



Agenda Item 7  
For Decision

**Council**

**CNL(13)12**

***Report of the Meeting of the Implementation Plan Review Group***



## CNL(13)12

### ***Report of the Meeting of the Implementation Plan Review Group***

***Defra, Smith's Square, London, UK  
12 – 14 March 2013***

*Note: The Review Group met during 12 – 14 March 2013 and completed its initial evaluations of thirteen Implementation Plans. Subsequent work in conducting an initial evaluation of one further plan and in re-evaluating revised plans was conducted by correspondence but this report covers all of the Group's work.*

#### **1. Opening of the Meeting by the Coordinator**

1.1 The Coordinator, Dr Peter Hutchinson, opened the meeting, welcomed members of the Review Group to London and thanked them for agreeing to undertake the important work assigned to the Group. He also thanked Mr Ted Potter (European Union) for arranging for the meeting to be held in the Defra offices. He noted that NASCO was possibly unique among RFMOs in undertaking an in-depth review of progress in implementing its agreements in cooperation with its accredited NGOs. The External Performance Review Panel had endorsed this approach, including the Council's decision to place greater emphasis in the second cycle of reporting on: identification of threats and challenges; the actions to be taken to address these; the expected outcomes; and the approach to monitoring and enforcement. The Council had also highlighted the need to address the specific issues for additional actions identified in the first reporting cycle. The Coordinator indicated that the Review Group had a challenging task because it had been asked to conduct critical evaluations of the Implementation Plans but there was a need to ensure that these were fair and balanced and presented in a diplomatic way. However, he noted that considerable experience had been gained in the first cycle of reviews, and clear guidelines were available for the preparation and evaluation of the plans that would guide the Group's work. He reminded the members of the Group that they had been appointed specifically to represent NASCO, not their Party or Organization, and that the Secretariat's role was to coordinate the work and, although they had been asked to conduct an initial assessment to ensure there were no gaps in the plans submitted, they would not serve as reviewers. In conclusion, he indicated that there was much to do during the meeting but that the Group's findings would play a central role in influencing the actions to be taken over the next five years to conserve and restore the wild Atlantic salmon.

1.2 A list of the members of the Review Group is contained in Annex 1.

#### **2. Adoption of the Agenda**

2.1 The Review Group adopted its agenda, IP(13)2 (Annex 2).

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

- 3.1 The Review Group noted that although no separate Terms of Reference had been provided by the Council, these were contained in the Guidelines for the Preparation and Evaluation of NASCO Implementation Plans and for Reporting on Progress, CNL(12)44, hereinafter the 'IP Guidelines'. These state the following:

*Implementation Plans will be subject to a critical evaluation by a Review Group appointed by the Council. The purpose of the evaluation will be to ensure that, as far as possible, the Implementation Plans provide a fair and equitable account of the actions that each jurisdiction plans to take to implement NASCO's Resolutions, Agreements and Guidelines. Answers to each question in the Implementation Plan template, CNL(12)42, should be assessed as:*

1. *Satisfactory answers/information.*
2. *Unclear or incomplete answers/information.*
3. *Clear omissions or inadequacies in answers/information.*

*Where Implementation Plans include answers in categories 2 and 3 above they will be returned to jurisdictions for modification with clear guidance on the way that the Review Group considers that the Implementation Plan should be improved. These assessments will not be made public at this stage. Re-submitted Implementation Plans will be reassessed by the Review Group to determine whether the areas highlighted have been addressed or a satisfactory explanation of the original content has been provided.*

*Where the Review Group considers that there are still clear omissions or inadequacies in the answers/information provided (category 3), these shortcomings will be listed in their report to the Council. The Review Group will present its evaluation of the Implementation Plans to the Annual Meeting of the Council, highlighting examples of good practice within the Plans. The President will lead the discussions with jurisdictions concerning any outstanding questions about their Implementation Plans and those jurisdictions will have an opportunity to revise their Implementation Plans after the Annual Meeting.*

- 3.2 At its meeting, the Review Group discussed its working methods. In accordance with the IP Guidelines, an initial assessment of each Implementation Plan had been conducted by the Secretariat prior to the Group's meeting. The aim of this limited assessment was to ensure that time was not wasted on a full critical review of Implementation Plans that clearly contained significant omissions. Specifically, the Implementation Plans were checked to ensure that they provided: answers to all the questions except where these were not relevant to the jurisdiction concerned; lists of threats to wild salmon and challenges for management related to the three theme areas; and actions to address the main threats and challenges including measurable outcome(s), the monitoring that will be undertaken to assess the effectiveness of the action and the planned timescale for the action. Following this initial assessment, the Implementation Plans had been distributed to the Review Group and made available on the NASCO website with an indication that these plans were undergoing review and may be subject to change.

