

CNL(06)11

Report of the Fifth Meeting of the International Atlantic Salmon Research Board

5 June 2006, Hotel Riekonlinna, Saariselkä, Finland

1. Opening of the meeting

- 1.1 The Chairman, Mr Jacque Robichaud, opened the meeting and welcomed Members of the Board, their scientific advisers and representatives of the accredited NGOs to Saariselkä. He referred to the progress made to date by the Board in establishing an inventory of research, improving coordination of existing research programmes funded by the Parties and their partners which, in total, involve expenditure in excess of £5.1 million, and in adopting the SALSEA programme. The key focus now for the Board is to agree approaches to raising the significant funds required to implement the SALSEA programme. In that regard, he believed the Board was at a crossroads.
- 1.2 A list of participants is contained in Annex 1.

2. Adoption of the agenda

- 2.1 The Board adopted its agenda, ICR(06)8 (Annex 2).

3. Inventory of Research

- 3.1 At its inaugural meeting the Board had developed an inventory of research relating to salmon mortality at sea, ICR(01)05, which had been updated in 2002, CNL(02)21, in 2003, ICR(03)3, in 2004, ICR(04)3 and ICR(04)6, in 2005, ICR(05)3 and ICR(05)10, and again in 2006, ICR(06)2. A summary of the updated inventory had been made available to the ICES Working Group on North Atlantic Salmon for information purposes so as to assist it in identifying data deficiencies, monitoring needs and research requirements. The inventory had also been reviewed by the Board's Scientific Advisory Group (SAG) to assist it in identifying gaps in research and research priorities and to develop recommendations for enhanced coordination of existing research.
- 3.2 The Assistant Secretary made a brief presentation on the inventory. He noted that maintenance of this inventory is required under the Board's Rules of Procedure and is considered an essential tool in identifying research gaps and priorities and in improving coordination of existing research. It is also important in demonstrating to potential funders the extent of existing commitments by the Parties and the nature of the ongoing research programmes. As requested by the Board at its last meeting, a number of changes had been made to the presentation of this information, including allocation of ongoing projects to the relevant Work Package of the SALSEA programme. The updated inventory includes a total of 50 ongoing projects. Since last year, 9 projects had been completed and 9 new projects added. As agreed by the Board at its last meeting, the ongoing projects for which no updated information had been provided had been included in the 'completed projects' section following

consultations between the Secretariat and the Board member concerned. The total annual expenditure on the ongoing projects included in the inventory amounts to about £5.1 million, a reduction of about 13% compared to 2005. No costings were available for 4 of the projects. Two new projects had been included in the inventory that are of particular relevance to the SALSEA programme as they involve development of genetic baseline information of salmon stocks in Ireland and Norway. He advised the Board that the inventory had been thoroughly reviewed by the Scientific Advisory Group which had developed a number of recommendations which would be presented by the Group's Chairman.

4. Report of the Scientific Advisory Group

- 4.1 The report of the fourth meeting of the Board's Scientific Advisory Group (SAG) was presented by its Chairman, Dr Lars Petter Hansen (Norway), SAG(06)7 (Annex 3). The Group had reviewed the updated inventory of research, considered a progress report on the SALSEA programme, identified possible topics for funding by the Board, and developed a matrix of timelines and costings for the components of the SALSEA programme based on various funding scenarios. In the light of the recommendations from the SAG, the Board took the following decisions:
- (a) in the event that ICES organizes a Workshop to assemble and analyse historical tagging information to investigate trends in migration and marine distribution of salmon at sea, the Board should propose to ICES that it would be willing to support participation at the Workshop by a small number of experts, particularly oceanographers and experts in Geographic Information Systems. The Board agreed to allocate up to £5,000 to support this Workshop;
 - (b) to invite the coordinators of the SALMAN initiative, Dr Eric Verspoor (Scotland) and Dr Timothy King (USA), to provide a report updating the Board on progress with the SALMAN initiative and providing proposals for genetic stock identification work of relevance to the SALSEA programme that might be supported by the Board. The Board decided not to specify the level of expenditure at this stage;
 - (c) to invite Dr Kevin Friedland (USA) to report to the Board on information relevant to marine mortality of salmon that can be derived from scale analysis, the availability of appropriate data sets and what research might be undertaken in future in support of the SALSEA programme. The Board agreed that production of this report was of a lower priority than the projects identified in paragraphs (a) and (b) above. The Board agreed to allocate up to £10,000 for the production of this report.
- 4.2 The Board asked that the Secretariat liaise with the Chairman of the SAG in taking forward the initiatives identified in paragraphs (a) to (c) above.
- 4.3 The Board agreed that the Parties should be given an opportunity to provide any additional information to the Secretariat by 30 June for inclusion in the inventory and that after that date the inventory should be made available on the Board's website.

4.4 The Board welcomed the detailed timelines and costings for implementing different components of the SALSEA programme based on various funding scenarios being available which had been developed by the SAG.

4.5 The Board thanked Dr Hansen for his report and the work of the Scientific Advisory Group.

5. The SALSEA Programme

(a) Progress Report

5.1 At its last meeting the Board had fully endorsed the SALSEA programme, a comprehensive mix of freshwater, estuarine, coastal and offshore research. The Board had noted that full implementation of the offshore element would require funds of approximately £7.8 million or £10.5 million, depending on whether there are two or three years of research cruises. It was recognised that funding for the SALSEA programme could either be raised from NASCO Parties or through a fund-raising initiative including public/private partnerships. The Board had agreed that the immediate next steps should be to:

- arrange for a peer review of the SALSEA programme. Drs Jack Helle (USA) and Dick Beamish (Canada), both of whom have extensive experience of research on Pacific salmon, were identified as possible reviewers;
- arrange for further communication of the SALSEA programme to ICES to raise awareness of the programme and to seek support for, and feedback on, the programme from scientists working on diadromous fish, and from the broader community of marine scientists in relation to SALSEA's relevance to the ecosystem approach;
- correct and update the SALSEA programme in the light of any feedback received from the reviewers.

5.2 The Secretary introduced document ICR(06)3 (Annex 4) which includes a review of the SALSEA programme by Dr Beamish. In summary, Dr Beamish had responded positively about the programme and had noted the similarity to marine survival issues for salmon in the Pacific. He had indicated his support for the marine survey, particularly when combined with genetic stock identification and a comprehensive disease assessment programme. Dr Beamish had suggested that there might be benefits from the establishment of a small international team of scientists studying the basic mechanisms regulating salmon populations in the North Pacific and North Atlantic Oceans.

5.3 The Board noted in the report of the SAG that Dr Niall Ó Maoiléidigh had also raised awareness of the SALSEA programme in ICES and the feedback had also been positive. The Board expressed its appreciation to Dr Ó Maoiléidigh for his assistance.

5.4 The Board welcomed the positive feedback from Dr Beamish and ICES and noted that no revision to the programme was required in the light of the comments received. The Board noted that in 2003 NASCO had held a successful joint meeting with ICES,

PICES, NPAFC and IBSFC on factors influencing the mortality of salmon in the sea. The Secretary indicated that NPAFC are keen to hold a major joint international symposium on this topic in 2008 or 2009 to allow for a further exchange of information between researchers in the North Pacific and North Atlantic Oceans. The Board asked that the Secretary liaise with NPAFC on the arrangements for such a meeting and report back to the Board following the annual meeting of NPAFC in October.

