expresses concern about impacts of the National Waterways Act 2016 on Endangered Ganges River dolphins and other riverine species (www.iucn-csg.org/wp-content/uploads/2010/03/39.IUCN-letter-re-India-Waterways-Bill-_20160519.pdf).

The top concern at the moment is the status of the vaquita which is now estimated to number only about 60 animals, an apparent decline of over 90% since 1997. Only if the recently adopted fishing controls are strictly enforced, and continued, can there be any hope of saving this Critically Endangered species

World Conservation Congress
The next World Conservation Congress (IUCN's 4-yearly general meeting) will be held in Honolulu Sept 1-10 2016. Among the many side events there are some relevant to cetaceans, including a knowledge café on "Managing maritime traffic in the high seas: exploring the use of IMO conservation tools in Important Marine Mammal Areas (IMMAs)". http://www.iucnworldconservationcongress.org/.

Appendix H

Expert meeting to support the development of practical options to further enhance scientific methodologies and approaches on the description of areas meeting the criteria for EBSAs
Berlin, 22-24 February 2016

Observer: Giuseppe Notarbartolo di Sciara (Italy)

On 22-24 February 2016 I attended a meeting in Berlin (Germany) convened by the Secretariat of the Convention on Biological Diversity (CBD) and the Secretariat of the Global Ocean Biodiversity Initiative (GOBI). Goals of the meeting were to support the development of practical options to further enhance scientific methodologies and approaches on the description of areas meeting the criteria for Ecologically or Biologically Significant Areas (EBSAs), and to share experiences and lessons learned on such methodologies and approaches.

This meeting sought to develop future practical options drawing on the experience of experts who have been actively involved in the Regional EBSA Workshops. Those present recognized the EBSA process is open and continuous, providing information on the inherent value of marine biodiversity to assist States and competent Intergovernmental Organisations in their efforts to make any appropriate management interventions.

The meeting was chaired by Dr. Pat Halpin (MGEL, Duke University). Five key future challenges were identified and examined: i) updating and refining individual EBSA descriptions; ii) categorizing EBSAs to better explain them as fixed or dynamic features; iii) introducing more systematic methods to complement the expert driven process adopted to date; iv) considering geographical areas and ecological features not considered to date; and v) using EBSA descriptions to influence global ocean research agendas. The meeting noted that sufficient experience has been gained during a productive five years of EBSA workshops to warrant such reflection. Consistent scientific and technical data gathering has provided workshops with useful baseline information augmented with regional knowledge and supported by national EBSA processes.

Critical for the future application of EBSAs will be how to include new information, for example through the provision of information deriving from the IUCN effort of identifying Important Marine Mammal Areas (IMMAs). Working groups within the meeting considered issues such as making best use of traditional knowledge, and different approaches for incorporating new scientific information.

Appendix I

CO-OPERATION WITH IMO

Sarah Ferriss (IWC) and Russell Leaper (UK)

The Scientific Committee, Conservation Committee and Commission have all recommended enhanced cooperation with IMO. In addition it was recommended that a document on the IWC's work on ship strikes be submitted to the IMO Marine Environment Protection Committee (MEPC).

Following these recommendations there was a meeting between the IWC and IMO Secretariat's in January 2016. This resulted in a number of actions including: (i) The IMO and IWC will continue efforts to cooperate on issues of mutual interest, (ii) Joint follow up with contacts in Sri Lanka regarding addressing the blue whale ship strike issue there, (iii) Further liaison on marine debris through IMO work in connection with the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), (iv) updating IMO on the progress on Important Marine Mammal Areas (IMMAs) and discussions in the Scientific Committee on this issue.

