Agenda item 6.3
For decision

Council

CNL(17)14

Report of the Meeting of the Implementation Plan/Annual Progress Report Review Group

CNL(17)14

Report of the Meeting of the Implementation Plan/Annual Progress Report Review Group

Rydges Kensington Hotel, London, UK

6 and 7 April 2017

1. Opening of the Meeting

1.1 The Chairman, Mr Rory Saunders (USA), opened the meeting and welcomed members of the Review Group to London. He noted that the main task before the Review Group was to evaluate the 2017 Annual Progress Reports (APRs) under the 2013 - 2018 Implementation Plans (IPs) which detail the measures to be taken by Parties/jurisdictions to implement NASCO's agreements. The evaluation is intended to ensure that Parties/jurisdictions have provided a clear account of progress in implementing and evaluating the actions detailed in their IPs and the other information requested in the APRs. The 2017 APRs are the fourth under the current IPs and, as such, the second cycle of reporting is nearing completion and it would be expected that considerable progress should have been made on the actions identified in the IPs. He suggested that the Review Group might also wish to consider arrangements for the next cycle of IPs with a view to making recommendations to the Council.

1.2 Paddy Gargan, Hugo Hansen, Paul Knight, Rory Saunders (Chairman) and Lawrence Talks participated in the meeting. Steve Sutton was unable to participate in the meeting but provided input to the reviews. The NASCO Secretary co-ordinated the work of the Group.

2. Adoption of the Agenda

2.1 The Review Group adopted its Agenda, IP(17)3 (Annex 1).

3. Review of the Terms of Reference and Consideration of Working Methods

3.1 The primary purpose of APRs is to provide details of:

- any changes to the management regime for salmon and consequent changes to the IP;
- actions that have been taken under the IP in the previous year;
- significant changes to the status of stocks and a report on catches; and
- actions taken in accordance with the provisions of the Convention.

3.2 The Council had agreed (see CNL(12)44) that the purpose of the evaluation of the APRs is to ensure that Parties/jurisdictions have provided a clear account of progress in implementing and evaluating the actions detailed in their IPs and have provided the information required under the Convention. Where the Review Group identified

shortcomings in the APRs, it had been asked to develop a list of questions to be sent to the Party/jurisdiction concerned. The Council had previously agreed that Parties/jurisdictions should provide written responses to these questions in advance of the Annual Meeting so that the responses could be circulated prior to discussion during a Special Session of the Council at the Annual Meeting.

Working Methods

3.3 The Review Group adopted the same working methods as it had used at its previous meetings as described in document CNL(16)13. In summary, the Review Group continued to adopt the following 'ground rules' in undertaking its 2017 evaluations:

(a) initial reviewers were appointed for each APR (mainly the same reviewers as for the IPs and previous APR evaluations) and asked to lead the discussion within the Group and to produce an initial evaluation of each APR. This included an assessment of progress against each of the actions in the IP and the reporting on: new initiatives or achievements for salmon conservation and management; stock status and new factors affecting salmon abundance; catch statistics; and the additional information required under the Convention;

(b) in reporting the evaluations, the initial reviewers remained anonymous but in the event that one or more members of the Review Group did not agree with a particular aspect or aspects of the evaluation, the report would indicate that there were dissenting views without disclosing which members of the Group expressed the dissenting views unless they wished to be identified;

(c) while the Group drew on information in the IPs, it only commented on the information presented in the APRs;

(d) because not all Parties/jurisdictions were represented on the Group, it was agreed that a member of the Review Group from a Party/jurisdiction whose APR was being reviewed would not be present during the initial review of that report. The members of the Group were appointed by the Council to represent NASCO, not their Party/Organisation.

3.4 For each APR, the Review Group assessed whether satisfactory responses had been provided on:

- any changes to the IP, new initiatives and significant changes in stock status;
- the provision of complete catch data;
- progress made on each action; and
- other returns required under the Convention.

3.5 When all evaluations were complete, a consistency check was undertaken of all the assessments.

4. Update on Receipt of Implementation Plans and Evaluation of any new IPs

Overview of the IP evaluations

4.1 In its report to the Council's Thirty-Second (2015) Annual Meeting, the Review Group had noted that it had reviewed 18 IPs and, of these, 11 were considered to be satisfactory. The Review Group had considered that the following IPs contained clear omissions or inadequacies: Canada; Denmark (in respect of the Faroe Islands and Greenland) - Faroe Islands; EU - Spain (Asturias); EU - Spain (Cantabria); EU - Spain (Galicia); EU - UK (Scotland); and the Russian Federation.

4.2 For those jurisdictions that have salmon farming, the Review Group had recognised that providing quantitative data to demonstrate progress towards the international goals for sea lice and containment (questions 4.2 and 4.3 in the IP template, respectively) was challenging. However, the Group had expressed the opinion that the IPs for all Parties/jurisdictions with salmon farming should present quantitative data in a transparent manner to demonstrate progress made over the period of the IP towards the international goals for sea lice and containment rather than describing only the management measures in place. The Review Group had recommended that where this information had not been provided in the IPs, it should be reported through the APRs or, if that was not feasible, prior to the start of the next IP cycle. The Review Group noted that some additional information had been provided at the Theme-based Special Session held during the Thirty-Third (2016) Annual Meeting.

4.3 The Review Group had emphasised that a score of '1' on an IP simply meant that a satisfactory answer/information had been provided and it did not mean that the Party/jurisdiction concerned was necessarily meeting NASCO guidelines or agreements. In some cases, responses were considered to be satisfactory even when the response was incomplete, provided that an action had been identified to begin to address any major shortcoming.

Changes to IPs since the 2016 Review Group meeting

4.4 It is the Council's intention that IPs apply for a period of five years (2013 - 2018), and generally require no annual modification unless circumstances change significantly. At its 2014 Annual Meeting, the Council had asked that where a Party/jurisdiction had changed its IP, it should send the revised IP to the Secretariat no later than 1 December each year. No revised IPs had been received since the Group's 2016 Annual Meeting.

4.5 Following the Review Group's 2015 meeting, and prior to NASCO's 2015 Annual Meeting, an Implementation Plan was received for EU - France, CNL(15)39rev. It had been submitted to the Secretariat as a partial plan to be further developed and it did not include identification of any threats/challenges in relation to aquaculture, introductions and transfers and transgenics and, consequently, no relevant actions. It was not, therefore, reviewed. However, the Review Group had welcomed this contribution, noted that the IP appeared to be generally satisfactory and encouraged EU - France to complete its plan without further delay so that it could be fully evaluated. The 2017 APR indicates that France is committed to submitting a complete IP by the second half of 2017. The Review Group is concerned that it has

taken more than two years to complete the remaining section (aquaculture, introductions and transfers and transgenics) of the French IP and notes that the current reporting cycle will end in 2018.

4.6 At the time of the Review Group's meeting, an IP had still not been received for EU - Portugal which is a concern given the significant challenges facing salmon managers in the southern part of the species' range. The Review Group reiterated this concern and asked that EU - Portugal be encouraged to report on the measures being taken to safeguard the resource in accordance with NASCO agreements and guidelines.

4.7 The Review Group notes that a self-assessment using the Six Tenets for Effective Management of an Atlantic Salmon Fishery had been received from EU - Spain (Bizkaia) but an IP has not been submitted. The Review Group encourages EU - Spain (Bizkaia) to participate in the IP process.

5. Evaluation of the 2017 Annual Progress Reports and Development of Feedback to the Parties/jurisdictions

Overview of the 2016 Annual Progress Report Evaluations

5.1 In 2016, the Review Group noted that several of the 2016 APRs had provided similar information to that provided in 2014 and 2015, even when the Group had previously sought clarification or further detail in its questions. The Review Group had again noted that evaluating the progress reported on actions in the APRs was very difficult when the descriptions of the planned actions in the IP were vague or imprecise. The Group had further noted that the APRs for several Parties/jurisdictions continued to lack a clear account of progress in implementing and evaluating some, or all, of the actions detailed in their IPs, despite the further guidance provided on completing the template and the provision of examples of good practice. The Review Group also experienced considerable difficulties in interpreting the progress in some APRs because of the continuing use of links to websites and references to publications. Overall, the Review Group had again considered that the most common fault with the information provided continues to be a lack of quantitative evidence on the extent of the progress made and/or what the results have been. All Parties/jurisdictions were asked to address this in future APRs. The Review Group had noted that if the evaluation process is to work effectively, and be fair and equitable, clearer and more detailed reporting would be required in the 2017 APRs for several Parties and jurisdictions.

2017 Annual Progress Report Evaluations

5.2 The 2017 APR template was issued on 12 January 2017 and, although the deadline for submission agreed by the Council is 1 April, Parties/jurisdictions had been encouraged to complete and return their APRs to the Secretariat by 24 March 2017 given the earlier date of the Review Group meeting. European Union - Sweden and the United States submitted their APRs by this date but most other APRs were received on 3 or 4 April. As requested by the Council, the Secretariat had completed the 'Description of Actions' and 'Expected Outcomes' fields in the APR template for each Party/jurisdiction using the text from the most recent versions of the IPs and had amended the 'Current Status of Action' field, to make it a choice field with only four

options ('Not started', 'Ongoing', 'Completed for Current Year' and 'Completed'). The 2017 reporting template had also been amended to highlight the fact that APRs should be stand-alone documents with a clear summary of progress that did not rely on links or references to additional information. In 2016, the Review Group had particularly commended EU - Sweden for the clarity of its APR and this APR was issued with the 2017 APR templates to assist all Parties/jurisdictions in reporting in 2017.

5.3 Seventeen APRs were submitted and reviewed by the Review Group at its 2017 meeting. Only EU - UK (Northern Ireland) indicated that it proposed to review its IP in 2017. This revision is being taken in response to the NASCO review process, and to better capture the main objectives for salmon management, the threats to wild salmon and the challenges to their management and better clarify the actions to be taken. The Review Group wishes to highlight that some of the actions in the current IP for Northern Ireland are unclear and read like progress reports making it difficult to evaluate progress and encourages Northern Ireland to address this during revision of its IP. The Review Group evaluated the following APRs:

Party/jurisdiction	**Document No.**	**Date APR received by Secretariat**	**Proposed amendments to IP in 2017**
Canada	CNL(17)26	31 March 2017	No
Denmark (in respect of the Faroe Islands and Greenland) - Faroe Islands	CNL(17)24	28 March 2017	No
Denmark (in respect of the Faroe Islands and Greenland) - Greenland			
EU - Denmark	CNL(17)33	3 April 2017	No
EU - Finland			
EU - France	CNL(17)30rev	27 March 2017	No
EU - Germany	CNL(17)35	4 April 2017	No
EU - Ireland	CNL(17)37	4 April 2017	No
EU - Portugal			
EU - Spain (Asturias)	CNL(17)27	3 April 2017	No
EU - Spain (Cantabria)	CNL(17)36	3 April 2017	No
EU - Spain (Galicia)	CNL(17)28	3 April 2017	No
EU - Spain (Navarra)	CNL(17)29	3 April 2017	No
EU - Sweden	CNL(17)21	21 March 2017	No
EU - UK (England and Wales)	CNL(17)31	3 April 2017	No
EU - UK (Northern Ireland)	CNL(17)34	3 April 2017	Yes
EU - UK (Scotland)	CNL(17)32	3 April 2017	No
Norway	CNL(17)25	31 March 2017	No
Russian Federation	CNL(17)23	28 March 2017	No
United States	CNL(17)22	24 March 2017	No

5.4 Where the Review Group considered that there were shortcomings in an APR, the Council had requested that it develop a list of questions to be sent to the

Party/jurisdiction concerned by 1 May. In some instances, the Review Group also asked questions where it felt that further information on the action would be helpful. The Review Group agreed that the questions should be sent to the Parties/jurisdictions by the Secretary as soon as possible after its meeting and that each Party/jurisdiction be asked to respond in writing no later than 12 May so that the responses can be circulated prior to, and discussed at, the Special Session to be held during the 2017 Annual Meeting.