5.5 The Board also agreed that there could be benefits from a small meeting of scientists studying the mechanisms regulating salmon populations in the North Pacific and North Atlantic Oceans and asked that Mr Beaupré (Canada) liaise with Dr Beamish on arrangements for such a meeting, which it is hoped might be held in 2007.

(b) Future actions

5.6 Consistent with Work Package 4, Task 1, of the SALSEA programme, the Board developed and adopted a proposal for the way forward to promote the SALSEA programme and its realization. The Board will:

- (1) establish immediately a Steering Committee reporting to the Board composed of 5 NGOs/5 Board representatives and the Secretary to assist in the implementation of this critical initiative;
- (2) start immediately the search for a Project Director, i.e. Mr/Ms SALSEA, who will be approved by the Board. For the time being the NASCO President will continue in this capacity;
- (3) obtain professional expertise to produce, with the Steering Committee, the case for support and marketing package. It will highlight the importance of research on salmon at sea and the unique opportunity for international collaboration and cooperation;
- (4) this summer and early fall, the NASCO President, with professional support, will seek some early buy-in and contributions;
- (5) request the SAG to deliver a comprehensive package highlighting all cruises over years 2008 and 2009. (This will include timelines, spatial coverage, cost breakdown, etc);
- (6) request Parties to ensure access to vessel time is given higher priority for 2008/2009, to realize SALSEA:
- (7) the Board will set aside £40,000 for the remainder of 2006 and £20,000 for 2007 towards the Work Package 4, Communications.

6. The search for new funds

6.1 At its last meeting the Board had received a report, ICR(05)8, from Brakeley Consultants, who had been engaged to develop a fund-raising strategy. This report had concluded that in the SALSEA programme, the Board had a positive and urgent

case, with objectives that meet this urgency, and wide potential sources of funding. However, the consultants had concluded *inter alia* that there was limited potential to raise money with the current structure of the Board, that the target of £7.5 million was too high, and that additional government funding would be essential as leverage for funding from the private sector. They had, therefore, recommended that, as the next steps, additional funding of £4 million should be sought from NASCO's Parties and that a professionally managed fund-raising programme should be initiated with the objective of raising £4 million over a five-year period. The Board had agreed that the first step should be to fully review the report from Brakeley Consultants and to coordinate views from the Board Members on the way forward with regard to the fund-raising approach. The Board had recognised that it would be desirable to use professional expertise in any fund-raising initiative rather than employing a staff member in the Secretariat, and that the consultants' role would be to identify possible sources of funding, develop relationships with potential funders and then make introductions so that representatives of the Board could present the SALSEA programme to them.

6.2 Following the Board's 2005 meeting, Brakeley's had developed a proposal for fund-raising from the private sector. Following consultations with the Chairman, the Secretary had written to members of the Board on 25 August 2005 asking for responses to the following two questions:

- are you able and willing to contribute a share of a total of about £4 million (in cash or new resources) over the next five years, i.e. your share of about £800,000 per year?
- are you able and willing to contribute a share of a total of about £350,000 over about three years to develop a fund-raising capability to the point where funds are, hopefully, flowing in?

6.3 A further question was posed about appropriate approaches to sharing the costs. The Secretary introduced document ICR(06)4 (Annex 5) which detailed the responses from the Parties to these questions.

6.4 The Chairman introduced Mr William Conner, Brakeley Consultants, who presented a summary of the feasibility study and the fund-raising strategy. He indicated that the next steps would be to define the public/private partnership, for the IASRB to enlist people who can deliver, for the NGOs to be integrated into the strategy and for a communication programme to be implemented. In order to start fund-raising, he suggested that £100,000 be allocated by the Board which it would be hoped could be paid back from early receipts. There would then be a need to create a steering committee to drive the fundraising and to agree a case for support. There should be a quarterly review of fundraising progress. He stressed that the success of the fund-raising would be dependent on the involvement of NGOs who would bring credibility to the project and could speed up the fund-raising process and thereby reduce the costs.

6.5 The Board recognized that fund-raising is only one component of a larger package of actions required to provide leadership in the realization of the SALSEA programme. The approach adopted by the Board to promote SALSEA is detailed in paragraph 5.6.

6.6 The Board noted that there had been discussions between the Secretary and President of NASCO and the Research Directorate General of the European Commission in relation to possible funding under the EU Seventh Framework Programme. The Board fully supported this initiative and saw it as a vital component for implementing the Work Package on oceanic distribution and migration. The Board was also advised that the President had been invited to attend an ASF Board meeting to present the SALSEA programme. Following this meeting, ASF had adopted a resolution pledging support for, and participation in, the SALSEA programme, including taking advocacy action and coordinating its research activities within the scope of the SALSEA programme. The Board greatly welcomed this support in promoting the SALSEA programme.

6.7 The Chairman indicated that the Board is always open to further contributions by the Parties.

7. Finance and administrative issues

7.1 Under Rule 14 of the Board's Rules of Procedure, it is stated that the Rules of Procedure "may be subject to review by the Council of NASCO at any time and should be reviewed no later than 2005". Since their adoption in 2001 the Rules of Procedure have not been reviewed or amended other than to reflect the change in name of the Board to the International Atlantic Salmon Research Board. At its last meeting, the Board noted that there had been some changes to the Rules such as those concerning NGO participation in its meetings which needed to be reflected in the Rules of Procedure and that further changes might be needed, and agreed that the rules should be reviewed more thoroughly at its 2006 meeting. The Secretary introduced document ICR(06)5 which included proposals for changes to reflect the establishment of the Board's Scientific Advisory Group and to reflect the Board's decision to allow NGO participation in its meetings and those of its Scientific Advisory Group. The Board adopted the revised Rules of Procedure unchanged, ICR(06)10 (Annex 6).

7.2 The Secretary reported that, in accordance with the Board's decision in 2005, the financial statements for the year to 31 December 2005, ICR(06)6, had been audited by the auditors to NASCO and sent to all Members of the Board. At the end of 2005 the fund balance stood at approximately £103,000. However, the Board had agreed to contribute £60,000 of these funds to further promoting the SALSEA programme, and the international symposium with NPAFC might require funding of around £28,000. The project work identified in paragraphs 4.1(a)-(c) could involve further expenditure of more than £15,000 if implemented.

7.3 The Board adopted the 2005 audited accounts. The Board recognized that there were significant costs in having the accounts audited annually and agreed that, in future, the Board's accounts should be audited every two years commencing with the 2007 financial statements. For years in which an audit is not conducted, details of the Board's expenditures and finances will be circulated to the members of the Board and discussed at its annual meeting.

