

Minutes of
27th Meeting
of the
BALTEX Science Steering Group

held at

*Baltic Sea Research Institute Warnemünde (IOW)
Warnemünde, Germany*

29 and 30 September 2011

Edited by

Marcus Reckermann



Participants at the 27th BALTEX Science Steering Group Meeting (BSSG), and members of the new Working Group on POSTBALTEX (WG-PB), from left to right: Eduardo Zorita (WG-PB), Andreas Lehmann (BSSG, WG-PB), Thomas Neumann (WG-PB), Hans von Storch (BSSG), Markus Meier (WG-PB), Benjamin Smith (BSSG, WG-PB), Anders Omstedt (BSSG), Sirje Keevallik (BSSG), Jüri Elken (BSSG), Zita Gasiūnaitė (WG-PB), Anna Rutgersson (WG-PB), Martin Stendel (BSSG), Piia Post (WG-PB), Franz Berger (BSSG), Valery Vuglinsky (BSSG), Bernd Schneider (BSSG), Andris Andrusaitis (BSSG), Karol Kuliński (WG-PB), Birgit Hünicke (WG-PB), Marcus Reckermann (IBS, behind the camera).

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Summary of Decisions

DECISION 1: Sirje Keevallik was approved as co-chairperson of the BALTEX Science Steering Group.

DECISION 2: Martin Stendel and Kai Myrberg were approved as new members of the BALTEX Science Steering Group.

DECISION 3: The 7th Study Conference on BALTEX will be held in the week 10-14 June 2013. Conference location will be Hotell Strand in Borgholm, Öland, Sweden.

DECISION 4: The BACC II Stakeholder Conference will be held in Tallinn, Estonia, 6-7 September 2012. A conference venue was tentatively reserved by Sirje Keevallik: The Tallink Spa & Conference Hotel.

Summary of Action Items

Action Item 1: To prepare and negotiate necessary arrangements with the hotel and conference venue of the 7th Study Conference on BALTEX (**IBS**)

Action Item 2: To prepare a 1st Announcement for the 7th Study Conference on BALTEX, and in line with this, install a scientific and a local organising committee (**IBS, BSSG Chairs**) (see also 3.2. below)

Action Item 3: **Sirje Keevallik** to find co-authors and lead the writing process for a publication on the motivations and events leading to the formation of a “pan-baltic” research community, stimulated by BALTEX.

Action Item 4: **Andris Andrusaitis** to explore the possibility for a sythesis report of selected thematically coherent groups of completed BONUS projects, organized by BONUS.

Action Item 5: **Franz Berger** to install and lead a writing team on assessing the state of research in water and energy budgets of the Baltic Sea basin.

Action Item 6: **Andris Andrusaitis** and **Marcus Reckermann** to explore the possibilities to hold the BONUS Triple meeting in conjunction with the 7th Study Conference on BALTEX in Borgholm, Öland, Sweden, 10-14 June 2013.

Action Item 7: To prepare, announce and organize the BACC II Stakeholder Conference in Tallinn, 6-7 September 2012 (**IBS** with **BACC II SSC**)

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- Appendix 1: BSSG #27 meeting agenda
- Appendix 2: BSSG #27 workshop agenda
- Appendix 3: Participants of the meeting
- Appendix 4: Draft Terms of Reference for the BALTEX Working Group on POSTBALTEX

List of E-Appendices (available at www.baltex-research.eu/ supplementary)

- E-Appendix 1: On Öland, the venue for the 7th Study Conference on BALTEX
- E-Appendix 2: BALTEX – An environmental research network for the Baltic Sea basin (M. Reckermann)
- E-Appendix 3: Climate research under post-normal conditions (H. von Storch)
- E-Appendix 4: East and West and BALTEX (S. Keevallik)
- E-Appendix 5: BONUS calls 2011 -2017: Contribution to the Earth Systems Science (A. Andrusaitis)
- E-Appendix 6: CV Martin Stendel
- E-Appendix 7: CV Kai Myrberg

Introduction

The 27th meeting of the BALTEX Science Steering Group (BSSG) was held on 29 and 30 September 2011 at the Baltic Sea Research Institute (IOW) in Warnemünde, Germany. The meeting started with a special scientific seminar, organized by the local host, Bernd Schneider. The seminar which was titled “Different concepts in biogeochemical modelling of the Baltic Sea” featured six presentations from renowned Baltic Sea biogeochemistry and ecosystem modellers. The business part of the meeting was of exceptional importance as it was a joint meeting of the BALTEX Science Steering Group and the new BALTEX Working Group on “POSTBALTEX”. The group was introduced to the world of BALTEX and its “boundary conditions” in the afternoon of the first day by a series of presentations on the history and the achievements of the almost last 20 years. In the morning of the second day, the group had its kick-off meeting and reported back to the BSSG at noon before the end of the meeting. Meanwhile, the BSSG discussed options and timeline for the wrap-up phase of BALTEX Phase II and decided on important milestones before the end of the current programme phase.