A document 'Information on recent outcomes regarding minimizing ship strikes to cetaceans' was submitted to MEPC69 in April 2016 (MEPC 60/10/3, SC/66b/ForInfo28). The MEPC 69 meeting was attended by Ferriss (Secretariat) and Leaper (Convenor of HIM). The paper was discussed under the agenda item related to Particularly Sensitive Sea Areas (PSSAs). The paper drew attention to work by the IWC on ship strikes including identification of high risk areas and potential mitigation measures and the collection of data through the IWC ship strike database. The presentation was widely welcomed with supportive comments from Belgium, Chile, New Zealand, United Kingdom and NGOs ACOPS, IFAW and World Shipping Council (WSC).

The next MEPC meeting (MEPC 70) is scheduled for 24-28 October 2016. It was agreed that a side bar presentation from IWC at an MEPC meeting could be useful in future but this would have to be requested well in advance and could be most effective when there is a very specific issue that IWC wishes to draw attention to.

The IMO adopted a draft International Code for Ships Operating in Polar Waters (Polar Code) in 2015. This applies to passenger and cargo ships covered by SOLAS and includes environmental provisions cover measures for the prevention of pollution by oil, noxious liquid substances, sewage, and garbage. Provisions relating to non-SOLAS ships, including fishing vessels and pleasure craft will be addressed in the future.

Appendix J

32nd Meeting of the Meetings of the Parties to the Agreement on the International Dolphin Conservation Program (AIDCP),
23rd Meeting of the Working Group to promote and publicize the AIDCP Dolphin Safe Tuna Certification System
36th Meeting of the International Dolphin Conservation Program Permanent Working Group on Tuna Tracking
58th Meeting of the International Review Panel
La Jolla, CA 19-20 October 2015

Observer: Annette Henry for Lisa Ballance (United States)

Agreement on the International Dolphin Conservation Program (AIDCP)
The objectives of the AIDCP are:

1. To progressively reduce incidental dolphin mortalities in the tuna purse-seine fishery in the Agreement Area to levels approaching zero, through the setting of annual limits;
2. With the goal of eliminating dolphin mortality in this fishery, to seek ecologically sound means of capturing large yellowfin tunas not in association with dolphins; and
3. To ensure the long-term sustainability of the tuna stocks in the Agreement Area, as well as that of the marine resources related to this fishery, taking into consideration the interrelationship among species in the ecosystem, with special emphasis on, inter alia, avoiding, reducing and minimizing bycatch and discards of juvenile tunas and non-target species.

As of 31 August 2015, Belize, Colombia, Costa Rica, Ecuador, El Salvador, the European Union, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, the United States, and Venezuela have ratified or ac-ceded to the Agreement. Bolivia and Vanuatu are applying the AIDCP provisionally.

On-board observer program – The AIDCP mandates 100% coverage by observers of fishing trips by purse seiners of carrying capacity greater than 363 metric tons (t) in the Agreement Area (i.e., the eastern Pacific Ocean (EPO)). In 2015, 100% of the trips by these vessels were sampled by independent observers and 633 dolphins were reported killed, a decrease from the previous year. In addition to reporting on dolphin deaths in the fishery, the observer program provides other critical data on catch and bycatch of other species, as well as information on gear configuration and compliance with existing AIDCP and IATTC conservation and management measures. The AIDCP Parties continue to ensure that progress is made in these areas to strengthen the implementation of the AIDCP. These efforts continued in 2015.

2015 Dolphin Mortality Limits – The overall dolphin mortality limit for the international fleet in 2015 was 5,000, and the portion available for distribution is 4,900; the difference constitutes the Reserve DML Allocation (RDA), utilized at the Director's discretion for extraordinary cases. The average individual-vessel DML (ADML) in 2015, of approximately 51 (51.57) dolphins per vessel were allocated to 95 vessels. In 2015, no vessel exceeded its DML. The number of sets on dolphin-associated schools of tuna made by vessels over 363 t was 9,375 in 2015. The mortality of dolphins caused by the purse-seine fishery is currently at least 100 times less than that which would be expected to impact the capacity of the dolphin populations in the eastern Pacific to remain at their current levels, as determined by the most recent stock assessment by the U.S. National Marine Fisheries Service (NMFS). Dolphin take by species and stock was not reported.

