

BOOS MODELLING PROGRAMME AGREEMENT

Preamble

In response to HELCOM Recommendation 12/6 1991 regarding development of an oil drift forecasting system, BSH and SMHI have developed an operational hydrodynamic Baltic Sea model, HIROMB, with a capacity, as a routine, to provide the Baltic Sea states with data necessary to fulfil their national duties with regard to navigational safety, Search & Rescue and environmental protection purposes. The original co-operation Agreement was called HIROMB Co-operation Agreement, dated 1995-08-15, and was signed by representatives from SMHI and BSH. The latest co-operation agreement, eg the HIROMB Agreement, dated 2007-05-17, had participants from Denmark, Germany, Latvia, Estonia, Russia, Finland and Sweden. Participants from Poland and Lithuania signed the Agreement later on in 2007. At the HIROMB Co-operation Annual Meeting 20140507 in Riga it was decided that The HIROMB Co-operation would change name to the BOOS Modelling Programme in alignment with the decision to be incorporated as a Programme under the BOOS umbrella.

The BOOS Modelling Programme (“**the Programme**”) is a joint venture for the development and handling of at least one operational oceanographic forecasting system for the Baltic Sea, the Kattegat, the Skagerrak and the North Sea. It is the aim of this Programme that any riparian state of the Baltic Sea shall actively participate and benefit from it.

The Programme shall be administered as a Programme under the Baltic Operational Oceanographic System (“**BOOS**”). BOOS Members are obliged to take part in at least one BOOS Programme. Parties to the BOOS Modelling Programme shall also be BOOS Members and shall undertake to follow the BOOS MoU.

The purpose of the co-operation shall be general development of circulation models and to develop, maintain and operate at least one operational model system.

The Programme is aware of the Copernicus Programme of the European Union with the purpose to develop and operate a Marine Environment Monitoring Service for the Baltic Sea as part of the Marine Service starting its operational phase on 1st May 2015. The Copernicus service model may, if suitable, be chosen as the BOOS Modelling Programme consortium model as long as the Copernicus service is available.

This Agreement, which shall supersede all previous HIROMB Co-operation Agreements, shall regulate the scope of co-operation as well as the Parties’ obligations in their joint efforts to further develop the BOOS Models and maintain them as operational tools within the Parties core activities.

1 Definitions

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| 1.1 | BOOS Model | shall mean a high resolution operational model for the Baltic Sea area developed and/or maintained by the Parties under this Agreement |
| 1.2 | BOOS Modelling Programme
Centre for Baltic Sea
Forecasting | The BOOS Modelling Programme Member that, for a determined period of time, undertakes to run a BOOS model on an operational basis on a suitable computer |
| 1.3 | Member/BOOS Modelling
Programme Member | a BOOS Modelling Programme Member shall be an operational oceanographic service provider willing to advance The BOOS Modelling Programme in their country and actively contribute to fulfilling the objectives of the BOOS Modelling Programme |
| 1.4 | Associate Member | research institutions, non-governmental organisations and multi-national organisations of riparian states of the Baltic Sea that are not considered as operational may, provided that they have aims and objectives consistent with this Agreement, be invited to become Associate Members at the discretion of BOOS Modelling Programme Members |
| 1.5 | Temporary Member | an entity not being eligible to become a Member or Associate Member or an entity only interested in participating in a specific Project can be a Temporary Member and participate in a Project |
| 1.6 | CEO | shall mean Chief Executive Officer |
| 1.7 | Results of the Programme | shall mean the operational oceanographic forecasting system comprising scientific models, software or parts of these |
| 1.8 | Products of the Programme | shall mean calculating/validating-contributions including data used for this purpose and data and forecasts regularly produced by the Results of the Programme |
| 1.9 | Parties | BOOS Modelling Programme Members, Associate Members and Temporary Members. |

2 General Principles

- 2.1 Each Party of the BOOS Modelling Programme Agreement shall, in order to become a Member, comply with the standards as set up in the BOOS MoU and shall be an operational oceanographic models service provider.

3 Additional Parties

- 3.1 The Parties' intention is to extend the co-operation within the field of activities described below. The Members at the Annual Meeting may therefore decide to invite other organisations to be a BOOS Modelling Programme Member or Associate Member to the BOOS Modelling Programme in accordance with 4.4 below.

