International Atlantic Salmon Research Board



Information Paper for the Inter-Sessional Meeting of the Board

ICRIS(23)04rev

Information Paper for the Inter-Sessional Meeting of the Board¹

Purpose

To provide information to enable a structured discussion on high-level issues around the implementation of the Board's purpose, at the inter-sessional meeting of the International Atlantic Salmon Research Board (the Board) on 24 and 25 January 2023.

Discussion Points for the Inter-Sessional Meeting

In November, Board members and the representative of the NGOs were invited to submit a paper outlining their views on the vision, scope and purpose of the Board. Three members of the Board and the NGOs did so.

Having reviewed the submissions, the small Working Group noted that there is broad agreement on the vision, scope and scientific priorities of the Board. However, views seem to diverge on some high-level issues around the implementation of the Board's purpose. The small Working Group had hoped to provide a paper that proposed a clear way forward for the Board, based on the papers submitted. However, it agreed that a full discussion and consensus will be required prior to documenting and implementing a way forward for the Board.

The Board does not usually have time allocated to discuss general concerns and issues. As such, the Chair of the Board would like to use the inter-sessional meeting on 24 and 25 January 2023, to fully discuss these high-level issues in a structured roundtable manner. Therefore, during the inter-sessional meeting, members will be asked in turn to provide comments on the following topics:

1. The proactive or reactive nature of the Board over the next five years

In the past, the Board (with the support of the SAG) has been proactive in terms of identifying research priorities, developing research concepts and seeking scientists to conduct the research, such as SALSEA and SALSEA-Track. More recently, the Board has been more reactive (i.e. taking a sit and wait approach), considering research projects already underway in pilot form, such as ROAM. The Chair will seek discussion on whether the Board should adopt a proactive or reactive stance, with respect to identifying research needs, developing research ideas, requesting proposals and soliciting funds, over the next five years.

2. The chicken and the egg of funding

The small Working Group discussed different models that scientists are faced with when seeking to fund their research. In some cases, the amount of funding available is determined by the funder and scientists develop a research proposal to fit that amount. In other cases, a proposal for research is developed and funding is then sought. The Chair will seek discussion on whether the Board should identify research needs and then seek funding, or whether the Board should seek funding, and then seek research proposals to meet it.

3. Sources of funding

In their paper, the NGOs noted that initially funding for Board activities came from an EU 7th

¹ This paper has been revised to include comments from the EU, which were provided after the original paper was circulated. The EU's comments have been added to the table in Annex 1, the rest of the paper remains the same.

Framework Research Programme and private sector cash donations from Total and the Atlantic Salmon Trust. More recently, Board funding has come from NASCO Parties only (including EU Grants for Action funding). Further, there seems to be agreement that the International Atlantic Salmon Research Fund (the Fund) has provided Parties with flexibility to target resources within their own organizations, to the benefit of the Board. The Chair will seek discussion on where future sources of funding should come from.

4. Big or small

In the past the Board has funded large-scale research projects with significant 'in the field (sea!)' elements. However, it might similarly fulfil its purpose with smaller / relatively inexpensive desk-based studies. The Chair will seek discussion on the scale of the research that the Board should be involved in over the next five years.

Following discussion on these issues, the Chair will aim to propose a way forward for the Board, if possible, during the inter-sessional meeting. However, it may be that the discussion is part of a longer process, which needs to continue at the Annual Meeting of the Board in June.

Supporting Information

Background

The 'Report of the Review of the Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea', <u>ICR(22)03</u>, included the recommendation that the Board may wish to:

- consider its overall vision, scope and purpose;
- assess whether the funding available to the Board is commensurate with its vision, scope and purpose;
- identify the priorities the Parties now have for the Board; and
- consider establishing a process for requesting and reviewing proposals.

At the Board's Annual Meeting in 2022, a process was agreed to enable the Board to consider these issues, <u>ICR(22)15</u>. Therefore, the following steps have been taken:

- 1. In October 2022, the Secretariat, Chair of the Board and SAG Chair worked together to prepare a Background Paper, ICRIS(23)01, and a 'Call for Views', ICRIS(23)02;
- 2. On 8 November 2022, these papers were sent to members of the Board who were invited to submit a paper outlining their views by 9 December;
- 3. On 11 November 2022, following a request, the Secretariat prepared and circulated an additional paper 'Historic overview of contributions made to the work of the Board,' ICRIS(23)03;
- 4. In November and December correspondence took place about (amongst other things) the background, successes and failures of the Board; and
- 5. By 13 December, papers from the following Board members had been received: Canada, UK, USA, as well as from the NGO representative.

As required, the Working Group has collated the views (Annex 1) and provides further background below, as requested by Norway.