- 3.3 Prior to the meeting, a format to assist with the evaluation of the plans had been developed by the Secretariat, CNL40.1485, based on the 27 questions contained in the Implementation Plan template, CNL(12)42. An initial reviewer was assigned to each plan and these initial reviews formed the basis for deliberations by the whole Group and the development of feedback to the Parties/jurisdictions.
- 3.4 The Group agreed on a number of ‘ground rules’ to guide its work in undertaking the reviews, based on those used by the Implementation Plan and Focus Area Review Groups in the first reporting cycle. These were as follows:
- (a) The initial reviewers were asked to lead the discussion within the Group and to produce an initial evaluation of the responses to the questions in the Implementation Plan template and initial suggestions for guidance on the way that the Implementation Plan should be improved;
  - (b) The initial reviewers would remain anonymous in the report and in the event that one or more members of the Group did not agree with a particular aspect or aspects of the review then the report would indicate that there were dissenting views but not disclose which members of the Group expressed the dissenting views unless they wished to be identified;
  - (c) The Group drew on information arising from the first reporting cycle, including the FAR assessments, but commented only on the information presented in the Implementation Plans;
  - (d) Because not all Parties/jurisdictions were represented on the Group, it was agreed that Group member from a NASCO Party/jurisdiction whose Implementation Plan was being reviewed would not be present during the initial review of that Plan;
  - (e) While the Group recognized that the extent of the salmon stocks and the resources available to manage them varies markedly between jurisdictions, the Group took no account of these differences in undertaking its reviews;
  - (f) The Group recognized that in some jurisdictions the responsibility for management of salmon stocks rests with the riparian owners while in others the resource is managed by the public sector. The Group felt that, nonetheless, governments have or should have powers to conserve the resource and it should, therefore, be possible to summarise in the Implementation Plan the management actions that are expected to be taken by the appropriate bodies in the coming years. Such differences were not, therefore, taken into account in reviewing the reports;
  - (g) The Review Group based its evaluations only on the information presented in the Implementation Plans and the assessments from the first reporting cycle, even though it was made aware of other information of relevance to the salmon conservation and management in some Parties/jurisdictions;
  - (h) Following the completion of all the initial evaluations, the Review Group re-examined these to ensure consistency.
- 3.5 The Review Group noted that under the IP Guidelines, any Implementation Plans requiring modification were to be returned to jurisdictions by 1 April with clear guidance on the Review Group’s recommendations for improvements. The Group

agreed to provide its assessments to the Parties/jurisdictions using an agreed template, CNL40.1485. These assessments were not made publicly available.

#### **4. Evaluation of the Implementation Plans**

##### *Focus of new Implementation Plans*

- 4.1 The first Implementation Plans had been developed in 2006/2007 and the first cycle of reporting was completed in 2011. During this period, reports on the actions taken under the Implementation Plans were made through detailed Focus Area Reports, which were critically reviewed, and in Annual Reports. Following a comprehensive review of the strengths and weaknesses of the first reporting cycle, the Council had agreed that Implementation Plans would be the key document in the second reporting cycle but that greater emphasis would be placed on: the actions to be taken over a five year period; clearly identifiable measurable outcomes and timescales; and appropriate monitoring to evaluate the effectiveness of the measures taken. Under the IP Guidelines, the Implementation Plans should *inter alia* apply to all the stocks/fisheries managed within a jurisdiction; apply for a period of 5 years (2013-2018); be clear and concise; draw on information contained in the first Implementation Plans; address the issues on which additional actions were recommended by the FAR Review Groups in the first reporting cycle; and specify the actions to be taken, the timescales for these actions, the expected outcomes and the approach to monitoring and enforcement so that progress can be subject to critical evaluation. To assist the Parties/jurisdictions, the Secretariat had compiled into a single document, CNL40.1420, the issues on which additional actions were recommended by the FAR Review Groups in the first reporting cycle. This document had been made available to the Parties/jurisdictions when the request to submit their Implementation Plans had been sent out in June 2012. It was also made available to the Review Group.

##### *Interpretation of assessments*

- 4.2 A template, CNL(12)42, had been agreed by the Council to assist jurisdictions in developing their Implementation Plans. The Group believed that this template had focused reporting on the key elements in the NASCO agreements and had facilitated evaluation of the new Implementation Plans. Overall, compared to the first cycle of reporting, the new Implementation Plans were clearer, better focused and more succinct. The Review Group emphasises, however, that a score of '1' (satisfactory answers/information) for an answer simply means that a satisfactory answer had been provided and did not indicate that the Party/jurisdiction was necessarily meeting NASCO guidelines or agreements. In some cases, the Review Group assessed a response to a question as being satisfactory even when the response was incomplete, provided that an action had been included in the Implementation Plan to address any major shortcoming.
- 4.3 Under the IP Guidelines, the Review Group was asked to highlight examples of good practice in the plans. The Review Group has developed an overview of responses in the 2013 – 2018 Implementation Plans, IP(13)3 (Annex 3), which summarises the extent to which the responses in the plans submitted for evaluation addressed the questions in the Implementation Plan template, CNL(12)42. It is

hoped that this will assist in identifying where questions were generally well answered and where there were shortcomings.

#### *Timeliness of reporting*

- 4.4 The Council had requested that Implementation Plans be submitted by 1 February, but despite the efforts of the Secretariat in issuing reminders to the Parties/jurisdictions, only seven plans had been received by this date and several plans were received much later (see section 4.6), leaving little time for their evaluation before the Group's meeting. One Implementation Plan (EU – UK (Scotland)) was not received until well after the Review Group's meeting and had been reviewed by correspondence. Under the timetable set by the Council, revised Implementation Plans were due back with the Secretariat by 15 May, and were then reassessed by the Review Group, by correspondence, to determine if the highlighted areas had been addressed or a satisfactory explanation of the original content had been given. Any remaining clear omissions or inadequacies in answers/information in the plans have been highlighted in this report (see paragraph 5.2 below). Given the very limited time available between the re-submission date and the meeting of the Council, the Review Group had asked that the Secretariat issue the Group's initial assessments to the Parties/jurisdictions as soon as possible after its meeting with a request that plans be re-submitted, if possible, no later than 1 May. Most revised Implementation Plans were received after this date, some after the original deadline of 15 May.