Current Marine Mammal Conservation and Management Concerns – The focus of the AIDCP is to minimizing the reported dolphin mortalities in the fishery. Additionally, it formed a working group to promote and publicize AIDCP dolphin safe label and education. The working group produced a pamphlet and video. A copy of the pamphlet is included in this report (Annex A); the video can be accessed online at https://www.iattc.org/AIDCPvideo/. The working group asked that the links be posted to outside websites to promote public awareness as well as on NGO and IATTC websites.

The increasing trend in sets made on tuna in association with dolphins is cause for some concern at least among the Parties that believe this practice may have indirect negative effects on dolphin populations. IATTC has been using purse-seine observer data to conduct research on the reliability of indices of relative abundance of dolphins for monitoring dolphin stock status as compared with population dynamics modeling to obtain abundance estimates from these models, which are used to establish the per-stock per-year dolphin mortality caps for the purse-seine fishery. It remains unclear whether indices of relative abundance for dolphins developed from the purse-seine observer data can be used to reliably track the absolute abundance of dolphin populations in the Eastern Pacific Ocean and a paper documenting the research has been accepted for publication in *Fisheries Research* (Lennert).

Other Business – The International Review Panel and AIDCP currently meet twice a year. Meeting trend should be to reduce meeting time. It appears that the system is working (i.e., publicizing program so there is likely less work to do; infractions are on a downward trend) and the success of this program reduces the need for meetings. No resolution determined at the meeting.

Place and date of the next AIDCP meetings – June 2016, La Jolla, CA.

Annex A

AIDCP protects
Dolphin Safe
AIDCP - APICD
Established in 1950, the Inter-American Tropical Tuna Commission (IATTC) is one of the most successful regional fisheries management organizations. It carries out research on the tuna stocks in the eastern Pacific Ocean,and establishes management rules to ensure the conservation and sustainable use of those stocks. The IATTC staff serves as technical Secretariat for the AIDCP.
CIAT
IATTC
APICD
Dolphin
Safe
Label
For further information
Please contact IATTC
(the Secretariat of AIDCP)
(858) 546 7100
Fax (858) 546 7133
www.iattc.org

The AIDCP dolphin safe label signifies:

- Tuna caught in fishing operations monitored by an observer on board.
- An indication to the consumer that the tuna was caught in sets in which no dolphins were observed killed or seriously injured.
- Tuna caught consistent with a conservation and management program supported by the best scientific information available.
- A labeling standard supported by an international program that incorporates strict operational fishing measures, close supervision, and sanctions for violations – all under a transparent, participative, and verifiable scheme..
- A system for tracking and verification of tuna's dolphin safe status, from the sea to the consumer.
- Compliance with certification standards and guidelines adopted under a multinational Agreement awarded the Margarita Lizárraga medal by the Food and Agriculture Organization of the United Nations (FAO) in 2005 for its contribution to responsible fisheries.

The AIDCP dolphin safe label

- The AIDCP dolphin safe label was created by the Parties to the AIDCP, which is administered by the IATTC

- The Parties to the AIDCP are Belize, Colombia, Costa Rica, Ecuador, El Salvador, European Union, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, United States, and Venezuela. Bolivia and Vanuatu apply it provisionally.
- The AIDCP, which is a binding agreement, builds on the achievements and success of the voluntary 1992 La Jolla Agreement.
- The program established by the Agreement was developed for application in the Eastern Pacific Ocean. Among its achievements are reducing the incidental mortality of dolphins in the tuna fishery, capturing large yellowfin tunas and ensuring the long-term sustainability of the tuna stocks and the other living marine resources associated with the fishery.

- At the beginning of the fishery, the dolphin mortality was above 150,000 and in 1985 nearly 60,000. With the La Jolla Agreement the trend towards a reduction in dolphin mortality was consolidated: the mortality decreased from 15,538 in 1992 to 3,601 in the first year of application of that Agreement (1993). Since the entry into force of the AIDCP in 2000, annual dolphin mortality has been further reduced from 1,636 to 801 in 2013. Accordingly a reduction in dolphin mortalities of 94% since the La Jolla Agreement has been achieved..