Activities of the Board

The past and current activities of the Board are set out on the Board website:

- SALSEA (including SALSEA Track) is now closed;
- <u>EU-Funded Research</u> is ongoing, with a proposal for a new project submitted in December 2023;
- The Research Inventory continues to be updated annually; and
- The <u>Metadatabase</u> of Salmon Survey Data and Sample Collections, will remain on the website, but no longer be maintained, after a final update in January 2023.

The SALSEA-Track Programme and the Inventory of Research were reviewed in 2020, ICR(20)07. The Board accepted the recommendations from the review.

Establishment of the Board (provided as part of the submission by the NGOs)

As outlined in the comprehensive background paper provided by the Secretariat, ICRIS(23)01, there were two principal reasons why the Board was formed. In the early 2000s it became very clear that Atlantic salmon were suffering unprecedented levels of marine mortality. It was agreed by the NASCO Council that tackling this required international research co-ordination and co-operation at an unprecedented scale. It was also clear that tackling marine mortality issues would cost many millions of pounds. Originally it was thought that NASCO itself could fundraise for and manage such a programme, but it soon became clear that because of constraints within the Convention, NASCO needed to establish an associated Board with the powers to gather and manage the funds that were required to tackle this urgent issue. The decision was therefore made to establish the International Atlantic Salmon Research Board.

The establishment of the Board and direct lobbying / fundraising by the Secretariat and the Presidency over the years 2001 to 2007 resulted in the establishment of a fund of some £5m (approx.), primarily comprising some €3.5m from an EU 7th Framework Research Programme and private sector cash donations from Total and the Atlantic Salmon Trust. In addition, very valuable ship time was donated from Norway, Ireland and the Faroe Islands. In parallel, major marine programmes, including additional ship time, were established and directly funded by the USA and Canada.

At this time, the Board comprised senior representatives from the Parties. Their role was to support and advise on the fund-raising programme, to assess the messaging from the Board and to provide governance over the very substantial funds under the overall management and control of the Board.

The role of the Scientific Advisory Group (SAG) was critical in advising the Board on the overall scientific aims and objectives of the marine research programme (subsequently named SALSEA) and on the co-ordination of the complex sub-programmes included in the work packages in both the western and eastern Atlantic.

Following completion of the SALSEA Programme, a sub-group of the SAG (<u>SAG(13)2</u>) met to review progress and to advise on future marine research programmes, arising from the initial SALSEA Programme, which was clearly aimed at assessing overall migration and distribution patterns of Atlantic salmon at sea. The sub-group proposed:

'.....that a particular focus for the Board should now be studies to partition mortality of salmon among the phases of the marine migration and it recommends that the Board considers whether it wishes to facilitate a meeting of scientists and external partners to further develop a collaborative international programme of research. A preliminary outline proposal has been provided and the aim would be to identify where there may be particular need for international collaboration and coordination and support with fund raising. The Sub-Group noted that the Board has very limited

resources and recognised that if it is to continue to play a role in supporting research on salmon at sea it should consider how it can address this situation. The Sub-Group also considered the future role of the SAG and concluded that as the SAG is the only body within NASCO that identifies research needs and addresses scientific coordination it is the most appropriate and effective forum in which to perform this important role?

Arising from this meeting the SALSEA-Track programme was formulated and agreed by the Council of NASCO.

[the yellow shading, italics and bold was included in the NGO submission].

Important Documents in the Establishment of the Board

In considering the vision, scope and purpose of the Board into the future, members may wish to consider the papers available around the time the Board was established.

In 2000, the Council considered 'Atlantic Salmon in the Sea - Draft Proposal to Establish an International Co-operative Research Programme' (Tabled by Norway), <u>CNL(00)43</u>, page 215.

In response a Working Group on International Cooperative Research was established, met and reported and the Secretariat produced papers based on the Working Group's outputs.

In 2001, the Council considered four papers:

- the Report of the Meeting of the Working Group on International Cooperative Research, <u>CNL(01)21</u>;
- Financial and Administrative Implications of Recommendations of the Working Group on International Cooperative Research, <u>CNL(01)22</u>;
- Existing Research and Development Funding on Salmon at Sea, CNL(01)36; and
- the Report of the Meeting of the Working Group on Cooperative Research Planning, Priorities and Funding, CNL(01)63.

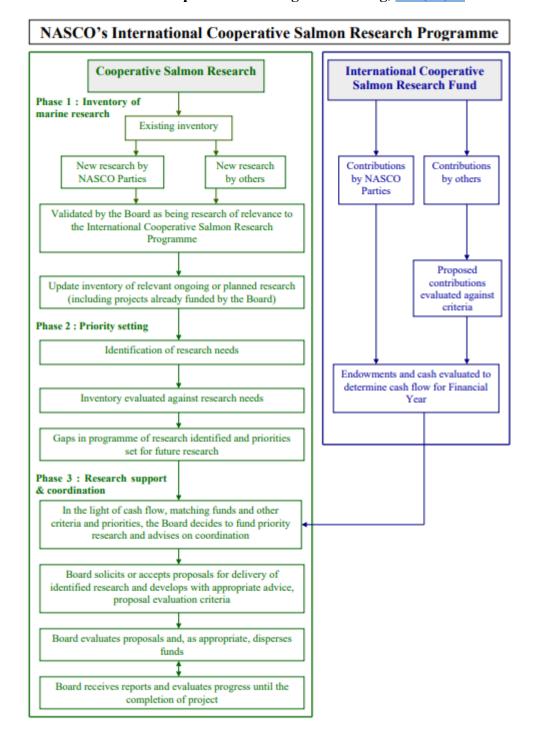
The Council agreed that the Board should be established by the end of June 2001, <u>CNL(01)67</u>. The following papers may also be of interest to the Board in its current discussions:

- The Report of the Inaugural Meeting of the International Cooperative Salmon Research Board, ICR(01)12. This includes a flow chart (copied below) which outlines the processes to be undertaken to establish and manage the Fund and the Programme. The Report also annexes the following:
 - o the Rules of Procedure for the International Cooperative Salmon Research Board, ICR(01)9 (Annex 3 in ICR(01)12);
 - o Guidelines on Acceptance of Voluntary Contributions to the International Cooperative Salmon Research Fund, ICR(01)10 (Annex 4 in ICR(01)12); and
 - Financial Rules of the International Cooperative Salmon Research Fund, ICR(01)11 (Annex 5 in ICR(01)12).
- the Report of the First Meeting of the International Cooperative Salmon Research Board ICR(02)12.

Other Board papers are available here: Annual Meetings – Salmon at Sea.

Secretariat, Chair of the Board and Chair of the SAG Edinburgh 11 January 2023

Flow chart from the Report of the Inaugural Meeting, ICR(01)12.



Feedback from Board members and the NGOs to the Questions Posed in Paper ICRIS(23)02, 'Call for Views on the Vision, Scope and Purpose of the Board'

Questions asked of Members	Comments for Board Members
1. Are you content with the current vision, scope and purpose of the Board, as set out in Paragraph 1 of the Terms of Reference, ICR(20)03 ? If not, how should it change?	Canada. Yes. Canada is content with the current vision, scope and purpose of the Board, as set out in Paragraph 1 of the Terms of Reference, ICR(20)03. The purpose of the Board is "to promote collaboration and co-operation on research into the causes of marine mortality of Atlantic salmon". More than ever, scientists have to work collaboratively on large scale research questions to understand the causes of marine mortality of Atlantic salmon. These large-scale questions at the North Atlantic scale cannot be answered by an individual or a small group of researchers, but rather requires international partnerships between experts and data owners.
	The Board can play a crucial role by identifying jurisdictional overlap in research projects that meet the priorities of the Board, either ongoing or completed, and promote collaborations between the research groups to combine and analyse data at the North Atlantic scale.
	EU. The EU believes that discussions around IASRB vision should be guided by the Terms of Reference (TOR) which were reviewed and revised in 2020 (ICR(20)03). It states that "The International Atlantic Salmon Research Board (the Board) is a body to promote collaboration and co-operation on research into the causes of marine mortality of Atlantic salmon and the opportunities to counteract this mortality." The EU considers that the text outlined above provides a high-level vision for the Board; given this some consideration could be given to the wording of the Vision. For example, there are emerging basin level issues, like that of pink salmon or open ocean aquaculture, that have the potential to impact on Atlantic salmon but do not fall into the defined wording of 'marine mortality'. The Board potentially has as role supporting research into establishment of the level of these threats and potential management interventions. The EU would caution against the expansion of the role of the Board into broader areas of research that might dilute the focus on the conservation of Atlantic salmon.

In relation to the scope (activities) of the IASRB, which is documented in its TOR (ICR(20)12), the 'Report of the Review of the Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea' (RMD(21)05rev) identified that the Board is carrying out very few of these tasks (activities).

The **UK** is content that the Paragraph 1 sets out the purpose 'to promote collaboration and cooperation' and scope 'the causes of marine mortality of Atlantic salmon' of the Board, but not its vision. The vision should be specified. UK suggests "The vision is that factors causing salmon mortality at sea, the underlying reasons for these factors, and changes in both in the past and future, are understood to the level required to target and prioritise management actions by Parties to reduce salmon mortality at sea in order to recover, protect and conserve salmon stocks".

The UK suggests adding 'basin-scale' before 'research' to further distinguish the Board's scope to promote collaboration and cooperation of large-scale research among Parties that could not be accomplished by individual Parties

US. Generally yes. However, Paragraph 1 of ICR(20)03 lays out the Vision of the Board and Paragraph 2 details its current Scope. The Purpose of the Board is not clearly articulated within ICR(20)03, but we believe that it is commonly understood.

