

*Minutes of*  
19<sup>th</sup> Meeting  
of the  
BALTEX Science Steering Group

*held at*

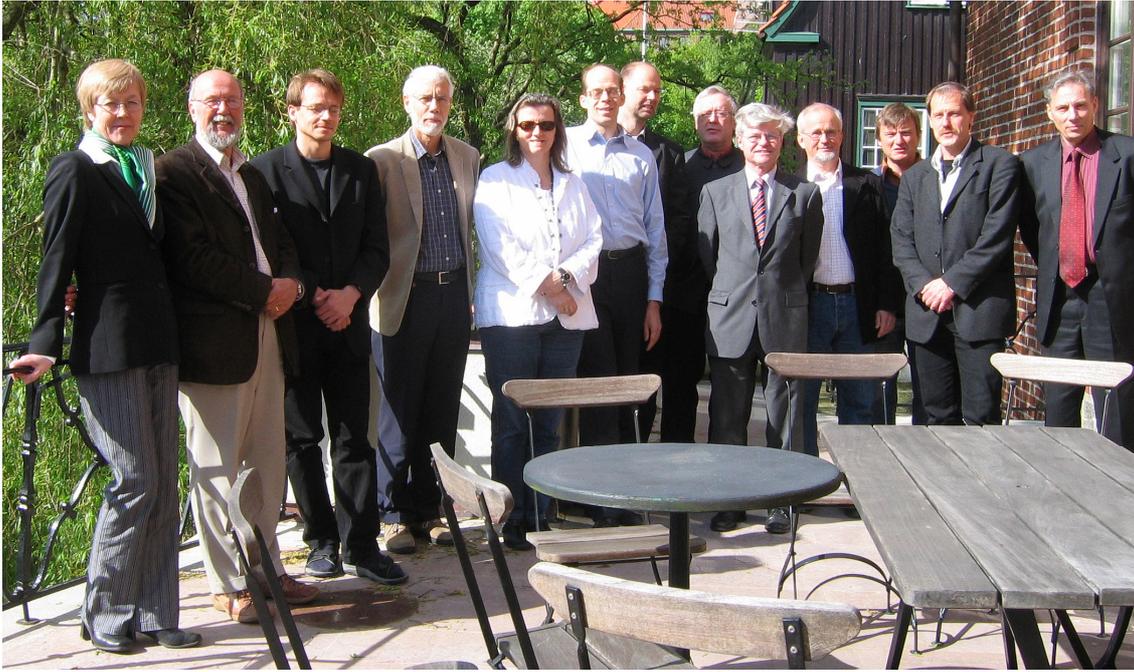
**Ågrenska Villan, Göteborg University**

**Göteborg, Sweden  
23 – 24 May 2006**

*Edited by  
Marcus Reckermann  
and Hans-Jörg Isemer*

International BALTEX Secretariat Publication  
ISSN 1681-6471  
No. 36  
October 2006





**Participants at the 19<sup>th</sup> BALTEX Science Steering Group Meeting**, from left to right: Sirje Keevallik, Jörgen Nilsson, Markku Rummukainen, Dan Rosbjerg, Daniela Jacob, Timo Vihma, Joakim Langner, Hans von Storch, Hartmut Graßl, Anders Omstedt, Marcus Reckermann, Andreas Lehmann, Valery Vuglinsky. Behind the camera: Hans-Jörg Isemer



**Historical meeting:** The “old” and new BALTEX SSG chairs met at the International BALTEX Conference on Assessment of Climate Change for the Baltic Sea Basin, Göteborg, 23 May 2006. Left: Lennart Bengtsson, BALTEX SSG chair 1994-1999, second from right: Hartmut Graßl, BALTEX SSG chair 1999-2006, right: Joakim Langner, BALTEX SSG chair since May 2006. Second from left: Mikko Alestalo, member of the BALTEX SSG.



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## Summary of Decisions

1. Hartmut Graßl resigned from his position as BALTEX SSG chair.
2. The BALTEX SSG unanimously elected **Joakim Langner** as the **new chair of the BALTEX SSG**. Joakim is director of the research department at the Swedish Meteorological and Hydrological Institute (SMHI) in Norrköping, Sweden. He is associated professor in meteorology and his key interest and specialisation include atmospheric dispersion modelling, development and application of various chemistry-transport models from local to global scales, and atmospheric chemistry.
3. The BALTEX SSG unanimously elected **Timo Vihma**, senior research scientist at the Finnish Meteorological Institute (FMI), Helsinki, Finland, as **new vice-chair of the BALTEX SSG**. Timo's specialisation and interest include boundary-layer meteorology, sea-ice thermodynamics and dynamics, polar meteorology, meso-scale atmospheric modelling and air-sea interaction. The BALTEX SSG also unanimously confirmed **Anders Omstedt**, Professor for Oceanography at Göteborg University, Earth Science Centre, Göteborg, Sweden, as **vice-chair of the BALTEX SSG**.
4. The BALTEX SSG approved new terms for SSG chairs and vice-chairs. Their term will be for 3 years with one possibility for one prolongation of again up to 3 years. The maximum term for chairs and vice-chairs is 6 years. Detailed terms of reference for BSSG chairs will be available at the next BSSG meeting in St. Petersburg in December (see Item 8 and Action Item 6).
5. The BALTEX SSG approved new terms for SSG members. Terms of SSG members will be for 3 years with the possibility of prolongation. No maximum term for members shall be imposed. Detailed terms of reference for BSSG members will be available at the next BSSG meeting in St. Petersburg in December (see Item 8 and Action Item 6).
6. The BALTEX SSG decided to strengthen the co-operation and strategic alliance with HELCOM (Helsinki Commission). Timo Vihma will act as the liaison person to HELCOM within the BALTEX SSG.
7. The BALTEX SSG considered it premature to finally decide on terms and members for suggested BALTEX working groups. Instead, a revised concept of how BALTEX Phase II objectives correspond to the present and suggested working groups shall be established by the new BALTEX SSG chair and vice-chairs and be finally discussed at the forthcoming BALTEX SSG meeting in December 2006. This will include suggestions and discussions on BALTEX SSG membership and additional possible management means and structures for BALTEX (see Items 8 and 9 and Action Item 14).
8. The BALTEX SSG will convene for its 20<sup>th</sup> meeting in St. Petersburg, Russia, on 7 and 8 December 2006.