- 3.2 An invitation in accordance with 3.1 shall at any time only be possible if it is in the interest of the Parties. The decision to invite new entities to this Agreement shall be documented in the minutes from the Annual Meeting.
- 3.3 New entities shall have the right of access to the Results of the Programme. New entities may be requested to provide compensation in a level defined by the Programme Board for the expenses incurred in the Programme until the date of their entry.
- 3.4 The Programme Board may decide to invite an entity to become a Temporary Member to participate in a Project.
- 3.5 New entities entering into this Agreement shall sign a rider, as stipulated in Appendix 3 to this Agreement, stating that this Agreement with all the obligations and benefits stated therein and all steering documents in relation hereto have been accepted. The rider shall be added to this Agreement as an appendix.

4 The Annual Meeting

- 4.1 The deciding body of the BOOS Modelling Programme shall be the Annual Meeting. The Annual Meeting shall evaluate the operations, development and achievements during the past year and decide about the different Plans of the Programme.
- 4.2 At the Annual Meeting each BOOS Modelling Programme Member shall have one vote and decisions are taken by Members present and voting; with a two-thirds majority or simple majority in accordance with the stipulations below.
- 4.3 Associate Members shall be invited to the Annual Meeting and may participate but shall have no right to vote.
- 4.4 The Annual Meeting shall decide on the following items with two-thirds majority;
- Amendments to this Agreement,
 - Decision on the termination of a membership for a BOOS Modelling Programme Member and Associate Member,
 - Establishment of the Programme Plan, including the Programme Budget, for the Programme,
 - Establishment of the Scientific Plan for the Programme,
 - Agreement on a BOOS Modelling Programme Member to run the BOOS Modelling Programme centre for Baltic Sea forecasting,
 - Invitation of new Parties; Members and Associate Members, to the Programme,
 - Establishment of a Work Plan for the Programme,
 - Establishment of a new Project.
- 4.5 The Annual Meeting shall decide on the following items with simple majority;
- Election of a Scientific Coordinator to be appointed for a period of two years,
 - Election of an Operational Coordinator from the BOOS Modelling Programme centre for Baltic Sea forecasting, to be appointed for a period of two years,
 - Election of an additional BOOS Modelling Programme Member to the Programme Board to be appointed for a period of two years,
 - Election of a Project Manager to be appointed for the duration of a Project,

- Election of the Chairperson for the Annual Meeting,
- Amendment of the Rules of Procedure, if any, for the BOOS Modelling Programme co-operation.

4.6 All other decisions, deemed relevant by the Programme Board, at the Annual Meeting shall require a simple majority.

5 The Programme Board

5.1 The managing body of the BOOS Modelling Programme shall be the Programme Board. The Programme Board shall consist of the Programme Manager – from a BOOS Modelling Programme Member institute- who is elected and appointed by the BOOS General Assembly. The other Programme Board Members are the Scientific Coordinator, the Operational Coordinator, preferably from the BOOS Modelling Programme Centre for Baltic Sea Forecasting, and an additional representative elected by the Parties at the Annual Meeting.

5.2 The Programme Board, which shall convene at least twice a year, shall be chaired by the Programme Manager and is responsible for the decided activities in the Programme.

5.3 The Programme Board shall execute the decisions made by the Parties at the Annual Meeting in relation to the Programme, including financial matters within the budget and matters concerning Intellectual Property Rights of the Programme and its decisions in relation hereto shall be included in the Programme Plan.

5.4 The Programme Board may invite Temporary Members to participate in a Project in accordance with 3.4 above.

5.5 The members of the Programme Board shall be elected at the Annual Meeting, except for the Programme Manager who is appointed by the General Assembly of BOOS.

5.6 The Programme Board shall be responsible for operational maintenance and development and for scientific development and research for the following year (“**the Scientific Work Plan**”). The Programme Board shall also be responsible for defining the various phases of the model development and shall co-ordinate the implementation of and into an operational version of the Operational Model (“**the Model**”).

5.7 The Programme Board shall follow up the Work Plan established at the Annual Meeting at a meeting in between Annual Meetings.