5.5 The Review Group's evaluations of the 2017 APRs are contained in document IP(17)4 (Annex 2). All the evaluations were agreed unanimously by the Review Group. The Review Group used the following format in presenting its evaluations:

- a paragraph (shown in bold italics) summarising its overall assessment of the APR in terms of whether it provided a clear account of progress and noting any shortcomings;
- a paragraph highlighting interesting developments or challenges related to implementation of NASCO's agreements and guidelines;
- paragraphs summarising the actions taken in relation to management of fisheries, habitat protection and restoration and aquaculture and related activities; and
- a list of questions where clarification is being sought from the Party/jurisdiction about the information (or lack of information) provided in the APR.

5.6 For some APRs, and as previously indicated by the Review Group, evaluating the progress made on actions remained difficult because the descriptions of the planned actions in the IP were vague or imprecise. The Review Group had previously highlighted such shortcomings and has noted this difficulty in some of its evaluations. The Review Group noted that the APRs for several Parties/jurisdictions continued to lack a clear account of progress in implementing and evaluating some, or all, of the actions detailed in their IPs, despite the further guidance provided on completing the template and the provision of examples of good practice. These reports either included:

- one or more gaps in the 'Progress on Action to Date';
- very little information or quantitative data to demonstrate progress and continuing reliance on links to information; and/or
- comment(s) bearing no clear relationship to the proposed action(s).

5.7 The Review Group also noted that several of the 2017 APRs had provided similar information to that provided in 2014, 2015 and 2016 even when the Review Group had previously sought clarification or further detail in its questions.

5.8 These shortcomings are a continuing concern to the Review Group given that improving commitment to NASCO agreements was a key aspect of the 'Next Steps' and External Performance reviews and as the second reporting cycle is almost completed. When preparing future APRs, Parties/jurisdictions are again reminded to provide evidence of progress made to address the action in the current year or to indicate that no further progress was made, taking account of previous questions asked by the Review Group.

5.9 The Review Group prepared a summary table (Table 1 below) to provide an overview of the number of actions in each IP/APR, the progress with their implementation and the extent to which that progress was reported in 2017 for each Party/jurisdiction. This table should be interpreted with care taking account of the explanatory footnotes.

5.10 The Review Group is concerned that, for some Parties/jurisdictions, actions have not yet started or where actions are on-going there has either been no report of progress or the reporting is unclear. Overall, the Review Group again considered that the most common fault with the information provided continues to be a lack of quantitative evidence on the extent of the progress made and/or what the results have been. All Parties/jurisdictions are asked to address this in future APRs.

5.11 Last year, the Review Group had noted that if the evaluation process is to work effectively, and be fair and equitable, clearer and more detailed reporting will be required in the 2017 APRs for several EU Member States. The Review Group considers that more detailed, clearer reporting will be required in the 2018 APRs for:

- EU - Denmark;
- EU - France;
- EU - Spain (Asturias);
- EU - Spain (Cantabria);
- EU - Spain (Galicia);
- EU - UK (Scotland); and
- Russian Federation.

5.12 The Review Group wishes to particularly commend the Faroe Islands for the clarity of its 2017 APR.

5.13 The Review Group noted that several Parties/jurisdictions reported some interesting and useful developments and challenges in addressing NASCO's Resolutions, Agreements and Guidelines, including:

- **Canada:** release of the 'Forward Plan for Atlantic Salmon' designed to take forward the 61 recommendations of the Ministerial Advisory Committee on Atlantic Salmon. Key highlights include reviewing the Wild Atlantic Salmon Conservation Policy and improving the co-ordination of science and research related to wild salmon through an Atlantic Salmon Research Joint Venture;
- **Denmark (in respect of the Faroe Islands and Greenland) - Faroe Islands:** adoption of a new regulation for sea lice which includes a lower threshold for treatment of 1.5 sexually mature female lice per salmon. If the threshold is exceeded on three occasions in succession all fish at the farm must be slaughtered within 2 months;
- **EU - Denmark:** a new cormorant plan has been issued with additional measures to protect salmon. Monitoring in the River Skjern indicated that less than 50% of smolts survived passage through the estuary with cormorant predation, described in the APR as 'devastating', accounting for most of the loss. Stocking will cease in the River Storå from 2017 as the stock has been re-built;

- **EU - Germany:** lower returns in 2016 to the Rhine and Elbe rivers. Smolt predation by birds, particularly cormorants, is a significant problem in the Rhine and beavers are altering salmon habitats in the Elbe;
- **EU - Spain (Navarra):** demolition of two dams in the lower reaches of the Bidasoa river funded through the LIFE IREKIBAI project;
- **EU - Sweden:** development of a national plan for future conservation and management of Baltic and Atlantic salmon and sea-running brown trout;
- **EU - UK (England and Wales):** launch of the Environment Agency's 'Salmon Five Point Approach (5PA)'. Its mission is to restore abundance, diversity and resilience of salmon stocks throughout England, maximising the production of healthy wild salmon smolts and seeking to reduce salmon mortality at sea. The work is focused in five areas: improving marine survival; further reducing exploitation; removing barriers to migration and enhancing habitat; safeguarding sufficient flows; and improving water quality. In Wales, fishermen and fisheries have been asked to introduce voluntary measures to ensure no salmon are killed in 2017;
- **EU - UK (Northern Ireland):** considerably improved returns, particularly of one-sea-winter salmon, in 2016. In the Lower Bann, returns were at a 20-year high;
- **EU - UK (Scotland):** introduction of a range of legislative measures to ensure harvesting is sustainable and that fishing does not damage vulnerable stocks or cause damage to the network of Special Areas of Conservation. The killing of salmon in inland waters is now managed on an annual basis and mandatory catch and release has been introduced for districts (or rivers) where stocks are below their conservation limits. The annual assessment model has been refined to allow the 2017 assessments to be made at the river level where data permit. For 2016, 28% of stocks were classed as grade 1 (> 80% chance of meeting CL), 29% as grade 2 (60 - 80% chance of meeting CL) and 43% as grade 3 (<60% chance of meeting CL);
- **Norway:** classification of 104 salmon stocks (representing 76% of the total Norwegian spawning target) using a National Quality Norm for Wild Salmon. While management targets were achieved for 82 of these stocks, only 23 of the stocks were classed as 'Good or very good' and 52 stocks were classed as 'Poor or very poor';
- **Russian Federation:** mortality of salmon in two rivers in the Murmansk region caused by Ulcerative Dermal Necrosis (UDN). Unlike 2015, no decision was taken to close the recreational fisheries in the affected rivers;
- **United States:** release of a draft recovery plan for endangered Atlantic salmon within the Gulf of Maine region outlining specific approaches to reduce threats to the species, identifying specific timetables for action and estimating costs to achieve recovery goals. Returns to the US remain 'dire' with a provisional return of 626 fish in 2016.

Parties/jurisdictions not submitting APRs

5.14 No APRs had been received from Denmark (in respect of the Faroe Islands and Greenland) - Greenland, EU - Finland and EU - Portugal by the time the Review

Group met to undertake its evaluations and were consequently not reviewed. The lack of these APRs is a concern to the Review Group.

Improvements to the APR template

5.15 The Review Group noted that the category 'Completed for the Year' had been included as a choice field in the 2017 APR reporting template because some actions, such as monitoring programmes, are annual activities while others would not be expected to be completed until the end of the IP reporting cycle. The inclusion of this additional category appeared to have caused some confusion in completing the 2017 APRs and the Review Group considers that it would be clearer use only three choices: 'Not Started', 'Ongoing', 'Completed' for the 2018 APRs and recommends that the Council requests that the Secretary makes this change to the reporting template.

5.16 The Review Group discussed the approach to highlighting shortcomings in the APRs. The Council had requested that where such shortcomings were identified, questions should be provided to the Parties/jurisdictions concerned for response prior to the Annual Meeting. The Review Group considers that this approach has a number of limitations. Some of the responses received to date have been unclear and the Party/jurisdiction may not include any clarification in subsequent reporting resulting in the same or a similar question being asked the following year. This process is also time consuming and is undertaken at a busy time of year for the Parties/jurisdictions and the Secretariat in the build-up to the Annual Meeting. In addition, this approach constrains the timing of the Review Group meeting and the time it has available to conduct its evaluations. The Review Group proposes that for the 2018 APRs, rather than developing questions for response by the Parties/jurisdictions concerned it details its evaluation of progress on each action in a table at the end of each review, highlighting shortcomings, and that Parties/jurisdictions are asked to address these in the APR for the following year. The Review Group recognises that the current APR cycle is close to completion but believes that this approach might be a valuable improvement that could be used in the next reporting cycle.

6. Arrangements for Presenting the Group's Report to the Council

6.1 The Review Group agreed that the Chairman would present its report to the Council during the Special Session at the Thirty-Fourth (2017) Annual Meeting. The Group agreed that this should briefly summarise the Group's working methods and provide an overview of the evaluations in terms of completeness and timeliness of reporting and progress to date. The circulation of the responses to the Group's questions ahead of the Annual Meeting should facilitate discussion at the meeting involving all Parties and NGOs.

7. Recommendations for the Third Round of Implementation Plans

7.1 At its 2015 meeting, the Review Group had discussed changes that might be made to the next (third) cycle of IPs and the subsequent APRs, which it anticipates will commence in 2019, so that these might be considered with a view to improving the effectiveness of future reporting. These were as follows:

- many of the actions that were planned by Parties/jurisdictions had been vague or unclear making it difficult to assess progress. In other cases, actions had little bearing on NASCO agreements or guidelines, even when the Party/jurisdiction was not abiding by the terms of the agreements and guidelines. In the next round of IPs, it may be necessary to include specific topic areas on which Parties/jurisdictions would be expected to provide an action if they do not demonstrate that they are fully compliant with NASCO agreements and guidelines;
- greater efforts should be made in the next round of IPs to ensure that all actions are clearly and concisely described. Any IPs that do not should not be accepted by the Review Group but returned to the Party/jurisdiction for revision; and
- there may be a need to include some standard questions in the template for the next round of IPs with a view to ensuring that such information is provided by all Parties/jurisdictions (e.g. relating to sea lice levels and containment within marine salmon farms).

7.2 The Review Group noted that all the Members of the West Greenland Commission had agreed to apply the Six Tenets for Effective Management of an Atlantic Salmon Fishery in order to evaluate the monitoring and control measures applying to their salmon fisheries. These tenets have already been applied to the salmon fishery at West Greenland and led to the adoption of an Updated Plan for Implementation of Monitoring and Control Measures in the Salmon Fishery at West Greenland, progress on which had been reported in the 2016 APR for Greenland, CNL(16)21. There had been some discussions within the West Greenland Commission as to whether the six tenets might be applied more widely to include all NASCO Parties/jurisdictions. If that is done, consideration might be given to including a section in the new IPs dealing with the monitoring and control elements covered by the six tenets.

7.3 The Review Group noted that in 2011, prior to the development of the second cycle of Implementation Plans covering the five-year period 2013 - 2018, the Council established a Working Group on Future Reporting under Implementation Plans and Evaluation of these Reports comprising one, but no more than two representatives from each Party and from NASCO's accredited NGOs (representatives were to be notified to the Secretariat by 1 July 2011). That Working Group was asked to report its recommendations to the 2012 Annual Meeting and its report included 'Guidelines for the Preparation and Evaluation of NASCO Implementation Plans and for Reporting on Progress', CNL(12)44 and templates for both Implementation Plans, CNL(12)42 and Annual Progress Reports, CNL(12)43. The timetable used for the development of IPs covering the period 2013 - 2018 was as follows:

June 2011	Council decides to establish a Working Group on Future Reporting under Implementation Plans and Evaluation of these Reports
July 2011	Members of the Working Group notified to the Secretariat
November 2011	Meeting of the Working Group on Future Reporting under Implementation Plans and Evaluation of these Reports and Guidelines
June 2012	Council adopts 'Guidelines for the Preparation and Evaluation of NASCO Implementation Plans and for Reporting on Progress', CNL(12)44 and templates for both Implementation Plans, CNL(12)42 and Annual Progress Reports, CNL(12)43.
February 2013	2013 - 2018 Implementation Plans submitted to the Secretariat
March 2013	Review of Implementation Plans
June 2013	Review Group's findings presented to the Council
September 2013	Final 2013 - 2018 Implementation Plans submitted to the Secretariat

7.4 While it is not a matter for the Review Group to decide on the arrangements for future Implementation Plans/Annual Progress Reports, it wishes to highlight to the Council that if a new cycle of IPs (2019 – 2024) is to commence in 2019, there would be a need to decide on the arrangements for preparing for this cycle at the 2017 Annual Meeting.