#### *Non-reporting*

- 4.5 No plans have been provided by EU – France, EU – Portugal and EU – Spain. It is understood that a Plan will be submitted by EU – France, but not until November 2013, and that initiatives are underway to develop an Implementation Plan for EU – Spain. The Group reiterates the views expressed by earlier Review Groups that if there is to be a complete assessment of whether the management actions being taken around the North Atlantic are in accordance with NASCO's agreements and guidelines, all Parties/jurisdictions need to participate. The development of Implementation Plans and subsequent reporting through Annual Progress Reports is essential. The External Performance Review Panel had also stated in its report, CNL(12)11, that 'Consideration should also be given to how to address failures in reporting. The Parties should be encouraged to report in a timely fashion...'

4.6 In total, the Review Group evaluated 14 Implementation Plans as follows:

<b>Party/jurisdiction</b>	<b>Document number</b>
Canada*	IP(13)15
Denmark (in respect of the Faroe Islands and Greenland)	
<i>Faroe Islands*</i>	IP(13)17
<i>Greenland</i>	IP(13)5
European Union	
<i>Denmark*</i>	IP(13)13
<i>Finland*</i>	IP(13)16
<i>Germany</i>	IP(13)8
<i>Ireland*</i>	IP(13)14
<i>Sweden</i>	IP(13)11
<i>UK – England and Wales</i>	IP(13)9
<i>UK – Northern Ireland</i>	IP(13)10
<i>UK – Scotland*</i>	IP(13)19
Norway*	IP(13)12
Russian Federation	IP(13)6
United States of America	IP(13)7

\* *IPs submitted after the 1 February deadline*

## **5. Development of feedback to the Parties/jurisdictions**

- 5.1 The Group’s assessments of the 14 plans were sent to the Parties/jurisdictions with clear guidance on how they should be modified. Following re-submission of revised Implementation Plans, the Group reassessed these plans by correspondence to determine if the areas highlighted had been addressed or a satisfactory explanation of the original content had been provided. Those Implementation Plans that are now considered to be satisfactory (but see comments under paragraph 5.2 below) are listed in paragraph 5.3 below. Those revised Implementation Plans that still contain clear omissions or inadequacies (scoring ‘3’) have been highlighted in paragraph 5.4 below. For those Parties/jurisdictions that have not yet re-submitted their revised Implementation Plans, clear omissions or inadequacies identified in the plan as originally submitted have been highlighted in paragraph 5.5 below. Those plans that are considered satisfactory have been allocated a Council document number.
- 5.2 The Review Group re-evaluated 12 of the Implementation Plans after they had been revised. In its report, the Review Group was only asked to highlight answers to questions in the revised Implementation Plans that had ‘clear omissions or inadequacies’ (scoring ‘3’) rather than any answers that were ‘unclear or incomplete’ (scoring ‘2’). The Review Group has done so. However, in a number of revised Implementation Plans, the actions detailed are still vague and this will make it difficult for the Review Group to assess progress through the Annual Progress Reports commencing in 2014. Given the Council’s intention that greater emphasis be placed on clearly identifiable measurable outcomes and timescales and appropriate monitoring to evaluate the effectiveness of the measures taken, the Council may wish to consider if it wishes to encourage the Parties/jurisdictions to



further clarify the plans before the 1 September deadline for submitting final plans. Furthermore, some Parties/jurisdictions have not provided further clarification where this was requested by the Review Group but again, the Group was only asked to highlight clear omissions or inadequacies in answers/information in its report so these shortcomings are not evident.

*Satisfactory assessments (but see 5.2 above)*

- 5.3 The Review Group considers that the following Implementation Plans are satisfactory following revision:

<b>Party/jurisdiction</b>	<b>Document number</b>
Denmark (in respect of the Faroe Islands and Greenland)	
<i>Greenland</i>	CNL(13)40
European Union	
<i>Denmark</i>	CNL(13)41
<i>Finland</i>	CNL(13)42
<i>Germany</i>	CNL(13)43
<i>Ireland</i>	CNL(13)44
<i>Sweden</i>	CNL(13)45
<i>UK – England and Wales</i>	CNL(13)46
<i>UK – Northern Ireland</i>	CNL(13)47
Norway	CNL(13)48

*Plans requiring further revision*

- 5.4 The Review Group has identified clear omissions or inadequacies in the following revised Implementation Plans and recommends that these be addressed after the Thirtieth Annual Meeting and prior to 1 September:

**Canada (IP(13)15rev)**

*Question 4.2: What progress can be demonstrated towards the achievement of the international goals for effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild stocks attributable to sea lice?’*

A description is provided on actions being taken, but further information is required on monitoring results to demonstrate whether lice numbers are declining or being maintained at low levels.

*Question 4.3: What progress can be demonstrated towards the achievement of the international goals for ensuring 100% containment in (a) freshwater and (b) marine aquaculture facilities?’*

A description is provided on actions being taken, but further information is required on monitoring results to demonstrate whether the number of escapes is declining or being maintained at low levels.

### **Russian Federation (IP(13)6rev)**

*Question 4.2: What progress can be demonstrated towards the achievement of the international goals for effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild stocks attributable to sea lice?’*

The Implementation Plan indicates that control measures are limited to monitoring and highlights the lack of legislation relating to aquaculture. Information is required on monitoring results to demonstrate whether lice numbers are declining or being maintained at low levels

*Question 4.3: What progress can be demonstrated towards the achievement of the international goals for ensuring 100% containment in (a) freshwater and (b) marine aquaculture facilities?*

A description is provided of actions being taken, but further information is required on monitoring results to demonstrate whether the number of escapes is declining or being maintained at low levels.