5.8 The Programme Board may set or decide upon specific conditions for withdrawal of a Party from the Programme.

5.9 The Programme Board’s decisions shall be unanimous.

6 The Programme Manager

6.1 The Programme Manager, who is appointed by the General Assembly of BOOS, shall be responsible for the execution of the Programme in compliance with assigned objectives and within the resources allocated for the Programme.

6.2 In his/her capacity the Programme Manager shall;

- Prepare the Programme Plan, including the Programme Budget,
- Direct and monitor the activities in the Programme and supervise underlying Projects,
- Assess progress, quality and schedule objectives,

- Alert the Steering Group of BOOS to any significant deviation from the Programme Purpose, as decided by the BOOS General Assembly, and propose solutions,
- Report to the Steering Group of BOOS in progress reports at least once in between Annual Meetings,
- Prepare an annual report to be presented at the BOOS General Assembly and the Annual Meeting,
- On request from the Steering Group of BOOS make a report concerning the Programme or Project status related to the undertaking outlined in the Programme Plan,
- Plan and organise the Annual Meeting including setting up an agenda for the meeting,
- Be the official representative and contact person of the BOOS Modelling Programme Co-operation, and
- At all times be responsible for keeping all the original documents related to BOOS Modelling Programme and to transfer them when a new Programme Manager is elected.

7 The Scientific Coordinator and the Operational Coordinator

The Scientific Coordinator

- 7.1 The Scientific Coordinator shall prepare and be responsible for the management of the Scientific Plan.
- 7.2 A Scientific Meeting shall be held annually in connection with the Annual Meeting. The Scientific Meeting shall review the scientific development of the Products and propose projects to further develop the quality of the Products.
- 7.3 The Scientific Coordinator shall produce an annual report on scientific matters to the Programme Board in due time for the Annual Meeting.
- 7.4 The Scientific Coordinator shall prepare the agenda for the Scientific Meeting, compose an annual report summarizing scientific progress and assess the fulfilment of the annual scientific work plan, to be presented to the Programme Manager.
- 7.5 The Scientific Coordinator shall present a midterm progress report to the Programme Manager.

Operational Coordinator

- 7.6 The Operational Coordinator shall prepare and be responsible for the management of the Work Plan. The Work Plan shall include specified deliverables of the Programme, responsible Party, contact person and time of delivery.
- 7.7 The Operational Coordinator shall produce an annual report on operational matters to the Programme Board in due time for the Annual Meeting.
- 7.8 The Operational Coordinator shall produce and present a midterm progress report to the Programme Manager.

8 Projects

- 8.1 Where work under the Programme is carried out in Projects a Project Plan shall be established. The Project Plan shall be decided upon unanimously by the Project Members.
- 8.2 Members, Associate Members and Temporary Members can be Project Members.
- 8.3 Project Members shall decide upon the Project Budget after consulting the Programme Manager.
- 8.4 Each Project under the BOOS Modelling Programme shall have a Project Manager. The Project Manager shall be appointed at the Annual Meeting.
- 8.5 The Project Manager shall compose an annual report summarizing Project progress, to be presented to the Programme Manager.
- 8.6 The Project Manager shall present a midterm progress report to the Programme Manager.

9 Operational commitments

- 9.1 There shall always be one BOOS Modelling Programme Member that, for a determined period of time, undertakes to run a BOOS model on an operational basis on a suitable computer, referred to as the “**BOOS Modelling Programme centre for Baltic Sea forecasting**”.
- 9.2 Forecasts from the North Sea to the Baltic Sea shall be produced by the operational modelling system for the entire Baltic Sea and the North Sea.
- 9.3 The forecasts from the operational BOOS model shall run at least daily and be made available to BOOS Modelling Programme Members and Associated Members within one hour of a completed run of the model. Archived Results of the Programme and Products of the Programme shall also be available in accordance with the stipulations above.
- 9.4 All BOOS Modelling Programme Members and Associated Members undertake to contribute to the Programme with oceanographic services such as modelling or by providing calculating/validating contributions including therefore used data (making real-time observations available) according to the applicable BOOS Data Policy for assimilation into the daily forecasts, and for running validation of the Products.

