

CNL(15)15

Report on Progress in Implementing the Measures contained in the 'Action Plan for taking forward the recommendations of the External Performance Review and the review of the 'Next Steps' for NASCO'

In 2013, the Council adopted an 'Action Plan for taking forward the recommendations of the External Performance Review and the review of the 'Next Steps' for NASCO (CNL(13)38). Last year, a comprehensive progress report on each of the recommendations contained in the Action Plan was presented to the Council, CNL(14)14. The following tables present an update for 2015 which should be read in conjunction with last year's report. Where there is no new progress to report on a recommendation or where a recommendation had been completed last year the recommendations have not been included in this report (EPR24, 27, 32, 69 and NS10, 11, 12 and 15 in section 1 and 2.3 and 2.5 in section 2).

Section 1 contains recommendations which had been implemented or planned at the time the Action Plan was developed in 2013 but for which there was a need to monitor progress and evaluate outcomes. In order to minimise the length of this report, the recommendations themselves are not described here but are referred to by their number in the Action Plan

Section 2 contains recommendations for which further action was required for their implementation. For ease of reference we have numbered the nine decisions in the Action Plan.

Section 3 contains actions to strengthen NASCO's work on the management of salmon fisheries.

Secretary Edinburgh 28 May 2015

Section 1: Recommendations of the External Performance Review Panel (EPR) and 'Next Steps' Review Group (NS) that have been implemented or are planned and for which there may be a need to monitor progress and evaluate outcomes

	2015 Update on Actions taken
EPRs 1, 2, 3, 36, 48, 50, 52, 53, 57 and 58. NS 1, 4, 5, 6, 8, 9 and 13	In its 2015 report, the Review Group notes that a new IP had been received for EU – Spain (Navarra), and that this was considered to be satisfactory. The Review Group noted that revised IPs had been provided by Canada, EU - Germany, EU - UK (England and Wales), EU - UK (Northern Ireland), EU - UK (Scotland), Norway, and the United States. The Review Group did not re-evaluate these IPs, but it noted that the changes made ranged from minor editorial changes to the inclusion of a new action (EU - Germany) and the removal of an action (United States). Since the Group's meeting a further IP has been received from EU – France and this is currently being evaluated. The Review Group had previously noted the difficulty in assessing progress on actions that are unclear or imprecise and has recommended that greater efforts should be made in the next round of IPs (2018-)to ensure that all actions are clearly and concisely described. Any IPs that do not do so should not be accepted by the Review Group but returned to the Party/jurisdiction for revision.
	For the 2015 APRs, the Review Group noted that while the clarification made to the reporting template had further improved the consistency of the reporting, several Parties'/jurisdictions' APRs had not provided a clear account of progress in implementing and evaluating some or all of the actions detailed in their IPs. These reports either included one or more gaps in the 'Progress on Action to Date', or the comment provided bore no relationship to the proposed action. The Review Group has provided a table summarising, for each jurisdiction, whether each action is ongoing, completed or has not yet started and it has also indicated whether the progress reports for ongoing and completed actions are clear or unclear. Overall, the Review Group considered that the most common fault with the information provided on progress with actions was a lack of quantitative information on what has been achieved and/or what the results have been. The Review Group has asked that all Parties/jurisdictions address this in future APRs. Where the Review Group considered that there were shortcomings in an APR, it developed a list of questions and each Party/jurisdiction was asked to respond in writing to these questions no later than 15 May. The Group's report will be presented at a Special Session during the Thirty-Second Annual Meeting to allow discussion of the Group's findings and for questions to be addressed to the Parties.
EPR2 and NS2	While the Socio-economics Working Group has not met since 2008, a Sub-Group has worked to develop information for inclusion on the NASCO website. In 2014, the Council held a Theme-based Special Session on the topic of 'Management of single and mixed stock fisheries, with particular focus on fisheries on stocks below their conservation limit' One of the objectives of this session was to consider how socio-economic considerations, including the interests of indigenous people, are weighed against conservation needs and, where fishing is permitted on stocks below their Conservation Limits, the approaches being used to ensure that exploitation is limited to a level that permits stock rebuilding within a stated timeframe. Last year the Council asked that Parties/jurisdictions be requested to advise the Secretariat of any new studies relating to the socio-economic values of the wild Atlantic salmon and agreed that future Theme-based Special Sessions might be held on integrating socio-economic factors in decisions relating to habitat protection, restoration and enhancement and to aquaculture. A further Theme-based Special Session will be held at the 2015 Annual Meeting on the topic of 'Maintaining and improving river connectivity with particular focus on impacts of hydropower'. One of the objectives of the session is to evaluate the benefits and costs of removing dams and other obstructions.