Opening, welcome and introduction

Prof. Wolfgang Fennel, Director of the Baltic Sea Research Institute Warnemünde (IOW), and Prof. Bernd Schneider as the local host, welcomed the meeting participants, consisting of BSSG and WG on POSTBALTEX members, to the IOW. Anders Omstedt, acting Co-Chairman of the BSSG, then opened the business part of the meeting. Short round table introductions by all attendants of the meeting were given.

1. Organisational issues

1.1 Approval of the agenda

The agenda for the 27th BSSG meeting (Appendix 1) was approved. Handouts are given in the Appendices.

1.2 / 1.3 Approval of the previous BALTEX SSG meeting minutes and action items

The minutes of the 26th BSSG meeting were unanimously approved. Decisions and Action items were revisited. All but action item 4 were settled. Action item 4 (“Identification of a writing team for a review paper/assessment of BALTEX Phase II Objective 1: Energy and Water Cycles” was adopted as task for this meeting.

1.4 BALTEX SSG membership changes

The following BSSG membership changes were approved by the BSSG:

a. **Joakim Langner** of SMHI, Norrköping, Sweden, resigned from the BALTEX Science Steering Group chairpersonship. Joakim had been BSSG chairperson since May 2006 (BSSG Meeting #19, Göteborg). The BSSG thanked Joakim for his cooperative leadership and his contributions to BALTEX, and wished him all the best for his future activities.

b. **Sirje Keevallik** of Tallinn University of Technology, Estonia was approved as new BALTEX co-chairperson. Sirje has been in the BSSG since 2001 (BSSG Meeting #11, Hamburg), but had been in the BALTEX scientific community well before that. Sirje was welcomed as new and third co-chairperson of the BSSG.

Thus, as of this meeting, the BALTEX SSG chairmanship is divided among three equal chairpersons: Sirje Keevallik, Anders Omstedt and Hans von Storch.

c. **Martin Stendel** of Danish Meteorological Institute, and senior scientist at Danish Climate Centre, was approved to succeed Philippe Lucas-Picher from the same Institute. Martin is a renowned climate modeller and thus strengthens this field in the BSSG. His CV can be found in the E-Appendices on www.baltex-research.eu/supplementary.

d. **Kai Myrberg** of Finnish Environment Institute SYKE was approved to succeed Hermanni Kaartikallio of the same institute. Kai is a physical oceanographer and had been a well-known member of the BALTEX community for many years. His CV can be found in the E-Appendices on www.baltex-research.eu/supplementary.

The two retired BSSG members Philippe and Hermanni were thanked for their commitment for BALTEX, and they were wished good luck and success for the future.

DECISION 1: Sirje Keevallik was approved as co-chairperson of the BALTEX Science Steering Group.

DECISION 2: Martin Stendel and Kai Myrberg were approved as new members of the BALTEX Science Steering Group.

1.5 Venues and time slots for the 7th Study Conference on BALTEX

Marcus Reckermann reported about the trip to the Swedish island of Öland to explore the possibilities to hold the 7th Study Conference on BALTEX on that island (see E-Appendices). The three possible venues were presented: The “Strand Hotell” in Borgholm, the “Golf Club Ekerum” and the “Hotel Skansen” in Färjestaden. All three venues possess very good conference facilities, so that the decision between the three venues was taken based on other considerations like the availability of sufficient accommodation possibilities near the conference venue and the location. It was decided by the BSSG to hold the conference at the Strand Hotell in Borgholm, as it is located in the only resort town with good infrastructure and sufficient accommodation possibilities. The Hotel itself can accommodate the vast majority of participants, still, the town of Borgholm features a wide range of other accommodation possibilities.

It was further decided to hold the conference in the week 10-14 June 2013, which is the week prior to the Swedish mid-summer vacations.

The BALTEX Secretariat is to prepare a first Announcement to be sent to the BALTEX community in early 2012 (see also section 3.2, below).

DECISION 3: The 7th Study Conference on BALTEX will be held in the week 10-14 June 2013. Conference location will be Hotell Strand in Borgholm, Öland, Sweden.

Action Item 1: To prepare and negotiate necessary arrangements with the hotel and conference venue of the 7th Study Conference on BALTEX (IBS)

Action Item 2: To prepare a 1st Announcement for the 7th Study Conference on BALTEX, and in line with this, install a scientific and a local organising committee (IBS, BSSG Chairs) (see also 3.2. below)

2. The Working Group on POSTBALTEX: Introduction to BALTEX

2.1 The new WG on POSTBALTEX: Terms and conditions

This part of the meeting began with the presentation and discussion of the draft Terms of References for the new group, suggested by the BSSG chairs and the BALTEX Secretariat. This paper was distributed to all participants and is in Appendix 4. The discussion revolved around the question which type of document should be produced by the new WG. Two views were discussed: a. that the document should be aligned with the BONUS programme and should be primarily designed to fulfil BONUS funding requirements, and b. that the document should freely define basic research needs without having too much an eye on current funding programmes. The argument was uttered that the document could represent sort of a white paper, defining research needs for the future which could help stimulating later funding programmes. The discussion was left open for the WG on POSTBALTEX to take it up the following day (see below, section 4).