## Summary of Action Items

Action #1: **Timo Vihma** to ask HELCOM for its willingness to officially co-organise the 5<sup>th</sup> Study Conference on BALTEX in 2007, as soon as possible;

**Note to the protocol: Action Item completed.**

*Timo Vihma contacted Anne Christine Brusendorff, Executive Secretary of HELCOMI. She confirmed that HELCOM is looking forward to the next joint conference and that her anticipated presence at the next BALTEX SSG meeting in St. Petersburg will also serve the preparation of the joint Conference.*

*Hans-Jörg Isemer had also been in contact with Juha-Markku Leppänen about the willingness of HELCOM to officially co-organise the Conference in 2007, which was confirmed by HELCOM; HELCOM appears on the conference flyer with its logo as co-organiser.*

Action #2: **Timo Vihma** to contact the Executive Secretary of HELCOM, Anne Christine Brusendorff, to invite her to the next BALTEX SSG Meeting in St. Petersburg to strengthen strategic alliance with HELCOM, as soon as possible;

**Note to the protocol: Action Item completed.**

*Timo Vihma contacted Anne Christine Brusendorff by E-mail and informed her of the new BALTEX BSSG chairs and invited her to the next BSSG meeting in St. Petersburg. Anne Christine Brusendorff answered positively, indicating that she is ready to come to St. Petersburg, but she did not yet finally confirm her attendance.*

Action #3: **Timo Vihma** to contact Sylvain Joffre at FMI and investigate possibilities for BALTEX to contribute to the “Baltic Sea and European Marine Strategy” Conference, 13 to 15 November 2006, in Helsinki, as soon as possible;

**Note to the protocol: Action Item completed.**

*Timo discussed this with Sylvain Joffre, who is a member of the organising committee of the "Baltic Sea and European Marine Strategy" conference to be held in Helsinki, 13 to 15 November, 2006. The Conference will include invited talks (speakers already invited) and exhibition stands and posters, focusing on the following themes: eutrophication, sustainable use of marine resources, reconciling human activities and ecosystems, protection of biodiversity, decreasing risks from hazardous substances, and linking science and policy. An exhibition stand was reserved for BALTEX at the Conference. Information on the Conference is available on [www.eu2006balticsea.net](http://www.eu2006balticsea.net).*

Action #4: **Chairs/Secretariat** to thank Clemens Simmer and Anders Lindroth for their past leadership to BALTEX, as soon as possible;

**Action Item completed.**

*Hans-Jörg Isemer sent E-mails to both Clemens and Anders, thanking them on behalf of the BALTEX SSG for their outstanding contributions to the leadership of the BALTEX programme.*

Action #5: **Chairs** to consider to discuss with Benjamin Smith and Bernd Schneider on their possible membership of the BALTEX SSG, as suggested at this meeting, prior to the next BALTEX SSG meeting;

- Action #6: **Chairs** to complete terms of reference for BALTEX SSG membership and chairs, including necessary implementation details such as voting procedures and rules, next BALTEX SSG meeting;
- Action #7: **Chairs, All** to review the present BALTEX SSG membership and propose adjustments related to the new BALTEX Phase II objectives, as required, next BALTEX SSG meeting;
- Action #8: **Chairs** to consider contacting present BALTEX SSG members with an apparent low activity profile in BALTEX, prior to the next BALTEX SSG meeting;
- Action #9: **Chairs/Secretariat** to consider the future role of national Services in BALTEX and their proper representation at the BALTEX SSG, in particular Services with an apparent low profile in BALTEX (e.g. Baltic States, Belarus, Russia); to undertake action to contact Services (e.g. by conducting specific meetings with Services concerned, explore SIDA support for such meetings) and discuss future contributions of the latter to BALTEX, prior to next BALTEX SSG meeting;
- Action #10: **Chairs, All** to consider a stronger contribution of leading scientists of the Baltic States to the BALTEX programme and its leadership, and identify potential candidates, next BALTEX SSG meeting;
- Action #11: **All** to identify Study Courses/Summer Schools for participation of BALTEX as contributions to the 6<sup>th</sup> BALTEX Phase II objective, continuous;
- Action #12: **Andreas Lehmann, Daniela Jacob, Hans von Storch, Marcus Reckermann** to provide suggested terms of reference and draft memberships of the suggested Working Groups, July 2006;
- Action #13: **Marcus Reckermann** to establish and demonstrate a revised draft BALTEX web site with emphasize on the planned outreach and education components in BALTEX Phase II, next BALTEX SSG meeting;
- Action #14: **Chairs** to review the present leadership and management structure of BALTEX, in particular how the new objectives of BALTEX Phase II may best be implemented in this structure, including the future role and terms of the BALTEX Working Groups, and propose an improved concept, next BALTEX SSG meeting;
- Action #15: **Jörgen Nilsson, Marcus Reckermann** to establish a link at the BALTEX web site to the UNI-DART web site and explore possibilities for data access, availability and use in BALTEX, as soon as possible;
- Action #16: **Jörgen Nilsson, Secretariat** to provide a list of data links and their availability for BALTEX data users, to be published at the BALTEX web site, next BALTEX SSG meeting and continuous;
- Action #17: **Jörgen Nilsson, Working Group on Data Management** to provide a critical review of the performance (e.g. data availability, data request, data gaps, etc) of the presently existing BALTEX Data Centres, including possible suggestions for changes or amendments, next BALTEX SSG meeting;
- Action #18: **Anders Omstedt, Timo Vihma, Secretariat** to identify climate data sets relevant for BALTEX, explore their availability for BALTEX research purposes, and establish internet links to these data sets at the BALTEX web site and the relevant BALTEX Data Centres, next BALTEX SSG meeting, and continuous;
- Action #19: **Secretariat** to announce and promote upcoming conferences and events relevant for BALTEX at the BALTEX web site;

Action #20: **Chairs, Valery Vuglinsky, Secretariat** to prepare for the 20<sup>th</sup> BSSG meeting (BSSG #20) to be held 7 and 8 December 2006 in St. Petersburg, Russia, to explore possible financial support through the Swedish SIDA.

### **Open or partially concluded action items from BALTEX SSG meeting #18**

**Action #10: Hans-Jörg Isemer** to establish a draft list of BALTEX data sets and products to be offered as BALTEX data contributions to meet GEWEX Phase I objectives, secondly to receive approval of these data sets' authors and other relevant persons having relevant intellectual property rights, thirdly organise the proper inclusion of these BALTEX data sets and products at the GEWEX data management website, **preferably in 2005**.