EPR4 and NS14	The 2014 Theme-based Special Session on the topic of 'Management of single and mixed stock fisheries, with particular focus on fisheries on stocks below their conservation limit', was very successful and the report has been published and distributed (see CNL(14)68). A half-day Theme-based Special Session will be held in 2015 on the topic of 'Maintaining and improving river connectivity with particular focus on impacts of hydropower'.
EPR 33	Since the last Annual Meeting of the West Greenland Commission, its <i>Ad hoc</i> Working Group on Monitoring and Control has met and there has been an intersessional meeting of the Commission. Important preparatory work was undertaken at these meeting including development of a Plan for Implementation of Monitoring and Control Measures in the Salmon Fishery at West Greenland, WGCIS(15)5, and a Framework for a Multi-Annual Regulatory Measure for Fishing for Salmon at West Greenland for 2015, 2016 and 2017, WGC(15)8. There will be negotiations for new regulatory measures or decisions in both the North-East Atlantic and West Greenland Commissions at the 2015 Annual Meeting. There is an agenda item in the North-East Atlantic Commission to allow for development a risk framework for the Faroese fishery.
EPRs 41 and 43	At its 2014 Annual Meeting, the IASRB agreed that its priority was to encourage studies to partition marine mortality of migrating Atlantic salmon in order to support the conservation and management of Atlantic salmon stocks across the North Atlantic It adopted a Resolution, ICR(14)6, encouraging NASCO Parties to continue the development of local collaborative telemetry projects and to encourage the development of large international collaborative telemetry projects that together build upon and expand local efforts. In support of this, the Board organised a Telemetry Workshop which was held in London in December 2014. The report, ICR(15)3, will be considered at the Board's 2015 Annual Meeting. The Board has continued to support research projects related to salmon at sea. In 2012, the Board had supported two projects (£6,000 each) as follows: 'Genetic stock of origin identification of European salmon captured at West Greenland' and 'Genetic stock identification of salmon caught in the Faroes fishery'. The funding provided by the Board had allowed these two projects to proceed and had led to other funds being made available. In 2014, the Board supported a project (£18,300) entitled 'Enhancement of a North American Atlantic salmon genetic baseline for individual and stock identification and application of the baseline to historical scales collected at West Greenland'.
	In its 2015 advice, ICES has provided details of new opportunities for research on salmon at sea and for collecting information on salmon bycatch in pelagic fisheries (see section 2.6 below).
EPRs 42 and 46	A Theme-based Special Session, on the topic of 'Management of single and mixed stock fisheries, with particular focus on stocks below their conservation limit', was held at the 2014 Annual Meeting. The objectives of this session were to allow for an exchange of information on:
	Progress in establishing conservation limits, or alternative reference points, and the approaches being used to manage fisheries in their absence;
	 How management measures are used to ensure the protection of the weakest contributing stocks in mixed-stock fisheries;
	 How socio-economic considerations, including the interests of indigenous people, are weighed against conservation needs and, where fishing is permitted on stocks below their CLs, the approaches being used to ensure that exploitation is limited to a level that permits stock rebuilding within a stated timeframe.
	Consistent with section 3 of the Action Plan (see below), an item on 'Mixed-stock fisheries conducted by members of the Commission' has been included on each Commission agenda for the 2015 Annual Meetings. Each Party with MSFs has been requested to submit a paper providing a brief description of any MSFs still operating, the most recent catch data, any updates to the IP relating to MSFs and any changes or developments in the management of MSFs in this IP period to implement NASCO's agreements.
	The 2015 APRs were evaluated by the Review Group and its findings are contained in document CNL(15)12. The 2014 Theme-based Special Session on the topic of 'Management of single and mixed stock fisheries, with particular focus on fisheries on stocks below their conservation limit', was highly successful and the report has been published and distributed (see CNL(14)68).

EPRs 47, 49	The Review Group has reported that sixteen APRs were submitted prior to, or shortly after, the deadline of 1 April. Two further APRs were received either			
and 54	immediately before (Russian Federation) or during (Canada) the Review Group's meeting, approximately two weeks after the deadline for submission. An IP			
una 5 i	and an APR (catch statistics only) were received for EU – France after the Review Group's meeting had concluded. The IP for EU – France is being review			
	by correspondence. The Review Group has stressed that timely reporting is important if the evaluation process is to be thorough and consistent.			
EPR 51	A Theme- based Special Session was held at the 2014 Annual Meeting to allow for an exchange of information on, <i>inter alia</i> , how management measures are			
	used to ensure the protection of the weakest contributing stocks in mixed-stock fisheries. With regard to fishing for salmon beyond areas of fisheries jurisdiction			
	by non-NASCO Parties, there have been no sightings since the early 1990s but no information was obtained from the Norwegian coastguard in 2014/15. In			
	accordance with the External Review Panel's recommendation, NAFO and NEAFC have been consulted on this matter (see section 2 below).			
EPRs 59 and	At the intersessional meeting of the West Greenland Commission, a Plan for Implementation of Monitoring and Control Measures in the Salmon Fishery at			
61	West Greenland, WGCIS(15)5, was adopted. This plan had been developed after an evaluation of the management of the fishery against six tenets for			
	effective management of an Atlantic salmon fishery There was support, in principle, for evaluating the fisheries of other members of the Commission after			
	further consultation and consideration of the approach to be adopted prior to, and at, the Annual Meeting. Estimates of unreported catch are contained in			
	document CNL(15)13. Consultations have commenced with NEAFC and NAFO on IUU fishing by non-NASCO Parties (see 2.1 below).			
EPR 73	The President of NASCO wrote to the Icelandic Minister for Fisheries and Agriculture on 27 October 2014, updating him on NASCO matters and encouraging			
NS 16	Iceland to re-accede to the NASCO Convention. The President requested that the Parties to NASCO also make individual representations to the Minister. No response has been received to date.			
	response has been received to date.			
EPR 74	The Secretary of NASCO wrote to the representative of France (in respect of St Pierre and Miquelon) on 17 February 2015 reiterating that the Council of			
	NASCO believes that full membership of NASCO by France (in respect of St Pierre and Miquelon) would better facilitate cooperation and dialogue among			
	interested Parties and, as requested, enclosing further information on the financial implications of accession to the Convention for France (in respect of St Pierre			
	and Miquelon). Two representatives of France (in respect of St Pierre and Miquelon) will attend the 2015 Annual Meeting.			
	The Chairman of EIFAAC attended the 2014 Annual Meeting of NASCO and will attend the 2015 Annual Meeting. NASCO is supporting an EIFAAC			
	symposium on Recreation Fisheries to be held in Lillehammer, Norway, in June 2015. At the 2015 Annual Meeting, the Finance and Administration Committee			
	will be reviewing the operation of the MoUs between NASCO and ICES and NASCO and the OSPAR Commission and will make its recommendations to the			
	Council.			