*Note: The Review Group notes that the revised Implementation Plan indicates that data on sea lice and escapees is not publicly available in the Russian Federation but it is not clear if the action relating to development of legislation to minimise impacts of aquaculture on the wild stocks will provide for these data to be available in the future.*

### **USA (IP(13)7rev)**

*Question 4.2: What progress can be demonstrated towards the achievement of the international goals for effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild stocks attributable to sea lice?’*

A description is provided on actions being taken, but further information is required on monitoring results to demonstrate whether lice numbers are declining or being maintained at low levels.

*Plans that have not yet been re-submitted after the initial evaluation*

- 5.5 The Review Group identified clear omissions or inadequacies in its original evaluations of the following Implementation Plans that have not yet been resubmitted and recommends that these be addressed after the Thirtieth Annual Meeting and prior to 1 September:

### **Faroe Islands (IP(13)17)**

*Question 2.6: What is the current level of unreported catch and what measures are being taken to reduce this?*

The ICES ACOM report does not present unreported catches by jurisdiction. The Annual Return to NASCO includes an estimate of unreported catch (zero for the Faroe Islands) and this should be provided in response to this question.

*Question 4.2: What progress can be demonstrated towards the achievement of the international goals for effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild stocks attributable to sea lice?*

The Implementation Plan states that Faroese waters are important feeding grounds for wild salmon and one of the most important measures for the Faroese aquaculture industry to protect these wild salmon is the prevention of disease outbreaks. A description is provided on actions being taken, but further information is required on monitoring results to demonstrate whether lice numbers are declining or being maintained at low levels. The Review Group suggests that consideration be given to identifying prevention of disease outbreaks as an action in the Implementation Plan.

*Question 4.3: What progress can be demonstrated towards the achievement of the international goals for ensuring 100% containment in (a) freshwater and (b) marine aquaculture facilities?*

The Implementation Plan states that Faroese waters are important feeding grounds for wild salmon and one of the most important measures for the Faroese aquaculture industry to protect these wild salmon is minimising escapes. A description is provided on actions being taken, but further information is required on monitoring results to demonstrate whether the number of escapes is declining or being maintained at low levels. The Review Group suggests that consideration be given to identifying minimising escapes as an action in the Implementation Plan.

#### **EU – UK (Scotland) (IP(13)19)**

*Question 2.3: Are fisheries permitted to operate on salmon stocks that are below their reference point and, if so, how many such fisheries are there and what approach is taken to managing them that still promotes stock rebuilding?*

Information is required on whether fisheries are permitted to operate when stocks are below their reference level (i.e. when the criteria defined in the Decision Flow Chart (diamond boxes) are met).

*Question 2.4: Are there any mixed-stock salmon fisheries and, if so, (a) how are these defined, (b) what was the mean catch in these fisheries in the last five years and (c) how are they managed to ensure that all the contributing stocks are meeting their conservation objectives?*

Under 2.4(c), information is required on what actions are taken ‘to ensure that all contributing stocks are meeting their conservation objectives’.

*Question 2.8: What actions are planned to address each of the above threats and challenges in the five year period to 2018?*

Information is required on the approach that will be taken to monitor effectiveness of management plans (F1) and enforcement activities (F6).

F5: The Review Groups notes that the new Aquaculture and Fisheries (Scotland) Act (Action F5) is expected to have significant implications for management of both fisheries and interactions between the aquaculture and wild fish sectors in Scotland. Reports of progress with implementation will be of particular interest to NASCO in relation to the achievement of the BMP goals. The Review Group considers that the Plan would be clarified if this aspect of this action was moved to Section 4.8. Action F5 could be clarified to indicate the implications of the Act for fishery management.

*Question 4.2: What progress can be demonstrated towards the achievement of the international goals for effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild stocks attributable to sea lice?*

Details of the legislation in place have been provided, but further information is required on monitoring results to demonstrate whether lice numbers are declining or being maintained at low levels. The Aquaculture FAR Review Group had indicated that data had not been presented that would allow progress towards attaining the international goal to be assessed and had identified this as an issue requiring additional action. The Aquaculture FAR for Scotland had highlighted ongoing initiatives in relation to sea lice e.g. publishing sea lice data, introducing threshold levels, but no information on progress with these has been provided.

## **6. Arrangements for presenting the Group's report to the Council**

- 6.1 The Review Group discussed arrangements for presenting its report to the Council at the Annual Meeting. This would not be done in a Special Session as had been the case in the first cycle of Implementation Plans and FARs. The Review Group agreed that, in accordance with the IP Guidelines, its presentation would highlight which Implementation Plans it considers to be satisfactory and those that still contain clear omissions or inadequacies in the answers/information provided. The Group agreed to develop its presentation and allocation of duties by correspondence. The Review Group noted that after its presentation, the President will lead the discussions with Parties/jurisdictions concerning any outstanding questions about their Implementation Plans and those jurisdictions will have an opportunity to revise their Implementation Plans after the Annual Meeting.

## **7. Report of the Meeting**

- 7.1 The Review Group agreed a report of its meeting.

## **8. Any other business**

- 8.1 There was no other business.

## **9. Close of the Meeting**

- 9.1 The Coordinator closed the meeting and thanked the members of the Review Group for their contributions.