8. Report of the Meeting

8.1 The Review Group agreed a report of its meeting.

9. Any Other Business

9.1 There was no other business.

10. Close of the Meeting

10.1 The Chairman thanked the members of the Review Group for their contribution to the meeting and wished them a safe journey home.

Table 1: Summary overview of progress on the actions reported in the 2017 APRs

		Denmark (in respect of the Faroe Islands and Greenland)		European Union															
	Canada	Faroe Islands	Greenland	Denmark	Finland	France	Germany	Ireland	Portugal	Spain - Asturias	Spain - Cantabria	Spain - Galicia	Spain - Navarra	Sweden	UK - England & Wales	UK - Northern Ireland	UK - Scotland	Norway	Russian Federation	USA
Actions Related to the Management of Salmon Fisheries																				
F1	CD	CD-FY		OG		OG-NP	OG	OG		OG-NP	NS	NS	NS	OG	OG	CD-FY	OG	OG	OG-NP	CD-FY
F2	OG			CD		OG-NP	OG	OG		OG-NP	NS	OG	OG	OG	OG	CD-FY	OG	OG	CD	CD-FY
F3	OG			OG-NP		OG-NP		OG			NS	OG	CD	OG	OG	OG	OG	OG	OG	CD-FY
F4	OG					NS					NS	OG-NP	CD	CD	OG	OG	OG	OG	CD	
F5	OG										OG			OG	OG		OG-NP			
F6														OG						
F7														OG						
F8														OG						
F9														OG						
F10														OG						
F11														OG						
Actions Related to Habitat Protection and Restoration																				
H1	OG			OG		NS	OG	OG		OG	OG-NP	NS	NS	OG	OG	OG	OG	OG	OG	CD-FY
H2	OG			OG-NP		OG-NP	OG	OG		OG-NP	OG-NP	OG-NP	OG	CD	OG	CD-FY	OG	OG	OG-NP	CD-FY
H3	OG			OG-NP		NS	OG	OG		CD-NP	NS	OG-NP		OG	OG	OG	OG-NP	OG		CD-FY
H4						OG-NP		OG-NP			NS	OG		CD	OG	CD-FY	OG	OG		CD-FY
H5														OG		OG				
H6																CD				
Actions Related to Aquaculture and Associated Activities																				
A1	OG-NP	OG					OG	OG-NP			NS			OG	OG	CD-FY	OG	OG	OG	CD-FY
A2	OG-NP						OG	OG						OG	OG		CD-NP	OG	OG	CD
A3	CD							OG							OG		CD-NP	OG	OG	CD-FY
A4	OG																	OG		CD-FY

Key: *NS = Not Started; OG = Ongoing - with clear progress report; OG-NP = Ongoing - without clear progress report; CD = Completed - with clear progress report; CD-NP = Completed - without clear progress report; CD-FY Completed for Year – with clear progress report; CD-FY-NP Completed for Year – without clear progress report.*

Note: *The table above is intended to show for each Party/jurisdiction which actions in the IP have been initiated and are ongoing, which have yet to commence, and which are completed. It should be noted that the Implementation Plans specify the planned timescales for implementing the actions and these will differ, with not all scheduled to commence in 2013 and some continuing beyond 2018. The scope of the work under each action will also differ. In some cases, an action to address a particular threat/challenge might comprise a number of different elements and although the action is shown as ongoing it does not mean that all elements have commenced or conversely that some are not completed. There is also a wide range in the number of actions in each Implementation Plan.*

Annex 1

IP(17)3

Meeting of the Implementation Plan/Annual Progress Report Review Group

Agenda

1. Opening of the Meeting
2. Adoption of the Agenda
3. Review of the Terms of Reference and Consideration of Working Methods
4. Update on Receipt of Implementation Plans and Evaluation of any new IPs
5. Evaluation of the 2017 Annual Progress Reports and Development of Feedback to the Parties/jurisdictions
6. Arrangements for Presenting the Group's Report to the Council
7. Recommendations for the Third Round of Implementation Plans
8. Report of the Meeting
9. Any Other Business
10. Close of the Meeting

Annex 2

IP(17)4

Evaluation of Annual Progress Reports and Questions from the Review Group to Parties/jurisdictions

Canada, CNL(17)26

The Annual Progress Report provides a generally clear and comprehensive report on the 12 actions identified in the Implementation Plan, particularly in relation to Action F4. Ten of these actions are on-going and two actions (Actions F1 and A3) have been completed. As previously reported by the Review Group, the precise activities that were planned are unclear, making it difficult to evaluate the progress made. Nonetheless, the APR provides generally clear and comprehensive reports to address the topic areas covered by each action. However, there is a lack of quantitative information, notably for actions A1 and A2, and a number of questions are raised for clarification.

Canada has published a *Forward Plan for Atlantic Salmon* in response to the Ministerial Advisory Committee on Atlantic Salmon's 61 recommendations to address conservation, enforcement, science and international issues. A priority is to review the Wild Atlantic Salmon Conservation Policy, which will be done collaboratively, with publication expected in 2017. Next steps include the formulation of regionally distinct implementation plans. Also of note is the formation of an Atlantic Salmon Research Joint Venture to prioritise scientific research and data and information-sharing. The intention is to fill the gap between watershed level science and that taking place through international fora like NASCO. Fisheries and Ocean Canada is to explore options for aquaculture legislative reform, including the development of an Aquaculture Act, to develop a clear and transparent legislative framework that enshrines the highest standards for environmental protection and mandates more transparent national public reporting for greater accountability. An outcomes-based standard for sea lice management could be considered for incorporation into new legislation.

Actions related to the management of salmon fisheries: Following new management measures to reduce exploitation and promote catch and release, release rates are estimated at 95% for large salmon and 51% for small salmon. In New Brunswick, Nova Scotia and Prince Edward Island restrictive measures, including total catch and release and gear restrictions, continued in 2016. In Newfoundland and Labrador, where declines in returns of >30% have been seen on more than half of monitored rivers in 2016, a decision on further management measures will be taken after stakeholder consultations. In Quebec, the new management measures have contributed to a 35% reduction in harvested salmon compared to the 5-year average while angler visits and fishing success with catch and release are among the highest in 20 years (Action F1). Fisheries and Ocean Canada is reviewing options to eradicate smallmouth bass from Miramichi Lake, which is connected to the Miramichi River in New Brunswick (Action F2). Linked to the Nova Scotia Salmon Association liming project, 2016 monitoring indicates a three to four fold increase in smolt output in the main branch of the West River. The scheme has been expanded with a second lime doser and a helicopter assisted catchment liming project (Action F3). Fisheries and Oceans Canada Gulf Region published an educational internet page on how to properly release Atlantic salmon in the recreational fishery. Enforcement continues to be actively pursued with 7,606 fishers and 23,349 fishing sites checked and 372 violations detected in 2016 (Action F4). Measures in place to restrict salmon by-catch include: restricted use of monofilament herring and mackerel gill

nets when salmon are present, closed areas for gill nets, delayed season openings and complete angling closures to all species in areas where salmon are vulnerable (Action F5).

Actions related to habitat protection and restoration: As part of the Recovery Strategy for Atlantic salmon in the Inner Bay of Fundy, work is underway to identify critical estuarine and marine habitat. An Action Plan for the iBOF Atlantic salmon has been prepared. Federal funding programmes provide on-going financial support for salmon conservation and recovery activities (>$4m) (Action H1). The Fisheries Protection Program is developing guidelines on: pipeline and transportation watercourse crossings, large and medium water intakes, and marine and coastal infrastructure (Action H2). Inter-jurisdictional discussions and collaborative activities are on-going but no new agreements have been struck (Action H3).

Actions related to aquaculture and associated activities: The Aquaculture Activities Regulations, which came into force in 2015, require increased reporting by licence holders. Specific data on drug and pesticide use for 2016 is not yet available. However, Fisheries and Oceans Canada has verified that there were no morbidity/mortality events caused by aquaculture activities during 2016. Further to the new regulations, Fisheries and Oceans Canada is to explore options for legislative reform, including the development of an Aquaculture Act. The goal is to develop a clear and transparent legislative framework that enshrines the highest standards for environmental protection and mandates more transparent national public reporting for greater accountability. An outcomes-based standard for sea lice management could be considered for incorporation into new legislation (Action A1). The use of triploid Icelandic salmon in Placentia Bay aquaculture operations was reviewed by the Introductions and Transfers Committee under the National Code of Introductions and Transfers. A formal risk assessment process was conducted and Fisheries and Oceans Canada approved the project pending verification of the triploid process and health status at the time of transfer. Should the project be approved, hatchery construction would begin immediately, with planned fish entry to sea cages in 2018 (Action A2). Canada's renewed National Code on Introductions and Transfers of Aquatic Organisms and the National Aquatic Animal Health Program were implemented in 2015 (Action A3). Canada has previously decided to permit the commercial production of transgenic Atlantic salmon in contained facilities. In 2016, the transgenic AquaAdvantage™ Atlantic Salmon were approved for human food and animal feed use. In 2016, there were no known regulatory violations in relation to these activities (Action A4).

Questions for written response prior to the 2017 Annual Meeting:

1. *Are the guidelines that are being developed in relation to pipeline and transportation watercourse crossings, large and medium water intakes, and marine and coastal infrastructure under the Fisheries Protection Program being developed with relevant government departments and planners and are they being supported by legislation? (Action H2).*

2. *Given the announcement that Fisheries and Oceans Canada will explore options for aquaculture legislative reform, including the development of an Aquaculture Act, will this be used as an opportunity to develop measures to support the achievement of the international goals for sea lice and containment set out in the NASCO Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks (Action A1)?*

3. *The North American Commission Protocols for the Introduction and Transfer of Salmonids appended to the Williamsburg Resolution state that: 'Reproductively viable strains of Atlantic salmon of European origin, including Icelandic origin, are not to be released or used in aquaculture in the North American Commission Area'. With regard to the approval of the Placentia Bay aquaculture project, can triploid rates of 100% be assured and will the salmon reared be all-female strains (Action A2)?*

4. *The Review Group considers that all Parties and jurisdictions with salmon farming should have presented quantitative data in a transparent manner in their Implementation Plans as a baseline for demonstrating progress towards meeting the international goals for sea lice and containment set out in the NASCO Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks. Summary data are requested to provide the baselines for Canadian salmon farming facilities (Actions A1 and A2).*

Denmark (in respect of the Faroe Islands and Greenland) - Faroe Islands, CNL(17)24

The Implementation Plan identifies only two proposed actions (there are no self-sustaining salmon populations in the Faroe Islands), and the APR provides a clear report on the progress made to address each action in 2016, one of which (Action F1) was completed for the year and the other (Action A1) is ongoing. The Review Group had proposed that all Parties and jurisdictions with salmon farming should have presented quantitative data in their Implementation Plans to demonstrate progress in implementing NASCO Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks. Where this information had not been provided, the Review Group had requested that it be provided in the APR. The Review Group welcomes new information provided in the current APR.

There was no salmon fishery at Faroes in the 2016/17 season.

Actions related to management of salmon fisheries: In 2015, NASCO's North-East Atlantic Commission agreed a Decision regarding the salmon fishery in Faroese waters in 2015/16, 2016/17 and 2017/18, NEA(15)10. In accordance with this decision, and consistent with the advice from ICES, no salmon fishery took place in Faroese waters in the 2016/17 season (Action F1).