8. Other business

8.1 There was no other business.

9. Report of the meeting

9.1 The Board agreed the report of its meeting.

10. Date and place of next meeting

10.1 The Board will agree the date and place of its next meeting by correspondence.

10.2 The Chairman thanked participants for their contributions and closed the meeting.

List of Participants

Chairman of the Board

Mr Jacque Robichaud

Canada

Mr Guy Beaupré
Mr Gerald Chaput
Mr David Meerburg
Mr Tim Young
Mr Bud Bird

Denmark (in respect of the Faroe Islands and Greenland)

Ms Mira Ann Kalsi
Dr Jan Arge Jacobsen

European Union

Mr Ted Potter
Mr David Dunkley

Iceland

Mr Arni Isaksson
Mr Atli Mar Ingolfsson

Norway

Mr Arne Eggereide
Mr Raoul Bierach
Dr Lars Petter Hansen

Russian Federation

Dr Boris Prischepa
Dr Svetlana Krylova
Ms Elena Samoylova

USA

Mr Pat Scida
Mr Tim Sheehan
Mr Andrew Goode
Dr Alexandra Curtis

Non-Government Organizations

Mr Chris Poupard
Mr Niall Greene

Secretariat

Dr Malcolm Windsor
Dr Peter Hutchinson

Brakeley Consultants

Mr William Conner

ICR(06)8

Fifth Meeting of the International Atlantic Salmon Research Board

*Hotel Riekonlinna, Saariselkä, Finland
Monday 5 June, 2006*

Agenda

1. Opening of the meeting
2. Adoption of the agenda
3. Inventory of Research
4. Report of the Scientific Advisory Group
5. The SALSEA Programme
 - (a) Progress report
 - (b) Future actions
6. The search for new funds
 - (a) Progress report on a fund-raising strategy
 - (b) Future actions
7. Finance and administrative issues
8. Other business
9. Report of the meeting
10. Date and place of next meeting

SAG(06)7

***Report of the Fourth Meeting of the Scientific Advisory Group of the
International Atlantic Salmon Research Board***

***Hotel Riekonlinna, Saariselkä, Finland
Sunday 4 June 2006***

1. Opening of the Meeting

- 1.1 The Assistant Secretary opened the meeting and welcomed members of the Scientific Advisory Group (SAG) to Saariselkä. He advised the group that Dr Malcolm Beveridge (European Union) had taken up a new posting and was unable to continue as Chairman of the SAG and there would, therefore, need to be an election to appoint a new Chairman.
- 1.2 A list of participants is contained in Annex 1.

2. Election of Chairman

- 2.1 The SAG unanimously elected Dr Lars Petter Hansen (Norway) as Chairman.

3. Adoption of the Agenda

- 3.1 The SAG adopted its agenda, SAG(06)6 (Annex 2).

4. Review of the updated inventory of research and recommendations for enhanced coordination of research

- 4.1 The Assistant Secretary provided an overview of the updated inventory of research relating to salmon mortality in the sea, ICR(06)2, which is considered by the Board to be an essential tool in identifying research gaps and priorities and in improving coordination of existing research. For 2006, 50 ongoing projects had been included in the inventory and the annual expenditure on these projects was approximately £5.1 million, although no costings had been provided for 4 projects. Where the information had been provided by the Parties, details of collaboration between public and private organizations, and a breakdown of the funding of these projects, had been included in the inventory. Since the last update, 9 new projects had been included in the inventory and 9 projects had been completed. In addition, two US projects formerly contained in the inventory had been removed completely because the US had advised that they were not relevant to marine mortality of salmon.
- 4.2 As agreed by the Board at its last meeting, projects that had not been updated had been removed from the list of ongoing projects following consultation between the Secretariat and the Board Member concerned.

- 4.3 As requested by the Board, the Secretariat had requested details of the sampling programme at St Pierre and Miquelon from the French authorities for inclusion in the inventory but no response had been received to date.
- 4.4 At its last meeting, the Board had asked that the Secretariat allocate ongoing projects to the Work Package and Task in the SALSEA programme to which they relate, so that those areas of the programme which are already being addressed, at least in part, through ongoing research, and gaps in the SALSEA programme, could be identified. The information is presented in Table 3 of the updated inventory. New projects of relevance to the SALSEA programme include genetic studies in Ireland and Norway which will contribute to the development of a baseline or genetic atlas of stocks to facilitate genetic stock identification of salmon caught in research cruises at sea, if these cruises can be funded. Two projects of particular relevance to the offshore element of the SALSEA programme had been completed in 2005. The first project involved collaborative trials of trawl gear conducted by Scotland and Norway. The second involved research cruises for salmon in the Labrador Sea by Canada. The SAG recommends that, in future, Table 3 in the inventory should not provide a comparison of expenditure on ongoing projects with that envisaged under the SALSEA programme because the values provided are not directly comparable and goals of the research may differ.
- 4.5 The SAG noted that research vessel fleets were being rationalized in several countries with the expectation of replacing older vessels with fewer, but larger, vessels. Given existing commitments of the remaining vessels, obtaining research vessel time for salmon work may be more difficult in future.
- 4.6 The SAG noted that there is only one ongoing study concerned with the development of methods. However, the Group was advised that Cefas (UK) has recently developed a new large-memory (8 Mbit) data storage tag that is small enough to be used on the largest smolts (1g in water). This development was not specifically related to tagging salmon and had not, therefore, been included in the inventory.
- 4.7 The SAG was also advised of a project involving the deliberate release of externally tagged farmed salmon involving collaboration between Scotland and Norway intended to improve understanding of the migration and fate of escaped farmed salmon. The Group believed that details of this project should be included in the inventory. The Group recognized that there was a number of activities being conducted which collect data of interest to Atlantic salmon marine dynamics, but which are not documented in the inventory. The absence of these projects relates to the focus of these studies which are not directly related to salmon and it would be difficult to capture all the activities and their costs. Knowledge of these projects would be important to the implementation team of SALSEA but are beyond the capacity of IASRB to document completely.
- 4.8 The Group noted that the inventory is made available on the Board's website and to the ICES Working Group on North Atlantic Salmon to assist it in identifying data deficiencies, monitoring needs and research requirements. However, the group agreed that efforts should be made to better communicate the valuable information in the inventory to researchers and to NASCO's accredited NGOs. The Group believed that it would be valuable to consult the Chairman of the NGOs to seek feedback from the

NGO group on whether or not they found the inventory useful. The Group also agreed that a brief overview of the inventory should be presented to the Board at its meetings. The SAG recommends that the Board Members make efforts to distribute the inventory to scientists involved with research on salmon at sea in their countries.

- 4.9 The SAG noted that for some Parties long-term monitoring programmes of smolt survival in a number of rivers are collated and presented as a single project in the inventory while other Parties present projects on individual rivers separately. The Group agreed that each Party or jurisdiction should be requested to present such studies as a single project for inclusion in the inventory when it is next updated.
- 4.10 The Group agreed that it is useful to include information on both ongoing projects and completed projects in the inventory.
- 4.11 The SAG recommends that the Parties be given an opportunity to provide any additional information to the Secretariat by 30 June for inclusion in the inventory, and that, thereafter, the inventory should be made available on the Board's website.