NGO. We would also suggest that a future vision for the coordination of international salmon research must move beyond the provision of catch advice based on single-species demographics to an ecosystemic vision. Such a shift would signal a recognition that changes in their ecosystem are impacting salmon populations during their marine phase and the need to tackle the urgent and fast moving challenges facing salmon populations for the remainder of this century. Such changes are firmly embedded in global environmental change. This approach would further recognise that a new management paradigm is required which no longer relies on estimates of population and catch advice alone but incorporates an ecosystem approach, linking models and prioritised research programmes to develop a suite of dynamic ecosystem indicators and integrated assessment methods.

2. Do you think the Board should identify scientific priorities?

What should these scientific priorities be?

Canada. Yes. Canada thinks that the Board should identify scientific priorities which will guide the scientific research to be supported or funded by the Board. These scientific priorities would be used to develop a call for proposals or to identify overlapping projects from the Research Inventory that are of interest to the Board for a targeted call for a proposal from the multi-jurisdictional research teams (as in Question 1 above).

What should these scientific priorities be? A key scientific priority for Canada is to further our understanding of the marine ecology of Atlantic salmon and evaluate causes of marine mortality. This is a priority for most jurisdictions and significant funding has been invested in research projects at the jurisdictional scale. The scientific priorities for the Board should be focussed at the North Atlantic scale.

This seems to be covered in the Vision proposed above??

EU. In relation to the Chair's request for a discussion on whether the Board should identify research needs and then seek funding, or whether the Board should seek funding, and then seek research proposals to meet it (ICRIS(23)04). The EU suggests that funding should only be requested if there are identified research needs.

UK. Yes. The scientific priorities of the Board are implicitly identified as 'data gaps / climate change / commonalities across jurisdictions / mechanisms for supporting new technologies' within the criteria as set out in ICR(20)07 for research needs that would be addressed through the adoption of a Programme of research.

USA. This is a bit of a nuanced question (and response), but we do not believe it appropriate for the Board to set scientific priorities, beyond the priority of investigating the causes of marine mortality. Beyond this level, the detailed scientific priorities that guide the Board's work should be based on the current knowledge base of the larger scientific community as well as the opportunities presented to the Board.

NGO. While we fully support the original objectives of the Board, we are very conscious that there are additional cross—cutting management areas, which could benefit from international coordination and cooperation (e.g. climate change impacts, climate change adaptation, gene

banking as a tool to protect vulnerable populations, managing the impacts of aquaculture). In reviewing the future of role of the Board, we would suggest that expanding the scope of the Board should be examined to see where international cooperation and coordination is required to assist in finding solutions to these difficult and challenging, management areas.

NGO. the agreed criteria from the Report of the Working Group to Review the SALSEA-Track Programme and the Inventory, (ICR(20)07), are an excellent basis on which to move forward in defining the projects which the Board should pursue.

3. Do you think that the Board should 'oversee, administer, and seek to advance an International Atlantic Salmon Research Programme', as set out in Paragraph 2 of the Terms of Reference, ICR(20)03?

Please add any further comments, if you wish.

Yes. Canada thinks that the Board should 'oversee, administer, and seek to advance an International Atlantic Salmon Research Programme', as set out in Paragraph 2 of the Terms of Reference, ICR(20)03. In order for the programme to be successful, Canada thinks the International Atlantic Salmon Research Programme should focus on developing partnerships between established research teams and data owners to synthesize their data at the North Atlantic scale. These "desktop" projects will provide added value to ongoing or completed jurisdictional projects and would only require funding at a nominal level (i.e. two-year Post-Doc). The Board would agree to targeted calls for proposals from experts identified from the Research Inventory. Large scale novel research projects take years to conduct (4-5 year), require significant funding (> million/year), have high risk of failure or delays and are difficult to manage.

UK. In part, but this answer is dependent on Board clarifying explicit definitions of the terms, especially 'oversee', 'administer' and 'Programme'.

Some revision of the Terms of Reference seems prudent to clarify the Board's role in 'oversight', 'administration' and 'advancement' of an International Atlantic Salmon Research Programme. For example, to 'oversee' and to 'administer' suggest an active and directed involvement in a Programme, whereas the aim to 'seek to advance' could be more strategic in nature.

Suggest 'Programme' be defined, for example as a clearly identified 'flagship' programme of research which aligns with the Board's vision, scope and purpose and fulfils criteria set out in ICR(20)03.

Given the Board only meets annually and has limited staff resource available, the UK suggests that 'oversight' be limited to reviewing annual progress updates and that 'administration' of the programme be provided by the 'clearly identified owner' of the programme (i.e. the Board does

not administer the programme per se, but may administer a potential funding mechanism). 'Advancement' of an international programme could result through periodic refinement of scientific priorities to aid in identification of a suitable 'flagship' programme which may be further advanced through solicitation of funding and dissemination of results via the Board's website.