Actions related to habitat protection and restoration: Because of the small size of the Faroese rivers, there is no historic record of any natural wild salmon population in Faroese rivers or fjords. Since there are no self-supporting wild salmon stocks in Faroese rivers, there are no actions in the Implementation Plan relating to habitat protection and restoration.

Actions related to aquaculture and associated activities: A new regulation on sea lice control was adopted in 2016 which sets out strict regulatory control measures in relation to sea lice on salmon farms. Sea lice must be counted every two weeks throughout the year and lice counting must distinguish between different life stages and sizes of lice. The number of mature female lice per fish (threshold) must not exceed 1.5. If exceeded more than three times in a row, all the fish at the farm must be slaughtered within 2 months. Farms with few lice problems may increase the number of smolts put to sea. Farms with significant lice problems are obliged to decrease the number of smolts put to sea. In 2016, the number of smolts put to sea was reduced by 30% at one site and by 10% at another site and one site was denied permission to increase the number of smolts put to sea. Reporting of escapes is mandatory and farmers are obliged to have a contingency plan in case of escape incidents and to attempt to recapture escapees. The most recent information on escapes indicates that, in 2014, two incidents occurred with an estimated escape of 40,000 fish averaging 4.8kg. Since salmon mortalities are reported on a daily basis, escapes can be indirectly verified through calculation of loss of fish at slaughter. Relatively reliable estimates of escapees are, therefore, available (Action A1).

Questions for written response prior to the 2017 Annual Meeting:

The Review Group has no questions on this APR and comments the Faroe Islands on the clarity of its report.

European Union - Denmark, CNL(17)33

The Implementation Plan identifies six proposed actions, one of which (Action F2) was completed in 2016, and is considered to have partly achieved its objective. The remaining five actions were on-going in 2016. For some of the actions quantitative measures of progress are still lacking. For the evaluation process to work effectively and be fair and equitable, the Review Group will require more detailed reporting on progress against each action in the 2018 APR.

The steady increase in salmon populations in all four rivers in Denmark has ceased with the trend stabilising or reversing in recent years. In the River Skjern, recruitment was low given the number of spawners so runs are expected to decline in the coming years. Monitoring in the River Skjern, has highlighted the 'devastating effect' of cormorant predation with less than 50% of smolts surviving passage through the estuary in 2016 and cormorant predation was responsible for most of the loss. A new cormorant plan has been developed with additional measures to protect salmon. However, for the River Storå, the population size is considered to be large enough to stop stocking from 2017. Catch quotas for each river are revised annually and seasons adjusted where necessary. The main barrier on the River Kongeå is being removed in 2017 providing access to more than 100km of free-flowing river with spawning and nursery areas.

No estimate has been provided of unreported catch and the confirmed catches for 2015 have not been provided but it is as stated that these were as previously reported.

Actions related to management of salmon fisheries: Denmark has continued to apply a national cormorant plan to regulate recruitment of cormorants where predation on salmonids is documented. The action is on-going with an increased number of measures being employed including shooting, removal of colonies and efforts to keep the birds away from the rivers. Despite these measures the APR indicates that the predation problem is 'worse than ever' and on the River Skjern the impact is 'devastating' (Action F1). The by-catch of salmon and sea trout in fisheries in the Ringkøbing Fjord is being assessed. The study has shown a very high by-catch of sea trout but a small by-catch of salmon. This action is completed and considered to have partially achieved its objective but a quantitative measure of progress is lacking (Action F2). Work is also underway to develop more reliable reference points for four wild salmon stocks in Denmark. Studies of potential run size have been initiated and potential runs are considerably higher than current returns. The APR indicates that the cormorant problem needs to be addressed before realistic reference points can be established (Action F3).

Actions related to habitat protection and restoration: Several hundred obstructions to fish migration have been removed as part of a programme to improve access for salmon and sea trout. The main barrier on the River Kongeå is being removed in 2017 providing access to more than 100km of free-flowing river including spawning and nursery areas. However, there is still no plan for removal of the two most important barriers on the River Storå (Action H1). Many habitat restoration projects are said to have been conducted in most watersheds, but no further details have been provided (Action H2). The APR states that 'present and potential salmon production has been estimated for Skjern, Ribe, Storå and Varde river will also be evaluated'. It is not clear which evaluations have been undertaken and which are planned (Action H3).

Actions related to aquaculture and associated activities: No actions were proposed in the Implementation Plan.

Questions for written response prior to the 2017 Annual Meeting:

1. *What further action is planned to reduce the mortality of salmonid smolts caused by cormorants given the 'devastating effect' identified in the APR (Action F1)?*

2. *What levels of by-catch of salmon were observed in the Ringkøbing Fjord and why is the project considered to have only partially achieved its objectives (Action F2)?*

3. *When is it anticipated that reliable reference points will be established for Danish salmon rivers (Action F3)?*

4. *Please provide quantitative data to demonstrate the great benefits to salmon of the restoration projects being undertaken in most watersheds (Action H1).*

5. *Please provide quantitative data to demonstrate restoration of habitat from earlier canalisation, pipe-laying and dredging (Action H2).*

6. *When is it anticipated that information on the present and potential salmon production will become available for all rivers (Action H3)?*

European Union - France, CNL(17)30rev

The partial Implementation Plan identifies eight proposed actions relating to management of salmon fisheries and habitat protection and restoration. The section of the Implementation Plan relating to aquaculture and associated activities has not been completed and consequently there are no actions on this topic in the APR. The APR reports on the progress made to address the eight actions in 2016; five actions were on-going and three have not yet started. For the on-going actions, The APR provides very little information on progress in delivering actions to protect and restore stocks. For the evaluation process to work effectively and be fair and equitable, the Review Group will require more detailed reporting on progress against each action in the 2018 APR.

The APR indicates that regional management actions are referenced in the PLAGEPOMI with two new projects adopted in 2016. However, these new initiatives are provided in French (and via links to websites) and could not be reviewed.

No estimate of unreported catch in 2016 has been provided, although data on catch and release have been provided for professional and recreational fishermen.

Actions related to management of salmon fisheries: The APR indicates that discussions are on-going, in particular with the Ministry in charge of sea fishing, to obtain more information on by-catch in other fisheries in order to determine if new measures are needed to protect salmon (Action F1) and in order to develop and implement rules, criteria or management strategies to eliminate unreported catches (Action F2). Project 'renosaum', aims to redefine existing conservation limits and investigate the possibility of transporting them to all salmon rivers in France to provide a reliable management system for setting catch quotas (Action F3). Very little information is provided to allow progress on Actions F1, F2 and F3 to be assessed. Action F4 seeks to conduct annual assessments of the status of salmon stocks to determine the need for measures to control exploitation but has not yet commenced.

Actions related to habitat protection and restoration: Action H1, to update a classification table and monitor implementation of the Water Framework Directive, and Action H3, to update salmonid mesohabitat maps for use in reporting the location of spawning and nursery habitats, have not yet started. The objectives set out in PLAGEPOMI are to preserve and restore habitats and restore and guarantee free movement of migratory fish. Watercourse classification is the priority of SDAGEs 2016 - 2012 programme which seeks to reduce the impact of existing structures in a fixed five-year programme with a deadline of 2018 - 2020 (Action H2). The SALMOGLOB project, which is being conducted in close collaboration with the ICES Working Group on North Atlantic Salmon, seeks to improve understanding and awareness of the ecological and demographic mechanisms that are responsible for the decline of the marine productivity of Atlantic salmon populations and to improve stock assessment models by better accounting for biological and ecological knowledge. A PhD project related to this project is on-going(Action H4). Very little information is provided to allow progress on Actions H2 and H4 to be assessed.

Actions related to aquaculture and associated activities: There are no actions relating to aquaculture in the IP.

Questions for written response prior to the 2017 Annual Meeting:

1. *Please provide additional information to demonstrate progress on all on-going actions (Actions F1, F2, F3, H2 and H4).*

2. *All the actions in the IP are scheduled to be completed by 2018. Have steps been identified to commence progress on actions F4, H1 and H3?*

European Union - Germany, CNL(17)35

The Implementation Plan identifies seven proposed actions all of which were ongoing. The APR provides clear and comprehensive reports on the progress made to address them in 2016 with detailed supplementary information provided in annexes to the APR.

A genetic monitoring programme has been launched by the International Commission for the Protection of the Rhine (ICPR) and installation of innovative fish passes is planned in the River Murg in the upper Rhine. Cross-border co-operation has been strengthened in relation to salmon re-introduction in the upper Elbe and video monitoring has commenced in the River Nuthe (a tributary of the Elbe). Salmon stocking in the Schwarze/Pulsnitz river system in the Elbe catchment was doubled in 2016 and the fish passage will be restored at a major obstruction (Kroppen weir) in 2017.

No estimate of unreported catch has been provided but it is recognised that bycatch and illegal catches occur but are likely to be at a very low level. Catch and release is not practiced (salmon fisheries are prohibited in the Rhine).

Actions related to management of salmon fisheries: An annual exchange of information among relevant experts on the implementation of ICPR recommendations aimed at improving legal compliance and thus reducing by-catches and illegal catches of salmon by professional and recreational fishing has continued. The Dutch delegation to the ICPR has been asked to provide information on the legal implementation of the ban against fishing on salmonids in relation to illegal sale of salmonids at a Dutch market (Action F1). Stocking of the River Agger ceased in 2015 with a view to developing a self-sustaining salmon population (Action F2).

Actions related to habitat protection and restoration: In 2016, the focus in relation to increasing accessibility of spawning and juvenile habitats in the Rhine, Ems, Weser and Elbe has been on progressing the planning of 47 measures which were prioritised at the end of the second implementation phase at the end of 2015. Three measures have been constructed, 3 measures will start in 2017 and 21 measures are in the planning process. A further 9 measures are in the preliminary planning phase (Action H1). The fish passage at the barrage weir in Strasbourg was officially launched in spring 2016 and implementation planning has commenced for three efficient fish passages at three barrages in the upper Rhine. Partial opening of the Haringvliet sluices in the Netherlands is scheduled for 2018. A workshop on downstream migration was held in Maastricht in 2016 (Action H2). Action is on-going to re-establish longitudinal connectivity in the river Elbe and its primary tributaries. The previous International Management Plan (2013-2015) has been updated for the period 2016 - 2021 in accordance with the European Water Framework Directive. The selection of supra-regional priority watercourses has been modified in the updated plan (Action H3).

Actions related to aquaculture and associated activities: Action is on-going with the intention of establishing a separate, locally-adapted indigenous salmon population in North Rhine Westphalia tributaries of the Rhine so as to eliminate the need for foreign ova. Measures to allow an increase in captive breeding at the gene bank facility LANUV NRW are being taken. The Wild Salmon Centre Rhine-Seig operated very successfully but still required some imported material. It is anticipated that all programme waters could be sufficiently supplied with young salmon which has priority over imported material (Action A1). A genetic monitoring programme has been launched by the ICPR to assign returning adult salmon to their 'home' hatchery and thereby identify the most promising stocking strategies. Almost all hatcheries in the Rhine basin participated in a pilot sampling campaign

that was conducted in the winter of 2016/2017 and the programme will be further developed in 2017. (Action A2).

Questions for written response prior to the 2017 Annual Meeting:

1. *What is the estimated harvest of salmon in the Dutch fisheries and are there any proposals for measures to eliminate these harvests in the gill net fisheries close to the shore near the Haringvliet sluices (Action F1)?*

European Union - Ireland, CNL(17)37

The Implementation Plan identifies ten proposed actions all of which are on-going. As previously reported by the Review Group, the precise activities that are planned for some actions are unclear making it difficult to evaluate the progress made. Nevertheless, the APR provides clear and comprehensive reports on progress to address actions in 2016 with useful quantitative data to demonstrate progress on a number of actions.

The APR indicates that Ireland faces major challenges to achieve water quality targets set for 2021 and 2027 as required under the Water Framework Directive. A new Protocol for Standard Design of Marine Fin Fish Farms was introduced to standardise an improved design process for marine fin fish installations and will apply to all new and renewal licence applications.