Section 2: Recommendations of the External Performance Review Panel (EPR) and 'Next Steps' Review Group (NS) that require further action for their implementation

2.1 IUU Fishing by non-NASCO Parties (This refers to recommendations contained within EPR6 – 8, EPR63, EPR 64 and EPR72)

Decision: A problem of fishing for salmon by vessels registered to non-NASCO Parties occurred in the North-East Atlantic in the late 1980s and early 1990s. NASCO took diplomatic action to address the problem and there have been no sightings of vessels registered to non-NASCO Parties fishing for salmon in international waters in the North-East Atlantic since the early 1990s. However, it is recognised that airborne surveillance of this area is limited, particularly during winter months. The Secretariat should continue to liaise with the Parties and the coastguard authorities. It should also seek cooperation from NEAFC and NAFO to use their MCS to identify any activity by vessels in their areas of competence that may be fishing for salmon in international waters and to compile information in accordance with the Council's Resolution on Fishing for Salmon on the High Seas, CNL(92)54. The Parties should coordinate with their delegations to NAFO and NEAFC, as appropriate, on this issue. In the event that there is evidence of such activity, it will be drawn to the Council's attention so that appropriate measures can be considered.

2014 Update: The Secretariat has continued to liaise with the coastguard authorities in Norway and Iceland concerning information from airborne surveillance flights. During July, August and September 2013, the Norwegian coastguard carried out eight surveillance flights over the area of international waters north of the Faroe Islands in the Northern Norwegian Sea. No fishing for salmon was observed in 2013 as has been the case since the early 1990s. No information has been provided by the Icelandic coastguard, but in 2012/13 it did not undertake any flights over this area of international waters. In the 1990s when fishing by non-NASCO Parties was known to have occurred, information was also obtained from ports and from fishery protection vessel patrols but no such information has been received since then.

The Secretariat has contacted NAFO and NEAFC to seek cooperation in using their MCS to identify any activity by vessels that may be fishing for salmon in international waters. The NAFO Secretariat has advised that NAFO is willing to assist NASCO with regard to fishing for salmon in international waters and indicated that most of the surveillance in the NAFO Regulatory Area is conducted by Canada. The NAFO Secretariat will advise whether the Parties or NAFO will respond. There will be an opportunity to discuss this further with the NAFO and NEAFC Secretariats at the 2014 Regional Secretariats Network (RSN) meeting.

2015 Update: The NEAFC Parties coordinate a comprehensive airborne and shipborne surveillance programme associated with fisheries for its regulated species. The NEAFC Secretariat also operates a VMS system and this combined with the surveillance operations, provides a real time flow of information on the fishery through the NEAFC Secretariat. NEAFC has not detected any IUU fishing by non-NEAFC Parties since 2006 although any such activity associated with tuna vessels may have been reported directly to ICCAT rather than to NEAFC. It is thought that NEAFC initiatives (and those of ICCAT e.g. its catch certification scheme) have effectively addressed IUU fishing in the NEAFC area. Furthermore, prior to 2006, the activity detected by NEAFC was associated with IUU trawling for pelagic redfish, mostly at depths between 200 - 600m and so it would be unlikely to result in catches of salmon. The NEAFC surveillance programme focuses on the areas of the regulated fisheries and while there may be areas that would not be covered, where any IUU fishing for salmon might still go undetected, an exchange of information between the NEAFC and NASCO Secretariats would increase the current temporal and spatial coverage of surveillance. This would be consistent with the External Performance Review and should supplement any information NASCO receives from the coastguard airborne surveillance operated by Norway in relation to the area of international waters north of the Faroe Islands. The Council might wish to ask the NASCO Secretary to continue to liaise with the NEAFC Secretary on arrangements for an exchange of information on IUU fishing and bycatch of salmon.

The NAFO Secretary has indicated that surveillance in the NAFO regulatory area is conducted by NAFO Contracting Parties and, as most of the airborne surveillance is conducted by Canada, the Council might wish to ask that the Secretariat consult Canada with a view to any activity that might involve IUU fishing for salmon being drawn to NASCO's attention. The fishery in the NAFO area is predominantly for demersal species. The NAFO Secretary has agreed to send NASCO the NAFO IUU list whenever it is updated but no vessels have been added to the NAFO IUU list since 2006. The NAFO Secretary has also advised that landings of fish caught in the NAFO regulatory area can only be made at authorised ports and that these ports would not allow landings from vessels involved in IUU activity. Under NAFO rules, 'authorized ports' are ports designated to receive landings of NAFO-managed species by NAFO-authorised fishing vessels that have fished in the NAFO Regulatory Area. However, a vessel that has not been fishing NAFO-managed species could land salmon at undesignated ports with no obligation on the port state to notify NAFO. As a result, NAFO would probably not be aware of the activity and would not be in a position to advise NASCO. Nevertheless the Secretary of NAFO has indicated that if NAFO becomes aware of any such activity, it would advise NASCO either formally or informally.

The Council might wish to ask the NASCO Secretary to continue to liaise with the NAFO Secretary to continue the exchange of information on IUU fishing .

2.2 IUU Fishing – NASCO Parties (This refers to recommendations contained within EPR60 and EPR62)

Decision: In response to requests from NASCO, ICES has advised that over recent years efforts have been made to reduce the level of unreported catch in a number of countries through improved reporting procedures, carcass tagging and logbook schemes. Consistent with the 1993 Minimum Standard for Catch Statistics, CNL(93)51, jurisdictions should continue to take measures to reduce the level of unreported catches. The IP template, CNL(12)42, seeks information on the current level of unreported catch and the measures being taken to reduce this. The APR template, CNL(12)43, seeks details of the estimated unreported catch from in-river, estuarine and coastal fisheries. There will be a need to monitor progress and evaluate outcomes. A Special Session was held on this topic in 2007 to review approaches to estimating and minimise such catches. The need for the development of guidelines on approaches to minimising unreported catches and for a Special Session on this topic could be considered in the light of the information provided in the next reporting cycle. ICES has reviewed the methods used to calculate unreported catches and has provided suggestions for how estimates of unreported catch should be included in regional, national and international assessments. Best practice guidelines have not, however, been developed by the Council and in the first instance, the Secretariat should review FAO's IUU IPOA with regard to any guidance the IPOA may include on best practice in minimising unreported catches and report back to the Council.