2.2. Overview presentations on different aspects of BALTEX

Following this, a number of overview presentations on the history and also on current aspects of the BALTEX programme were given, spanning from a portrayal of East-West contacts in the early BALTEX years, to a description of the current BONUS calls and deadlines.

Marcus Reckermann gave a historical overview over mostly the first phase of BALTEX, emphasizing its international embedment in GEWEX/GHP and the World Climate Research Programme, the BALTEX infrastructure, and main achievements of BALTEX Phase I.

Anders Omstedt talked about the motives for starting BALTEX Phase II, and also explained efforts and achievements of this extension of the BALTEX programme.

Hans von Storch gave a presentation on the societal conditions under which BALTEX related science (especially climate research) is being performed and perceived by politicians and the public. He emphasized that different “knowledge claims” compete for the “correct” interpretation of the world, with a sound scientific one not necessarily winning this competition against alarmist, deniers, trivialists or vested interests. It is important that scientists understand the “post-normal” societal conditions under which they work.

Sirje Keevallik showed how the first contacts between Eastern and Western scientists came about and how the collaboration developed in BALTEX. The availability and exchange of data was important in the first years. Her presentation was considered so interesting that it was suggested that Sirje prepares (together with other “BALTEX veterans”) a publication on the formation of a “pan-baltic” research community, stimulated by BALTEX. Sirje agreed to initiate this.

Action Item 3: Sirje Keevallik to find co-authors and lead the writing process for a publication on the motivations and events leading to the formation of a “pan-baltic” research community, stimulated by BALTEX.

Finally, *Andris Andrusaitis* showed the latest developments in BONUS, namely a specification of BONUS calls for 2011-2017, with an emphasis to BALTEX relevant topics. The new calls represent a contribution to Earth System Science for the Baltic Sea basin. The Strategic Research Agenda has now been published and can be downloaded from the BONUS website at www.bonusportal.org/sra. Also for the first time, the Guidelines for Evaluators of proposals are available online, contributing to the transparency of the evaluation process. Relevant BONUS deadlines for the next months:

1 December 2011: 1st call published
 31 January 2011: Pre-registration deadline
 29 February 2012: Deadline for proposals

A BONUS Strategic Orientation Workshop will be held in March 2013.

(Note as of December 2011: The above given dates are obsolete. The BONUS call 2011 is postponed to the first half of 2012. Further information at www.bonusportal.org)

The presentations are available at www.baltex-research.eu/supplementary.

3. Wrap-up of BALTEX Phase II and WG on POSTBALTEX

In the morning of the second day, the group split up into the BSSG and the WG on POSTBALTEX to hold their first meeting. The BSSG discussed wrap-up activities until the end of BALTEX Phase II in 2012/2013.

3.1. Publications (BSSG)

The question how to best conclude BALTEX Phase II was the main topic of the BSSG in the morning of the second day. Possible wrap-up publications were named and discussed (with relevant BALTEX Phase II objectives given in parentheses):

- *BACC II (Obj. 2, 4, 5, 6)*
 The BACC II book will be an outstanding BALTEX publication in the final phase; it is anticipated to be published by the end of 2013. It encompasses most BALTEX Phase II objectives, and can be regarded as a major outcome report of BALTEX Phase II.
- *BONUS Reports/Special publications of*
 - *ECOSUPPORT (AMBIO Special Issue) (Obj. 2, 4)*
 - *Baltic-C (Obj. 2, 4)*
 - *AMBER (Obj. 2, 4)*

A second suite of publications which qualify as BALTEX wrap-up publications will come from the BALTEX related BONUS projects ECOSUPPORT, Baltic-C, and AMBER. These projects have a strong connection to objectives 2 and 4. Next to the project reports which need to be assembled at the termination of the project, several journal articles and joint publications like special issues are currently planned, like an

special journal issue in AMBIO by the ECOSUPPORT group. Other special issues are in the planning. Another interesting way to disseminate results of selected BONUS projects was discussed: Outside experts with an excellent reputation could be asked by BONUS to synthesize results of selected projects, which could be arranged in thematic clusters. This would need to be done in alignment and consent of the coordinators of the projects involved. In this way, a “synthesis report” on the outcome of these project clusters might be published still in 2012.

Action Item 4: Andris Andrusaitis to explore the possibility for a synthesis report of selected thematically coherent groups of completed BONUS projects, organized by BONUS.