US. Overseeing, administering and seeking to advance an International Atlantic Salmon Research Programme is somewhat counter to promoting collaboration and co-operation on research into the causes of marine mortality. The former paints a picture of actively implementing a research program while the latter paints of picture of supporting ongoing external research effort. This discrepancy should be addressed and doing so may provide further clarity as to the future role/scope of the Board. Having said that, many of the activities set out in Paragraph 2 of ICR(20)03 are useful activities that support the current Vision of the Board.

NGO. In our view the role of the Board in stimulating, guiding and funding the required internationally co-ordinated research is fundamental to the overall conservation and management of Atlantic salmon populations.

4. Do you think that the Board should continue to maintain the Inventory, as per the decisions taken after the 2020 Review?

Please add any further comments, if you wish.

Yes. **Canada** thinks that the Board should continue to maintain the Inventory, as per the decisions taken after the 2020 Review. The maintenance of the Inventory is a good exercise that involves minimal work annually. The Inventory can be useful for setting research priorities, determining research gaps and could be important in future ventures. If the Inventory is to continue, the Board should use it as a tool for evaluating research gaps and establish priorities.

If the Board is interested in the use of the Inventory by external organisations, a web survey (e.g. number of visits) could be undertaken.

EU. The EU agree that this activity is valuable, ongoing and a useful reference source to monitor new and completed relevant research programmes.

UK. Yes, but see further comments below regarding the purpose, content and users of the Inventory, below.

The UK considers that the ambition for the use of the Inventory requires some clarification

because it is not clear that it is being used as originally intended. For example, the practical purpose of the Inventory would seem to be either to support the SAG in identifying research gaps and priorities to realise the vision of the Board OR to provide the core, definitive, information source to allow the Board to evaluate science gaps.

Depending on the clarified purpose of the Inventory, the Board should (perhaps through periodic convening of the SAG) (i) explicitly use the Inventory to determine (and report to Parties) whether the science priorities (but see answer to Qu 2) are being researched and if not then to target influence in said topic areas, and (ii) continue to evaluate the extent to which the Inventory is used through hit statistics and related metrics.

If the Inventory is to be used as the primary source of information for the Board on research into marine mortality, and thereby to evaluate knowledge gaps and set scientific priorities, the Board should seek to gather evidence from all sources: the Parties, NGOs and academic institutions.

However, if the Inventory is used as a core (but not exclusive) source of information for the SAG to evaluate research needs, it will not be necessary to solicit Inventory entries from all relevant stakeholders (e.g., NGOs, academia). However, the SAG may consider other sources of information such as scientific literature when identifying research gaps and include the NGO representative on the Board in Inventory solicitation.

However, projects funded by the Board should appear within the Inventory. The Secretariat may consider asking those specific project coordinators for annual updates if not represented by the contributions of Parties.

US. Yes, the Board should continue to maintain the Inventory as we still agree with the conclusions of the 2020 Review. The Inventory is a useful resource that outlines completed and ongoing research into Atlantic salmon marine mortality. Such an inventory can and has served multiple purposes over the years. The changes made to the process for updating the Inventory, as suggested by the 2020 Review, has significantly reduced the annual burden for the Inventory contributors.

NGO. we also support the retention of the Inventory of Marine Research. A knowledge of ongoing work in this area and the funding allocated to the various ongoing programmes, is

	invaluable in assessing and prioritising the future marine research programmes which the Board may wish to tackle.
5. Do you agree that the Board should no longer seek to identify research needs? Please add any further comments, if you wish.	No. Canada does not agree that the Board should no longer seek to identify research needs. Now more than ever, research gaps and needs have to be identified and prioritized to guide future research on marine mortality of salmon.
	EU. The EU supports the IASRB task related to the identification of research needs. Given this, the EU would also recommend that the Board operate at a strategic level in the development of a horizon view (5 to 10 yrs) of research requirements directed at the conservation of Atlantic salmon. It is important that there is a focus on applied research that will support the Parties in conservation actions. The research needs should be driven by the Parties and their identified needs for collaboration and coordination.
	No, the UK does not agree that the Board should no longer identify research needs.
	Research needs identified by the Board would direct the adoption of a flagship Programme of research.
	The Board may wish to further refine research needs by periodic expert solicitation via e.g., the SAG and / or a Term of Reference to the ICES WGNAS (via the NASCO Standing Scientific Committee)
	US. Yes, we agree that the Board should no longer seek to identify research needs. The Board's current Vision is to promote collaboration and co-operation on research into the causes of marine mortality. Keeping the focus of the Board at this higher level will provide further scope for potential future actions that could be undertaken by the Board.
	No. Canada does not agree that the Board should <u>no longer</u> seek to evaluate the Inventory against research needs. The evaluation of the Inventory against research needs will help focus potential funding towards multi-jurisdictional partnerships. It would be beneficial to conduct the