***List of Participants***

Dr Paddy Gargan	Inland Fisheries Ireland, Ireland
Mr Niall Greene	Salmon Watch Ireland, Ireland
Ms Kristina Guldbaek	Ministry of Fisheries, Hunting and Agriculture, Greenland
Dr Peter Hutchinson	NASCO Secretariat (Review Group Coordinator)
Mr Ted Potter	CEFAS, UK
Mr Rory Saunders	NOAA, National Marine Fisheries Service, USA
Ms Sue Scott	Atlantic Salmon Federation, Canada



**IP(13)2**

***Agenda***

1. Opening of the Meeting by the Coordinator
2. Adoption of the Agenda
3. Review of the Terms of Reference and Consideration of Working Methods
4. Evaluation of the Implementation Plans
5. Development of feedback to the Parties/jurisdictions
6. Arrangements for presenting the Group's report to the Council
7. Report of the Meeting
8. Any other business
9. Close of the Meeting





**IP(13)3**

***Overview of responses in the 2013 – 2018 Implementation Plans***

Under the Council's 'Guidelines for the Preparation and Evaluation of NASCO Implementation Plans and for Reporting on Progress', CNL(12)44, the Review Group has been asked to present its evaluation of the Implementation Plans to the Annual Meeting of the Council, and to highlight examples of good practice within the Plans. In this document, the Review Group has provided an overview of the extent to which the responses in the Implementation Plans submitted for evaluation addressed the questions in the Implementation Plan template, CNL(12)42.

The Implementation Plan template comprises some Introductory questions followed by three sections with questions, based on NASCO agreements, guidance or resolutions relating to Fisheries Management, Protection and Restoration of Salmon Habitat and Management of Aquaculture, Introductions and Transfers and Transgenics. The Review Group has assessed the response to each question and highlighted where there were 'Unclear or incomplete answers/information' (scored '2') and 'Clear omissions or inadequacies in answers/information' (scored '3'). The Review Group emphasised that a score of '1' (Satisfactory answers/information) for an answer simply meant that a satisfactory answer had been provided and did not indicate that the Party/jurisdiction was necessarily meeting NASCO guidelines or agreements. In some cases, the Review Group assessed a response to a question as being satisfactory even when the response was incomplete provided that an action had been identified to address any major shortcoming.

In general, the Review Group felt that the new template had worked well in terms of focusing the reports on the key elements of NASCO's agreements. Not all Parties/jurisdictions adhered to the guidance on length in their responses to all questions, while others managed to do so by referring to information provided in the relevant Focus Area Report (FAR). However, overall, the Implementation Plans were more consistent, much clearer and more concise than those prepared in 2007, some of which exceeded 100 pages in length. As a result the amount of information was more manageable and amenable to making decisions as to whether the Party/jurisdiction had provided the necessary information, whether further clarification was required or whether the information provided was insufficient.

**1. Introduction**

**1.1 What are the objectives for the management of wild salmon?**

The Review Group considered that, in general, the responses to this question provided a good overview of the overarching objectives relating to the conservation and management of wild Atlantic salmon. In some cases, the objectives described related mainly to the management of salmon fisheries, rather than clearly reflecting all aspects of NASCO's objectives relating to the conservation, restoration, enhancement and rational management of salmon based on sound scientific evidence. While this was noted in the assessments, the Review Group decided not to seek additional clarification/information from any Party/jurisdiction on these objectives but suggests that this aspect be considered further in the next reporting cycle.

**1.2 What reference points (e.g. conservation limits, management targets or other measures of abundance) are used to assess the status of stocks?**

Under the NASCO Guidelines for the Management of Salmon Fisheries, CNL(09)43, Conservation Limits (CLs) should be established to define adequate levels of abundance for all river stocks of salmon; these should be established for separate sea age components (i.e. one-sea-winter (1SW) and multi-sea-winter (MSW) salmon). The Implementation Plans confirm the information provided by ICES that river-specific conservation limits have been established by some Parties/jurisdictions for all or most of their rivers. Progress is being made in most other Parties/jurisdictions towards development of these conservation limits and in the meantime juvenile abundance data and/or catch statistics are being used as temporary reference points by some jurisdictions.

**1.3 To provide a baseline for future comparison, what is the current status of stocks relative to the reference points described in 1.2, and how are threatened and endangered stocks identified?**

Most Implementation Plans provided information on the current status of stocks and this provided a useful baseline for comparison in the future. The Review Group noted that a variety of approaches were presented to categorise the status of stocks using reference levels, the broad stock categories (threatened with loss, not threatened with loss etc.) used in the NASCO Rivers Database or other categories. In some cases, information on stock status was only available for a proportion (sometimes small) of the total number of rivers with salmon populations. Information presented in these different ways does not allow easy comparisons among Parties/jurisdictions. The Review Group is aware that the Council is considering updating the categories in the NASCO Rivers Database (see 1.7 below). The Review Group considered that classifications based on the attainment of conservation limits or probability of achieving the management objective provided the most reliable basis for future comparison, although, as noted, compliance may only be assessed in a small percentage of the rivers. Only one jurisdiction provided a classification taking account of different sea age components of the stocks.

**1.4 How is stock diversity (e.g. genetics, age composition, run-timing, etc.) taken into account in the management of salmon stocks?**

Under the Strategic Approach for NASCO's 'Next Steps', CNL(05)49, the objective for the management of salmon fisheries is to promote and protect the diversity and abundance of salmon stocks. The main factors being taken into account in management decisions, other than stock abundance, are smolt and adult age composition and adult run-timing. Little specific information was provided on how this understanding of diversity influences management decisions, although some jurisdictions noted that efforts were made to avoid adverse selective pressures on certain stock components; measures to protect early running salmon were described in several plans. There are challenges here, because stock diversity appears to be changing in response to climate change and increased mortality of salmon at sea and this makes it difficult to establish appropriate reference levels for management.