- *Review paper on the Utility of Regional Climate Models (Markus Meier et al.) (Obj. 2)*
A review paper on regional climate models in the Baltic Sea basin and their added values relative to the increasingly higher resolved global models is the anticipated product of the “BALTEX Working Group on the Utility of Regional Climate models” (Chairman: Markus Meier). This review paper can be expected to give an excellent overview over the state of art in this important field of BALTEX research.
- *Review paper on Water and Energy Cycles (Obj. 1, 3) Writing Team: Franz Berger et al.)*
A synthesis or assessment report on the state of art in this important BALTEX objective is urgently needed. Franz Berger offered to lead a writing team on assessing the state of research in water and energy budgets of the Baltic Sea basin, if appropriate also including hydrological issues of Objective 3. It was suggested that this document should not only be a review but could also be read as a white paper, stating and discussing future research needs, usable also for funding agencies.

Action Item 5: Franz Berger to install and lead a writing team on assessing the state of research in water and energy budgets of the Baltic Sea basin.

Furthermore, two overarching publications on BALTEX in general and BALTEX Phase II issues could also qualify as BALTEX wrap-up publications:

- *A review paper titled “BALTEX – An interdisciplinary research network for the Baltic Sea region”, M. Reckermann, J. Langner, A. Omstedt, H. von Storch, S. Keevallik, B. Schneider, B. Arheimer, M. Meier, B. Hünicke (2011) Environ. Res. Lett. 6 045205 doi:10.1088/1748-9326/6/4/045205.*
This paper covers in a general and comprehensive way BALTEX as a whole, emphasizing on Phase II and infrastructure
- *A book on “Climate Impacts on the Baltic Sea: From Science to Policy” (Ed.: Reckermann, Brander, MacKenzie, Omstedt), Springer 2012 (Obj. 2, 4, 5, 6).*
This book is the outcome of a BALTEX Summer School which was held on Bornholm, Denmark in 2009. It compiles chapters on various aspects of climate change in the Baltic Sea basin, ranging from physics to biogeochemistry and ecosystems to societal aspects and international agreements. The book is anticipated to be published in spring 2012.

Other relevant publications need to be identified.

3.2. Events (BSSG)

The 7th **Study Conference on BALTEX** (to be held in Borgholm, Öland, Sweden on 10-14 June 2013, see above section 1.5) will be the primary BALTEX Phase II wrap-up event. It was discussed what the scope of the conference could be, and it was suggested that the conference should have a catchy title. As this will be the final BALTEX Phase II conference, it should of course present an overview over BALTEX achievements of both BALTEX phases, possibly also in invited overview presentations. In addition to that, the conference should also act as a starting event for the next phase of BALTEX community research, tentatively named POSTBALTEX. Thus, a large proportion of the conference should also be dedicated to future challenges. To accommodate these two goals, and to emphasize the BALTEX struggle for competent and reliable research in service for the scientific community, and increasingly also for society in general, the following title was suggested: *Building scientific credibility – 20 years of BALTEX research and future challenges*.

The Organising Conference Committee (OCC) shall consist of Joakim Langner (chair), Anders Omstedt and the International BALTEX Secretariat (Marcus Reckermann, Hans-Jörg Isemer, Silke Köppen), and additional members, yet to be selected. The Scientific Conference Committee (SCC) shall consist of the BALTEX Science Steering Group, plus selected individuals of relevant international organisations, e.g. BONUS, HELCOM, EU-DG Environment, EU-DG Mare, GEWEX/GHP, ICES etc. The list shall be fixed and individuals invited still in 2011 (see also Action Item 2).

The SCC, with the help of BSSG chairs and the BALTEX Secretariat shall draft topics for the conference and prepare a 1st Announcement flyer in early 2012 (January/February).

Andris Andrusaitis suggested that BONUS may have a side event at this conference (the BONUS Triple Meeting). This idea was taken up positively.

Action Item 6: Andris Andrusaitis and Marcus Reckermann to explore the possibilities to hold the BONUS Triple meeting in conjunction with the 7th Study Conference on BALTEX in Borgholm, Öland, Sweden, 10-14 June 2013.