6. Do you agree that the Board should <u>no longer</u> seek to evaluate the Inventory against research needs? Please add any further comments, if you wish.	evaluation at a regular time interval such as every 3 years to assess if research needs remain the same.
	EU: See the response above and below.
	UK. No. The Board should periodically (e.g., 3 – 4 years) convene the SAG to evaluate the Inventory, together with other sources of information on research related to salmon mortality at sea, to enable it to identify research gaps (see Q7).
	US. Yes, we agree that the Board should no longer seek to evaluate the Inventory against research needs. As noted within our response to question #5, we do not think that the Board should be identifying research needs and therefore it is un-reasonable to expect the Board to match these needs against completed or ongoing research efforts.
7. Do you agree that the Board should <u>no longer</u> seek to identify gaps in the Inventory and set priorities for further research? Please add any further comments, if you wish.	No. Canada <u>does not agree</u> that the Board should <u>no longer</u> seek to identify gaps in the Inventory and set priorities for further research. The identification of research gaps in the Inventory will allow the board to prioritize research needs to guide potential funds towards projects. The Board may want to coordinate a working group to identify gaps and set research priorities.
	EU. The EU supports the activity of identification of research gaps based on an analysis of the inventory of research programmes, as it is reasonable to expect that this analysis would offer some insight into future research needs. Given this however, and as noted above, the EU would also like to see a focus on 'horizon scanning' as a driver of future research needs. The Board should also focus on identification of research gaps that require Party collaboration with programmes necessitating Atlantic wide implementation.
	UK. No. The Board should periodically (e.g., 3 – 4 years) convene the SAG to evaluate the Inventory, together with other sources of information on research related to salmon mortality at sea, to enable it to identify research gaps (see Q6).

	US. Yes, we agree that the Board should no longer seek to identify gaps in the Inventory and set priorities. As noted in our responses to questions # 5 and 6, we do not think the Board should set research needs, but should instead focus on its stated vision by working to promote collaboration and co-operation on research into the causes of marine mortality.
8. Do you think that the Board should provide a forum for co-ordination of research efforts by the Parties? If, so how? Please add any further comments, if you wish.	Yes. Canada supports that the Board provide a forum for co-ordination of research effort by the parties. As proposed in Question 1, the Board could co-ordinate research priorities and establish a science working group for experts to join international effort to tackle large scale questions that cannot be done by an individual or a small group of researchers. The various Parties have existing data from research projects or ongoing monitoring programs (e.g. scales, tissue) requiring a lower funding level (e.g. hire Post-Docs) for data analysis and publication.
	EU: The EU is supportive of this activity and see it a key role of the IASRB.
	No, the UK considers that the Board should provide a forum for <i>facilitation</i> of co-ordination of research efforts (see below).
	The UK considers that the Board should provide a forum for enabling research collaboration among the Parties if a suitable large-scale project is identified; the Board may then seek to advance the project by soliciting resource from Parties, etc to support the project and to provide limited oversight and contribute to dissemination of results.
	However, given the timescale at which the Board's work is undertaken, the UK does not agree the Board is itself a forum for co-ordination of research efforts <i>per se</i> , the 'clearly identified owner' of the large-scale project would be more appropriately placed and resourced to do that.
	US. Yes we think the Board can serve as a forum for co-ordination of research efforts by the Parties, but it is unclear exactly what this would look like as it is wholly dependent on what the Parties bring to the Board. Before information on ongoing or proposed research projects are

brought to the Board, the project proponents should carefully consider the purpose for sharing this information with the Board and what potential role(s) may be useful to recommend from the Board. We note that the makeup of the ICES WGNAS and the nature of their report also provide an efficient resource for advertising the existence of ongoing research projects from across the North Atlantic.

If a universally agreed upon signature project were developed and its implementation were facilitated by the Board, the Board could serve a significant role in coordinating its implementation. The Board could also serve an important role facilitating information exchange between related projects that for whatever reason are not communicating effectively. However, the Board should focus their efforts on promoting collaboration and co-operation rather than assuming an oversight role.

NGO. In our view the role of the Board in stimulating, guiding and funding the required internationally co-ordinated research is fundamental to the overall conservation and management of Atlantic salmon populations.

9. Do you think that the Board should continue to accept financial contributions and manage the Fund?

Please add any further comments, if you wish.

Yes. Canada supports that the Board continue to accept financial contributions and manage the Fund.

EU. The EU is supportive of this function [the Fund] as it is a mechanism for NASCO Parties to support Atlantic salmon conservation research projects. There are a number of examples of successful EU Funded projects that have been delivered using this mechanism, including SALSEA and various SMOLTtrack projects. The delivery of potential new projects, like ROAM, might require the development and management of a 'research fund' potentially funded through Party contributions.