The Review Group recognises that there has been increasing use of genetic methods to support management, particularly with regard to identifying the stocks contributing to mixed-stock fisheries, and it welcomes this progress. Genetic methods are also leading to increased appreciation of the complex stock structure that exists within rivers. Genetic tools are also

being used to select the most appropriate source populations for programmes to reintroduce salmon to rivers from which they have been lost.

**1.5 To provide a baseline for future comparison, what is the current and potential quantity of salmon habitat?**

The NASCO Guidelines for the Protection, Restoration and Enhancement of Atlantic Salmon Habitat, CNL(10)51, state that the quantity and quality of available salmon habitat, both current and historic, should be determined to provide a baseline against which achievement of the international goal of maintaining, and where possible increasing, the productive capacity of Atlantic salmon habitat can be assessed.

Most Parties/jurisdictions have provided information on the quantity of habitat currently available (accessible river length or wetted area) but few provided an estimate of historically available habitat. However, the Review Group noted that information on habitat quantity may be of limited value in the absence of an assessment of the quality of the habitat and how accessible it is. This would certainly be an important consideration when restoration work is planned.

**1.6 What is the current extent of freshwater and marine salmonid aquaculture?**

The Implementation Plan template seeks information on the number of aquaculture facilities and the production of all salmonids for both stocking and food production, and the provision of maps to show the location of aquaculture facilities and any aquaculture free zones. While most Implementation Plans provided information for Atlantic salmon, some Parties/jurisdictions did not provide information for other salmonid production in aquaculture (defined in the ‘Williamsburg Resolution’ as comprising farming, ranching and stocking activities) which could have impacts on wild salmon. The provision of a map was helpful in identifying areas where wild salmon stocks might be affected by aquaculture.

**1.7 To aid in the interpretation of this Implementation Plan, have complete data on rivers within the jurisdiction been provided for the NASCO rivers database?**

All Parties/jurisdictions reported that they have contributed basic information to the database (river name, location, stock status), although several jurisdictions referred to the need to update this information and not all have provided information relating to river length, catchment area, impact factors etc. The Review Group is aware that at the inter-sessional meeting of the Parties in February 2013 (see CNL(13)11), it had been recommended that the stock categories in the database be reviewed. The Review Group recognises that the rivers database is a useful tool and encourages the Parties/jurisdictions to update the information and provide complete information.

**2. Fisheries Management**

**2.1 What are the objectives for the management of the fisheries for wild salmon?**

Under the Strategic Approach for NASCO’s ‘Next Steps’ the goal for management of salmon fisheries is to promote and protect the diversity and abundance of salmon stocks. The Review Group considered that the responses to this question were generally clear but not all Parties/jurisdictions objectives clearly reflected those of NASCO.

The Review Group noted that there may have been some confusion arising from the use of the term ‘Fisheries Management’ rather than ‘Management of Salmon Fishing’ in the title to this section (and also in some of the questions). Consequently, some Parties/jurisdictions had included threats/challenges and actions that related to habitat and aquaculture and not just to the management of exploitation. This issue might be addressed in the template prior to the next reporting cycle. Some Parties/jurisdictions do not permit any exploitation of salmon because of the poor status of the stocks.

**2.2 What is the decision-making process for fisheries management, including predetermined decisions taken under different stock conditions (e.g. the stock level at which fisheries are closed)?**

The Review Group noted that many of the responses to this question provided information on the organizations that are involved in the decision-making process but not on how decisions are taken in response to different stock conditions. The Implementation Plan template indicates that the question could be answered by providing a flow diagram and the Review Group noted that such diagrams could provide a clear indication of how the decision-making process responded to stock status in a way that would also be clear to stakeholders. However, only one jurisdiction provided a good example of a decision structure that clearly indicates what changes in regulation are appropriate at different stock levels (expressed as the probability of achieving the management objective).

**2.3 Are fisheries permitted to operate on salmon stocks that are below their reference point and, if so, how many such fisheries are there and what approach is taken to managing them that still promotes stock rebuilding?**

Under the NASCO Guidelines for the Management of Salmon Fisheries (CNL(09)43), it is stated that fishing on stocks that are below their conservation limit should not be permitted, but that if it is, it should be limited to a level that will still permit stock recovery within a stated timeframe.

It is clear from the responses to this question that fisheries are permitted to operate on stocks that are below their reference point in several jurisdictions, but the number of fisheries involved and the management measures applying to these fisheries to promote stock rebuilding were not always clearly described. One jurisdiction where fishing is permitted indicated that harvest fisheries only take place on river stocks that are above their conservation limits

**2.4 Are there any mixed-stock salmon fisheries and, if so, (a) how are these defined, (b) what was the mean catch in these fisheries in the last five years and (c) how are they managed to ensure that all the contributing stocks are meeting their conservation objectives?**

The NASCO Guidelines for the Management of Salmon Fisheries state that rational management of a mixed-stock fishery requires knowledge of the contributing stocks and of the status of each of those stocks, and that management actions should aim to protect the weakest of the contributing stocks.

Most Implementation Plans clearly indicated whether or not a Party/jurisdiction had mixed-stock fisheries and how these are defined (most used the NASCO definition but one Party/jurisdiction indicated that it considers mixed-stock fisheries to be in-river fisheries that exploit salmon from more than one tributary within the river system). Where Parties/jurisdictions have such fisheries, the Implementation Plans generally provided information on catches but clear descriptions of how the fisheries are managed to ensure that all the contributing stocks are meeting their conservation objectives were often lacking. One Party/jurisdiction noted that while there were no mixed-stock fisheries domestically, stocks originating in its rivers were exploited in distant-water mixed-stock fisheries.