2014 Update: All Parties/jurisdictions are requested to report annually to NASCO on the level of unreported catch (and information is also provided to ICES). NASCO's 2012 External Performance Review had concluded that timely reporting on estimates of unreported catches and measures taken to reduce such catches is essential. Last year, in its report to the Council (CNL(13)12), the Implementation Plan Review Group had indicated that most, but not all Parties/jurisdictions had provided an estimate of the level of unreported catch in their Implementation Plan. Most Parties/jurisdictions also described a range of measures being taken to reduce unreported catches and these include:

- carcass tagging;
- logbooks;
- ban on the sale of rod caught salmon;
- measures to increase awareness among fishermen of the need to report catches (including issuing reminders, campaigns in the media and deposits on catch reports);
- targeted enforcement activity to reduce illegal fishing;
- a requirement to report any bycatch in fisheries for other species and use of observers on vessels to document any bycatch of salmon.

For 2013, the estimated unreported catch was 295t down from 398t in 2012 (no estimate was available for the Russian Federation and not all EU Member States provided an estimate) (see CNL914)12). An estimate of unreported catch for 2013 is also included in the ICES ACOM report of 306t down from 404t in 2012. ICES has again noted that

over recent years efforts have been made to reduce the level of unreported catch in a number of countries (e.g. through improved reporting procedures and the introduction of carcass tagging and logbook schemes). Nonetheless, the estimate of unreported catch in 2013 equates to approximately 20% of the reported catch and not all Parties/jurisdictions have provided an estimate.

NASCO's Guidelines for the Management of Salmon Fisheries, CNL(09)43), provide some general guidance in relation to unreported catches including that estimates of the level of unreported catches and other mortalities associated with the fishery should be collected for all salmon fisheries; information should be sought on the by-catch of salmon in fisheries for other species and efforts made to identify their river of origin; and managers should be able to enforce the measures that are in place to regulate fishing activity and to minimise the level of unreported catches.

The International Plan of Action (IPOA) to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing is a voluntary instrument that was approved by the FAO Committee on Fisheries (COFI) in 2001. It was developed because COFI was concerned about an apparent increase in IUU fishing including fishing vessels flying 'flags of convenience'. It contains an Introduction and sections on the Nature and Scope of IUU Fishing and the IPOA; Objectives and Principles; Implementation of Measures to Prevent, Deter and Eliminate IUU Fishing (sub-divided into All State Responsibilities, Flag State Responsibilities, Coastal State Measures, Port State Measures, Internationally Agreed Market-Related Measures, Research, and Regional Fisheries Management Organizations); Special Requirements of Developing Countries; Reporting; and the Role of FAO. The objective of the IPOA is to prevent, deter and eliminate IUU fishing by providing all States with comprehensive and transparent measures by which to act, including through appropriate regional fisheries management organizations. There are certainly elements in the IPOA that could be supportive of NASCO's initiatives with regard to IUU fishing but many of these relate to IUU fishing by non-NASCO Parties (see 2.1 above) and there have been no sightings of such activity since the early 1990s. The IPOA could, however, be helpful if such activity occurs in future. For example, the IUU IPOA indicates that: States should discourage their nationals from flagging fishing vessels under the jurisdiction of a State that does not meet its flag State responsibilities; States should ratify, accept or accede to *inter alia* the 1995 UN Fish Stocks Agreement and the 1993 FAO Compliance Agreement; States should avoid flagging vessels with a history on non-compliance and should deter vessels from reflagging for the purpose of non-compliance with conservation and management measures; States should require vessels seeking permission to enter their ports to provide reasonable advanced not

There are also some elements that appear consistent with NASCO's initiatives to reduce IUU fishing for salmon by NASCO Parties such as recommendations that States should undertake comprehensive and effective monitoring, control and surveillance of fishing and that they should ensure compliance with and enforcement of policies and measures related to IUU fishing adopted by relevant regional fisheries management organizations. However, the IPOA does not contain best practice guidance on minimising unreported catches in salmon fisheries and appropriate measures may differ among Parties. It may, therefore, be more appropriate to share experience of measures to minimise unreported catches through the IPs/APRs (including holding a further Special Session on this topic which might result in development of guidance).

2015 Update: Estimates of unreported catch are contained in document CNL(15)13. At the intersessional meeting of the West Greenland Commission, a Plan for Implementation of Monitoring and Control Measures in the Salmon Fishery at West Greenland, WGCIS(15)5, was adopted. This plan had been developed after an evaluation of the management of the fishery against six tenets for effective management of an Atlantic salmon fishery. There was support, in principle, for evaluating the fisheries of other members of the Commission after further consultation and consideration of the approach to be adopted prior to, and at, the Annual Meeting.

2.4 Rivers database (This refers to recommendations contained within EPR40 and NS7)

Decision: All jurisdictions have contributed to the database and the information is available on the NASCO website. This information has already been used in research projects and is a valuable PR tool. The Council will convene a Working Group, to work by correspondence or at the Annual Meeting, to develop recommendations for revisions to the stock categories that are used in the database that better reflect status of stocks relative to attainment of conservation limits. The Parties would then be requested to update the stock category information held in the database and provide information on threats to those stocks. With the available information, the NASCO

Secretariat should be requested to prepare an overview of the status of stocks around the North Atlantic and the threats to them using the information contained in the rivers database. The EPR considered that the Strategic Approach had provided a comprehensive framework for the work of NASCO and it will be used in the next cycle of reporting.

2014 Update: The 2013 request for scientific advice from ICES (CNL(13)10) included a request to provide a review of the stock status categories currently used by the jurisdictions of NASCO, including within their IPs, and to advise on common approaches that may be applicable throughout the NASCO area. ICES has advised that the database is an important source of information on Atlantic salmon stocks and rivers but notes that the stock categories used in the database do not reflect the use of conservation limits (CLs) and management targets (MTs) in making management decisions, the approach agreed by NASCO.

ICES reports that the NASCO categories 'maintained', 'not present but potential', and 'restored' are descriptive and do not appear to have a close parallel with the other species or river stock classifications generally in use. They clearly relate to special categories for stocks which have been or might be subject to special intervention, possibly including stocking. The NASCO categories 'Threatened with loss' and 'Not threatened with loss', while relating more directly to stock status, were also difficult to align directly with categories based on attainment of stock indicators because the terminology is imprecise and interpretation of these categories tends to encompass several categories in other systems.