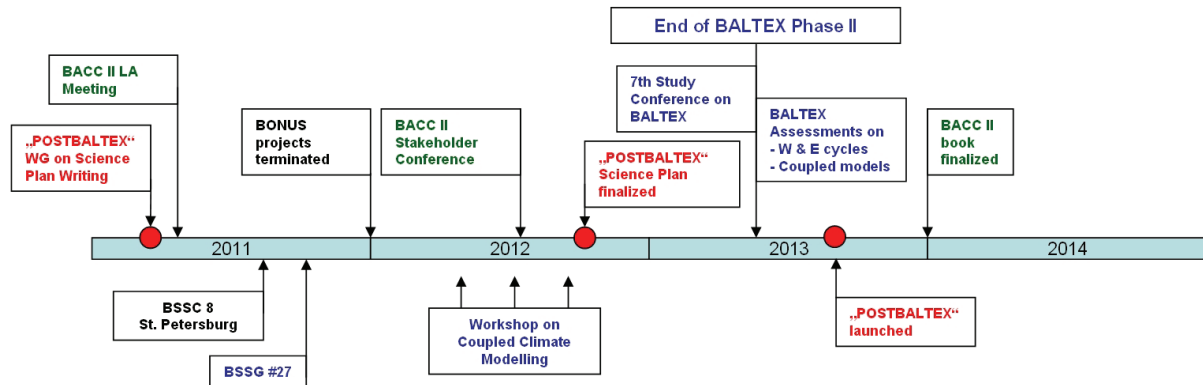
The **BACC II Stakeholder Conference** will be a second prominent BALTEX Phase II wrap-up event. The conference is planned tentatively after the example for the BACC Stakeholder Conference in Göteborg in 2006. Hence, BACC II lead authors will present their chapters, and will discuss the outcomes with scientists and interested stakeholders. HELCOM will be a major stakeholder at this conference but other groups are welcome. This needs to be further explored and prepared. A decision on the time and venue was taken nonetheless: the conference will be in Tallinn, Estonia, 6-7 September 2012.

DECISION 4: The BACC II Stakeholder Conference will be held in Tallinn, Estonia, 6-7 September 2012. A conference venue was tentatively reserved by Sirje Keevallik: The Tallink Spa & Conference Hotel.

Action Item 7: To prepare, announce and organize the BACC II Stakeholder Conference in Tallinn (IBS with BACC II SSC)

3.3. Timeline (BSSG)

A reassessment of the timeline as given in the last BSSG minutes (#26) showed that it is still valid and activities are well on track.



Tentative timeline for BALTEX and BALTEX related events as well as intended POSTBALTEX milestones

4. First meeting of the BALTEX Working Group on POSTBALTEX (WG on POSTBALTEX)

The Working Group on POSTBALTEX had its first meeting in the morning of the second meeting day. Before the end of the meeting at noon, Markus Meier (acting as meeting chairperson) gave a short report. Anna Rutgersson was elected as chairperson, Andreas Lehmann was elected as vice-chair. The short summary of the group discussion given below is based on the brief oral report and it should be clear that it is not binding; the group may state different suggestions in their final report.

The group will meet twice before summer 2012, when the final product of the WG is due. The second WG on POSTBALTEX meeting shall be in connection with the 3rd BACC II Lead Author Team meeting which will take place in Copenhagen, 9-10 February 2012. The group may decide to enlarge the group, depending on expertise required. The group suggested continuing with a research network like BALTEX, but it is still in debate whether there should be a new name or whether BALTEX should somehow remain. There was also agreement in the group that a strong focus of the new programme should be Regional Earth System research, spanning from meteorology, oceanography and hydrology to terrestrial and marine biogeochemistry and ecology. All necessary research disciplines to describe the system should be included, including human interactions (social science). The geographic boundary of interest should be the same as for BALTEX – the hydrological drainage basin of the Baltic Sea.

The research agenda of the new programme should be basically science-driven (as opposed to policy-driven programmes). That means that basic research questions should be identified and formulated, which then can be used for applications like model systems, decision support systems, or climate services. Next to modelling efforts, field campaigns to gather new observational data were suggested, while taking advantage of existing data bases at the same time. The question how and where (e.g. GEWEX/GHP, WCRP, ICSU-ESSI) the new programme should be embedded in international research frameworks was discussed and remains open.

The WG stated that a secretariat, as the current BALTEX Secretariat, is crucial for the success of the new programme. Also a continuation of organizing meetings, workshops and conferences on a regular basis was deemed necessary, with a desirable extension to online outreach activities, e.g. through the social media. The WG plans to draft a science plan for the new programme before summer 2012. Also, 1-2 “white papers” are planned to help “lobbying” POSTBALTEX research for funding agencies and stakeholders.

Place and time of the next BSSG meeting

The next BSSG meeting (BSSG #28) will take place in Tallinn on 5 September 2012 in Tallinn, Estonia, in connection and directly prior to the BACC II Stakeholder Conference.

Any other business

None.

Some Abbreviations and Acronyms

AMBER	Assessment and Modelling of Baltic Ecosystem Response (a BONUS+ project)
AMBIO	A scientific journal of the human environment
BACC	BALTEX Assessment of Climate Change for the Baltic Sea basin
BALTEX	The Baltic Sea Experiment
Baltic-C	Building predictive capability regarding the Baltic Sea organic/inorganic carbon and oxygen systems (a BONUS+ project)
BONUS	Joint Baltic Sea research and development programme
BSSG	BALTEX Science Steering Group
ECOSUPPORT	Advanced tool for scenarios of the Baltic Sea ECOSystem to SUPPORT decision making (a BONUS+ project)
EU-DG	European Commission - Directorates-General
GEWEX	Global Energy and Water Cycle Experiment
GHP	GEWEX Hydroclimate Panel
HELCOM	Helsinki Commission
IBS	International BALTEX Secretariat
ICES	International Council for the Exploration of the Sea
IOW	Institut für Ostseeforschung Warnemünde (Baltic Sea Research Institute)
POSTBALTEX	Interims acronym for the BALTEX successor programme
SMHI	Swedish Meteorological and Hydrological Institute
SSC	Science Steering Group
WG-PB	BALTEX Working Group on POSTBALTEX