5. The SALSEA Programme

(a) Progress Report

- 5.1 At its 2005 meeting, the Board had fully endorsed the SALSEA programme and had noted that its implementation would require funds of approximately £7.8 million to £10.5 million, depending on whether there are two or three years of research cruises. The Board had agreed to arrange for a peer review of the SALSEA programme and the Chairman was asked to write to Drs Helle (US) and Beamish (Canada), both of whom have extensive experience of research on Pacific salmon, inviting them to review the SALSEA programme.
- 5.2 The Assistant Secretary referred to document ICR(06)3 which indicated that a response had been received from Dr Beamish but not, to date, from Dr Helle. Dr Beamish had indicated his support for the marine survey, particularly when combined with genetic stock identification and a comprehensive disease assessment programme. He had suggested that while there are numerous sources of mortality he believed there had to be a fundamental mechanism regulating carrying capacity. He had also suggested that there might be benefits from the establishment of a small international team of people studying the basic mechanisms regulating salmon populations. The SAG welcomed this support for the SALSEA programme, but noted, however, that in the Pacific Ocean salmon are the dominant pelagic fish species. This is not the case in the North Atlantic Ocean and there have been enormous increases in the biomass of pelagic species such as herring and blue whiting in recent years. The SAG considered that any changes in ocean carrying capacity in the North Atlantic may not be related to intra-specific competition and agreed that it would be valuable if ICES was requested to provide information on trophic dynamics of salmon and their implications for mortality of salmon at sea.
- 5.3 The SAG noted that the Board is being asked to consider supporting a joint symposium with the North Pacific Anadromous Fish Commission in 2008 or 2009 to allow for a further exchange of information between researchers in the North Pacific and North Atlantic Oceans on issues concerning marine mortality of salmon. The

SAG supported this proposal and noted that there was also support in ICES for a symposium on this topic.

5.4 The Board had also asked that the SALSEA programme be communicated to ICES to raise awareness of the programme and to seek support for, and feedback on, the programme from ICES' community of marine scientists in relation to SALSEA's relevance to the ecosystem approach. Dr Niall O'Maoileidigh (EU) had agreed to make appropriate arrangements in ICES and reported to the SAG that he had presented information on the SALSEA programme to the Consultative Committee of ICES on two occasions and the item remains on that Committee's agenda. This Committee includes representatives of the ICES advisory and science committees. He had provided the background to the establishment of the International Atlantic Salmon Research Board and the development of the SALSEA programme, an overview of NASCO's work under the Precautionary Approach and the Board's efforts to implement a fund-raising initiative. The Consultative Committee had indicated its support for the SALSEA programme and had suggested that ICES would be willing to serve as a coordinator for the SALSEA programme if that would be of interest to the Board. The SAG believed that it could be valuable for ICES to assist the Board by identifying possible opportunities for salmon research to be incorporated into existing research vessel cruises and in providing oceanographic information of relevance to the SALSEA programme.

5.5 It was noted that the SALSEA programme is a comprehensive mix of freshwater, estuarine, coastal and offshore elements but that the Board's initial priority is studies of the migration and distribution of salmon at sea. The SAG discussed the nature of the information on mortality of salmon at sea that would be derived from the inshore and offshore elements of the SALSEA programme. It was recognized that telemetry studies in coastal waters could provide quantitative estimates of mortality and that such studies might be progressively extended offshore. In contrast, the information derived from offshore research would be qualitative in nature but improved understanding of the distribution of salmon at sea should facilitate identification of the factors influencing them.

5.6 The SAG noted that there had been discussions between the Secretary and President of NASCO and the Research Directorate General of the European Commission in relation to possible funding under the EU Seventh Framework Programme. The SAG recognized that there may need to be considerable work in developing a proposal to ensure that elements in the SALSEA programme are framed around one of the Seventh Framework Programme themes (e.g. climate change). However, the SAG was advised of an initiative to include the SALSEA programme as a separate theme under the EU programme.

(b) Recommendations to the Board

5.7 In adopting the SALSEA programme, the Board had agreed that research priorities and timescales for the use of the Board's existing funds that are available for research should be identified and the research initiated at the earliest opportunity. This would demonstrate to the Parties and to potential fund-raisers further progress in implementing the SALSEA programme. In 2005 the Board had noted that several research coordination Workshops had been identified that would support the SALSEA

programme. The Chairman introduced document SAG(06)2 which indicated that in accordance with the Board's decisions at its 2005 meeting, the SAG had been requested to liaise with the SAG members to develop recommendations on:

- projects that might be initiated immediately given that the major elements of the SALSEA programme are dependent on substantial funds being raised;
- detailed time-lines and costings for the components of the SALSEA programme based on various funding scenarios.

5.8 The SAG had previously identified two main topics that might be supported from the Board's existing resources, SAG(06)2. These were analysis of tagging data and genetic stock identification. While the SAG was aware of the Board's current financial resources, it did not know the extent of the funds that may be available to support research because the Board's planned expenditure in other areas in the coming year is unknown.

Analysis of tagging data

5.9 The SAG noted that there is a considerable amount of information on tag recoveries in laboratories around the North Atlantic that have not been fully analyzed (e.g. data from West Greenland, Maine, Norwegian Sea and Faroes). While the SAG recognized that the historical tag recovery data had been obtained from fisheries, many of which no longer operate or are greatly reduced, there could be valuable information obtained from an analysis of the information with regard to the spatial and temporal distribution of salmon at sea. The Group discussed if there would be merit in an assessment of the lessons learned from previous tagging studies but noted that the SALSEA programme proposes the use of genetic stock identification methods to identify fish sampled during research cruises. The SAG believes that an analysis of historical tag data could be highly informative and could assist in planning research cruise efforts. The SAG noted that the ACFM report to NASCO, CNL(06)7, contains a recommendation that "a Workshop be organized to assemble and analyse historical tagging information to investigate trends in migration and marine distribution of salmon at sea". The SAG supported this recommendation and suggests that if ICES organized such a Workshop the Board may wish to propose to ICES that it would be willing to support the participation at the Workshop of a small number of additional experts, particularly oceanographers and experts in GIS (Geographic Information Systems). It was suggested that participation in the Workshop by salmon biologists might be facilitated if it was held in conjunction with a meeting of the Working Group on North Atlantic Salmon. Others had concerns about extending the Working Group meeting. The SAG felt that funding of up to £5,000 by the Board might be appropriate.

Genetic stock identification

5.10 There is now a concerted effort, SALMAN, in relation to genetic stock identification (GSI) of salmon, which aims to collect standardized genetic information on Atlantic salmon from around the species' distribution area. SALMAN is an association of scientists who have agreed to collaborate on salmon genetic issues under the coordination of Eric Verspoor in Scotland and Tim King in the USA. The SAG

discussed whether or not it would be valuable to support a workshop with the objective of planning an inter-laboratory calibration exercise involving laboratories working through the SALMAN initiative. The SAG also discussed whether at that Workshop the SALMAN members might be asked to develop a road map of how genetic stock identification work is developing and how it might be used to support the SALSEA programme. The SAG recognized that it did not have the technical expertise to develop detailed Terms of Reference for a genetic workshop and noted that there had already been some progress at a meeting in Virginia in 2004 in agreeing sixteen loci for use in future genetic studies of salmon. However, the report of this meeting had not been seen by members of the SAG. The SAG felt that it would be useful to have an update on progress and further explanation of how genetic stock identification may be implemented in the SALSEA programme. Rather than proposing a workshop to allow this information to be developed the SAG agreed that the Board should seek proposals from geneticists, through a process of competitive tenders, to develop a comprehensive report on these aspects. The SAG recommends that a sum of £20,000 should be made available to facilitate this process.