10 Financing

- 10.1 The BOOS Modelling Programme has no common budget. Each decision is, when required, accompanied by its own budget. The general principle is that each BOOS Modelling Programme Member carries its own costs.
- 10.2 Financial contributions from BOOS to the BOOS Modelling Programme can be either general contributions or directed towards specific projects. Financial contributions are decided by the BOOS General Assembly and executed by the BOOS Steering Group.
- 10.3 Programme Budgets are decided by the Programmes.
- 10.4 Project Budgets are decided by the Project Members after consulting the Programme Manager.
- 10.5 Whenever possible external funding may be pursued. External funding is administrated according to the application and the rules of the funding organisation.

11 Rules of Procedure

- 11.1 Rules of Procedure deemed necessary, expedient or convenient for the proper conduct and management of a Project and for the purposes of prescribing conditions can be established from time to time. The Rules shall aim to regulate the procedure at meetings and the function of the Programme Board in so far as such procedure is not regulated by this Agreement.
- 11.2 The Rules can be altered, added to or repealed at the BOOS Modelling Programme Annual Meeting or, so decided at the BOOS Modelling Programme Annual Meeting, by the Programme Board. Where a new Rule is binding upon the Parties, the Programme Board shall circulate the information to all Parties. If a Rule is in conflict with any of the statutes in this Agreement the Agreement shall prevail.
- 11.3 The Rules are attached as an appendix to this Agreement and if the Rules are altered the new Rules shall replace the existing appendix.

12 Proprietary Rights

- 12.1 BOOS Modelling Programme Members and Associated Members shall have joint intellectual property rights to the Results of the Programme and to any model or other software tool jointly developed within the BOOS Modelling Programme Co-operation (“**Model or Software**”). None shall have the right to make available the Results or its source-code to any third party without the written consent of the BOOS Modelling Programme Members unless the model or software license states otherwise. The same applies to granting licences to any third party of the Result of the Programme or any Model or Software developed under the BOOS Modelling Programme Co-operation.
- 12.2 The intellectual property rights to any model or software tool developed prior to entering into the BOOS Modelling Programme Co-operation (“**Member Model or Software**”) shall be retained by that developing Party.
- 12.3 Licenses shall be granted to any such Member Model or Software, if it is necessary in order to be able to use the Results of the Programme. The license shall be non-exclusive and conditioned only for use in connection with the joint Results of the Programme under this Agreement.
- 12.4 In order to use Results of the Programme for commercial purposes the BOOS Modelling Programme Members shall give a written consent hereto, unless applicable law or regulation states otherwise.
- 12.5 BOOS Modelling Programme Members and Associated Members shall be free to use, for any of their services, any Products of the Programme.
- 12.6 Other procedures than stipulated in 12.1-12.5 above can be specified by the Programme Manager and the Project Members through a unanimous decision, regarding a Project under this Agreement. All BOOS Modelling Programme Members and Associated Members shall be informed hereof. The decision shall be attached as an Appendix to this Agreement. In the event of conflict between the Appendix and this Agreement the Agreement shall prevail.

13 Confidentiality

- 13.1 Without the written consent from the other Parties, neither Party may exploit in their own business, or divulge to any third party, information, documentation or proceedings relating to business secrets or internal circumstances which has been brought to the Party’s knowledge within the scope of the co-operation under this Agreement. Should any of the Parties by applicable law or as a result of a court decision be ordered to issue

information and/or documentation covered by this clause such a disclosure shall not be construed as a breach of confidentiality in this Agreement.

13.2 Only the personnel affected by the Programme may use the working material and then only to the extent necessary for their work within the Programme.

13.3 Clause 13.1 above does not apply to such information that is generally known or such information which the Party can prove having obtained in good faith from other sources than through the Programme.

13.4 Confidentiality in accordance with clause 13.1 above applies for the duration of the Programme and for a period of five years after termination thereof.

14 Force Majeure

14.1 Should circumstances arise beyond the control of any of the Parties which the Party could not have foreseen when entering into this Agreement and which the Party cannot avoid or prevent that makes the fulfilment of the obligations under this Agreement impossible, the Party shall immediately notify the other Parties of the circumstances and the foreseen consequences thereof.