NASCO has recommended the development of CLs for all stocks. However, these have not yet been developed by some jurisdictions, where alternative stock abundance indicators may be used in management. ICES recognises that the implementation of any standardized classification scheme may also be difficult but considered that it might be possible to develop a classification more closely reflecting the generally applied categories used for describing stock status and providing management advice (i.e. CLs). A preliminary and tentative example was provided. However, it was recognised that approaches would need to be developed to enable compliance with the classification criteria to be averaged over time periods and thus avoid the need for assessment and updating of the Rivers Database on an annual basis. In addition, some degree of expert judgement would also be required for stocks that do not currently have CLs. The Council may wish to decide on the next steps with regard to the classification system used in the rivers database.

2015 Update: A Working Group, comprising scientists and managers, has been established to recommend a classification system to be used by jurisdictions to indicate stock status relative to conservation limits, or where these have not been established other reference points or indicators of abundance. The Group has been asked to develop recommendations to address the following: what time period the stock indicators cover (e.g. annual, averaged over five years); frequency of updates; how the absence of any data will be reported; and how other relevant information to describe stock status can be taken into account in relation to NASCO's goals for salmon management, e.g. biodiversity and harvestable surplus. The Group will also recommend changes to the NASCO Rivers database to implement the recommended classification system. Once the Council has agreed a classification system and the database has been updated an overview of stock status can be prepared.

2.6 Research on Salmon at Sea (including bycatch) (This refers to recommendations contained within EPR10, EPR55-56 and NS3)

Decision: The annual request to ICES seeks information on bycatch in new and existing fisheries. ICES has advised that the current salmon fisheries in both the NEAC and NAC areas probably have no or only minor influence on the marine ecosystem. For the WGC area ICES has indicated that there is no information on by-catch of other species in the salmon fishery that is practiced with nearshore surface gillnets. This fishery has been restricted to an internal-use fishery (~20 tonnes) since 1998 by NASCO agreements. The need for a by-catch strategy in NASCO might be considered if the ICES advice on this issue changed. If that was the case, the Secretariat could be requested to prepare a review of the International Guidelines on Bycatch/Discards. NASCO's Guidelines for the Management of Salmon Fisheries, CNL(09)43, indicate that information should be sought on the by-catch of salmon in fisheries for other species and efforts made to identify their river of origin. Such information should be reported to NASCO. Concern was raised about bycatch of salmon in pelagic fisheries (e.g. for herring and mackerel) in the NEAC area. In the light of the new information and tools developed through the SALSEA Programme, the Council recommends that jurisdictions undertake further studies to assess by-catch in pelagic fisheries such as those recently undertaken by Russia, Iceland and the Faroe Islands. Further liaison with the pelagic RAC is also encouraged. The Secretariat might also liaise with NAFO and NEAFC regarding availability of information on by-catch of salmon obtained through their observer programmes. The Board's role is to promote collaboration and cooperation on research into the causes of mortality of salmon at sea and the opportunities to counteract it. It has agreed to review its working methods in 2013; its TORs require that it maintain an

inventory of research relating to mortality of salmon at sea. This includes information on long-term monitoring programmes in freshwater. It will be a matter for the Council to decide if it wishes to have a broader inventory of research relating to other aspects of NASCO's work. The Parties considered that Theme-based Special Sessions might allow for a further exchange on research priorities and needs. A Sub-Group of the SAG has met and provided recommendations to the IASRB for future research for consideration during the 2013 Annual Meeting.

2014 Update: In 2013, ICES was asked to provide recommendations on how a targeted study of pelagic bycatch in relevant areas might be carried out with an assessment of the need for such a study considering the current understanding of pelagic bycatch impacts on Atlantic salmon populations in 2014. The advice from ICES is contained in document CNL(14)8. In summary, ICES advises that the latest information highlights ongoing uncertainty on the salmon bycatch question, but new screening programmes, considered by ICES to provide the most reliable data, suggest relatively low levels of bycatch in the mackerel catches. ICES noted the markedly higher salmon bycatch rates recorded in the IESSNS surveys, but cautions that it is unclear how representative these might be of the bycatch in the commercial fishery given differences in the design and operation of the gears used. In any event, the capture rates remain low relative to the estimates of total NEAC PFA (< 2%). Given that estimates of the bycatch of salmon in the pelagic fisheries are highly uncertain, ICES considers it would be informative to increase efforts to obtain reliable estimates of the bycatch of salmon and made a number of recommendations as to how this might be achieved. These include, collating all available information on post-smolt and salmon marine distribution; collating information of possible interceptive pelagic fisheries in areas frequented by Atlantic salmon (in cooperation with scientists working on pelagic fish assessments); reviewing pelagic fisheries and investigating ways to intercalibrate survey trawls with commercial trawls; and carrying out comprehensive catch screening on commercial vessels fishing in areas with known high densities of salmon post-smolts or adults (this would require significant resources, coordination and funding). The Council may wish to consider if further action is needed.

The Secretariat has contacted NAFO and NEAFC about possible availability of information on by-catch of salmon obtained through their observer programmes. NAFO has responded indicating a willingness to assist but highlighting that the NAFO regulated species are mainly groundfish stocks. Some NAFO Parties report catches of salmon through STATLANT but NAFO indicates that it is not clear what fishery these come from and this issue will be raised at the upcoming NAFO Scientific Council meeting.

The IASRB agreed to focus on the partitioning of marine mortality of salmon and, through its Scientific Advisory Group, has established a Telemetry Sub-Group to develop and document a roadmap outlining a large scale international collaborative telemetry project to ultimately provide information on migration paths and quantitative estimates of mortality during phases of the marine life-cycle of salmon. The report of this Sub-Group will presented to the SAG and the Board at the 2014 Annual Meeting (see document SAG(14)4). The Board's response to the Sub-Group's recommendations will be presented to the Council, CNL(14)9.