Actions related to management of salmon fisheries: Enforcement activities related to illegal fishing are well described for 2016 including man hours spent (188,404), protection patrols undertaken (31,180), number of nets seized (301), number of Fixed Charge Notices issued (160) and number of prosecutions (66). In 2017, it became apparent that the powers to prosecute offences under the Fisheries Acts had not been transferred from the former Central and Regional Fisheries Boards to Inland Fisheries Ireland in 2010. Amending legislation is being prepared. Those found in contravention of the acts in the interim period can, however, be prosecuted once the amending legislation is in place (Action F1). Efforts are being made to improve catch reporting through the use of national carcass tagging and logbooks. In recent years, all commercial salmon fishermen have made a catch return. The percentage of recreational fishermen that reported in 2016 was 68.6% compared to 70.5% in 2015 and 2014. All anglers who do not return logbooks are written to and a proportion taken to court; an electronic licence application system is in place (Action F2). A national reporting mechanism for fish counter data and validation has been in place since 2014. Information from 31 counters (an increase of 10 since 2011 but one less than in 2015) was used to inform the 2017 assessment (Action F3).

Actions related to habitat protection and restoration: The APR indicates that Ireland faces major challenges to achieve water quality targets set for 2021 and 2027 as required under the Water Framework Directive. The target for 2015 has not been met. A State of the Environment report indicates that there has been no overall improvement in water quality over the first river basin cycle and improvements are required at 50% of rivers, lakes and estuaries that are impacted by pollution with agricultural sources accounting for 50% of pollution cases. The main success has been the virtual elimination of seriously polluted river sites but only 21 river sites were classified as having the highest quality compared to 575 between 1987 and 1990. The second round of River Basin Management Plans (RBMPs) were published in 2016 and the Irish Government has established a new structure with responsibility for various tasks in developing and implementing the next cycle of RBMPs (Action H1). The Forestry Act passed into law in October 2014 and a GIS-based management system is being used to ensure that forestry activities are approved only following detailed environmental consultation. In 2016, the HYDROFOR project report was published. This project investigated the relationship between forestry operations and water quality and ecology and the findings will inform the development of programmes of measures under the Water Framework Directive. Environmental requirements for afforestation were published in 2016 which updated the mandatory requirements for new afforestation and consolidated existing environmental guidelines (Action H2). Efforts to improve waste water treatment are ongoing and in recent years 81 waste water projects have been completed with 25 projects currently in progress. Further sustained investment is required. A 2016 report from the Environment Protection Agency sets out compliance status and identifies the key national

priorities that require solution, including 45 urban waste water schemes linked with river pollution, untreated waste water discharge from 43 areas in rivers, estuaries and coastal waters and reduction in the number of sites where bad ecological status was attributable to waste water from 9 in 2009 to 1 in 2015. Published information shows that the initial failure rate of domestic treatment systems was 48% but 79% of these systems are now compliant and 1,000 inspections are planned annually in 2015 - 2017 (Action H3). The APR indicates that stringent action is being taken by the Irish authorities to enforce Treatment Trigger Levels (TTLs) for sea lice, including accelerated harvests and early fallowing of sites, but no quantitative information has been provided (Action H4).

Actions related to aquaculture and associated activities: The APR indicates that in 2016 only two fish were identified as escapees during screening for coded wire tags and no escapees were reported from broodstock recovery programmes in seven rivers. In 2016, a new Protocol for Standard Design of Marine Fin Fish Farms was introduced to standardise an improved design process for marine fin fish installations and will apply to all new and licence renewal applications (Action A1). On-farm sea lice monitoring together with alternative approaches to complement husbandry and medicine treatments and rigorous regulatory oversight are reported to have led to improved sea lice levels throughout the Irish salmon farming industry and the APR indicates that sea lice levels have been well managed in 2016 with all of the inspections on smolts and 84% of inspections on one-sea-winter salmon below the TTLs (Action A2). There were no outbreaks of listed diseases in 2016. Phytoplankton and zooplankton blooms and jelly fish swarms were problematic at certain sites during the year (Action A3).

Questions for written response prior to the 2017 Annual Meeting

1. *How representative is the scanning programme for escapees and can information be provided on the number of escape events and the number of escapees from fish farms to support the statement that the level of escapes in Ireland is low (Action A1)?*

European Union - Spain (Asturias), CNL(17)27

The Implementation Plan identifies five proposed actions, and the APR indicates that all of these are on-going. The APR provides very little information on progress in delivering actions to protect and restore stocks. For the evaluation process to work effectively and be fair and equitable, the Review Group will require more detailed reporting on progress against each action in the 2018 APR.

Fishing has been prohibited in estuaries and the sea since 2002. The average level of exploitation by anglers on salmon rivers is estimated at 27.1% and ranges from 7.3% to 46.8%. No catch and release data is provided though salmon over 75cm have to be released at certain periods of the year. Unreported catch is reported as being negligible in rivers and is reported not to occur in estuarine and coastal waters.

Actions related to the management of salmon fisheries: Annual monitoring programmes continue to be conducted in fishing reserves to reduce poaching (Action F1). 'Broodstock' counts have been undertaken to estimate the exploitation rates in fisheries. A fish counter has been installed at Caño on the Sella River and in 2016 operated from 21 March to 1 August. Salmon over 75cm have to be released during certain periods of the year (Action F2).

Actions related to habitat protection and restoration: An annual programme of cleaning and maintenance of fish ladders in mini hydroelectric plants and removing obstacles impeding the upstream movement of salmon has been completed for 2016. Observations of 'broodstock' indicate which obstacles are passable (Action H1). In 2016, further lectures were given to heighten awareness of the fragility of salmon in the region (Action H2). An up-to-date inventory of river obstacles that impede passage in the river network has been completed (as reported in 2015) (Action H3). Very little information is provided to allow progress on Actions H1, H2 and H3 to be assessed.

Actions related to aquaculture and associated activities: There are no actions relating to aquaculture in the IP.

Questions for written response prior to the 2017 Annual Meeting:

1. *Given the fragility of salmon stocks at the southern edge of their range and the level of angler exploitation, what measures are being taken to promote catch and release fishing and what is the current estimated level of catch and release (Action F1)?*

2. *Given the fragility of salmon stocks at the southern edge of their range, what actions are being taken to mitigate the impact of climate change (Action H2)?*

3. *Have any measures been put in place to optimise the downstream migration of smolts notably past hydropower stations (Action H3)?*

4. *Has an assessment been made of the effectiveness of the on-going stocking programme?*

European Union - Spain (Cantabria), CNL(17)36

The Implementation Plan identifies 10 proposed actions and the APR indicates that three of these are on-going and seven have not yet started. The APR provides very little information on the progress to address the on-going actions in 2016 and the Review Group is concerned to know when work will begin on the seven actions that have not yet started. For the evaluation process to work effectively and be fair and equitable, the Review Group will require more detailed reporting on progress against each action in the 2018 APR.

There are no salmon fisheries in the sea. Two fish are reported to have been caught and released by anglers in 2016 (approximately 1.82% of the catch). Unreported catch is estimated to be zero.

Actions related to the management of salmon fisheries: The APR states that no work has started on actions to reduce exploitation of MSW salmon (Action F1), to promote catch and release (Action F2), to develop conservation limits and management targets (Action A3) and to estimate exploitation levels (Action F4). However, the opening of the fishing season was again delayed in 2016 (Action F1). From the 2016 season, both salmon retained and released are counted in terms of the quota for each fisherman and TAC for each salmon river in order to avoid fishermen continuing to release fish until they catch a larger specimen. Only two fish were released in 2016, representing 1.82% of the catch (Action F2). Sampling of smolts and juveniles is continuing in an index river but no estimates of marine survival have yet been obtained (Action F5).

Actions related to habitat protection and restoration: Maintenance work on existing fish passes continues to be carried out (Action H1). Four projects are underway to install gratings at the entrance and exits of hydropower facilities but progress has been limited (Action H2). Work has not started to provide appropriate river flows by implementing sustainable abstraction programmes (Action H3) and to develop integrated catchment management plans to reduce land-use impacts (Action H4).

Actions related to aquaculture and associated activities: Work has not started on the planned action to regulate salmonid stocking by implementing and enforcing existing and proposed new stocking programmes (Action A1).

Questions for written response prior to the 2017 Annual Meeting:

1. *All the actions in the IP are scheduled to be completed by 2018. What steps are being taken to commence progress on actions F1, F2, F3, F4, H3, H4 and A1?*

European Union - Spain (Galicia), CNL(17)28

The Implementation Plan identifies eight proposed actions, and the APR indicates that work is on-going on six of these and has not started on the remaining two. The APR provides very little information on progress on delivering other actions. The Review Group is concerned to know when work will begin on the remaining actions to protect and restore stocks. For the evaluation process to work effectively and be fair and equitable, the Review Group will require more detailed reporting on progress against each action in the 2018 APR.

Reporting of the salmon that are caught and released is not mandatory in Galicia. About 7.5% of the licenses issued for salmon fishing in 2016 were for catch and release fishing but some fishermen practice catch and release with other kinds of license. It is estimated that in 2016 a minimum of 30 salmon out of a total of 204 salmon caught were released (14.7%).

Actions related to the management of salmon fisheries: Action F1 to establish Conservation Limits for the Eo, Ulla, Masma, Mandeo and Lérez rivers has not started (Action F1). Representatives of the Galician government participated in the annual meeting for the development of fishing rules for the fishery in the River Miño. As part of the NASCO Smoltrack project the survival of smolts was studied on the River Tea, the main tributary of the River Miño. (Action F2). A ban on natural baits for trout or sea trout was again rejected by fishermen in waters other than 'salmon waters' and there is an objection to increasing the extent of these waters in order to protect salmon. The APR recognises that more work is needed to increase awareness of the benefits of this type of regulation in protecting salmon (Action F3). No parr were available for stocking the River Sor in 2016. An evaluation of fish passage on the River Anllóns suggested that it was not worth continuing with the stocking programme (Action F4).

Actions related to habitat protection and restoration: The implementation of guidelines for the management of riparian vegetation in order to control river temperatures has not yet started (Action H1). Implementation of the WFD requires that all rivers achieve 'good ecological status'. The APR indicates that the Rivers Anllóns, Xubia and Miño just achieved 'moderate status' with some tributaries being in the 'bad status' category. No details are provided of actions to improve the status of these rivers (Action H2). No information is provided on the implementation of compensation flows and the APR indicates that there has been no reporting as required in River Basin Plans (Action H3). The construction of a fish pass on the River Sor and the removal of a barrier on the River Mandeo are under investigation. The presence of fish being held up at the Corcoesto Dam on the River Anllóns indicates that a fishway is urgently required (Action H4).

Actions related to aquaculture and associated activities: There are no actions relating to aquaculture in the IP.

Questions for written response prior to the 2017 Annual Meeting:

1. *Given the fragility of salmon stocks at the edge of their range, what measures are being taken to establish conservation limits (Action F1) and implement guidelines for the management of riparian vegetation in order to control river temperatures (Action H1)?*

2. *What alternatives to stocking are being implemented to enhance salmon stocks on the in the Rivers Mandeo, Xubia and Mera and to re-introduce salmon to the Rivers Sor, Anllóns and Eume and are stakeholders involved (Action F4)?*

3. *Has a programme of work been established to enable the Rivers Anllóns, Xubia and Miño to achieve good ecological status (Action H2)?*

European Union - Spain (Navarra), CNL(17)29

The Implementation Plan identifies six proposed actions, and the APR indicates that two are completed, two are on-going and two are yet to start. Where actions are on-going, the APR provides quantitative information on the progress made. The Review Group is concerned to know when work will begin on the remaining two actions.

In 2016 the annual catches were below the TAC and the MSW protection measures were applied with the angling season closed in the second week of July. There are no fisheries in estuaries or the sea, there is said to be no unreported catch and catch and release is considered to be uncommon. Through the LIFE IREKIBAI project (LIFE14 NAT/ES/000186) three fishways have been evaluated and two dams have been removed.