Appendix 1: BSSG #27 Meeting Agenda**27th BALTEX SSG Meeting**

**Baltic Sea Research Institute Warnemünde,
Germany**

29-30 September 2011

AGENDA AND EXPLANATORY MEMORANDUM

(As of 23 September 2011)

At this BALTEX Science Steering Group (BSSG) meeting, members of the newly formed Working Group on POSTBALTEX will meet for the first time. Working Group members will participate in the regular BSSG meeting in the afternoon of the first day, and will have the morning of the second day for a breakout meeting. It is planned to discuss and approve terms of reference for the new WG and to elaborate an updated plan for the wrap-up phase of BALTEX Phase II, including the time and venue for the 7th Study Conference on BALTEX. The meeting will be opened by a half-day scientific seminar, which is organized by the local host of the meeting.

Thursday, 29 September 2011

9:00 – 12:00 Scientific seminar:
"Different concepts of modelling the biogeochemistry in the Baltic Sea"
Organized by Bernd Schneider, local host of the meeting (see separate agenda)

12:00 Lunch

BALTEX Science Steering Group meeting #27

14:00 Welcome by the Host of the Meeting
Wolfgang Fennel, Director of the IOW
Bernd Schneider, IOW and BSSG member

14:05 Introduction by the BALTEX Science Steering Group Chairmen
Anders Omstedt and Hans von Storch

14:10 TOP 1: Organisational issues

- 1.1 Approval of the agenda
- 1.2 Approval of the previous BALTEX SSG meeting minutes

- 1.3 Review of previous BALTEX SSG meeting action items
- 1.4 BSSG membership changes
- 1.5 Suggested venue and time slot for the 7th Study Conference on BALTEX on Öland, Sweden

15:40 ***Health Break***

16:00-18:00 **TOP 2: Working Group on POSTBALTEX: Introduction**

In order to introduce the new WG members to the world of BALTEX and its “boundary conditions”, there will be overview presentations on specific topics

- 16:00 The new WG on POSTBALTEX: Terms and conditions
- 16:20 The roots and beginnings of BALTEX (H.-J. Isemer/M. Reckermann)
- 16:40 Motives, efforts and achievements of BALTEX Phase II (A. Omstedt)
- 17:00 Socio-cultural conditions of BALTEX related science in the postnormal context – From 1990 until now (Hans von Storch)
- 17:20 East and West and BALTEX (Sirje Keevallik)
- 17:40 Latest developments in BONUS: Upcoming call (Andris Andrusiaitis)

19:00 ***Joint Dinner***

Friday, 30 September 2011

BSSG

9:00 **BALTEX wrap-up activities and timeline**

10:30 ***Health break***

11:00 **BALTEX wrap-up activities and timeline *cont.***

Parallel breakout meeting: WG on POSTBALTEX constitutional meeting

9:00 **WG on POSTBALTEX meeting**

10:30 ***Health break***

11:00 **WG on POSTBALTEX meeting**

12:00 **Joint closing meeting BSSG and WG on POSTBALTEX**

13:00 ***Closing of the meeting***

Appendix 2: BSSG #27 Workshop Agenda



Open Scientific Seminar in conjunction with the
27th BALTEX Science Steering group meeting

"Different Concepts in Biogeochemical Modelling of the Baltic Sea"

Leibniz Institute for Baltic Sea Research
Warnemünde, 29 September 2011

This open scientific seminar is organized by Bernd Schneider, Leibniz-Institute for Baltic Sea Research Institute Warnemünde. Everyone interested is welcome.

- | | |
|---------------|---|
| 9:00 – 9:10 | Introduction (B. Schneider, Leibniz-Institute for Baltic Sea Research Institute Warnemünde, IOW) |
| 9:10 – 9:35 | Peculiarities of the nutrient biogeochemical modelling in the Baltic Sea (O. Savchuk, Baltic Nest Institute, Stockholm) |
| 9:35 – 10:00 | Biogeochemical modelling with ERGOM (T. Neumann, IOW) |
| 10:00 – 10:25 | Advantages and disadvantages of biogeochemical models used within ECOSUPPORT (M. Meier, Swedish Meteorological and Hydrological Institute, Norrköping) |
| 10:25 – 10:45 | Coffee break |
| 10:45 – 11:10 | Modelling the Baltic Sea biogeochemical dynamics (A. Omstedt, M. Edman and E. Gustafsson, University of Gothenburg) |
| 11:10 – 11:35 | Modelling and data synthesis in the Baltic Sea at the Gotland Deep monitoring site (M. Kreuz and M. Schartau, Helmholtz-Zentrum Geesthacht) |
| 11:35 – 12:00 | An Eulerian nutrient to fish model (W. Fennel and H. Radtke, IOW) |