Other topics

- 5.11 A third project, identified by the SAG, but of lower priority, would be for the Board to seek updated information on advances in scale reading methodologies and analyses in relation to marine growth and details of relevant data sets. It was suggested that Dr Kevin Friedland (USA) might be approached in this regard. The SAG recommends that the Board should allocate a sum of £10,000 for this project. The SAG also felt that the Board may wish to consider opportunities to enhance collaboration in relation to information obtained from monitored rivers.

Timelines and costings

- 5.12 The Chairman of the Board, Mr Jacques Robichaud, indicated that the SAG had been asked to develop detailed timelines and costings for the components of the SALSEA programme based on various funding scenarios (e.g. if £7.5 million was available in 2007, £4 million available in 2008, etc.). The SAG recognized that it would be important to prioritise the research elements in the SALSEA programme in the event that the Board proceeds with a fund-raising programme. For example, a potential sponsor may wish to know how any contribution to the Board would be spent and it may be possible to extend the period of research so as to reduce the funds required each year. The SAG noted that one possible approach might be to initially prioritise the highest cost projects in the SALSEA programme but noted that a number of projects are inter-dependent. The SAG, therefore, developed a matrix of research priorities within the SALSEA programme (Table 1).
- 5.13 The following costings are based on those provided in the SALSEA programme. It should be borne in mind that the SALSEA programme includes a wide range of marine and freshwater elements, and was designed to allow consideration to be given to funding specific components, either as support to the full implementation of the programme, which is clearly the desired option, or to possible stand-alone elements which could be considered from funding if this became necessary. The IASRB has agreed to give priority to the marine surveys for their funding efforts, and only the

components of Workpackages 1 (*Supporting Technologies*) and 3 (*Oceanic Distribution and Migration*) are costed in the SALSEA programme.

“No costs are provided for Work Package 2 (Early Migration) as it is assumed that this work will continue to be carried out by the Parties, but will include a greater level of cooperation and coordination of research in the priority areas previously outlined in this report”.

- 5.14 The first option in Table 1 is the cost presented in the SALSEA programme for full implementation of Work Packages 1 and 3 with a minimum of two years of cruises in all jurisdictions outlined in the SALSEA programme. The total estimated funding required is £7,760,000.
- 5.15 The second cost option assumes that only one year of cruises in all jurisdictions can be funded and that all of the supporting technology programmes are also implemented. The cost in this instance is £4,960,000 but will lack the advantage of having the second year of cruises to consolidate the initial survey findings.
- 5.16 Option 3 is the minimum cost considered to allow at least three cruises of the fifteen cruises outlined in the SALSEA programme over one year and full implementation of the preparatory programme (3.2 and 3.1). However, there will be limited development of trawl techniques (1.2) and the costs presented here are limited to purchase or adaptation of existing trawls for these cruises. The costs of analysis (3.4) are also reduced to account for the lower volume of material to be analysed. Elements such as the genetic stock identification baseline (1.1) will need to be funded from other sources as will the analysis of existing scale sets (1.3) to highlight important information in historical marine survival. This option costs £750,000 which is considered the minimum for initiating research cruises.
- 5.17 The remaining options (4 to 7) assume that only limited funding as indicated becomes available and for illustrative purposes funds of £400,000, £200,000, £100,000 and £50,000 are shown with the elements of the SALSEA programme which should be considered for funding. In all instances, the funds are not sufficient to allow a research cruise effort which would provide adequate spatial or temporal coverage to meet the SALSEA objectives. The elements to be considered are therefore restricted to the establishment of the genetic baseline (1.1) and the analyses of scale samples (1.3), either in full or in part, depending on the funding available.
- 5.18 If funding greater than £750,000 but less than £5 million is secured, decisions would need to be made about the number and distribution of additional research vessel cruises to be undertaken and the relative level of investment in other parts of the SALSEA programme, including genetic analysis and scale studies.
- 5.19 With regard to the establishment of the international genetic baseline (1.1) it should be noted that a considerable investment has been put in place since the SALSEA programme was developed and that the costs illustrated in this example required for this element are, therefore, overstated.

6. Other business

- 6.1 There was no other business.

7. Report of the meeting

7.1 The SAG agreed a report of its meeting.

8. Date and place of next meeting

8.1 The SAG decided to agree the date and place of its next meeting by correspondence.

8.2 The Chairman closed the meeting and thanked the members of the group for their contributions.

Table 1 SALSEA components to be considered depending on available funds

SALSEA Workpackage	WP and task	Task title	Priority	Option 1 All cruises over 2 years	Option 2 All cruises over 1 year	Option 3 3 cruises over 1 year	Option 4 Available funds £400,000	Option 5 Available funds £200,000	Option 6 Available funds £100,000	Option 7 Available funds £50,000
Supporting technologies	1.2	Sampling techniques and new technologies	1	£330,000	£330,000	£50,000				
Oceanic distribution and migration	3.2	Standardisation - a common approach	2	£25,000	£25,000	£25,000				
Oceanic distribution and migration	3.1	Distribution mechanisms	2	£25,000	£25,000	£25,000				
Oceanic distribution and migration	3.3	Salmon at sea	2	£5,600,000	£2,800,000	£600,000				
Oceanic distribution and migration	3.4	Distribution and migration	3	£180,000	£180,000	£50,000				
Supporting technologies	1.1	Genetic tagging to determine stock origin	4	£1,500,000	£1,500,000		X in part	X in part	X in part	X in part
Supporting technologies	1.3	Signals from scales	4	£100,000	£100,000		X	X	X in part	X in part
Cost				£7,760,000	£4,960,000	£750,000	£400,000	£200,000	£100,000	£50,000

List of Participants

Canada

Mr Gerald Chaput
Mr David Meerburg

Denmark (in respect of the Faroe Islands and Greenland)

Dr Jan Arge Jacobsen

European Union

Dr Niall O'Maoileidigh
Mr Ted Potter

Norway

Dr Lars Petter Hansen (Chairman)

Chairman of the Board

Mr Jacque Robichaud

Secretariat

Dr Peter Hutchinson

SAG(06)6

**Meeting of the Scientific Advisory Group of the
International Atlantic Salmon Research Board**

**Hotel Riekonlinna, Saariselkä, Finland
Sunday, 4 June, 2006**

Agenda

1. Opening of the meeting
2. Election of Chairman
3. Adoption of the agenda
4. Review of the updated inventory of research
5. The SALSEA Programme
 - (a) Progress report
 - (b) Recommendations to the Board
6. Other business
7. Report of the meeting
8. Date and place of next meeting