**Action #14: the BALTEX Secretariat with the support of all BSSG members** to establish presentation material (in particular a set of presentation slides (ppt files)) on i) major BALTEX Phase I achievements and results, and ii) BALTEX Phase II objectives and plans, preferably still **in 2005**.

*Comment HJ Isemer: action started, but needs continuous update and completion.*

**Action #18: Anders Omstedt** to elaborate the importance of the carbon cycle in the climate system and its relevance for BALTEX Phase II research, establish relevant implementation strategies and project outlines for BALTEX Phase II, and report to the BSSG at its forthcoming meeting.

**Action #19: Daniela Jacob** to review existing PhD schools and programmes (such as the International Max Planck Research School on Earth System Modelling) and possibilities to submit BALTEX-related PhD proposals to these programmes, and report accordingly to BSSG at its forthcoming meeting.

**Action #20: Daniela Jacob** to establish closer relations between BALTEX and the COSMOS (Community Earth System Models<sup>1</sup>) project and integrate BALTEX initiatives and projects into COSMOS, and/or vice versa, to the extent beneficial for both programmes, and report to BSSG at its forthcoming meeting for final approval.

**Action #22: Jarmo Koistinen** to provide an overview on how weather radar activities and research is expected to contribute to BALTEX Phase II objectives, in particular how the recently established co-operation of the BALTEX WG on Radar with NORDMET R&D activities contribute to these objectives, and report to BSSG at its forthcoming meeting accordingly.

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<sup>1</sup> See <http://cosmos.enes.org>

## Introduction

The 19<sup>th</sup> meeting of the BALTEX Science Steering Group (BSSG) was held in conjunction with the Conference “Assessment of Climate Change for the Baltic Sea Basin” (BACC) and was hosted by Göteborg University at the Conference Centre Wallenberg, and at Ågrenska Villan, Göteborg, Sweden in the afternoon of 23 and in the morning of 24 May 2006, respectively.

The steering group meeting had been scheduled as a short, interim meeting of one day duration, limited primarily to issues concerning the BSSG chair and membership as well as discussions on future management and steering structures of BALTEX during phase II of the programme. In the afternoon of 23 May, two external presentations were given by Kaisa Kononen on recent developments of the 6<sup>th</sup> EU framework ERA-NET project BONUS, and by Anna Tjörvar, Swedish International Development Co-operation Agency (SIDA) on funding possibilities within the Swedish funding scheme SIDA. The BALTEX Working Group on Data Management had a separate meeting following the BONUS and SIDA presentations. Minutes of the latter meeting are given in Appendix 5.

On 23 May, an official dinner was given for BALTEX SSG members upon invitation by the Swedish Meteorological and Hydrological Institute (SMHI), where the outstanding leadership of Hartmut Graßl during his term as BALTEX SSG chair in the period 1999 to 2006 was honoured and appreciated by several speakers. The hospitality of SMHI was highly appreciated by all dinner participants.

The second part of the 19<sup>th</sup> BSSG meeting was opened by Hartmut Graßl on Wednesday 24 May at 8:30, and was closed at 14:30. The meeting agenda and list of participants can be found in Appendix 1 and 2, respectively.

### **Item 1: BONUS for the Baltic Sea Science – Network of Funding Agencies: Towards an Article 169 funding programme in FP7**

Kaisa Kononen, co-ordinator of the 6<sup>th</sup> EU Framework Programme (FP6) ERA-NET project BONUS, reviewed the present status of the BONUS project and highlighted in particular the current preparations for a specific funding programme for Baltic Sea research at the European level according to article 169 of the EU Treaty (BONUS-169). BONUS-169 is one of four article 169 funding programmes which are currently under preparation at the European level, and the preparations for BONUS-169 may be considered most mature among those four, according to Kaisa Kononen. BONUS-169 is planned for duration of 5 years, and a second draft of the work programme is near to completion. Anticipated funding by the EU Member States contributing to BONUS-169 is expected to amount to 50-60 Mill € at present, and the Commission may contribute additional 75 Mill €; however, these figures are still uncertain at present. A final decision on the implementation of BONUS-169, which requires separate approval by both the European Parliament and the European Council may be expected in late 2006 or 2007; a first call for proposals through BONUS-169 may realistically not be expected before 2008. For BALTEX-related research, Theme 1 of the BONUS-169 draft work programme (“Understanding Climate Change and Geophysical Forcing”) will most obviously be relevant for proposals, but Themes 2 (“Combating Eutrophication”) and 5 (“Preventing Pollution”) have also potential to be relevant for BALTEX Phase II. The presentation material used by Kaisa Kononen is available in Appendix 3.

The BALTEX SSG thanked Kaisa Kononen for attending this BSSG meeting and updating the BSSG on the present state of BONUS and BONUS-169. Members of the BALTEX SSG voiced their expectation that BONUS-169 will be a major international funding source for BALTEX Phase II projects.

### **Item 2: Information of funding options by SIDA**

Anna Tjörvar presented the Baltic Sea Unit of SIDA, the Swedish International Development Agency. This unit was established in 2005 with the objective to strengthen Swedish relations with Estonia, Latvia, Lithuania and Poland. It was made clear that this funding scheme may provide funds for workshops and conferences, work and study visits, initial project funding, or project assistance. The scientific scope fits well with the BALTEX objectives, thus SIDA may represent a good instrument for BALTEX to strengthen the integration of organisations and individuals in the Baltic States. As SIDA is a Swedish national initiative, any proposals must be filed by Swedish scientists, and must be in the Swedish interest. As BALTEX is an international programme with a large Swedish contribution, this was not considered to be an obstacle. SIDA funding may help to attract scientists and national meteorological services in the Baltic States to BALTEX activities, such as the 5<sup>th</sup> Study Conference on BALTEX scheduled to take place on the island of Saaremaa, Estonia in June 2007 (see also Item 8 and Action Items 9, 10). The presentation by Anna Tjörvar is available in Appendix 4.

### **Item 3: Welcome by the host and the chairman (Anders Omstedt and Hartmut Graßl)**

Anders Omstedt welcomed the BSSG on behalf of Göteborg University. He shortly introduced Ågrenska Villan, which is a former family residence and nowadays serves Göteborg University as a meeting venue.

Hartmut Graßl welcomed all present BSSG members and thanked Göteborg University for the pleasant meeting venue. He also thanked SMHI for having invited the BSSG for dinner the previous evening.