The Secretariat has been advised by Professor Ken Whelan that the Atlantic Salmon Trust (AST) attended the 2012 and 2013 General Assembly of the Pelagic Regional Advisory Council and gave presentations at each event, including details of the work of the IASRB. The Trust has recently joined the Pelagic RAC in an observer capacity and was advised that an application from the IASRB to join the Pelagic RAC would be welcomed, as the experience and expertise of the various salmon interest groups would be of benefit to the Pelagic RAC's work, possibly through involvement of scientists and managers on its Working Groups. The AST has advised that there was great interest within the Pelagic RAC in the research carried out under SALSEA and the potential development by the IASRB of an international tracking programme. The Pelagic RAC suggested that the IASRB could seek a briefing on pelagic surveys currently underway which could be of direct relevance to its work on salmon at sea. It was noted that the pelagic scientists may benefit from a technical workshop convened between salmon and pelagic scientists to update the pelagic scientists on the stock discrimination techniques developed under SALSEA. ICES has advised that if efforts are to be made to obtain reliable estimates of the bycatch of salmon (see above) there will be a need for close cooperation between WGNAS scientists and those working on pelagic fish assessments.

2015 Update: At its 2014 Annual Meeting, the IASRB agreed that its priority was to encourage studies to partition marine mortality of migrating Atlantic salmon in order to support the conservation and management of Atlantic salmon stocks across the North Atlantic It adopted a Resolution, ICR(14)6, encouraging NASCO Parties to continue

the development of local collaborative telemetry projects and to encourage the development of large international collaborative telemetry projects that together build upon and expand local efforts. In support of this, the Board organised a Telemetry Workshop which was held in London in December 2014. The report, ICR(15)3, will be considered at the Board's 2015 Annual Meeting. The Board has continued to support research projects related to salmon at sea. In 2012, the Board had supported two projects (£6,000 each) as follows: 'Genetic stock of origin identification of European salmon captured at West Greenland' and 'Genetic stock identification of salmon caught in the Faroes fishery'. The funding provided by the Board had allowed these two projects to proceed and had led to other funds being made available. In 2014, the Board supported a project (£18,300) entitled 'Enhancement of a North American Atlantic salmon genetic baseline for individual and stock identification and application of the baseline to historical scales collected at West Greenland'.

ICES has identified new opportunities to sample salmon at sea. The International Ecosystem Survey of the Nordic Seas (IESSNS) is a collaborative programme involving research vessels from Iceland, the Faroes, and Norway; surveys are carried out annually in July–August and present such an opportunity. The area surveyed (2.45 million km² in 2014) overlaps in time and space with the known distribution of post-smolts in the North Atlantic, and as these cruises target pelagic species such as herring and mackerel, bycatch of salmon post-smolts and adult salmon is not uncommon. ICES has been in contact with the coordinator of the IESSNS surveys, who is keen to facilitate collaboration with WGNAS. Preliminary discussions have taken place to clarify sampling protocols and to identify appropriate individuals to carry out subsequent analysis of any salmon samples. These are expected to provide valuable information on the distribution of salmon at sea, the size, sex, and diet of individual fish and will also enable stock origin to be investigated using genetic techniques. Furthermore, the IESSNS survey data will provide information on salmon distribution in relation to other pelagic species, to hydrography, and to plankton abundance.

With regard to bycatch of salmon in pelagic fisheries, although NEAFC does not operate an observer programme, skippers of vessels fishing for regulated species are required to maintain logbooks of all species caught and information may be recorded on adult salmon catches, but probably not post-smolts. The NEAFC Secretariat has indicated that it would be willing to raise with the NEAFC Parties the possibility of future cooperation with NASCO on this issue and IUU fishing with the nature and scope of the cooperation subject to an exchange of letters between the two Secretariats. The Council might therefore wish to ask the NASCO Secretary to continue to liaise with the NEAFC Secretary on arrangements for an exchange of information on IUU fishing and bycatch of salmon. The NAFO Secretary has advised that the fishery in the NAFO regulatory area is predominantly targeted at groundfish, with the exception of the initiation in recent years of a pelagic fishery for redfish to the south of Greenland. Information provided by the NEAFC Secretary indicates that this fishery is mostly at depths between 200 - 600m and so it would be unlikely to result in catches of salmon. In this fishery, observer programmes are operated by both NAFO and NEAFC. Salmon have not been reported to date by the NAFO observers. However, the NAFO's fisheries management team will advise NASCO if catches of salmon are recorded by NAFO observers.

ICES has reported on a new tagging initiative and a wide-scale tag screening programme in the Northeast Atlantic. The tagging programme is directed at pelagic species (herring and mackerel) using glass-encapsulated passive integrated transponder (PIT) tags/RFID tags (radio frequency identity tags). Tag detection relies on the installation of antenna-reader systems at ports of landing. To date, such detectors have been installed at eight factories processing herring and mackerel; these are located in Norway (1), Iceland (1, with 2 more planned), Faroes (1), and Scotland (5, with 1 more planned). Further detectors are also planned in Ireland (3) and Denmark (1). By end 2015, there may be as many as 22 RFID detector systems screening herring and mackerel catches around Europe. PIT/RFID tags are also widely applied to salmon (29 895 in 2014). The tag detectors will thus be able to detect such tags should post-smolt or adult salmon be taken as bycatch in the mackerel and herring fisheries.

2.7 Public relations (This refers to recommendations contained within EPR68 and EPR70 – 71)

Decision: The IPs and APRs in the second cycle of reporting will be made available on the NASCO website. NASCO has 34 accredited NGOs which now participate in most of the meetings and improvements have been made to the website. Stakeholder consultation meetings are a tool to be considered when a specific need for seeking broad input is identified. The Council has agreed that its initial priorities in Public Relations are its websites and the Salmon Rivers database. The work to enhance the website is on-

going and should continue. The Council believes that NASCO should be the source of information on salmon stock status around the North Atlantic and has agreed to develop a State of the Salmon report using the updated stock categories in the rivers database (see above). The Council should keep its PR approach under review and consider if further actions are needed.