ICR(06)3

Peer Review of the SALSEA Programme

1. At its last meeting, the Board agreed that there should be a peer review of the SALSEA programme. Drs Dick Beamish (Canada) and Jack Helle (USA), both of whom have extensive experience of research on Pacific salmon, were identified as possible scientists who might be asked to conduct such reviews. Dr Beamish has responded, and indicated that he liked the proposal and noted the similarity to marine survival issues for salmon in the Pacific. His comments are contained in Annex 1. He suggests that freshwater factors are unlikely to be the key to recent trends in poor returns, and while there is a tendency to continue freshwater research because it has inertia, he feels it may be better to focus on marine studies. He is supportive of the marine survey, particularly when combined with genetic stock identification and a comprehensive disease assessment programme. He believes that while there are numerous sources of mortality, there has to be a fundamental mechanism regulating carrying capacity, rather than predation and disease, which are too random to be the mechanism, and suggests that there might be benefits from the establishment of a small international team of people studying the basic mechanisms regulating salmon populations. One proposal that the Board will be asked to consider is whether it would wish to support a joint symposium with the North Pacific Anadromous Fish Commission in 2008 or 2009 to allow for a further exchange of information between researchers in the North Pacific and North Atlantic Oceans.
2. We do not yet have the feedback from Dr Helle but anticipate that this will be available before the meetings of the Board and its Scientific Advisory Group (SAG) on 5 and 4 June, respectively.
3. Last year, the Board had also asked that the SALSEA programme be communicated to ICES to raise awareness of the programme and to seek support for, and feedback on, the programme from scientists working on diadromous fish, and from the broader community of marine scientists in relation to SALSEA's relevance to the ecosystem approach. Dr Niall Ó Maoiléidigh, who was Chairman of the ICES Diadromous Fish Committee at the time, agreed to make appropriate arrangements within ICES. We anticipate that Dr Ó Maoiléidigh will be attending the meeting in Finland and will be able to report back to the SAG.

Secretary
Edinburgh
12 May 2006

Comments on the SALSEA programme by Dr R Beamish, Department of Fisheries and Oceans, Nanaimo, Canada

P7-12 very little to add

- Use of DNA stock ID and high seas sampling methods will enable us in the Pacific to identify where, when and at what age juvenile salmon are located in the ocean. This allows us to associate ocean and climate conditions with marine survival. Our high seas sampling also provides abundance estimates which we are finding out relate to subsequent returns. We should eventually be able to eliminate the coastal “surprises” such as occur in the Fraser River.
- probably could do this cooperatively with laboratories in the Pacific.
- will migration routes change as regimes change?
- there is no reported size bias in the trawls we use.

P13

- local factors in the ocean are related to basin scale factors in our Strait of Georgia studies. There may be a local expression of the basin scale change but they are related.
- Body size is important as it represents energy storage which is needed in the winter when there is a net lipid deficit.

P15

- I suspect that freshwater experiences are not key to the recent trend in poor returns. There is a tendency to continue freshwater research because it has inertia, but it may be better to focus on marine studies.

P19

- Predators are a major source of mortality, but salmon smolts most likely are a minor prey for predators. It is useful to do the scarring study, but predator diet studies traditionally are difficult to interpret.

P21

- Aquaculture impacts need to be monitored but the recent declining trends in production probably are related to large-scale changes in the ocean. What are the sea lice intensities on wild Atlantic salmon and have they changed over the period that salmon farming developed? It may be possible that the very reduced density of wild salmon may affect the productivity of sea lice in the open ocean. I realize that it is the farm site that is of interest, but the wild salmon will carry the sea lice into the open ocean unless the fish are killed which should not be too difficult to assess.

- The marine survey may be your best bet; particularly when it is combined with DNA stock identification and a comprehensive disease assessment program.
- Pacific salmon are doing very well. In 2003, there was the second-highest all nation catch in history. In 2005 Alaska had its largest catch in history. It is useful to try and understand why these historic high catches are occurring as the mechanism probably relates to Atlantic salmon and may provide cues to the widespread poor production. I suspect the key is the amount of lipid storage in the first marine year in relation to the energy required to survive the first marine winter. There are numerous sources of mortality but there has to be a fundamental mechanism regulating carrying capacity. Predation is too random to be the mechanism, as is disease. It may be wise to create a small international team of people studying the basic mechanism regulating all salmon populations. One or two meetings for several years may be a good investment as it could focus research, saving money in the long term.

ICR(06)4

Responses from the Parties on Funding for the SALSEA Programme and a Fund-Raising Initiative

1. At its last meeting in Vichy, the Board fully and unanimously endorsed the SALSEA programme and noted that its implementation would require funding of between £7.8 - £10.5 million over five years, depending on whether there were two or three years of research cruises. On 25 August last year, I sent to the Board members a proposal from Brakeley consultants in relation to fund-raising. This proposal set out all the action needed and summarised the costs (Annex 1). Brakeley's had suggested a public/private-sector initiative, with the Parties contributing around £4 million over five years. The cost of a fund-raising exercise with the private sector to raise the additional £4-5 million was estimated to be in the region of £350,000 over a period of about three years, although some of these costings were indicative only.
2. Following consultation with the Chairman of the Board I wrote to the parties on 25 August 2005 and asked for a response to the following two questions:

(1) Are you able and willing to contribute a share of a total of about £4 million (in cash or new resources) over the next five years, i.e. your share of about £800,000 per year?

If so, how can the sum be shared (e.g. equally, according to the NASCO formula, or according to a new (Board) formula)? Equal shares would be about £115,000 per annum per Party for five years.

(2) Are you able and willing to contribute a share of a total of about £350,000 over about three years to develop a fund-raising capability to the point where funds are, hopefully, flowing in?

If so, how can the sum be shared (e.g. equally, according to the NASCO formula, or according to a new (Board) formula)? Equal shares would be around £17,000 per annum per Party for about three years.

3. A number of possible outcomes were envisaged depending on the responses from the Parties. These were as follows:

Q1	Q2	OUTCOME
YES	YES	We can initiate SALSEA now and carry out the whole programme with two years of research cruises if fund-raising is successful.

Q1	Q2	OUTCOME
YES	NO	We can start selected elements of SALSEA but we cannot fund all of the programme.

Q1	Q2	OUTCOME
NO	YES	We cannot start the programme for about 2 years (but if the fund-raising is successful, scheduled elements of SALSEA can be conducted).

Q1	Q2	OUTCOME
NO	NO	We can only 'coordinate' existing programmes

4. I have now received the following responses from the Parties' Board Members and these are summarized below.

Canada

No response received.

Denmark (in respect of the Faroe Islands and Greenland)

No response received.

European Union

As I indicated when we spoke, I have discussed the SALSEA funding with John Spencer. He was hoping to have a meeting with you, and he said that he would discuss issues relating to possible funding from the Commission at that time. I agreed to contact Member States to determine what contributions they might be able to make.

EU Member States were asked three questions: can they contribute to the cost of the consultants (mainly in the next 1-2 years); can they contribute to the balance of the overall research programme that will not be covered by the fund-raising, including redirecting current research work; and could they contribute any assistance to the research programme in kind (e.g. research vessel time). So far I've managed to get information from six Member States (including the 'main players' UK and Ireland), and the picture is fairly consistent; research and development funds are generally very tight (and/or have yet to be allocated).

With regard to contribution to the costs of the consultants, only one country has indicated that they MAY be able to contribute, although their budgets for 2006/07 have not been finalised. All other countries have so far indicated having no spare funds for this purpose.

There is general support for the SALSEA programme, and several Member States have said that they may be able to modify some of their research programmes to fit in better with the SALSEA objectives, but in most cases this would not involve contributing funds to the SALSEA budget but would involve commissioning research on issues in the programme that are of particular national interest. Only one country has said that such 'contributions' might include putting funds into the SALSEA kitty.