15 Disputes, Law and Language

15.1 In case of a dispute between the Parties on matters concerning this Agreement or related matters the dispute shall be submitted for settlement by a panel consisting of the CEO's of the Parties involved.

15.2 Should the CEO's not be able to resolve the dispute within the panel each Party may submit the matter for final settlement by arbitration in accordance with the Rules for Arbitration of the International Chamber of Commerce.

15.3 The arbitration proceedings shall, unless otherwise agreed by the Parties, be held at the Chamber of Commerce in London.

15.4 This Agreement and all matters in connection therewith shall be subject to the laws of the Kingdom of Sweden.

15.5 The English language shall be the official language for all matters related to this Agreement.

16 Validity of this Agreement

16.1 This agreement enters into force when signed by two parties. For new parties after that it shall become valid for each party when the new party have signed the rider in Appendix 3. All Parties to this Agreement are listed in Appendix 1.

16.2 This Agreement is valid for an indefinite period.

16.3 The Annual Meeting acting unanimously may decide to terminate the Agreement. In such circumstances the Annual Meeting shall decide, with two-thirds majority, the appropriate arrangements concerning running Projects and common assets.

16.4 Any Party may terminate its own participation in the co-operation stipulated in this Agreement giving each of the other Parties twelve months written notice. Parties wishing to terminate its participation in the co-operation shall after said termination be responsible for all obligations stipulated in this Agreement concerning all projects, underlying the Programme, started prior to the termination.

17 Limitation of Liability

17.1 The Parties shall not be liable for any indirect or consequential loss or consequential damage that Party has caused to any other Party. This limitation shall not, however, apply to loss which can be attributed to gross negligence and wilful breach of contract.

This agreement has been executed in one original for each original Signatory.

Appendix 1

Parties

The Parties to this Agreement shall be the following governmental and non-governmental institutes;

- The Swedish Meteorological and Hydrological Institute, 601 76 Norrköping, Sweden, hereinafter referred to as SMHI,
- Russian State Hydrometeorological University, 98 Malookhtinsky Pr. 195196 St. Petersburg, Russian Federation, hereinafter referred to as RSHU,

Appendix 2

Rules of procedure

- The Annual Meeting shall take place preferably in April or May each year. Items for the agenda shall be submitted to the Programme Manager at the latest four weeks before the meeting and the agenda shall be submitted to the Parties by the Programme Manager at the latest two weeks before the meeting.
- Two-thirds of the Members constitute a quorum. If a BOOS Modelling Programme Member is represented by more than one representative only one shall have the right to vote. It shall be declared before the Annual Meeting who is the voting delegate.
- The Annual Meeting shall appoint a person, preferably from the country hosting the Annual Meeting, to chair the Annual Meeting (“**the Chairperson**”). The Chairperson shall be appointed to chair one Annual Meeting. The Chairperson shall be responsible for the minutes of the meeting. The minutes shall be circulated at the latest six weeks after the meeting, thereafter it shall be signed by the Chairperson and the Programme Manager.
- Two Programme Board Members are appointed at one election and one Programme Board Member is appointed at the election the year after. Programme Board Members, excluding the Programme Manager, are eligible for re-election two times i.e. they may serve for a period of 6 years. Candidates for election must be announced to the Parties 3 weeks before the Annual Meeting.
- The Programme Board shall each year present and distribute an updated draft Programme Plan for the coming 3 years, starting July 1st each year. The Programme Plan shall cover a period of 3 years but shall be decided upon annually at the Annual Meeting. The draft of the Programme Plan shall be distributed at least two months before the Annual Meeting each year.
- The Scientific Plan shall cover a time period of three years but shall be decided upon annually at the Annual Meeting.

Appendix 3

New Party

In accordance with Section 4.4 of the BOOS Modelling Programme Agreement (“the Agreement”), the Annual Meeting has decided to invite [insert name of company or institute, company registration number, address] to become a [Member/Associate Member] of the BOOS Modelling Programme. [Insert name of company or institute] has accepted the invitation.

By signing this rider [insert name of company or institute] accepts what is stated in the Agreement regarding obligations and benefits therein and all steering documents in relation hereto, in respect of its member status.

Date

Signature

Name in block letters