## **2.5 How are socio-economic factors taken into account in making decisions on fisheries management?**

The Review Group noted that NASCO's Guidelines for Incorporating Social and Economic Factors in Decisions under the Precautionary Approach, CNL(04)57, are not referred to in the Implementation Plan template and no Party/jurisdiction made reference to their use in management decisions. The NASCO Guidelines for the Management of Salmon Fisheries indicate that in evaluating management options, conservation of the salmon resource should take precedence, and transparent policies and processes should be in place to take account of socio-economic factors in making management decisions and for consulting stakeholders.

The intention of this question, and question 3.2, was to provide an opportunity for the Parties/jurisdictions to provide information on how managers balance socio-economic factors against conservation requirements in making decisions relating to management of salmon fisheries (Q2.5) and management of salmon habitat (Q3.2). Many plans referred to stakeholder consultations, both at national and regional levels, and some identified the factors that are taken into consideration in making management decisions. These include:

- whether a proposed measure will have an unreasonable effect on someone's livelihood (e.g. net fishing) or the value of their property (e.g. fishing rights);
- whether one group of stakeholders will be unreasonably affected relative to another;
- the effect of controls on the viability of commercial and recreational fisheries;
- the obligations to indigenous/Aboriginal peoples;
- the heritage value of the fishery.

One jurisdiction reported that conservation takes precedence over socio-economic factors and harvest fisheries are only permitted on stocks above their conservation limits. However, generally little information was provided on how the costs and benefits of different options were weighed in decision-making. This was also an issue that was poorly covered in the first cycle of reporting. The Review Group notes that the Council intends to hold a Special Session on socio-economics in 2014 and strongly endorses the need for such discussions.

## **2.6 What is the current level of unreported catch and what measures are being taken to reduce this?**

All Parties/jurisdictions are requested to report annually to NASCO on the level of unreported catch (and information is also provided to ICES). NASCO's 2012 External Performance Review had concluded that timely reporting on estimates of unreported catches

and measures taken to reduce such catches is essential. Most, but not all Parties/jurisdictions provided an estimate of the level of unreported catch in their Implementation Plan. Most Parties/jurisdictions also described a range of measures being taken to reduce unreported catches and these include:

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

In its report to NASCO last year, CNL(12)8, ICES indicated that over recent years efforts have been made to reduce the level of unreported catch in a number of countries. In 2011, however, the ICES estimate of unreported catch was 421 tonnes, despite not all Parties/jurisdictions reporting.

**2.7 What are the main threats to wild salmon and challenges for management in relation to fisheries, taking into account the Fisheries Guidelines and the specific issues on which action was recommended for this jurisdiction in the Final Report of the Fisheries Management FAR Review Group, (CNL(09)11)?**

The Review Group considered that most Parties/jurisdictions had identified a range of threats and challenges related to the exploitation of the resource, and this reporting was greatly improved compared to the first Implementation Plans. The Review Group noted that the use of the term threat/challenge in the Implementation Plan template could have led to Parties/jurisdictions excluding the routine, but important, management activities related to exploitation of the resource. However, this did not appear to be the case as many Implementation Plans included challenges and actions relating to routine assessment of the stocks and regulation of the fisheries. While this question sought information on threats to wild salmon or challenges for salmon management, one Implementation Plan identified a series of threats and also the challenges involved in addressing those threats.

**2.8 What actions are planned to address each of the above threats and challenges in the five year period to 2018?**

Following a comprehensive review of the strengths and weaknesses of the first reporting cycle, the Council had agreed that Implementation Plans would be the key documents in the second reporting cycle but that greater emphasis should be placed on:

- the actions to be taken over a five year period;
- clearly identifiable measurable outcomes and timescales; and
- appropriate monitoring to evaluate the effectiveness of the measures taken.

The Review Group did not expect that an Implementation Plan would provide actions to address every threat/challenge facing salmon in a Party/jurisdiction but that actions should be described to address several of the most important issues facing the resource. In particular, Implementation Plans were expected to address the issues on which additional actions were

recommended by the FAR Review Groups in the first reporting cycle. Generally, the new Implementation Plans included actions, expected outcomes and descriptions of the monitoring programmes to assess the effectiveness of the actions to be taken, although in some cases the precise action to be taken was not very clear. Most Implementation Plans did address issues on which additional actions were recommended in the first reporting cycle. The Review Group noted that the key to demonstrating progress in implementing NASCO's guidelines and agreements through the actions detailed in the Implementation Plans will be the Annual Progress Reports commencing in 2014. These will be reviewed. In some cases, where a threat or challenge was identified by a Party/jurisdiction but no action had been proposed, the Review Group suggested that consideration be given to including an appropriate action in the revised Implementation Plan.

### **3. Protection and Restoration of Salmon Habitat**

#### **3.1 How are risks to productive capacity identified and options for restoring degraded or lost salmon habitat prioritised, taking into account the principle of 'no net loss' and the need for inventories to provide baseline data?**

The Review Group considered that most Implementation Plans provided satisfactory descriptions of the mechanisms in place for identifying impacts on salmon habitat but, in general, less information was available on how habitat that has been degraded or lost to salmon production is prioritised for restoration. A range of data sources are being used to identify impacts and prioritise habitats for restoration and it is important to ensure that such monitoring is well targeted and prioritized as it is expensive to undertake. Monitoring programmes to identify risks to productive capacity and prioritise options for restoring degraded or lost salmon habitat include:

- morphological and ecological surveys;
- electrofishing surveys of the abundance and distribution of juvenile salmon;
- habitat rehabilitation;
- high quality aerial photographs of rivers.