Some countries have indicated that they might be able to provide assistance in kind, two suggesting that they may be able to provide some research vessel time,

although this would need to be fitted into their marine fisheries research vessel programme.

I am still chasing some Member States and others have said that they will try to provide firmer information in the coming weeks.

Iceland

Question 1: *We cannot visualize putting so much money directly into research according to the formula so the answer to question 1 is NO.*

Question 2: *We would like to contribute an equal share for funding the fund-raising for 3 years, pending that we get funds to increase the NASCO contribution (Pounds 17,000 for 3 years). The answer to question 2 is thus YES (we are willing and probably able).*

Norway

We have discussed your questions on the background of the recommendations made by Brakeleys. Unfortunately we cannot give you a complete and conclusive answer at this stage, but would like you to consider the following reply:

Question 1: *There are several issues that need further consideration, mainly in relation to how research on salmon at sea is currently organized in Norway and budgetary implications and solutions. We would also like to suggest another option on how to proceed given the fact that the Board, Fund and SALSEA programme were set up based on the presumption that there are considerable amounts of private money "out there", that could match current public spending and efforts on these issues. What about an approach where the Parties commit themselves to double any given amount of private sponsor money, within a given timeframe and up to a defined maximum amount. Couldn't this also work as an extra motivation factor for private sponsors to give money? In any case we would also like to emphasize that the cost sharing cannot be based on the NASCO formula and that equal shares might be a realistic model for cost-sharing.*

Question 2: *We think that the costs connected to the fund-raising activities seem to be very high, especially on the background of the uncertainty of getting any money from private sponsors at all. We would like to ask whether we could find other more cost-effective ways of doing this. We discussed that one alternative could be to hire a person (part-time), with the skills required, at the NASCO Secretariat (?) and set up a group/network of people amongst our NGOs experienced in fundraising (who could be paid by the hour) to do the job, following the work plan made by Brakeleys. And again we would like to mention that any costs connected with this could not be shared based on the NASCO formula and that equal shares might be a realistic model for cost-sharing.*

We are prepared to, and will continue to, work on finding solutions, but at the same time we feel that suggestions like ours should be further discussed, before we give our final answers. We also feel that answers given by other Parties will be important for our further considerations. We therefore look forward to getting a summary of the replies made by other Parties.

Finally we would also like to confirm that the money already given by Norway in principle can be used both on research projects and fund-raising activities, but we would like to see the outcome of the questions asked above, before we give our final approval of how the money can be used.

Russia

***Question 1:** It may be difficult for us to arrange that our government pays a contribution in cash; however, we may be able to contribute with research vessel days on salmon research at sea. To this end, we are now considering, how we can incorporate this into our standard research surveys plans.*

***Question 2:** At this point of time, it is difficult to make any commitment that Russia can contribute cash in addition to the annual subscription to NASCO. Additional cash from government funds, as you know, is always a problem. Anyway, any sum to be contributed, should, I presume, be shared equally among Contracting Parties.*

USA

***Question 1:** No.*

***Question 2:** No.*

The U.S. can confirm that per the conditions of the grant by which the U.S. contribution was provided to the Board, the U.S. funds can only be used for research-related purposes, and not for fund-raising purposes.

5. At the meeting in Finland, Board members will be asked to confirm the situation with regard to contributing to the SALSEA programme and any fund-raising activities.

Secretary
Edinburgh
12 May 2006

**Proposal for Fundraising Consultancy & Assistance
to the
International Atlantic Salmon Research Board (IASRB)**

1. Proposed service

This proposal for consultancy assistance, following the Report of the Fundraising Feasibility and Planning Study, is designed to prepare, set-up, and implement a programme of action to assist IASRB in fundraising for the SALSEA programme.

2. Introduction

In the report of the Fundraising Feasibility and Planning Study for IASRB, BRAKELEY made the following recommendations on the understanding that the SALSEA initiative, as costed, was adopted by NASCO/IASRB and supported by Accredited NGOs:

1. Contracting Parties should be approached for an additional GBP 4M over the five-year period, (this additional funding possibly contingent on matching funds being secured from private sources).*
2. A fundraising initiative for GBP 4M over five years should be undertaken.*
3. Accredited NGOs with fundraising experience should commit themselves to providing support for the fundraising for this initiative for the period of the programme.
4. The focus of fundraising should be the SALSEA initiative with IASRB as the managing agent for the programme.
5. All fundraising initiatives by Accredited NGOs for activities falling within the SALSEA programme should be encouraged as long as they are fully co-ordinated with programme management.
6. NASCO/IASRB should engage professional fundraising management.
7. Management of fundraising should be closely co-ordinated with the management of the SALSEA programme.
8. The Chair of IASRB should budget a substantial proportion of his time for fundraising/public relations activity.

Brakeley also proposed the following Next Steps for IASRB:

1. A 'public private partnership' strategy should be defined and agreed by NASCO/IASRB.
2. With the assistance of the Accredited NGOs, IASRB should enlist (or create a parallel structure including) people who can deliver the GBP 8M (USD 14M) of additional public and private funding required.
3. The Accredited NGOs should be integrated into the strategy with full transparency and partnership in both policy and fundraising matters.
4. A communications programme should be implemented to support these initiatives.

*(Note: The total fundraising goal remains to be clearly defined. Brakeley is working on the basis of a planning goal of the order of £5 million from non-governmental sources).

3. Programme of Action

Brakeley proposes a programme of action divided into three phases as follows:

Phase 1 - Preparation for Fundraising

In the Study Report Brakeley identified the greater involvement of the Accredited NGOs, particularly in the enlistment of volunteer leadership, as essential to any future success in fundraising. A key element of preparation will therefore be to understand the nature and activity of the Accredited NGOs and to discuss with their leaders how their greater involvement with IASRB and the SALSEA programme can be achieved to the advantage of all concerned. The discussions will include exploration of ways of identifying and enlisting high-level volunteer leadership. The objectives will be to provide a platform for future identification of potential leaders and prospective donors and to devise robust and transparent structures for the future management of fundraising with the participation of all parties.

The following two activities will run concurrently.

i. Involvement of NGOs

- Carry out a survey of Accredited NGOs for relevance and capacity
- Conduct interviews with selected NGO officers and leaders
- Undertake an evaluation of potential NGO involvement

Staff involved David Carr Morris and Anne Voboril Conner

Resource requirement 17 consultant days

Fee £15,350

Deliverables Report with recommendations on model fundraising arrangements
Provisional list for prospect research programme
Provisional list for leadership enlistment

Timescale Three months

ii. Structures of Governance

- Discuss recommended model arrangements with IASRB leadership
- Prepare a proposal for administrative and financial arrangements for fundraising
- Secure the buy-in of all interested parties

Staff involved William Conner, David Carr Morris and Anne Voboril Conner

Resource requirement 8.5 consultant days

Fee £8,400

Deliverables Final agreed programme of involvement

Timescale Three months

Phase 2 – Prospective Donor Identification and Leadership Enlistment

The work undertaken for the Study Report, taken together with the information obtained in discussion with Accredited NGO leadership, will inform a programme of prospect research that will aim to identify some 100 realistic prospective donors and to prepare the detailed profiles, essential for effective fundraising, on some 50 of these. Undertaking this work in the preparatory stage before any fundraising takes place will ensure that the fundraising itself is firmly based and can develop and maintain momentum.