### **Item 4: Chair of the BALTEX SSG**

Hartmut Graßl again officially formulated his wish to resign from the position of the BSSG chair. He iterated that he had initiated the identification of a suitable successor already early in 2006 when asking Mikko Alestalo and Jörgen Nilsson, both members of the BSSG, to propose a new BALTEX SSG leadership to be presented at this BSSG meeting. Jörgen Nilsson continued to summarize subsequent actions by Mikko Alestalo and himself. In summary, the suggestions are as follows:

1. **Joakim Langner**, Research Director at the Swedish Meteorological and Hydrological Institute (SMHI) to become the new chairman,
2. to nominate two vice-chairs: **Timo Vihma** of the Finnish Meteorological Institute (FMI), already member of the BSSG, and **Anders Omstedt** of Göteborg University, who has already been co-chair of the BALTEX SSG,
3. to limit the term of reference of the BSSG chair and vice-chairs to two years, with the possibility of a prolongation.

Jörgen Nilsson continued to note that the above suggestion, including CVs of the new nominees had been circulated to BSSG members prior to this meeting with no critical comments received. He also noted that both Joakim Langner and Timo Vihma had agreed to their nomination, provided they would be officially elected. The suggestion was based on several criteria, including (i) proven outstanding scientific profile in an area important for meeting for BALTEX Phase II objectives, (ii) to more closely involve national Services in the steering process of BALTEX, and (iii) to appreciate the long-lasting Scandinavian contribution to BALTEX and its steering process after a long period of German BALTEX SSG leadership.

The suggestion was well taken by meeting participants. The group entered into a discussion on the appropriate length of the terms of reference. The proposed 2 years were considered too short by various speakers. The main argument in support of a longer duration of 3 years was the possibility of a continuous leadership for the entire phase II of BALTEX, provided that the chairmanship may be extended for another term of 3 years. The change from one to two vice-chairmen was also welcomed. The main argument voiced here was the broader spectrum of topics covered by the three proposed chairpersons, including atmosphere dispersion modelling and chemistry, meteorology and oceanography, which are all at the heart of the future expected BALTEX research activities.

Furthermore, the precise role of the three chairpersons and the SSG members were discussed. Participants suggested that the terms of reference for BSSG members and chairs need to be re-formulated. The new chairs and the BALTEX Secretariat were asked to draft revised terms of reference to be presented for approval at the next BSSG meeting.

The following decisions were taken officially and unanimously:

**Decision 1:** Hartmut Graßl resigned from his position as BALTEX SSG chair.

**Decision 2:** The BALTEX SSG unanimously elected **Joakim Langner** as the **new chair of the BALTEX SSG**. Joakim is director of the research department at the Swedish Meteorological and Hydrological Institute (SMHI) in Norrköping, Sweden. He is associated professor in meteorology and his key interest and specialisation include atmospheric dispersion modelling, development and application of various chemistry-transport models from local to global scales, and atmospheric chemistry.

**Decision 3:** The BALTEX SSG unanimously elected **Timo Vihma**, senior research scientist at the Finnish Meteorological Institute (FMI), Helsinki, Finland, as **new vice-chair of the BALTEX SSG**. Timo's specialisation and interest include boundary-layer meteorology, sea-ice thermodynamics and dynamics, polar meteorology, meso-scale atmospheric modelling and air-sea interaction. The BALTEX SSG also unanimously confirmed **Anders Omstedt**, Professor for Oceanography at Göteborg University, Earth Science Centre, Göteborg, Sweden, as **vice-chair of the BALTEX SSG**.

**Decision 4:** The BALTEX SSG approved new terms for SSG chairs and vice-chairs. Their term will be for 3 years with one possibility for prolongation of again up to 3 years. The maximum term for chairs and vice-chairs is 6 years. Detailed terms of reference for BSSG chairs will be available at the next BSSG meeting in St. Petersburg in December.

**Decision 5:** The BALTEX SSG approved new terms for SSG members. Terms of SSG members will be for 3 years with the possibility of prolongation. No maximum term for members shall be imposed. Detailed terms of reference for BSSG members will be available at the next BSSG meeting in St. Petersburg in December (see Item 8 and Action Item 6).

Both Joakim Langner and Timo Vihma, who did not participate in the meeting until this point, were now personally welcomed by meeting participants. Joakim Langner accepted his responsibility as new BSSG chairman, and Timo Vihma and Anders Omstedt accepted their responsibility as vice-chairmen. Joakim Langner thanked the BSSG for the honour to act as new chairperson and stressed that the BALTEX objectives fit well with the research profile of SMHI, where he acts as research director. Joakim said that he wishes to pursue good continuity together with the two vice-chairs. He also noted that the extended objectives of BALTEX Phase II may require changes in the steering process and personnel. He in particular stressed that the success of the programme does not depend too much on the chairpersons, but primarily on ideas, motivation and actions of every individual researcher contributing to BALTEX objectives.

Having been elected as BSSG chair, Joakim Langner took over the chair of this BSSG meeting. In the name of the BSSG and for the entire BALTEX community, he heartily thanked Hartmut Graßl for his past leadership, and remembered again aspects of the speeches given at the dinner the day before.

#### **Item 5: Amendment and approval of the agenda**

The agenda to the 19<sup>th</sup> BSSG meeting was approved (see Appendix 1).

#### **Item 6: Approval of the previous BALTEX SSG meeting minutes**

The minutes of the 18<sup>th</sup> BSSG meeting were unanimously approved. Some action items are still pending; these are again listed at the end of the current action items list on page 10 of these minutes.

#### **Item 7: Wrap-up of the BACC Conference and future steps related to BACC (BALTEX Assessment of Climate Change for the Baltic Sea basin)**

Hans von Storch, initiator and chairman of BACC, considered the BACC conference to be a success. He thanked the numerous organisations and individuals having contributed to BACC and the conference. A particular appreciation was given to SMHI and FMI for valuable engagements and contributions to the BACC conference and the book manuscript. Concerning the preparation of the BACC book, he emphasized that chapters 2, 3 and 4 had been reviewed positively by external referees. Chapter 5 (Climate-related changes in marine ecosystems) received major critical comments by external referees, which resulted in a revised chapter manuscript with significant adjustments included. The revised chapter manuscript will again be sent to 5 external reviewers prior to any decision on publication. Optimistically, the manuscript may be ready for print at the end of 2006 and may be published in the middle of 2007.