#### **3.2 How are socio-economic factors taken into account in making decisions on salmon habitat management?**

See comment relating to integrating socio-economic factors in management decisions under 2.5 above.

#### **3.3 What are the main threats to wild salmon and challenges for management in relation to estuarine and freshwater habitat taking into account the Habitat Guidelines, and the specific issues on which action was recommended for this jurisdiction in the Final Report of the Habitat Protection, Restoration and Enhancement FAR Review Group, (CNL(10)11)?**

See comment relating to threats and challenges under 2.7 above.

#### **3.4 What actions are planned to address each of the above threats and challenges in the five year period to 2018?**

See comment relating to actions to address threats and challenges under 2.8 above.

## **4. Management of Aquaculture, Introductions and Transfers, and Transgenics**

### **4.1 What is the approach for determining the location of aquaculture facilities in (a) freshwater and (b) marine environments to minimise the risks to wild salmon stocks?**

Generally, the Implementation Plans provided a description of the process used in decisions concerning siting of aquaculture facilities, including consultations among stakeholders, although the extent to which the risks to wild salmon stocks are considered in this process was not always clear from the responses. The Review Group noted that section 4 of the Implementation Plan template, (CNL(12)42), did not include a question relating to how socio-economic factors are included in decisions on aquaculture and related activities, but the intention may have been that it would be covered by this question. The responses provided information on the consultation process but, as with the comments under questions 2.5 and 3.2, explanations of how the costs and benefits of different options were weighed in decision-making were lacking.

### **4.2 What progress can be demonstrated towards the achievement of the international goals for effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild stocks attributable to sea lice?**

The Review Group noted that most Implementation Plans described the measures being taken in relation to sea lice management on salmon farms and that some plans described these for each element in the 'Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks', SLG(09)5. However, the Review Group agrees with the findings from the aquaculture FAR review that a satisfactory response to this question requires the provision of quantitative data to demonstrate progress towards the international goal. Several Implementation Plans provided such information and the Review Group highlighted this as an omission in those plans that did not. Some Parties/jurisdictions publicise such information on the internet.

### **4.3 What progress can be demonstrated towards the achievement of the international goals for ensuring 100% containment in (a) freshwater and (b) marine aquaculture facilities?**

The Review Group noted that most Implementation Plans described the measures being taken in relation to containment of farmed salmon and that some plans described these for each element in the 'Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks', SLG(09)5. However, the Review Group agrees with the findings from the aquaculture FAR review that a satisfactory response to this question requires the provision of quantitative data to demonstrate progress towards the international goal. Several Implementation Plans provided such information and the Review Group highlighted this as an omission in those plans that did not. Some Parties/jurisdictions publicise such information on the internet. One jurisdiction uses only land-based closed containment systems. Developments in containment technology, including closed containment systems, has been identified as a topic for a future theme-based Special Session.



#### **4.4 What progress has been made to implement NASCO guidance on introductions, transfers and stocking?**

The NASCO guidance on stocking is based on scientific principles e.g. with regard to the use of local stocks. The Review Group noted that most Parties/jurisdictions reported that they had regulations in place to implement the NASCO guidelines on stocking, particularly in relation to fish health, although the extent of the regulations in relation to other aspects of the guidance was not always clear. The threat posed by pressures to increase stocking as a means to support fisheries and/or stocks had been highlighted by two Parties/jurisdictions.

#### **4.5 What is the policy/strategy on use of transgenic salmon?**

Under the NASCO Guidelines for Action on Transgenic Salmonids, CNL(04)41, (Annex 5 of the Williamsburg Resolution) the Parties are required to take all possible actions to ensure that the use of transgenic salmonids, in any part of the NASCO Convention Area, is confined to secure, self-contained, land-based facilities.

The Review Group noted that while most Parties/jurisdictions indicated some presumption against the use of transgenic salmon, it was not always clear from some Implementation Plans if there was any legal basis governing the use of transgenic salmon.

#### **4.6 What measures are in place to prevent the introduction or further spread of *Gyrodactylus salaris*?**

The Review Group considered that the responses to this question generally provided a satisfactory description of the measures in place to prevent the introduction or further spread of *G. salaris*. Under the North-East Atlantic Commission's 'Road Map' for Taking Forward the Recommendations from the Workshop on *Gyrodactylus salaris* in the Commission Area', NEA(04)13, it is recommended that countries should have contingency plans in place for the treatment, containment or eradication of the parasite. While not all plans confirmed the existence of these contingency plans, a range of measures to prevent the introduction and spread of the parasite were described including:

- monitoring in watercourses and fish farms to confirm the presence or absence of the parasite;
- eradication programmes in infected rivers;
- information campaigns to advise of the risks of introducing or spreading the parasite;
- provision of disinfection facilities for anglers equipment;
- controls on fish movements including maintenance of the EU guarantee in some countries that prevents higher risk imports of live farmed (or other) salmonids from *G. salaris* risk areas;
- prohibition of stocking in rivers free from the parasite; and
- research related to the parasite.

**4.7 What are the main threats to wild salmon and challenges for management in relation to aquaculture, introductions and transfers, and transgenics, taking into account the Williamsburg Resolution, the BMP Guidance and specific issues on which action was recommended for this jurisdiction in the Final Report of the Aquaculture FAR Review Group, (CNL(11)11)?**

See comment relating to threats and challenges under 2.7 above.

**4.8 What actions are planned to address each of the above threats and challenges in the five year period to 2018?**

See comment relating to actions to address threats and challenges under 2.8 above.