Actions related to the management of salmon fisheries: Work has not yet started on the development of conservation limits due to lack of funding (Action F1). Data for stock assessment was collected in 2016 with including biometric data collected from both rod caught salmon and salmon caught in a trap, monitoring of juveniles and redd counting. Smolt trapping was not possible due to previous flood damage to the rotary screw trap. In 2016, according to the tentative limits, the conservation status of the Bidasoa salmon stock remains unfavourable (Action F2). A TAC of 81 salmon was set for the rod fishery in 2016 with a TAC for MSW salmon alone of 28 fish. When 80% (22 fish) of the MSW TAC had been caught, the fishery was closed for one week (Action F3). Broodstock collection and fry and autumn parr stocking have been undertaken on the Bidasoa river and its tributaries in 2016. All stocked fish are marked (adipose clip) with parr also tagged with coded wire tags that allow the differentiation between the progeny of 1SW and MSW parents (Action F4).

Actions related to habitat protection and restoration: Work to update salmonid mesohabitat maps has not started (Action H1). Through the the LIFE IREKIBAI project (LIFE14 NAT/ES/000186) the first three fishways were evaluated during the 2016/2017 migrtions with the analysis of the data ongoing. Two dams (Endarlatsa and Bera) were removed during the summer of 2016 (Action H2).

Actions related to aquaculture and associated activities: There are no actions relating to aquaculture in the Implementation Plan.

Questions for written response prior to the 2017 Annual Meeting:

1. *Given the fragility of salmon stocks at the southern edge of their range, are steps what measures are being taken to to establish reference limits (Action F1) and salmonid mesohabitat maps (Action H1)?*

2. *Has the success of the stocking programme on the Bidasoa River been evaluated (Action F4)?*

European Union - Sweden, CNL(17)21

The Implementation Plan identifies eighteen proposed actions and the APR provides clear information on the progress made to address the majority of the actions in 2016, three of which are complete and fifteen are on-going. However, there appears to have been no progress on Actions H3 and H5 in 2016.

In 2015, the Swedish Government requested the preparation of a national plan for the future conservation and management of salmon and sea-running brown trout in both the Baltic Sea and the Atlantic Ocean. The plan was delivered in late 2015 but has not yet resulted in any changes in the Implementation Plan. In 2014, a ban was imposed on gill-net fishing for salmon along the coast at water depths >3m. Implementing actions and control has been undertaken in 2015 and 2016 resulting in no mixed-stock fishing on the coast. In 2013 and 2016, despite weak spawning runs due to impaired sea survival, the electrofishing monitoring has shown an increase of fry (0+) and parr (>0+) over the period 2012 - 2016.

Actions related to management of salmon fisheries: Legal commercial fishing for salmon on the coast has been prohibited since 2014 and catches were insignificant in 2016, with only occasional catch of salmon in gillnets by non-commercial fishermen. Catch and release in rivers increased to 18% and in individual rivers a maximum legal size was imposed. There is a bag limit of two salmonid fish in sport fishing on the coast. It is estimated that the bag limit will result in practically no fishing mortality for salmon in sport fishing in the sea (Action F1). The APR indicates that mixed-stock fisheries on the coast are 'trifling'. However, there is still a mixed-stock (reared and wild fish) fishery in the two major rivers; the proportion of wild fish caught as 'by-catch' is estimated to be 2% in the River Lagan and 25% in the Göta älv (Action F2). Fin clipping of reared salmon and trout has continued in 2016 and allows wild and reared salmon to be distinguished. During the period 2000 - 2016 the average number of marked reared salmon smolts released annually has been approximately 170,000. (Action F3). A genetic baseline has been completed for 18 of 23 salmon stocks and a report will be published in late 2017 (Action F4). The efficiency of the traps in the index River Ätran have been evaluated and the results have been used to establish Biological reference points (Action F5). Conservation limits and Management Targets have been set for the index river and a process for transporting these to other rivers has been developed (Actions F6). Data on in-river exploitation has been gathered for the index river over the period 1985 - 2016 but reporting of fishing effort data for other rivers is not required under Swedish legislation (Action F7). In 2017, a new project will be launched in an effort at increasing reporting of non-commercial catch data. Reporting of catch statistics is compulsory for commercial fishermen (Action F8). While there has been no national action on reducing over-exploitation of MSW fish in rivers through restrictions on landing large fish, voluntary restrictions have been implemented in some rivers (Action F9). The number of sites being monitored for salmon parr recruitment had decreased in recent years but it is planned to increase monitoring to 20 sites in 2017 to reverse this trend. (Action F10). Fish management units have already been formed in many rivers but a need for management units in smaller rivers and in some parts of the larger rivers has been identified. Information exchange and discussions with river managers and land owners are on-going. The catch of salmon in rivers without management units is generally low (Action F11).

Actions related to habitat protection and restoration: All salmon rivers and their tributaries with salmon that require liming are presently included in a liming program. Generally, the goal of keeping pH above 6 and labile aluminium at non toxic levels has been achieved (Action H1). A report on compiling the findings of habitat surveys indicates that available habitat has increased by

16% since 1991 mainly due to new fishways, liming operations and habitat improvement (Action H2). A plan for continued habitat restoration in salmon rivers started in 2015 but no report on progress was provided for 2016 (Action H3). Criteria for best available technology (BAT) for hydropower generation were established in 2015 (Action H4). Work in establishing criteria and a work plan for surveillance of hydropower plants requires action (Action H5).

Actions related to aquaculture and associated activities: Annual monitoring of rivers for the presence of *G. salaris* was undertaken as planned. During 2015, the River Rolfsån in Halland County became infected and is being monitored. Measures have been undertaken to avoid spreading the parasite, e.g. a ban on stocking salmonid fish in the catchments of uninfected rivers. A report on the presence of *G.salaris* in Swedish rivers was compiled in February 2017 (Action A1). Alien (escaped) salmon have been collected and will be evaluated when the development of the baseline (Action F4) is published in 2017 (Action A2).

Questions for written response at the 2017 Annual Meeting:

1. *Are there plans to revise the legislation to require reporting to allow in river exploitation levels to be established for rivers other than the index river (Action F7)?*

2. *The APR indicates that the Swedish authorities consider G.salaris to be a great threat to salmon stocks. In the light of the spread of G.salaris to a new river in 2015, are there plans to increase monitoring and take additional measures to prevent the further spread of the parasite (Action A1) ?*

European Union - UK (England and Wales), CNL(17)31

The Implementation Plan identifies 12 proposed actions, a number of which are divided into sub-headings. The APR provides clear and comprehensive reports to address the topic areas covered by each action, all of which are on-going with three actions completed for the year.

A five-point approach (5PA) has been jointly developed which sets out high level commitments to restore England's salmon populations. The work is focused in five areas: improving marine survival; further reducing exploitation by nets and rods; removing barriers to migration and enhancing habitat; safeguarding sufficient flows; and improving water quality. Natural Resources Wales is examining options to reduce exploitation and is considering mandatory catch and release in rivers in the worst risk categories. In the interim, fishermen have been asked to introduce their own voluntary measures to ensure no salmon are killed in 2017. Natural Resources Wales is seeking to develop a new research initiative to investigate the effects of extreme winter climate on salmonid spawning and examine options for mitigation.

Actions related to management of salmon fisheries: An annual assessment of the status of salmon stocks was completed for 2016 and will be reported to ICES and published (Action F1). No Net Limitation Orders (NLOs) were renewed in 2016, but 12 are due for renewal in Wales in 2017. A catch condition limiting each licensee to a maximum catch of 10 salmon was introduced for the Solway haaf net fishery to protect salmon stocks. Catchment-wide mandatory catch limits were introduced on the Rivers Leven and Crake to restrict the number of fish taken. Discussion are underway under the 5PA initiative to review the need for further controls on exploitation. A stock assessment workshop was held and a number of improvements to existing measures were identified (Action F2). Actions F3a (implement new regulatory measures for the Severn Estuary MSF) and F3b (review and amendment of the 10-year NLO for the Anglian MSF) were completed in 2014 and 2015, respectively. The review of the NE coast beach net fishery is due to be completed in 2017 (Action F3c). Recent genetic studies confirm that the beach and drift net fisheries in Northeast England exploit salmon from rivers in Scotland (47%) as well as England (53%). Efforts to promote catch and release fishing include production of a video on how to play, handle and release salmon and a introduction of a voluntary carcass tagging scheme in the Rivers Ribble and Eden. In Wales, catch and release has been promoted through press releases and in discussions with local fishery groups. Catch and release has increased from 10% in 1993 to a provisional estimate of 80% in 2016 with further increases in rates anticipated under the 5PA initiative (Action F4). Efforts aimed at disrupting illegal fishing continued in 2016 with information provided on prosecutions in 2016 (Action F5).

Actions related to habitat protection and restoration: A climate change adaptation plan continues with over 15,000 trees planted in 2016. Measures included in the second cycle River Basin Management Plans (2015 - 2021) are designed to increase resilience to climate change. Natural Resources Wales has developed Prioritised Improvement Plans for all Natura 2000 sites in Wales and Thematic Plans produced identifying strategic actions to address issues including climate change. Thermal standards have been produced for transitional and coastal waters (Action H1). Progress in re-connecting salmon habitat continued in 2016 with improved access for salmon to 555km of river in England and improved access to about 700km of river in Wales. Natural Resources Wales has begun a 5-year programme to improve access and habitat for salmon as an alternative to mitigation stocking. New regulations to enhance powers to require fish passage and screening improvements are under development in England. Three reports related to hydropower impacts were published (Action H2). Under the Restoring Sustainable Abstraction Programme, 271 unsustainable abstraction licenses have been changed in England and a further 158 will be

modified by 2020, 16 of which relate to salmon rivers. In Wales, around 35 abstraction licenses have been modified or revoked and a further 10 will be modified by 2020. Implementation of Abstraction Reforms under the Water Bill is expected by 2020 (Action H3). A number of actions have been taken concerning integrated catchment management including investigating the sources of sediment, stakeholder engagement, priding advice to land managers, encouraging uptake of incentive schemes, pollution prevention campaigns and improving soil protection, making use of local partnerships and reviewing Good Agricultural and Environmental Condition. Progress includes: investigations and wet-weather walk-overs continue to target measures to tackle diffuse water pollution; more than 1,500 organisations are engaged with the catchment based approach nationwide; Natural Resources Wales provides a publicly available on-line mapping facility ('Water Watch Wales') for users to identify the WFD status of Water Bodies; a trial to better manage conflicts between fisheries and fish-eating birds was successful and funding secured to support two Fishery Management Advisers; Catchment Sensitive Farming advice has now been given to 19,995 farm holdings; by December 2016, the Countryside Stewardship scheme in England had 2,987 live agreements; the Angling Trust Save Our Salmon campaign highlighted agricultural pollution as a key concern, along with predation by fish-eating birds; the five-year £20million 'Unlocking the Severn' project aims to re-open the UK's longest river to all fish species; announcement of a £15m Natural Flood Management Programme; and Salmon and Trout Conservation UK is continuing its investigation into the state of fly life (Action H4).

Actions related to aquaculture and associated activities: As previously reported, the Environment Agency in England no longer permits stocking of salmon into rivers that are Special Areas of Conservation (SACs) where salmon is a qualifying feature. Natural Resources Wales ended the stocking of salmon and sea trout (as reported in 2015); alternatives being used include work to resolve barriers to migration and sub-optimum habitats (Action A1). A suite of activities designed to stop the introduction and spread of non-native species is described in including monitoring for *Saprolegnia* fungal infections which were less prevalent in 2016. Monitoring is also ongoing for Red Vent Syndrome. A Precautionary Approach is taken with regard to proposals to farm non-native species where these might pose a risk to native salmonids. Monitoring for *Gyrodactylus salaris* occurs on wild fish because of the low number of farms in England and Wales. In 2016, a novel non-destructive method for sampling wild salmonids was introduced. Biological control is being used including in relation to water fern. To increase awareness, an Invasive Species Week was organized in 2016 and involved 160 organisations. A European Piscicide Working Group has been formed (Action A2). Application of discharge controls for prohibited substances and associated research on the effects of contaminants from fish farms on wild salmon populations are ongoing. In 2016, preliminary figures indicate that 330km of river have been improved including through 15 schemes to reduce sediment, 8 to reduce phosphate, 29 to manage diffuse pollution and 10 to manage point source pollution. The equivalent statistics are available for Wales. There have been no new investigations into contaminants from fish farms but previous studies did not identify a component of the effluent responsible for specific impacts so the implications for wild salmonids remain unclear (Action A3).