Hans von Storch continued to highlight the successful collaboration between BACC and HELCOM (Baltic Marine Environment Protection Commission, or Helsinki Commission), which was considered to be of mutual benefit, not only for the BACC initiative, but as a strategic step for the entire BALTEX programme. He strongly suggested this collaboration to be continued and strengthened. Additionally motivated by the established BACC – HELCOM

collaboration, climate and climate change issues of the Baltic Sea region are beginning to become a more important item of HELCOM's agenda, as exemplified by the HELCOM assembly suggestion of March 2006 to consider the draft HELCOM Assessment Report on "Climate Change in the Baltic Sea Area", established by the HELCOM Secretariat on the basis of the BACC material, as a possible input to the HELCOM Baltic Sea Action Plan, which is currently being established. Concerning the revision of chapter 5 (see above), close contact will be held to the HELCOM Secretariat to update the related parts in HELCOM's draft assessment report.

Anders Omstedt underscored the aspect that the BACC project has contributed to stimulating contacts between scientists working in physical disciplines on the one side and other disciplines (e.g. biogeochemistry, marine and terrestrial ecosystem research) on the other side. These groups basically tend to speak different scientific languages, which is beginning to be overcome by joint discussions and projects, *inter alia* the BACC project. The climate focus in the potential BONUS-169 funding scheme is expected to further stimulate this multidisciplinary approach.

The collaboration with HELCOM was positively acknowledged by the BSSG. The role of BACC, and thus BALTEX, being acknowledged now by HELCOM as an independent scientific advisor related to climate and climate change issues of the Baltic Sea region, is an important strategic aspect for the BALTEX programme, also and in particular related to the expected stronger outreach objective of BALTEX Phase II. Both the widening of BALTEX objectives to water quality issues, and the concurrent intention of HELCOM to consider also climate change aspects on its agenda, seem to open a broader field of future co-operation between BALTEX and HELCOM. BALTEX, as a major European science programme and a "family member" of the World Climate Research Programme (WCRP) will thus gain additional reputation by supporting and officially co-operating with a major intergovernmental organisation such as HELCOM.

A concrete further collaboration option with HELCOM may be the official co-organisation of the 5<sup>th</sup> Study Conference on BALTEX scheduled for 2007 on the island of Saaremaa, Estonia (See Item 10 below). Juha-Markku Leppänen, professional secretary of HELCOM, has already agreed to become a member of the Conference committee, and a special Conference session on climate-related changes in marine ecosystems is planned, where HELCOM has a specific interest. Another aspect of potential collaboration is the development of objectives 5 and 6 of BALTEX Phase II: *Increased interactions with stakeholders and decision makers* and *Education and outreach*. Timo Vihma of FMI was asked to act as contact person to the HELCOM secretariat in Helsinki and to invite Anne-Christine Brusendorff, the Executive Secretary of HELCOM to the 20<sup>th</sup> BALTEX Steering Group meeting scheduled to take place in St.Petersburg, Russia in December 2006.

The following official decision was formulated:

**Decision 6:** The BALTEX SSG decided to strengthen the co-operation and strategic alliance with HELCOM (Helsinki Commission). Timo Vihma will act as the liaison person to HELCOM within the BALTEX SSG.

**Action #1:** *Timo Vihma to ask HELCOM for its willingness to officially co-organise the 5<sup>th</sup> Study Conference in on BALTEX 2007, as soon as possible;*

**Note to the protocol:** *Action Item completed.*

*Timo Vihma contacted Anne Christine Brusendorff, Executive Secretary of HELCOM. She confirmed that HELCOM is looking forward to the next joint conference and that her anticipated presence at the next BALTEX SSG meeting in St. Petersburg will also serve the preparation of the joint conference.*

*Hans-Jörg Isemer had also been in contact with Juha-Markku Leppänen about the willingness of HELCOM to officially co-organise the 5th Study Conference on BALTEX in 2007, which was confirmed by HELCOM; HELCOM appears on the conference flyer with its logo as co-organiser.*

**Action #2:** *Timo Vihma to contact the Executive Secretary of HELCOM, Anne Christine Brusendorff, to invite her to the next BALTEX SSG Meeting in St. Petersburg to strengthen the strategic alliance with HELCOM, as soon as possible;*

**Note to the protocol:** *Action Item completed.*

*Timo Vihma contacted Anne Christine Brusendorff and informed her of the new BALTEX BSSG chairs and invited her to the next BSSG meeting in St. Petersburg. Anne Christine Brusendorff answered positively, indicating that she is ready to come to St. Petersburg, but she did not yet confirm her attendance.*

The upcoming conference “Baltic Sea and European Marine Strategy - Linking Science and Policy” on 13-15 November 2006 in Helsinki, Finland, which is organised on the occasion of the Finnish EU presidency is considered a good opportunity to propagate objectives and results of BACC and BALTEX. Timo Vihma of FMI was asked to find out about possibilities to present BALTEX and BACC at this conference. The way in which this will be presented will be further discussed.

**Action #3** *is for Timo Vihma to contact Sylvain Joffre at FMI and investigate possibilities for BALTEX to contribute to the “Baltic Sea and European Marine Strategy” Conference, 13 to 15 November 2006, in Helsinki, as soon as possible;*

**Note to the protocol:** *Action Item completed.*

*Timo discussed this with Sylvain Joffre at FMI, who is a member of the organising committee of the "Baltic Sea and European Marine Strategy" conference. The Conference will include invited talks (speakers already invited) and exhibition stands and posters, focusing on the following themes: eutrophication, sustainable use of marine resources, reconciling human activities and ecosystems, protection of biodiversity, decreasing risks from hazardous substances, and linking science and policy. An exhibition stand was reserved for BALTEX at the Conference. Information on the Conference is available at [www.eu2006balticsea.net](http://www.eu2006balticsea.net).*

## **Item 8: The BALTEX Science Steering Group: Future role, function, activities and membership**

BSSG noted with regret that Clemens Simmer and Anders Lindroth had asked to resign from the steering group.