It is not clear that this activity, soliciting of funds, is happening within the Board. This task may fall outside the mission to promote collaboration and co-operation on research into the causes of marine mortality of Atlantic salmon. The EU would like to ensure that changes would not impact on the EU ability to provide grants to NASCO, noting that grants are now signed between the Agency from the EU (CINEA) and NASCO. Consideration should be given to any potential

	changes to the administrative burden associated with a more proactive approach to the seeking of research funding.
	Yes, the UK agrees that the Board may continue to provide an administrative mechanism to accept financial contributions from the Parties, international funding agencies, or NGOs for research related to salmon at sea.
	The UK suggests that funds are only 'solicited' in the event a suitable large-scale project is identified.
	US. Yes, the Board should continue to accept financial contributions and manage the Fund. The Fund has been an extremely useful tool for exchanging and managing financial resources to facilitate research into the causes of marine mortality. From our perspective the Fund has received monies of 3 different types:
	Ring-fenced money from EU to support funded projects;
	Ring-fenced money from Parties to support specific types of projects; and
	• Non-ring-fenced money from Parties to be used at the Board's discretion.
	The management of the Fund has provided the Parties with a great amount of flexibility in organizing and targeting financial resources towards a large variety of efforts investigating the cause of marine mortality. Given the approximate 1.8 million pound provided to the Board to date, as outlined within ICRIS(23)03, this aspect of the Board's work could be considered its greatest contribution/accomplishment to date.
No question was asked about 'establishing terms and conditions for	EU: Please note the comments above. In relation to project evaluation, the current IASRB ToR (ICR(20)03) provides for an external scientific evaluation of research projects considered for

soliciting, evaluating, approving and funding relevant research projects' but the NGO and EU commented on this.

funding under the International Atlantic Salmon Research Programme. It is worth noting also that the IASRB Chair, with agreement from the Members, may establish informal, ad hoc, Working Groups which may be directed at supporting project evaluation. The final decision on funding and approval of projects from IASRB funds is a matter for the Board of IASRB. The IASRB may wish to consider documenting a more formal review process for evaluation, approval and funding of projects.

NGO. To achieve its goals we believe that the Board might be well served by reverting to its original structure whereby scientific advice/guidance and recommendations are offered by SAG on an ongoing basis and the Board focuses on fundraising / seeking out research partnerships and governance of the funds acquired / coordination of the partnership programmes. Given the number of major ongoing marine research programmes taking place across the range of the Atlantic salmon great care should be taken we believe to identify candidate projects which cannot be tackled by individual parties or research organisations, but require international coordination and cooperation to achieve their objectives.

10. Do you agree that the Board should continue to endorse projects that are consistent with the objective / purpose?

Please add further comments, if you wish.

Canada. Yes. The Board should continue to endorse projects if a scientific research proposal has been submitted, including the specific questions to be addressed, detailed methodology and expertise of the research team. The research proposal would be reviewed by the SAG for scientific merit.

EU: The Board should continue to endorse projects which are consistent with the mission and priorities of the Board. The current process is for the SAG to provide feedback on these project proposals for the review and consideration of the Board. Given this, there is no formal documented process outlined for endorsement of research projects.

UK. Yes. The UK considers that if the Board clearly set out its vision and current scientific priorities on its website, projects seeking to align with these priorities could do so by reference to those priorities, rather than asking the Board to review individual project proposals which are not seeking funding as a large-scale 'flagship' programme.

If projects are seeking funding as a large-scale 'flagship' programme, the Board could endorse the proposal to encourage Parties to further support the programme through targeted funding.

	US. Yes, the Board should continue to endorse projects that are consistent with the Vision of the Board. We think it is important for the Chair of the Board to serve as the first line of review for the Board. If after a preliminary review, the Chair considers the proposal to be solid and in line with the Vision of the Board, the proposal should be forwarded to the Board for its consideration. If the Chair finds the proposal lacking or outside of the Vision of the Board, the proposal should be returned to the PIs for editing if desired. The Board should ensure that their review is not simply a rubber stamping exercise, but instead a vigorous review of the merits of the proposed project. The Board may wish to consider developing some review criteria akin to the recommendations outlined within the Report of the Working Group to Review the SALSEA-Track Programme and the Inventory (ICR(20)07).
	NGO. We believe that the Board should agree to offer, through SAG, to endorse programmes which are aligned to its core objectives and also put in place a formal system to consider supporting the preparation of major research applications to emerging international cooperative ventures such as the virtual laboratory initiative recently announced by the UK and Irish Governments (see pdf attached).
11. Do you wish to identify other priorities for the Board? Please add further comments, if you wish.	Yes. As stated, Canada is proposing that the Board consider, at this time, an International Atlantic Salmon Research Programme, with a committed funding amount from all Parties (minimum \$120,000 USD total per year for two to three years or what is sufficient as agreed by the Board – funds sufficient to support Post-Doc). This funding would be used to initiate a targeted call for proposals from established research teams to collaborate and collate their data to address questions at the North Atlantic scale. The funding amount available needs to be established prior to the call for proposals.
	Not at this time, but the UK reserves the option dependent on the agreed definition of the Vision of the Board.
	US. We do not have any suggestions for new priorities for the Board at this time. If new priorities are suggested during this review or in the future, we strongly suggest that these

priorities should be clearly justified as to how they will realistically advance the Vision of the Board.