Questions for written response prior to the 2017 Annual Meeting:

1. *What is the timeline for the delivery of new fish passage regulations (Action H2)?*

European Union - UK (Northern Ireland), CNL(17)34

The Implementation Plan identifies eleven proposed actions ten of which are on-going (with five completed for the current year) and one of which has been completed and is reported to have achieved its objective. As previously reported by the Review Group, the precise activities that were planned are unclear (with some descriptions of actions reading like progress reports) making it difficult to evaluate the progress made. Nonetheless, the APR provides generally clear and comprehensive reports to address the topic areas covered by each action. The Review Group welcomes new information provided on sea lice levels at the one salmon farm in Northern Ireland. The Review Group welcomes the commitment to update the Implementation Plan, by 1 December 2017, in response to its comments.

All primary rivers have now been surveyed for salmon habitat and CLs established on them. Commercial salmon fisheries no longer operate in Northern Ireland. Legislation is now in place across Northern Ireland which restrict recreational harvest to only rivers meeting their management targets. Returns of salmon, particularly one-sea-winer salmon, showed considerable improvement in the DAERA area in 2016 e.g. on the largest river (the Lower Bann) returns represented a 20-year high.

Information on catch and release is only provided for the DAERA area and only as a percentage rather than number and percentage.

Actions related to management of salmon fisheries: Commercial fisheries in both the DAERA area and Loughs Agency area are currently closed and river stocks contributing to the fisheries would need to meet their MTs consistently before consideration would be given to allowing fishing activity. Similarly, recreational harvests are only permitted on rivers meeting their MTs with catch and release in rivers in which MTs are not achieved. In 2016 only 3 rivers in the DAERA area were open for harvesting while in the Loughs Agency area all rivers except the Finn were open (Actions F1 and F2). No exploitation of MSW stocks is permitted in the DAERA area irrespective of whether rivers are meeting their MTs with compulsory catch and release prior to 1 June. In the cross-border River Melvin exploitation of MSW fish is controlled by an annual allocation of tags based on the harvestable surplus. In the Loughs Agency area, MSW harvest is limited to catch and release in the River Finn, the main fishery for MSW salmon and is limited by a maximum allocation of 5 tags per angler elsewhere (Action F3). Fishery enforcement activities are carried out in both the DAERA area and the Loughs Agency area (Action F4), with quantitative information provided (e.g. no detections of illegal catches in the DAERA area and 33 successful prosecutions in the Loughs Agency area in 2016).

Actions related to habitat protection and restoration: Assessment of the impacts on fisheries of hydropower applications continued in 2016 with 12 applications reviewed and fisheries advice provided. A higher Q value is required in salmonid rivers during abstraction. An assessment of the impacts of water abstraction on fish densities has commenced (Action H1). Fisheries advice was provided on several proposed drainage projects to ensure protection of fish stocks in 2016. In addition, habitat enhancement projects were carried out on 4 rivers in 2016 (Action H2). Monitoring in relation to pollution or waste disposal continued with inspections conducted at 278 farms in 2016. In addition, more than 1,800 investigations were conducted in relation to incidents of water pollution. A 'Fish Kill' Protocol was developed and introduced in 2016 to allow a co-ordinated response to reported fish mortalities (Action H3). Work to identify barriers to migration has continued and a study of cumulative effects is being written up. A range of habitat improvement and barrier removal/passage works were conducted in 2016 although it remains

unclear if an inventory of connectivity issues throughout Northern Ireland has been completed (Action H4). To reduce illegal alterations to salmon habitat, organised patrols were carried out in both the DAERA area and the Loughs Agency area. Information is presented on the number of applications received and assessed to remove material from the river bed and permission is not granted if there will be a negative impact on fish stocks. However, it is unclear if progress was made in 2016 to improve public awareness of the impacts of the removal of material from the river bed on salmon stocks (Action H5). All primary rivers have now been surveyed for salmon habitat and CLs have been established for them (Action H6).

Actions related to aquaculture and associated activities: An assessment of sea lice levels on wild salmon returning to the River Bush takes place annually and in 2016 91% of the fish had no sea lice, 6% low levels of lice and 3% moderate lice levels. An assessment of the level of genetic introgression in wild salmon from escaped farmed salmon has been completed but a rolling programme is conducted every 3 years with the next report due in 2018. Details of sea lice numbers monitored on farmed stocks are provided (Action A1).

Questions for written response prior to the 2017 Annual Meeting:

1. *What level of resources is available to detect illegal fishing activities in both the DAERA area and the Loughs Area (Action F4)?*

2. *Has an inventory of connectivity issues throughout Northern Ireland been developed and if not when is this expected (Action H6)?*

European Union - UK (Scotland), CNL(17)32

The Implementation Plan identifies 11 proposed actions, a number of which are divided into sub-headings. In 2016, the Review Group requested more detailed reporting on progress against each action in the 2017 APR. While this request was partially met, much of the 2017 APR remains unclear and relies on web links and publications. For the evaluation process to work effectively and be fair and equitable, the Review Group will require more detailed reporting on progress against each action in the 2018 APR.

The Scottish Government introduced a series of legislative measures to manage exploitation in 2016 to ensure harvesting is sustainable and does not damage vulnerable stocks or the network of Special Areas of Conservation. The killing of salmon in inland waters is managed on an annual basis with mandatory catch and release introduced for those districts (or rivers) where stocks are below their conservation limits. During 2016, refinements were made to the annual assessment model to allow the 2017 assessments to be made at the river level where data are available.

The APR does not provide the catch data requested; the reasoning for this has previously been explained.

Actions related to management of salmon fisheries: A public consultation on the draft legislation to take forward Wild Fisheries reform, took place in 2016 (Action F1a) and an analysis of the value of wild fisheries in Scotland was published (Action F1b), but no details are provided, other than through weblinks. Fisheries management plans have been developed through the Wild Fisheries Reform process and a conservation plan template has been developed and distributed to local fisheries managers in order to identify pressures and proposed responses (Action F2a). A review of the salmon counter network and prioritisation of actions is underway with the priority being the potential for counters on SAC rivers. A PIT detector system is being installed in the River Awe to enhance interpretation of data from the existing counter (Action F2b). Action F3a appears to duplicate Action F2b. Historic data relevant to the nature of MSFs is being prepared for analysis and tracking of smolts from several rivers and development of a smolt dispersal model are underway to better understand marine migration routes (Action F3c). Action F4 seeks to improve salmon fisheries and enforcement and reduce illegal fishing. A new Working Group has agreed revisions to enforcement provisions and is considering the introduction of a national intelligence database (Action F4a). Carcass tagging for net caught fish in category 1 and 2 areas was introduced in 2016 (Action F4b). Implementation of a monitoring strategy for marine renewable energy projects is on-going together with projects to support the aims of the overall strategy e.g. trialing a trawl incorporating video recording and PIT tag detection (Action F5a). The Independent Consenting Review of Scottish Aquaculture was published in July 2016 and an Aquaculture Industry Leadership Group was established. A new sea lice management policy is being implemented (Action F5b). The SARF project remains ongoing (Action F5c). Voluntary industry-led publication of quarterly lice data continues (Action F5d). Sensitivity maps for aquaculture sites are being developed based on conservation status of wild salmon and the potential distance of influence of sea lice (Action F5e). An improved modeling tool for discharge consents has been launched (Action F5f). A report has been published on the Scottish Shelf Model that should inform sea lice dispersal projections (Action F5g). Links to websites are provided for Actions F5h and F5i but no summary information has been provided.

Actions related to habitat protection and restoration: Action H1 describes a broad suite of activities under Scotland's Climate Change Adaptation Plans. In 2016, a temperature monitoring network was implemented including spatial modeling components to highlight sensitive areas.

National temperature predictions and planting opportunity maps are being produced. Riparian tree planting has been carried out but no quantitative information provided A barrier assessment programme is underway with five barrier removal projects completed in 2016. Options development and design has commenced for 8 barriers, design has been completed for two barriers and 29 scoping studies undertaken (Action H2). Action H3 seeks to ensure provision of appropriate flows. The transferability of hydraulic habitat models has been assessed and models produced that can be applied to salmon fry. Research and reviews are ongoing in relation to implementing the RBMP process and issue of CAR licences for abstraction but no details are provided. An integrated catchment management approach is being conducted to reduce the impact of land use with farm visits in priority catchments and ~100% compliance with guidance in a number of these catchments but quantitative information is lacking (Action H4).

Actions related to aquaculture and associated activities: Scotland continues to regulate stocking of fish in its waters with 391 licenses issued in 2016 (Action A1). Progress on action A2 (implementation of EC Council Regulation 708/2007 concerning Use of Alien and Locally Absent Species in Aquaculture and encouraging water users to remain vigilant to the risks of non-native species and pathogens and report sightings) remains unclear although the *G. salaris* contingency plan is being updated. Action A3 is intended as a wide-ranging action concerning the implementation of the Aquaculture and Fisheries Act of 2013. The APR indicates that the Ministerial Group for Sustainable Aquaculture seeks to ensure that any growth of aquaculture in Scotland is sustainable but no further details are provided other than a reference to Action F5b.

Questions for written response prior to the 2017 Annual Meeting:

1. *Can additional information be provided in relation to the carcass tagging programme for rivers in category 1 and 2 areas (Action F4b)?*

2. *In seeking to ensure that growth of the aquaculture industry is sustainable, what measures are being taken to protect wild salmon and achievement of the international goals for sea lice and escapees set out in the NASCO Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks (Action F5b and Action A3)?*

3. *What mechanism exists for engagement with wild salmon interests regarding the establishment of the Aquaculture Industry Leadership Group (Action F5b and Action A3)?*

4. *How will the redefining of satisfactory measures under the new sea lice management policy and the accompanying enforcement regime ensure the protection of wild salmon and achievement of the international goals for sea lice set out in the NASCO Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks (Action F5b)?*

5. *Action A3 is reported to have been completed. Have the expected outcomes been achieved and, if so, please provide details (Action A3)?*

6. *The Review Group considers that all Parties and jurisdictions with salmon farming should have presented quantitative data in a transparent manner in their Implementation Plans as a baseline for demonstrating progress towards meeting the international goals for sea lice and containment set out in the NASCO Guidance on Best Management Practices to Address*

Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks. Summary data are requested to provide the baselines for Scottish salmon farming facilities.

Norway, CNL(17)25

The Implementation Plan identifies 12 planned actions and all are on-going. The APR provides a clear report on measures to address them in 2016, although the Review Group has identified some questions for clarification.

In 2016, 104 salmon populations were classified according to the National Quality Norm for Wild Salmon. Management targets, based on spawning target attainment alone, were achieved for 82 of the 104 classified stocks in the period 2010 - 2014. However, only 23 of the 104 stocks were classed as good or very good quality, 29 stocks were of moderate quality and 52 stocks were classified as poor or very poor. Forty-five stocks did not reach the goal for Conservation limit attainment and 68 stocks did not reach the goal according to the Genetic Integrity Dimension. Overall, quality status for 36 stocks was determined by influences from farmed salmon. For 32 stocks, the status was worse than good for both dimensions. An action plan is being developed with the goal of improving the status of the stocks.

National fishing regulations were revised in 2016. A new agreement for a revised management regime for the River Tana has been approved by the parliaments of both Norway and Finland.

Actions related to management of salmon fisheries: In 2016, out of 186 salmon stocks with sufficient information, management targets were achieved in 87% of stocks. In response to the scientific advice, new regulatory measures were introduced for sea and river fisheries in 2016 (Action F1). An increasing number of rivers were subject to mandatory mid-season fishery assessments in 2016. An evaluation revealed that very few managers initiate pre-agreed measures when the assessments indicate immediate angling restrictions are required and adjustments are needed (Action F2). In 2016, a workshop was held reviewing all the spawning targets in Nordland County. A report describing progress on a new method to calculate spawning targets is in process (Action F3). A new agreement on a revised management regime for the River Tana has been approved in 2017 by the parliaments of Norway and Finland (Action F4).