Appendix 3: List of participants

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Appendix 4: BALTEX Working Group on “POSTBALTEX” Draft Terms of Reference

BALTEX Working Group on “POSTBALTEX”

Draft Terms of Reference

Background and objective

BALTEX Phase II will be terminated on schedule at the end of 2012. The 7th Study Conference on BALTEX in June 2013 will be the final concluding BALTEX Phase II event. The discussions on a BALTEX successor programme after 2012 (temporarily termed “POSTBALTEX”) commenced at the 23rd BSSG meeting (12-14 January 2009 in Helsinki). Since then, the BALTEX community responded in various ways to enquiries on the future of BALTEX (e-mail questionnaire, open discussions at the 24th (Riga) and 25th (Wolin) BSSG meetings, responses to an official letter sent to selected scientific institutes in the Baltic Sea basin). The vast majority of respondents argued that there is a need for a successor programme to BALTEX. Thus, at the 26th Science Steering Group meeting (Gothenburg), the installation of a new Working Group on the potential BALTEX successor programme, was decided. A number of young dedicated scientists from the wider BALTEX community, primarily not from the BSSG, were invited to form this group. The new programme to succeed BALTEX should be up and running in 2013.

Expected outcome

The Working Group is to prepare a Draft Science Plan for the new programme. This may be in the form of different objectives or research topics with dedicated goals to be reached within a given time frame, or any other form deemed appropriate. Guard rails for the new programme can be taken from section 2.4.5. “Synopsis of POSTBALTEX polls and discussions” of BSSG meeting #26 (Gothenburg) minutes (see below). Given this broad range of themes, the Working Group is free to suggest topics, objectives and goals, including a term deemed necessary for the accomplishments of these. The Working Group shall also suggest a name for the new programme.

Deliverable shall be a written report (the Draft Science plan) to be submitted to the BSSG within one year after the installation of the Working Group, by October 2012. There are no restrictions concerning the volume and structure of this report.

Terms

The group shall decide on a chairperson and a vice chairperson who will be the contact person to the BSSG and the BALTEX Secretariat and who shall report back to the BSSG in due time. The group may change its memberships based upon a majority vote.

BALTEX Working Group on POSTBALTEX memberships (as of 30 September 2011)

Name	Country	Expertise
Chantal Donnelly	Sweden	Hydrology
Zita Gasiunaite	Lithuania	Marine ecology
Jaari Haapala	Finland	Sea ice physics
Birgit Hünicke	Germany	Baltic Sea level change, coastal processes
Karol Kulinski	Poland	Marine biogeochemistry
Andreas Lehmann* (vice-chair)	Germany	Oceanography, climate research
Markus Meier	Sweden	Oceanography, coupled climate modelling
Thomas Neumann	Germany	Marine biogeochemical modelling
Carin Nilsson	Sweden	Climate service
Piia Post	Estonia	Meteorology, atmospheric physics
Anna Rutgersson (chair)	Sweden	Atmospheric physics
Benjamin Smith*	Sweden	Terrestrial ecology and biogeochemistry
Eduardo Zorita	Germany	Regional climate modelling, paleoclimate

* current member of the BALTEX Science Steering Group

Synopsis of POSTBALTEX polls and discussions

(excerpt from BSSG meeting #26 minutes, International BALTEX Secretariat Publication Series 49)

(...) The BALTEX programme should be continued under slightly different priorities. The interdisciplinary aspect should be pursued, and the networking through regular workshops and conferences should be fostered; the further development of the education and outreach aspect by seminars and summer schools would also be desirable. The POSTBALTEX programme should include the human dimension (socio-economic aspects, urban areas and infrastructure). Relevant stakeholders mentioned were HELCOM, the EU, and national and regional governments and administrations.

Strategically, it was recommended to follow a complementary approach to the BONUS programme. While BONUS is rather stakeholder- and policy-, hence “applied”-driven, it may be worthwhile for POSTBALTEX to foster basic research.

The scientific focus (...) could be the application of an Earth system approach, with a holistic, system-oriented view and further efforts to develop regional coupled models integrating atmosphere-hydrology-ocean-ice-biogeochemistry models, with the explicit inclusion of biogeochemical processes. Connected with this, a further emphasis to be followed would be the engagement in regional climate and impacts research including detection and attribution studies, and efforts to increase predictability on seasonal and decadal scales, as well as the reduction of uncertainties.