2014 Update: Since last year, further improvements have been made to the NASCO and IASRB websites. The new IPs and first APRs have been made available on the website together with the outcome of their evaluation. NASCO has supported the production of a film entitled 'Atlantic salmon: Lost at Sea' and served on the Steering Committee and contributed to a Discussion Forum on the Atlantic salmon held by the Royal Society of Edinbugh in November 2013. Further details of NASCO's activities relating to PR are contained in document CNL(14)6. The 2013 request for scientific advice from ICES (CNL(13)10) included a request to provide a review of the stock status categories currently used by the jurisdictions of NASCO, including within their IPs, and to advise on common approaches that may be applicable throughout the NASCO area (see 2.4 above).

2015 Update: Since last year, further improvements and updates have been made to the NASCO and IASRB websites. New IPs and the 2015 APRs have been made available on the website together with the outcome of their evaluation. See also 2.4 above.

2.8 Future role for NASCO on aquaculture (This refers to recommendations contained within NS17)

Decision: Aquaculture remains a focus area for NASCO in terms of concerns over impacts on wild Atlantic salmon. In general, NASCO has established the goal to minimise adverse impacts to wild stocks from aquaculture activities. However, it is for the Parties and jurisdictions to identify and implement appropriate measures to meet this goal. Progress will be tracked as Implementation Plans and Annual Reports are submitted. Some more specific measures are contained in the NAC Protocols, appended to the Williamsburg Resolution.

2014 Update: At the 2013 Annual Meeting, the Council agreed that an item should be retained on the Council's agenda entitled 'Liaison with the Salmon Farming Industry', during which a representative of the International Salmon Farmers' Association (ISFA) could be invited to participate in an exchange of information on issues concerning impacts of aquaculture on wild salmon. The regular meetings of the Liaison Group would not be continued, but, if a specific need arose, consideration could be given to convening a joint *ad hoc* group. A representative of ISFA will attend the 2014 Annual Meeting. The Review Group has reported that five IPs contained clear omissions or inadequacies in the responses to either or both questions 4.2 and 4.3 concerning demonstration of progress towards the international goals for sea lice and containment. The 2014 APRs include updates on progress on actions relating to aquaculture, introductions and transfers and transgenics and have been evaluated by the APR Review Group. Questions have been asked to those Parties/jurisdictions whose IPs contained clear omissions or inadequacies in the responses to either or both questions 4.2 and 4.3 as to how progress towards the international goals will be monitored. The Group's report will be presented in a Special Session at the Annual Meeting, when jurisdictions will answer any questions raised by the Group in relation to the APRs. The Review Group has developed a table showing the status (not started, ongoing or completed) of each action for each jurisdiction and this will be updated annually.

2015 Update: The 2015 APRs include updates on progress on actions relating to aquaculture, introductions and transfers and transgenics and have been evaluated by the APR Review Group. The Group's report will be presented in a Special Session at the Annual Meeting, when jurisdictions will answer any questions raised by the Group in relation to the APRs. The Review Group has developed a table showing the status (not started, ongoing or completed) of each action for each jurisdiction and this year has indicated whether the report on progress for ongoing and completed actions was clear or unclear. Where IPs had previously been identified as containing clear inadequacies or omissions were updated in 2014 checks were made to see if any new information had been provided that would affect the Group's assessment and lead to a satisfactory evaluation. This was not the case.

2.9 Meeting schedule and structure (This refers to recommendations contained within NS18)

Decision: The Parties are invited to submit proposals for changes to the structure, frequency and location of NASCO meetings to the Secretariat who will prepare a paper, based on these submissions, for consideration by the Council at its 2013 Annual Meeting. The intention is to explore options for changes to the structure, frequency and location of NASCO meetings with a view to ensuring the most effective use of the time available and expertise present. The Parties may choose to communicate with each other during the development of these papers and Canada committed to circulate its draft to the other Parties.

2014 Update: Prior to NASCO's 2013 Annual Meeting, papers were received from Canada, Norway, the Russian Federation and the US and collated by the Secretariat (see document CNL(13)16). No suggestions were made regarding the location of NASCO meetings. The Council decided not to change the frequency (i.e. annual) of its meetings or the policy on the location of its Annual Meeting, but agreed to change its structure on a trial basis for 2014 using the papers from Norway and the US as a basis to improve the opportunities for exchange of information during the meeting. The Agendas for the 2014 Annual Meeting have been adapted in accordance with the proposals from Norway and the US and a full-day Theme-based Special Session will be held on the topic of 'Management of single and mixed stock fisheries, with particular focus on fisheries on stocks below their conservation limit'. A Programme for this session has been developed by the Steering Committee which comprised representatives of NASCO's Parties and its accredited NGOs.

2015 Update: The Council recognised that the 2014 Theme-based Special Session had allowed for very valuable exchanges and decided to hold a half day Theme-based Special Session during the Thirty-Second Annual Meeting on the topic of '*Maintaining and improving river connectivity, with particular focus on impacts of hydropower*'. The Programme is contained in document CNL(15)14. The Council has agreed to consider a topic and appoint a Steering Committee for a 2016 Theme-based Special Session to be held during the Thirty-Third Annual Meeting.