- The AIDCP also promotes the conservation of other marine species, such as turtles, seabirds and sharks-, some of which are threatened.
- The AIDCP has many unique features, such as training and certification of fishing captains; strict operating requirements for vessels, such as the backdown maneuver and the use of divers to ensure the safe release of all dolphins captured; 100% coverage by independent on-board observers; full transparency; and enforcement.

- A very important aspect of the AIDCP is its system for reporting and sanctioning cases of non-compliance. The International Review Panel, made up of representatives of governments, the industry, and environmental organizations, reviews the performance of the fishing vessels, identifies cases of non-compliance, and notifies the responsible governments so that they may apply sanctions

Appendix K

REPORT ON COOPERATIVE WORK BETWEEN THE IWC AND THE SECRETARIAT OF THE PACIFIC REGIONAL ENVIRONMENT PROGRAMME (SPREP)

Submitted by David Mattila (IWC)

After IWC66a (2015, San Diego, USA), the IWC Secretariat continued to be actively engaged with the SPREP Secretariat. IWC technical adviser Mattila, represented the IWC at SPREP's annual meeting, 22-24 September in Apia, Samoa. He provided an observer statement in support of SPREP's "year of the whale" in 2016-2017, which outlined areas where the goals of the two organizations overlap. The IWC Secretariat is working with SPREP in order to identify actions that support mutual objectives. In particular, it is looking at continued capacity building for response to entangled large whales.

Appendix L

REPORT ON COOPERATIVE WORK BETWEEN THE IWC AND THE INTERNATIONAL COMMITTEE ON MARINE MAMMAL PROTECTED AREAS (ICMMPA) AND ITS COROLLARY, THE IUCN TASK FORCE ON MARINE MAMMAL PROTECTED AREAS

Submitted by Lorenzo Rojas-Bracho

Members of this committee who were attending SC66b in Bled, Slovenia, met to continue preparation for the fourth International Conference on Marine Mammal Protected Areas, which will be hosted by Mexico in Pt. Vallarta, 13-17 November, 2016. One of the topics of interest to the IWC include a workshop, co-convened by the IWC Global Whale Entanglement Response Network, to develop cooperation and a possible MOU between Mexico, the USA and Canada on transboundary whale entanglement events. In addition, there will be a progress update on Important Marine Mammal Areas (IMMA). The latter is an initiative of the IUCN's Marine Mammal Protected Areas Task Force, which will be sharing its criteria and results with the IWC for possible management purposes (e.g. identifying overlap with high risk human activities). In particular, identified IMMAs may be of value to the IWC Scientific Committee and Ship Strike Working Group, as they provide input to the IMO on areas that are of high risk for collisions.

Appendix M

PROTOCOL ON SPECIALLY PROTECTED AREAS AND WILDLIFE (SPAW) OF THE CARTAGENA CONVENTION FOR THE WIDER CARIBBEAN

Submitted by David Mattila

The 2015/2016 work plan for SPAW includes several cooperative activities with the IWC, including:

- Follow-up ship strikes and entanglements trainings (with IWC)
- Finalise MoC between UNEP-CAR/RCU and the IWC

In 2012-2014 the IWC partnered with SPAW for two entanglement trainings and a ship strike workshop. The trainings included participants from Belize, Colombia, Costa Rica, Dominican Republic, Guadeloupe, Mexico, Panama, Saba, St. Barthelemy, St. Eustatius, St. Lucia, St. Martin, and Tobago. In follow up to those trainings, the IWC provided its training in Nov/Dec, 2015 for more trainings in Guadeloupe and Martinique, with participants from Dominica. The IWC and SPAW Secretariats continue discussion of a possible MoC between the two IGOs, part of which may include activities arising from the joint ship strike workshop.