Actions related to habitat protection and restoration: Twenty-two rivers are now included in the national liming programme which cost NOK45 million (approximately £4 million) in 2016. Salmon stocks have been re-established in limed rivers and account for 10 - 14% of total salmon catch in Norwegian rivers (Action H1). Revisions of licence conditions and rules of operations for hydropower plants were addressed in 5 river systems in 2016 (Actions H2). The road authorities have removed 22 migration obstacles for salmon and sea trout in 2016 and future measures to mitigate obstacles have been prioritised (Action H3). In two rivers in Central Norway, migration barriers caused by erosion protection were replaced by small weirs and ponds in four tributaries (Action H4).

Actions related to aquaculture and associated activities: Growth or reduction in salmon aquaculture production is now regulated within each of the designated production areas with reference to the effects of sea lice on wild salmon stocks. Research on, and modelling of, how sea lice from salmon farms affect wild salmonids was refined in 2016 (Action A1). In 2016, the aquaculture industry removed 521 farmed fish from 37 salmon rivers to reduce the risk of genetic interaction with wild stocks. Research on sterile farmed salmon is on-going to reduce genetic and ecological threats to wild salmon populations and several commercial salmon farmers have started using triploid fish in 'green' salmon farm licenses. The national programme for monitoring escaped salmon is on-going and a field handbook, standardising the various methods used in the programme, was developed in 2016 (Action A2). Efforts to combat the parasite *G. salaris* in five

infected rivers in the Rauma region started in 2014 and these rivers will be monitored for a 5-year period. The two infected rivers in the Skibotn region were treated in 2015 and 2016. The building of a long-term fish barrier in the River Driva began in 2016 (Action A3). A surveillance programme has been established to identify self-sustaining pink salmon populations in rivers in Finnmark County and removal efforts to reduce the extent of spawning were carried out in 2016 (Action A4).

Questions for written response prior to the 2017 Annual Meeting:

1. *What steps have been taken to ensure pre-agreed measures are implemented when mid-season assessments indicate that these are required (Action F2)?*

2. *What level of mortality of wild salmonids is allowed before salmon farm production is decreased and how is this approach consistent with the international goals for sea lice in NASCO's Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks (Action A1)?*

3. *Have the intended public consultation on amendments of the Norwegian Aquaculture Act been undertaken and if so has it resulted in a strengthened legal base for protection of wild salmon and achievement of the international goals for sea lice and containment set out in the NASCO Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks (Action A2)?*

Russian Federation, CNL(17)23

The Implementation Plan identifies nine proposed actions, seven of which are on-going and two (Actions F2 and F4) are completed. The APR provides a clear report on the progress made to address five actions in 2016. Little information is provided to demonstrate progress on Actions F1, H2, A1 and A2. For the evaluation process to work effectively and be fair and equitable, the Review Group will require more detailed reporting on progress against each action in the 2018 APR.

During the salmon spawning run in 2015, a mass mortality of salmon was observed in the Kola River, Murmansk region, caused by Ulcerative Dermal Necrosis (UDN). In 2016, mortality attributed to UDN was again observed in the Kola River and also in the Tuloma River. However, no closure or restriction of recreational fisheries for salmon occurred in the Kola river and in the tributaries of the Tuloma river system during the 2016 season.

No estimate of unreported catch has been provided for 2016 (as was the case for 2015).

Actions related to management of salmon fisheries: In the Republic of Karelia the best guess-estimate of illegal catches in 2016 was 3 tonnes. No other estimates of unreported catches were available for 2016. In an effort to reduce the level of unreported catch, recreational fisheries for salmon were closed in some remote fishing sites in the Varzuga River for 2016 and catch-and-take fisheries were prohibited in some areas. Protection patrols in rivers, lakes and coastal areas were undertaken to prevent illegal fishing and some recreational and commercial fishing sites hired protection staff (Action F1). A comprehensive genetic baseline has been established through the Kolarctic Atlantic Salmon project (2011 - 2013) and has been used in establishing fishing regulations for anadromous fish (Action F2). Quota allocations for coastal salmon fisheries in the White Sea were made using data on salmon stock contributions to the fisheries. In 2016, 'free migration' periods were established for coastal fisheries in the White Sea. Salmon fisheries have been banned in areas of the Barents Sea and the White Sea to protect migrating salmon. Any fisheries have been banned in estuaries for 0.5km on both sides of outlets of rivers. Other seasonal restrictions have been set for coastal fisheries (Action F2). Conservation limits have been set for salmon stocks in the Murmansk region and were revised in 2016. In the Arkhangelsk region and the Nenets Autonomous Region, conservation limits have been set for exploited salmon stocks. No conservation limits have been established in the Republic of Karelia (Action F3). Clearer legislation was completed in 2015 to manage the fisheries conducted by indigenous small nations of the North. In 2016, salmon quotas were set for Sami communities of the Murmansk region (Action F4).

Actions related to habitat protection and restoration: The carrying capacity of some Barents Sea rivers of the Murmansk region was revised in 2016 on the basis of new data from spawning and nursery grounds mapping. The re-assessment of the carrying capacity of the White Sea rivers of the Murmansk and Archanglesk regions is underway. A study to estimate salmon habitat and productive capacity in the Republic of Karelia is planned (Action H1). General recommendations on habitat restoration were prepared for a number of salmon rivers in the Murmansk region in 2015 and then updated in 2016 but no detailed plans have been developed for specific rivers (Action H2).

Actions related to aquaculture and associated activities: The Federal Law on aquaculture came into force in 2014 and a new amendment was introduced in 2016. No by-law regarding management of sea lice in aquaculture has been developed. However, in accordance with the

current rules on veterinary control, the regional veterinary authority inspect salmon farms quarterly to check for diseases and parasites (Action A1). Veterinary controls for *G.salaris* are applied in aquaculture and new measures are under development. Some recreational fisheries companies in the Murmansk region have started voluntary programmes for anglers to disinfect their tackle, clothes etc. While basic recommendations to prevent the spread of *G.salaris* have been developed, no obligatory measures to prevent the introduction or further spread of the parasite through recreational fisheries have been developed (Action A2). A comprehensive scientific evaluation is required prior to any introduction of aquatic species and no movements originating from outside the North-East Atlantic Commission area of reproductively viable non-indigenous anadromous salmonids or their gametes has occurred in 2016 (Action A3).

Questions for written response prior to the 2017 Annual Meeting:

1. *The Review Group considers that all Parties and jurisdictions with salmon farming should have presented quantitative data in a transparent manner in their Implementation Plans to provide a baseline for demonstrating progress towards the international goals for sea lice and containment in the NASCO Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks. The Russian Federation has not provided these data. Can the results of monitoring and enforcement for sea lice and escaped farmed salmon be provided?*

2. *The APR states the in cases of high sea lice infestation, approved methods are recommended. What are the Treatment Trigger Levels and what remedial actions are taken (Action A1)?*

3. *As the parasite G. salaris has been identified as a threat, what specific veterinary measures have been undertaken to prevent the spread of the parasite (Action A2)?*

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The Implementation Plan identifies twelve proposed actions, all of which are considered to be completed for the year. The APR provides a clear and comprehensive report on the progress made to address all the planned actions in 2016. However, the Review Group has a number of questions for clarification.

In 2016, the US Fish and Wildlife Service and NOAA Fisheries released a draft recovery plan for endangered Atlantic salmon within the Gulf of Maine region. The plan outlines specific approaches to reduce threats to salmon and provides a vision for Atlantic salmon recovery that includes long-term objectives and criteria, research and management actions, as well as time and cost estimates to recover and conserve the species in its native habitats. The status of Atlantic salmon in the United States remains 'dire' with provisional returns of 626 salmon in 2016.

Actions related to management of salmon fisheries: In 2016, the United States continued to play an active role in the work of NASCO including facilitating the sampling of the West Greenland fishery (Action F1). The APR indicates that there are stringent and extensive regulations governing recreational fishing for other species in salmon habitats. Fishing regulations explain that sea-run salmon are federally endangered and cannot be removed from the water. Anglers are also prohibited from retaining landlocked salmon and brown trout above 25 inches in about 40 specific waters to ensure that adult sea-run salmon are not incidentally captured and retained. A comprehensive conservation plan applicable to the entire freshwater range of endangered Atlantic salmon has not yet been developed (Action F2). For 2016, the vessel landing and dealer sales databases were queried and no record was found of Atlantic salmon having been caught. For the observer database, a recent summary report reveals the instance of salmon by-catch to be very limited over the time series (Action F3).

Actions related to habitat protection and restoration: In 2016, 30 additional aquatic connectivity projects were completed in Maine. Over 57km of stream were made accessible as a result of these projects. In Connecticut, one dam was removed in the area that is still actively managed for sea-run salmon. Removal of the Norton Mill Dam opened 17 miles of high quality habitat including areas stocked with salmon fry (Action H1). A summary of the last five years of enforcement actions in Maine pursuant to the Clean Water Act reveals fines totalling approximately US$400,000. There were no new enforcement actions made public in 2016 (Action H2). Consultations continued in 2016 among federal agencies where their activities occur in or near areas where Atlantic salmon Essential Fish Habitat (EFH) is designated. Sixteen conservation recommendations were issued which may include measures to avoid, minimise or mitigate or otherwise offset adverse effects on salmon habitat. In many instances, EFH conservation recommendations are not necessary because project proponents are already proposing best management practices to reduce impacts to the maximum extent practicable (Action H3). Under the Endangered Species Act, the United States has designated critical habitat for Atlantic salmon. NOAA and the US Fish and Wildlife Service conduct consultations with other federal agencies that require all federal agencies to ensure that any action they undertake or fund does not prevent the survival and recovery of endangered Atlantic salmon. In 2016, 55 consultations for projects within designated Critical Habitat were completed and resulted in changes to actions to reduce incidental mortality of endangered salmon (Action H4).

Actions related to aquaculture and associated activities: Monitoring continued regarding compliance with protective measures in place within the US salmon farming industry. The current status of active farm sites in Maine shows all sites are in full compliance with the required permit

conditions. However, in 2016, there were two escape events leading to recapture of two aquaculture escapees in the Dennys River and one in the Penobscot River. Since all of the farmed fish in the United States are genetically marked, authorities were able to determine that the fish were of farmed origin and from which site they escaped. Containment Management System plans are being reviewed with a view to determining if additional measures are required (Action A1). In 2016, Atlantic salmon returning to the Penobscot River were examined for the presence of sea lice and were free of any pathogens of concern (Action A1). In 2015, revisions to the existing fish health guidelines were completed and have been unanimously accepted (Action A2). Broodstock management protocols have been implemented at conservation hatcheries to maintain genetic diversity of the hatchery stock rebuilding program. Estimates of genetic diversity are used to monitor if genetic diversity within seven broodstock populations is being maintained over time. The results of monitoring are presented (Action A3). Many salmon rivers are no longer stocked with exotic species such as brown trout and rainbow trout. There is not yet a comprehensive conservation plan for Atlantic salmon regarding the stocking of salmonids to support recreational fisheries. There is, however, progress in curtailing stocking of non-native salmonids in salmon rivers. For example, in Maine, stocking locations of non-native salmonids will be spatially segregated from areas that are actively managed for Atlantic salmon (Action A4).

Questions for written response at the 2017 Annual Meeting:

1. *How effective is the 25 inch length limit on brown trout and landlocked salmon in protecting sea run salmon (Action F2)?*
2. *Can information on the scale of the by-catch reported to be very limited over the time series be provided (Action F3)?*
3. *Are there any penalties in place when authorities track escaped farmed salmon back to the farm of origin (Action A1)?*
4. *What was the scale of the escape event in 2016 and are the authorities confident that all escaped fish were recaptured (Action A1)?*