The establishment of regular assessment reports of the BACC-type on various topics related to the Earth System of the region was considered a good complement to the scientific basic research topics. This would add an outreach dimension to the basic research agenda and would provide the scientific community with regular basic science-grounded overview and inventory, facilitating the identification of knowledge gaps.

Concerning international embedment of the programme, a subsistence in a global programme like GEWEX/GREW was recommended, and collaborations with similar programmes in other regions (North Sea, Mediterranean, Black Sea) were also deemed helpful.

BALTEX Working Groups (BWG)

Working groups are the centres of action within BALTEX. Working groups are established to cover either

- i) a dedicated topic or element within one BALTEX Phase II objective, or
- ii) a topic or element cross-cutting through several or all objectives.

Working groups currently installed are

- BALTEX Working Group on Data Management (BWGD)
 - BALTEX Working Group on Radar (BWGR)
 - BALTEX Working Group on the Utility of Regional Climate Models (BWG-RCM)
 - BALTEX Working Group on BACC II (BACC II SSC, as of 13 April 2010)
-

General Terms of Reference for BALTEX Working Groups

These general terms of references apply to all working groups. Working groups are asked to formulate specific terms of reference which allow for the specific scope and purpose of individual working groups.

Tasks are to

- represent the “working level” of BALTEX,
- conduct and actively promote a dedicated topic or element within one BALTEX Phase II objective (Type 1 BWG), or,
- conduct and actively promote a topic or element cross-cutting through several or all objectives (Type 2 BWG),
- organise to conduct or conduct relevant projects,
- report to the BSSG on a regular basis,
- meet regularly, at least once a year, with telephone conferences as required.

Term

- 2 years, or less, depending on the term of the working group, requires approval by the BSSG,
- possibility of pro-longations.

Election and approval

- New members need to be approved by a qualified majority of working group members

Decisions

- Unanimously

Deliverables

- Deliverables are to be defined in the specific Terms of References of the individual Working Groups. The deliverables are to be presented after the regular 2-year term, if not specified otherwise in the Working Group’s specific Terms of Reference.

International BALTEX Secretariat Publication Series

ISSN 1681-6471

- No. 1:** Minutes of First Meeting of the BALTEX Science Steering Group held at GKSS Research Centre in Geesthacht, Germany, 16-17 May, 1994. August 1994.
- No. 2:** Baltic Sea Experiment BALTEX – Initial Implementation Plan, 84 pages. March 1995.
- No. 3:** First Study Conference on BALTEX, Visby, Sweden, August 28 – September 1, 1995. Conference Proceedings. Editor: A. Omstedt, SMHI Norrköping, Sweden, 190 pages. August 1995.
- No. 4:** Minutes of Second Meeting of the BALTEX Science Steering Group held at Finnish Institute of Marine Research in Helsinki, Finland, 25-27 January, 1995. October 1995.
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- No. 7:** Minutes of Fourth Meeting of the BALTEX Science Steering Group held at Institute of Oceanology PAS in Sopot, Poland, 3-5 June, 1996. February 1997.
- No. 8:** *Hydrological, Oceanic and Atmospheric Experience from BALTEX*. Extended Abstracts of the XXII EGS Assembly, Vienna, Austria, 21-25 April, 1997. Editors: M. Alestalo and H.-J. Isemer, 172 pages. August 1997.
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- No. 16:** Minutes of 9th Meeting of the BALTEX Science Steering Group held at Finnish Meteorological Institute in Helsinki, Finland, 19-20 May 1999. July 1999.

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- No. 27:** Minutes of 15th Meeting of the BALTEX Science Steering Group held at Risø National Laboratory, Wind Energy Department, Roskilde, Denmark, 8 - 10 September 2003. January 2004.
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- No. 37:** Minutes of 20th Meeting of the BALTEX Science Steering Group held at St. Petersburg, Russia, 6 – 7 December 2006. March 2007.
- No. 38:** Fifth Study Conference on BALTEX, Kuressaare, Saaremaa, Estonia, 4 - 8 June 2007. Conference Proceedings. Editor: Hans-Jörg Isemer, 209 pages. May 2007.
- No. 39:** Minutes of 21st Meeting of the BALTEX Science Steering Group held at Kuressaare, Saaremaa, Estonia, 3 June 2007. September 2007.
- No. 40:** Minutes of 22nd Meeting of the BALTEX Science Steering Group held at SMHI, Norrköping, Sweden, 23-25 January 2008. May 2008.
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- No. 42:** International Conference on Climate Change – The environmental and socio-economic response in the southern Baltic region. University of Szczecin, 25-28 May 2009. Conference Proceedings. Editors: Andrzej Witkowski, Jan Harff and Hans-Jörg Isemer. 140 pages, May 2009.
- No. 43:** Minutes of 23rd Meeting of the BALTEX Science Steering Group held at Finnish Meteorological Institute, Helsinki, Finland, 12 - 14 January 2009. July 2009.
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Copies are available upon request from the International BALTEX Secretariat.