At the same time the process of enlisting a group of economically influential leaders will begin. The key to this will be a series of interviews with these potential leaders, following introductions made through NGOs, as a preparation for engagement as part of a leadership group. It is also anticipated that these interviews will add to the list of prospective donors to be researched.

This phase will take six to ten weeks, primarily because of the time required to make interview appointments with potential leaders of the calibre required.

The precise levels of resource required will be identified in the reporting on Phase 1. The fee levels stated are therefore indicative only.

i. Prospect research

- Identify 100 realistic prospective donors
- Research the top 50 of these prospective donors and prepare profiles

Resource requirement 15-20 Prospect Research Days

Fee c £10,000

Deliverables Report and profiles

Timescale Two months

ii. Identification and enlistment of volunteer leadership.

- Identify core group of 8 to 12 potential volunteer leaders to whom introductions can be made
- Interview these potential leaders
- Recommend, and plan the enlistment of, core leadership group
- Prepare plan for enlistment and engagement of expanded leadership group.

Resource requirement 10-15 Consultancy days

Fee £11,000

Deliverables Report and action plan

Timescale Two Months

Phase 3 - Management of Fundraising

The management of fundraising would fall into two stages. The setting up stage would cover the preparation of a detailed plan and the integration of the plan with the programme for the SALSEA research activity. The second stage would involve the programme of enlistment, cultivation and solicitation of gifts, first from fundraising volunteer leaders and then from the donors whom they would introduce and influence. The management period is envisaged as taking place over two to three years with the first stage taking 6-9 months and the second stage two years to completion.

i. Planning Fundraising Approaches

- Revising the case for Support
- Coordinating with the SALSEA programme
- Specifying the project elements
- Writing sample proposals and applications
- Sequencing and segmenting the campaign plan
- Appointing and training a co-ordinator*
- Selecting and commissioning a fundraising database
- Database training
- Engagement of Campaign Chair and international and national lead groups
- Meeting and reporting

(Brakeley advises the appointment of a co-ordinator to be based at the office in Edinburgh. This would be a half-time equivalent post for an experienced secretary/administrator.)

<i>Estimated Resource requirement</i>	90 consultant days
<i>Fee (Monthly)</i>	£14,000
<i>Deliverables</i>	Monthly Reports; Draft Plan
<i>Timescale</i>	Six Months

Fundraising Operations

- Refining Plan with lead groups
- Cultivation Programme
- Events
- Written Proposals
- Solicitations
- Follow-up and Stewardship
- Direction and co-ordination
- Supervision and Reporting

<i>Resource requirement</i>	220 Consultant Days
<i>Fee (Monthly)</i>	£9,000
<i>Deliverables</i>	Monthly Reports; Agreed fundraising goal
<i>Timescale</i>	Two Years

Expenses

We should endeavour to keep expenses to a minimum through distributing work to Brakeley staff in the UK, in the USA, and in the Nordic and other mainland EU countries as appropriate and by sharing international travel expenses with other clients wherever possible. To avoid excessive time spent on reconciling small expenses we charge an additional flat rate of 2% of the fee for communications and other incidental expenses. We suggest an initial budget figure of £1,500 per month for travel and subsistence which could be regularly reviewed in the light of experience.

Personnel

The preparation for fundraising activity would be undertaken by David Morris and Anne Voboril Conner under my direction with additional assistance from Brakeley subsidiary company staff in the Nordic countries, Germany and France as appropriate.

For management we should involve local Brakeley consultants as appropriate in the countries concerned. Use of all consultants would be subject to the agreement of the Secretary of IASRB.

Conditions

Invoices for Brakeley fees would be submitted by the 15th of each month for payment by the end of the month. VAT is charged on all our invoices.

Brakeley standard conditions of service continue to apply.

Brakeley looks forward to being able to assist the International Atlantic Salmon Research Board in implementing its SALSEA programme.

William Conner
Managing Director

ICR(06)10

Rules of Procedure for the International Atlantic Salmon Research Board

1. The International Atlantic Salmon Research Board is a body, established by and reporting to the Council of NASCO, to promote collaboration and cooperation on research into the causes of marine mortality of Atlantic salmon and the opportunities to counteract this mortality.
2. The Board shall establish and administer an International Atlantic Salmon Research Programme into the causes of marine mortality of Atlantic salmon and the opportunities to counteract this mortality with the following Terms of Reference:
 - maintaining an inventory of relevant research projects which are ongoing or planned and for which budgets have been confirmed;
 - identifying research needs;
 - evaluating the inventory against research needs;
 - identifying gaps in the inventory of research and setting priorities for further research;
 - providing a forum for coordination of relevant research efforts by the Contracting Parties of NASCO;
 - developing administrative mechanisms to accept financial contributions to an International Atlantic Salmon Research Fund;
 - soliciting and accepting financial contributions and managing the Fund;
 - establishing terms and conditions for soliciting, evaluating, approving and funding relevant research projects;
 - funding approved projects and reviewing results in relation to the objectives of the Programme.
3. The Board shall comprise one Member from each Contracting Party assisted, as appropriate, by one or more advisers. The costs associated with representation on the Board shall be borne by the Contracting Parties. In exceptional circumstances the Board may, by consensus, deviate from this rule concerning membership and costs.
4. The Board may establish criteria for appointment of, and may appoint, Patrons to the International Atlantic Salmon Research Fund.
5. The Board shall work by consensus but in the event that agreement cannot be reached the matter concerned shall be referred to the Council of NASCO for resolution.
6. The Board shall meet on an annual basis or at more frequent intervals if it, or the Council of NASCO, so decides.
7. Between meetings the Board may conduct its work and take decisions by correspondence.

8. The Board shall invite the Chairman of NASCO's accredited NGOs, or his/her nominee from within the accredited NGOs, to participate in the meetings of the Board so as to provide the NGO viewpoint on the issues under discussion. The Board should consider appropriate arrangements for increasing NGO involvement in its work.
9. The Board shall establish a Scientific Advisory Group (SAG) to identify research gaps and priorities, to develop recommendations for enhanced coordination of existing research, to develop calls for proposals, and to develop recommendations for research and other activities that may be supported by the Board. The SAG shall invite the Chairman of NASCO's accredited NGOs, or his/her nominee from within the accredited NGOs, to participate in its meetings so as to provide the NGO viewpoint on the issues under discussion.
10. The Board shall appoint a Chairman by consensus, who shall serve for a term of two years and who may be eligible for re-election for a further term of two years. A Contracting Party providing the Chairman shall also be entitled to provide a Member of the Board and one or more advisers.
11. The Board may establish Working Groups in order to progress specific areas of its work.
12. The Secretariat shall provide a Rapporteur and reports of the Board's meetings shall be presented to the Council in a timely manner.
13. The Board may seek advice from NASCO's Standing Scientific Committee.
14. The Board may make arrangements for external scientific evaluation of research projects funded by the Board or any research projects considered for funding under the International Atlantic Salmon Research Programme.
15. These Rules of Procedure may be subject to review by the Council of NASCO at any time.