**Action #4 for Chairs and Secretariat** *to thank Clemens Simmer and Anders Lindroth for their past leadership to BALTEX, as soon as possible.*

**Note to the protocol:** *Action Item already completed.*

*Hans-Jörg Isemer sent E-mails to both Clemens and Anders, thanking them on behalf of the BALTEX SSG for their outstanding contributions to the leadership of the BALTEX programme.*

The role, structure and memberships of the BSSG were discussed. It was a general consensus that in the light of the 6 remaining years for BALTEX Phase II, activities must be intensified in order to accomplish its goals. It was argued that the present BSSG structure reflects the scientific needs of BALTEX Phase I, and that an amendment is necessary in order to reflect the changed BALTEX Phase II objectives. Expertise in fields such as air and water pollution, eutrophication, biogeochemical cycles and related modelling needs to be properly represented in the BALTEX SSG. Expertise in the field of air pollution has already joined the steering group through Joakim Langner (new BSSG chairman), but other key scientist with expertise in areas mentioned above relevant for BALTEX Phase II shall be identified and stimulated to join the BSSG. In this context, two names were mentioned: *Bernd Schneider* of the Baltic Sea Research Institute in Warnemünde (IOW), Germany is a chemical oceanographer with special interest and research profile in the marine CO<sub>2</sub> system and air-sea exchange, and *Benjamin Smith* of Lund University, Sweden who is an ecologist and ecological modeller. He is also lead author of chapter 4 (Climate-related changes in terrestrial ecosystems) of the BACC book.

*Action #5 for BSSG Chairs to consider to discuss with Benjamin Smith and Bernd Schneider on their possible membership to the BALTEX SSG, prior to next BALTEX SSG meeting.*

The strategy concerning BALTEX Phase II was further discussed. It was argued that the new objectives of BALTEX Phase II are meant as a gradual extension of BALTEX Phase I, and that a strong engagement towards supporting *e.g.* environmental policy on the one hand and in fundamental research on the other hand should not result in overloading the capacity of the BALTEX programme. A possible way to accommodate the entire spectrum of BALTEX Phase II could be the establishment of new or additional working groups, according to the BALTEX Phase II objectives.

A further point of discussion was again on the role and tasks of the BSSG members and chairs. It was decided to establish detailed terms of reference for the BSSG membership and chairmanship. The option of implementing a BALTEX Task Force was also discussed, but, at present, it was finally considered better to keep the management structure simpler without a specific Task Force.

*Action #6 for BSSG Chairs and the Secretariat to prepare draft terms of reference for chairmanship and SSG membership, including rules and voting procedures; by next BSSG meeting.*

*Action #7 for BSSG Chairs and all BSSG members to review the present BALTEX SSG membership and propose adjustments related to the new BALTEX Phase II objectives, as required, by next BALTEX SSG meeting.*

Furthermore, the low activity profile of some BSSG members and related possible actions were discussed once more (see also minutes of the 18<sup>th</sup> BALTEX SSG meeting). Especially organisations in the Baltic States, and in particular the National Meteorological Services, have in the past years shown little interest in collaboration with BALTEX. It was suggested to stimulate their interest by providing support (possibly by SIDA) for conferences and

workshops, and to encourage the heads of the Meteorological Services to send motivated representatives. Also, motivated scientists from these countries should individually be approached in order to include expertise necessary to meet objectives of Phase II in BALTEX research activities.

***Action #8 for BSSG Chairs to consider communication to present BALTEX SSG members with an apparent low activity profile in BALTEX, prior to the next BALTEX SSG meeting.***

***Action #9 for BSSG Chairs and the Secretariat to consider the future role of national Services in BALTEX and their proper representation at the BALTEX SSG, in particular Services with an apparent low profile in BALTEX (e.g. Baltic States, Belarus, Russia); to undertake action to contact Services (e.g. by conducting specific meetings with Services concerned, explore SIDA support for such meetings) and discuss future contributions of the latter to BALTEX, prior to next BALTEX SSG meeting.***

***Action #10 for BSSG Chairs and all BSSG members to consider a stronger contribution of leading scientists of the Baltic States to the BALTEX programme and its leadership, and identify potential candidates, next BALTEX SSG meeting.***

The participation in study courses and summer schools should be promoted to a larger extent. This will contribute to objective 6 of BALTEX Phase II (Education and Outreach), and also spread the mission of BALTEX in the young scientific community.

***Action #11 for all BSSG member to identify Study Courses/Summer Schools for participation of BALTEX as contributions to the 6<sup>th</sup> BALTEX Phase II objective, continuous;***

## **Item 9: BALTEX Working Groups**

At present, several new BALTEX Working Groups have been suggested and draft terms of reference and draft membership were established, but await final approval. This holds true in particular for working groups shortly reviewed below under Items 9.1, 9.2, and 9.4. The suggested Working Group on Climate Change and Variability (Item 9.3) has initially been introduced after the 18<sup>th</sup> BSSG meeting, but was not discussed by BSSG in detail. The BALTEX Working Group on Data Management is the only new working group with terms of reference and initial membership being officially approved by the BALTEX SSG (see minutes of the 18<sup>th</sup> BSSG meeting). The respective suggested Working Group chairs briefly summarized the state of the working group and presented draft terms of reference and suggested group memberships.

***Action #12 for Working Group chairs (D. Jacob, A. Lehmann, H. von Storch, M. Reckermann) to provide draft terms of reference and draft memberships of the suggested Working Groups, by July 2006.***

### *9.1: Working Group on Budgets (Daniela Jacob)*

Water and energy budgets may later be extended by carbon and nitrogen cycles and budgets.

### *9.2: Working Group on BALTIC GRID (Andreas Lehmann)*

Andreas Lehmann reported that the Pilot Phase of GRID will be the synthesis of results related to the BRIDGE period 1999-2004.

*9.3: Working Group on Climate Change and Variability (Hans von Storch)*

The main tasks of this Working Group are: 1) the completion of the BACC book; and 2) based on this synthesis, the formulation of future research needs.

*9.4: Working Group on BALTEX Web Site Content (Marcus Reckermann)*

Marcus Reckermann reported that a new URL for the BALTEX web site has been reserved: *www.baltex-research.eu*. The BALTEX web site can now be accessed through this domain, while the old domain *www.gkss.de/baltex* remains intact for the time being. Marcus distributed draft Terms of Reference of the Working Group, but a membership has not yet been established. The terms of references and membership will be presented at the next BSSG meeting in December, together with a draft version of an extended BALTEX web site for the general public.

***Action #13** for Marcus Reckermann to establish and demonstrate a revised draft BALTEX web site with emphasize on the planned outreach and education components in BALTEX Phase II, at next BALTEX SSG meeting.*

A general discussion evolved about the possibility to establish specific rules and terms of reference for BALTEX Working Groups. Hans von Storch remarked that the perception of BALTEX from outside could be improved by enhancing the work of the working groups. It was suggested to precisely define achievements and deliverables, or milestones to be completed after a defined period of time. It was also noted, that this approach may not be applicable to all working groups. Current working groups should present their achievements within a given limited period of time. In view of the extended research objectives of BALTEX Phase II, it was suggested to re-consider the draft objectives and terms of reference of the presently suggested working groups in light of all new BALTEX Phase II objectives.