Section 3: Strengthening the work of NASCO

Following a comprehensive discussion among the Parties in relation to the options for strengthening the work of NASCO (see FVN(13)12) it was agreed that in addition to the actions in sections 1 and 2, the priority area for special focus is in the area of fisheries management. The Parties renewed their commitment to the following actions:

	Recommendation	Action taken		
3.1 (a)	During the 2013 Council meeting, critically review the new 5-year Implementation Plans which include the following sections: information on reference points used to assess the status of stocks;	2014 Update: The IPs were evaluated by a Review Group whose findings were presented at a Special Session during the 2013 Annual Meeting. The Council asked the Parties to take the opportunity to revise their IPs, including those considered by the Review Group to be satisfactory, so as to clarify any unclear/incomplete answers. Most Parties took advantage of this opportunity. Since 2013, new IPs have been received from EU – Spain (Asturias, Cantabria and Galicia).		
(b) (c) (d)	the decision-making process for fisheries management, including predetermined decisions taken under different stock conditions (e.g. the stock level at which fisheries are closed); identification of whether fisheries are permitted to operate on salmon stocks that are below their reference point and, if so, how many fisheries there are and what approach is taken to managing them that still promotes stock rebuilding; and identification of any mixed-stock salmon fisheries and an explanation of how they are managed to ensure that all the contributing stocks are meeting their conservation objectives.	 The Review Group had noted inter alia that: river-specific conservation limits have been established by some Parties/jurisdictions for all or most of their rivers. Progress is being made in most other Parties/jurisdictions towards development of these conservation limits and in the meantime juvenile abundance data and/or catch statistics are being used as temporary reference points by some jurisdictions; many of the responses provided information on the organizations that are involved in the decision-making process but not on how decisions are taken in response to different stock conditions; that fisheries are permitted to operate on stocks that are below their reference point in several jurisdictions, but the number of fisheries involved and the management measures applying to these fisheries to promote stock rebuilding were not always clearly described; most IPs clearly indicated whether or not a Party/jurisdiction had mixed-stock fisheries and how these are defined. Where Parties/jurisdictions have such fisheries, the IPs generally provided information on catches but clear descriptions of how the fisheries are managed to ensure that all the contributing stocks are meeting their conservation objectives were often lacking. 		
During the 2014 Annual Meeting, there will be a Theme-based Special Session		During the 2014 Annual Meeting, there will be a Theme-based Special Session on the topic of management of single and mixed stock fisheries, with particular focus on fisheries on stocks below their		

conservation limits. The objectives of this session are to allow for an exchange of information on:

- Progress in establishing conservation limits, or alternative reference points, and the approaches being used to manage fisheries in their absence;
- How management measures are used to ensure the protection of the weakest contributing stocks in mixed-stock fisheries;
- How socio-economic considerations, including the interests of indigenous people, are weighed
 against conservation needs and, where fishing is permitted on stocks below their CLs, the
 approaches being used to ensure that exploitation is limited to a level that permits stock
 rebuilding within a stated timeframe.

2015 Update: In its 2015 report, the Review Group notes that a new IP had been received for EU – Spain (Navarra), and that this was considered to be satisfactory. The Review Group noted that revised IPs had been provided by Canada, EU - Germany, EU - UK (England and Wales), EU - UK (Northern Ireland), EU - UK (Scotland), Norway, and the United States. The Review Group did not re-evaluate these IPs but it noted that the changes made in revising IPs ranged from minor editorial changes to the inclusion of a new action (EU - Germany) and the removal of an action (United States). Since the Group's meeting a further IP has been received from EU – France.

3.2 During each annual Council meeting, critically review the annual progress reports from each Party, paying particular attention to progress against actions relating to the management of salmon fisheries.

2014 Update: A Special Session is to be held at the 2014 Annual Meeting to allow for presentation and discussion of the evaluations of the APRs under the IPs. During this Special Session, Parties will be given the opportunity to respond to any questions the APR Review Group may raise in connection with their APRs and there will be an opportunity for all delegates to raise questions.

2015 Update: For the 2015 APRs, the Review Group noted that while the clarification made to the reporting template had further improved the consistency of the reporting, several Parties/jurisdictions' APRs had not provided a clear account of progress in implementing and evaluating some or all of the actions detailed in their IPs. These reports either included one or more gaps in the 'Progress on Action to Date', or the comment provided bore no relationship to the proposed action. The Review Group has provided a table summarising for each jurisdiction whether each action is ongoing, completed or has not yet started and it has also indicated whether the progress reports for ongoing and completed actions are clear or unclear. Overall, the Review Group considered that the most common fault with the information provided on progress with actions was a lack of quantitative information on what has been achieved and/or what the results have been. The Review Group has asked that all Parties/jurisdictions address this in future APRs. Where the Review Group considered that there were shortcomings in an APR, it developed a list of questions and each Party/jurisdiction was asked to respond in writing to these questions no later than 15 May. The Group's report will be presented at a Special Session during

		the Thirty-Second Annual Meeting to allow discussion of the Group's findings and for questions to be
		addressed to the Parties.
3.3	Ensure there are agenda items in each of the	2014 Update: For the 2013 Annual Meeting, a new item was included on the North-East Atlantic
	Commissions to allow for a focus on mixed-stock	Commission's Agenda specifically focused on management of mixed-stock fisheries. At the 2014
	fisheries	Annual Meeting, there is to be a one-day Theme-based Special Session on the topic of management of
		single and mixed stock fisheries, with particular focus on fisheries on stocks below their conservation
		limits. The intention is to facilitate a greater exchange of information and the objectives of the session
		are detailed in 3.1 above. As such, no agenda items on mixed-stock fisheries have been included on
		the Commission agendas for 2014 because of the Theme-based Special Session but such items will be
		included on the 2015 agendas for all three Commissions.
		2015 Update: An item on 'Mixed-stock fisheries conducted by members of the Commission' has been
		included on each Commission agenda for the 2015 Annual Meetings. Each Party with MSFs has been
		requested to submit a paper providing a brief description of any MSFs still operating, the most recent
		catch data, any updates to the IP relating to MSFs and any changes or developments in the management
		of MSFs in this IP period to implement NASCO's agreements.
3.4	Focus the first Council new theme-based Special	2014 Update: See point 3.1 above
	Session on mixed-stock fisheries.	2015 Update: The report of the Theme-based Special Session has been published and widely
		distributed.
In addition, the Parties agreed to explore opportunities to		2014 Update: The Secretariat has not been advised of any new Protocols or Resolutions that are
strengthen their commitment to implement the NASCO		being developed by Parties.
Guidelines on Management of Salmon Fisheries inter alia		2015 Update: The Secretariat has not been advised of any new Protocols or Resolutions that are
by the use of a Protocol or Resolution.		being developed by Parties.