12. Do you agree that the Board should develop a document which clarifies its role in accepting project proposals, reviewing them and determining whether they should be endorsed or funded?

Yes. **Canada** thinks that the Board should re-visit a document produced by the SAG in 2009 under Agenda Item 5 "Review of Applications for Potential Funding by the Board". A document could be developed by the Board to clarify research priorities guiding the selection of proposals for funding.

UK. Yes. This role should be specified but as part of the website, not a PDF document, so the information is more accessible and findable months and years after it is first posted.

The Board has a role in considering large-scale project proposals (i.e. a 'flagship' programme; via a concisely specified template), reviewing them based on the criteria set out above and determining if they should be recommended to the Parties for funding solicitation.

The Board's role is limited to oversight (in the form of reviewing annual progress updates) and aiding dissemination of project progress and results via its website (though the primary responsibility for dissemination lies with the programme lead).

A concise (i.e., work or page limited) proposal template may request e.g., project title / principal investigator(s) / project abstract / project description (background, SMART objectives and hypotheses, relevance to Board's stated research priorities, application) / data management & dissemination strategy / indicative annual budget)

US. We do not think that the Board should develop a document which clarifies its role in accepting project proposals, reviewing them and determining whether they should be endorsed or funded. This would be an unnecessary layer of bureaucracy for a group that is currently struggling with the balance between bureaucracy and advancing its Vision. The Board is not a funding body, but rather it is an entity which was established by an RFMO to promote collaboration and co-operation on research into the causes of marine mortality. It irregularly has available funds to award and therefore further guidance clarifying this intermittent role is not necessary.

In our opinion, it is the responsibility of the Board members to sufficiently advertise the role of the Board to their colleagues so that the Board as a potential resource can be further understood.

Interested colleagues can reach out to the Secretariat and the Chair of the Board for further information and discussion as appropriate. The burden of using the Board as a potential resource to advance research into the causes of marine mortality should be placed on the potential applicants, not on the Board itself. We believe that it is the role of the members to adequately disseminate relevant Board documents, decisions, and potential opportunities to their colleagues

However, as noted within our response to question #10, the Board could consider if developing review criteria would be beneficial to their future efforts. These criteria could help guide the review process for the members of the Board and if appropriate could be shared to potential applicants as appropriate.

NGO. We believe that the Board should ... put in place a formal system to consider supporting the preparation of major research applications to emerging international cooperative ventures such as the virtual laboratory initiative recently announced by the UK and Irish Governments (see pdf attached).

13. Do you have any comments, at this stage, on whether the funding available to the Board is commensurate with its vision, scope and purpose.

Canada. As there is no ongoing funding of the Board, it is not commensurate with its vision, scope and purpose. Funding would have to be committed by all Parties for a predetermined time period (two to three years) in order for the Board to consider funding research projects and prior to releasing a call for proposals. Researchers are more likely to submit detailed proposals with a known funding amount or range available.

EU: With respect to funding approved projects and reviewing results in relation to the objectives of the Programme, the EU comments above support the IASRB role in funding and approving project. The EU would support a discussion around how active projects should be reviewed and monitored. For example, should this be a role assigned to the NASCO secretariat or an external function.

The UK considers that the funding and staff resourcing currently available to the Board is not commensurate with its scope, purpose or vision (undefined); however, if the Board limits its discretionary funding to a single large-scale programme (yet to be identified) which is commensurate with the criteria set out above then it could play a role in funding such a programme through recommendations to the Parties for contributions.

US. As noted within our response to question #2, this is a bit of a nuanced question as the answer is wholly dependent on what the exact role of the Board is. If the Board is looking to coordinate a large scale research project that meets the criteria set out within the Report of the Working Group to Review the SALSEA-Track Programme and the Inventory (ICR(20)07), then the funding available is not commensurate. If the Board is looking to fund individual projects that are investigating the causes of marine mortality, the funding available to the Board is still not commensurate as there is very little free cash available to fund submitted project proposals, especially on an annual basis. However if the Board is looking to promote collaboration and cooperation on research into the causes of marine mortality then the funding available could be considered commensurate as the resources required to conduct this work could be minimal. Further discussion to finalize the Scope of the Board as detailed in Paragraph 2 of ICR(20)03 are required before a funding amount which would be commensurate could be determined. At this time, we suggest that the work of the Board should be focused on its current Vision towards promoting collaboration and co-operation on research into the causes of marine mortality and the Scope of the Board should be reviewed to ensure that the activities support this Vision. In our view, this would simplify the current work of the Board while keeping it flexible enough to take advantage of potential future opportunities as they may arise.