The following decision was officially taken:

**Decision 7:** The BALTEX SSG considered it premature to finally decide on terms and members for suggested BALTEX Working Groups. Instead, a revised concept of how BALTEX Phase II objectives correspond to the present and suggested working groups shall be established by the new BALTEX SSG chairs and vice-chairs and be finally discussed at the forthcoming BALTEX SSG meeting in December 2006. This will include suggestions and discussions on BALTEX SSG membership and additional possible management means and structures for BALTEX.

***Action #14** for **BSSG Chairs** to review the present leadership and management structure of BALTEX, in particular how the new objectives of BALTEX Phase II may best be implemented in this structure, including the future role and terms of the BALTEX Working Groups, and propose an improved concept, by next BALTEX SSG meeting.*

*9.5: Working Group on Data Management (Jörgen Nilsson)*

Jörgen Nilsson reported on main developments concerning the data management working group. The main subject was the availability of data sets for users, which should generally be facilitated. Generally, the availability of data sets must be promoted in an offensive way so researchers are able to work with the data. This is also at the core of the GRID initiative, and a close co-operation with the working group on GRID is understood. Jörgen Nilsson reported that the MARE data base at Stockholm University may possibly be transferred to the SMHI, and may be incorporated into the BALTEX data base pool. A major achievement of the

MARE project ([www.mare.su.se](http://www.mare.su.se)) is the development of the Decision Support System NEST. The data base includes environmental (hydrographical and biological) data from the entire Baltic Sea. Jörgen also referred to the UNI-DART programme of the German Weather Service DWD, which has as its main goal the development of a meteorological web portal to provide uniform access to meteorological data and products through the Internet ([www.dwd.de/UNIDART](http://www.dwd.de/UNIDART)). The usability for BALTEX data bases will be evaluated by the BWGD and a connection via the BALTEX web site will be established. The minutes of the separate meeting of the Working Group on Data Management can be found in Appendix 5.

***Action #15 for Jörgen Nilsson and Marcus Reckermann** to establish a link at the BALTEX web site to the UNI-DART web site and explore possibilities for data access, availability and use in BALTEX, as soon as possible;*

***Action #16 for Jörgen Nilsson and the Secretariat** to provide a list of data links and their availability for BALTEX data users, to be published at the BALTEX web site, next BALTEX SSG meeting and continuously;*

***Action #17 for Jörgen Nilsson and the Working Group on Data Management** to provide a critical review of the performance (e.g. data availability, data request, data gaps, etc) of the presently existing BALTEX Data Centres, including possible suggestions for changes or amendments, next BALTEX SSG meeting;*

***Action #18 for Anders Omstedt, Timo Vihma and the Secretariat** to identify climate data sets relevant for BALTEX, explore their availability for BALTEX research purposes, and establish internet links to these data sets at the BALTEX homepage and the relevant BALTEX Data Centres, next BALTEX SSG meeting, and continuous;*

#### **Item 10: The 5<sup>th</sup> Study Conference on BALTEX in 2007: Status of preparations**

Both Sirje Kevallik and Hans-Jörg Isemer, who visited the Conference location at Kuressaare on the island of Saaremaa, Estonia in April 2006 for local logistics preparations, summarised the status as follows:

The Conference will take place during 4 to 8 June 2007. A lecture hall for up to 300 participants in the building of the municipal library in the centre of Kuressaare has been pre-booked. The building has the usual facilities for poster exhibition, outbreak rooms, Conference secretariat, etc. available. Hotel rooms have been pre-booked in different hotels for up to 150 participants. Logistical preparations such as hotel room booking, preparation of social program, ice-breaker and the like will be done in co-operation with the Estonian travel agency Reisiexperdi AS in Tallinn. A preliminary Conference budget estimate indicates that the Conference fee for Conference participants may be Euro 240 (100) for full (student) delegates. Three Estonian institutions have already indicated to support the Conference in financial terms. No other external funding has been explored so far, but will be done, for example with the Swedish SIDA program, see Item 2 of the agenda.

Hans-Jörg Isemer suggested to seek to officially co-organise the 5th Study Conference on BALTEX with other programmes, organisations or projects, which have a specific expertise profile in those areas, which BALTEX intends to co-operate more closely with, according to the extended objectives of BALTEX Phase II as worked out in detail in chapter 10 of the BALTEX Phase II Science Framework and Implementation Strategy. Particularly suggested were:

1. HELCOM (Baltic Marine Environment Protection Commission, Helsinki Commission),
2. LOICZ (Land-Ocean Interactions in the Coastal Zone), a core project of IGBP,
3. ASTRA (Developing Policies & Adaptation Strategies to Climate Change in the Baltic Sea Region) an INTERREG IIIB Project,
4. ENSEMBLES (Ensemble-based predictions of climate changes and their impacts), an Integrated Project co-financed through the 6<sup>th</sup> Framework Programme of EU (FP6), and
5. EUR-OCEANS (Excellence for Ocean Ecosystem Analysis), a Network of Excellence co-financed through FP6.

The BALTEX SSG endorsed the suggested co-operation for the Conference as one concrete implementation measure for the envisaged scientific co-operation of BALTEX during its phase II, and the Secretariat was given the mandate to negotiate means of co-operation with the relevant representatives of the suggested 5 programmes mentioned above.

A draft First Conference Announcement had been established by the BALTEX Secretariat, and was finally discussed by meeting participants. Adjustments to the wording of the scientific scope and themes of the Conference were voiced by participants. The BSSG chairs and the Secretariat were asked to finally adjust details of the First Conference Announcement concerning the possible co-organisation with other projects and programmes, and the related wording on the scientific scope of the Conference.

Note to the protocol: All five suggested co-operation partners for the Conference rapidly agreed to officially act as co-organisers of the Conference. All are explicitly mentioned on the First Announcement, which was finally approved by the BALTEX SSG chairs and published in June 2006.

BSSG also discussed briefly the appearance of BALTEX at other major related Conferences and

*Action #19 was given to the Secretariat to announce and promote upcoming conferences and events relevant for BALTEX on the BALTEX web site.*

**Item 11: BONUS for the Baltic Sea Science – Network of Funding Agencies: Towards an Article 169 funding programme in FP7**

Meeting participants repeated their expectation that BONUS-169 will be a major international funding source for BALTEX Phase II projects. It was agreed to closely follow future preparations towards BONUS-169, as has been done already in the past by several BSSG members. In this context the second draft work programme for BONUS-169, which is to be published soon, shall be closely explored for future funding options for BALTEX.

**Item 12: Summary of previous BALTEX SSG meeting action items**

A few action items from the 18<sup>th</sup> BSSG meeting are still open. These items are again listed together with the action items of this BSSG meeting (see page 10 of these minutes).

**Date and Place of the next BSSG meeting**

The following decision was officially taken:

**Decision 8:** The BALTEX SSG will convene for its 20<sup>th</sup> meeting in St. Petersburg, Russia, on Thursday 7 and Friday 8 December 2006.

The meeting is anticipated to start early on 7<sup>th</sup> December, hence, participants are expected to travel already on 6<sup>th</sup> December.

*Action #20 for the Secretariat and Valeri Vuglinsky to prepare for the 20<sup>th</sup> BSSG meeting (BSSG #20) to be held during 7 and 8 December 2006 in St. Petersburg, Russia.*

**Any other business**

None.

**Acronyms and Abbreviations**

ABL	Atmospheric Boundary Layer
ASTRA	Developing Policies and Adaptation Strategies to Climate Change in the Baltic Sea region (EU-INTERREG IIIB Project)
BACC	BALTEX Assessment of Climate Change for the Baltic Sea Basin
BALTIMOS	BALTEX Integral Model System
BALTEX	Baltic Sea Experiment
BALTIC GRID	A major BALTEX Phase II Activity
BONUS	Baltic Sea Science – Network of Funding Agencies
BRIDGE	The Main BALTEX Experiment 1999 - 2001
BSSG	BALTEX Science Steering Group
BWG-BGRID	BALTEX Working Group on BALTIC GRID
BWGD	BALTEX Working Group on Data Management
BWG-Web	BALTEX Working Group on Website Content
COSMOS	Community Global Earth System Model
DWD	Deutscher Wetterdienst (German Meteorological Service)
ECMWF	European Centre for Medium-Range Weather Forecasts
ENSEMBLES	EU Project for the Development of an Ensemble Prediction System for Climate Change in Europe
ERA-NET	EU Funding Programme “European Research Area – Net”
ESM	Earth System Modelling
EU	European Union
EUR-OCEANS	European Network of Excellence for Ocean Ecosystems Analysis
FMI	Finnish Meteorological Institute
FP6	Framework Programme #6 of the EU
FP7	Framework Programme #7 of the EU
GEWEX	Global Energy and Water Cycle Experiment
GHG	Greenhouse Gas
GHP	GEWEX Hydrological Panel
GIF	Graphics Interchange File Format
GRID	See BALTIC GRID
HELCOM	Helsinki Commission
IOW	Institut für Ostseeforschung Warnemünde – Baltic Sea Research Institute
LOICZ	Land-Ocean Interactions in the Coastal Zone
MARE	Marine Research on Eutrophication
NEST	Decision Support System of MARE
NORDMET R&D	Nordic Co-operation in Meteorology, Research and Development
P-E	Precipitation - Evaporation
RCAO	Rosby Centre Regional Atmosphere-Ocean Model
SIDA	Swedish International Development Agency
SMHI	Swedish Meteorological and Hydrological Institute
SSG	Science Steering Group
UNI-DART	Uniform Data Request Interface Programme
URL	Uniform Resource Location (Internet address)
WG	Working Group

**Appendix 1: BSSG Meeting Agenda****19<sup>th</sup> BALTEX SSG Meeting**

at  
**Göteborg University**  
 Göteborg, Sweden

**23 and 24 May 2006**

**PROVISIONAL AGENDA AND EXPLANATORY MEMORANDUM**

The BSSG meeting will be divided into two parts. A one-hour meeting part is now scheduled for Tuesday afternoon, 23 May 2006, where the group is offered to receive an update on two major funding programmes with possible relevance for BALTEX. The main meeting will be conducted on 24 May 2006, as planned until recently. Note, that the Swedish Meteorological and Hydrological Institute (SMHI) invites all BSSG members to an informal dinner on Tuesday, 23 May 2006, 19.30. See the separate invitation.

**Tuesday, 23 May 2006**

*This part of the BSSG meeting will take place at  
 Conference Centre Wallenberg, Göteborg, Sweden  
 see*

*<http://www.konfoservice.adm.gu.se/english/conferencevenues/confwall/>*

*This is the same building where the BACC Conference will take place. The room number will be announced and displayed at the BACC conference.*

- 14.30      Item 1: BONUS for the Baltic Sea Science – Network of Funding Agencies: Towards an Article 169 funding programme in FP7**  
 Kaisa Kononen, Academy of Finland, Co-ordinator of the FP6 EraNet BONUS

BONUS is currently preparing conditions for a future joint Baltic Sea research and funding programme under the forthcoming 7<sup>th</sup> Framework Programme of the EU. An update of the present status will be given and discussions on perspectives for the BALTEX programme are envisaged.

**Item 2: Information on funding options by SIDA**

Anna Tjörvar, Swedish International Development Co-operation Agency

/SIDA

- 15.30      Closing of part 1 of the BSSG meeting**

- 19.30      Dinner**

Invitation by the Swedish Meteorological and Hydrological Institute (SMHI)  
 For details on the location see the separate invitation

**Wednesday, 24 May 2006**

*This part of the BSSG meeting will take place at  
Ågrenska Villan, Göteborg University, Göteborg, Sweden  
see*

*<http://www.konfoservice.adm.gu.se/english/conferencevenues/agrenska/>*

*Coffee and refreshments will be offered throughout the meeting. During the morning break sandwiches will be offered. A specific lunch break is not planned.*

**08.30 Item 3: Welcome by the host and the Chairman (A. Omstedt, H. Graßl)****Item 4: Chair of the BALTEX SSG**

The present BSSG chair, Hartmut Graßl, indicated that he may wish to resign from the position of the BSSG chair. He had asked Mikko Alestalo and Jörgen Nilsson, both members of the BSSG, to identify a candidate for a new BALTEX SSG chair. A related suggestion has been brought to the attention of the BSSG prior to this meeting, and is expected to be discussed and concluded.

**09.30 Item 5: Amendment and approval of the agenda****Item 6: Approval of the previous BALTEX SSG meeting minutes****Item 7: Wrap-up of the BACC Conference and future steps related to BACC (BALTEX Assessment of Climate Change for the Baltic Sea basin)**

Lead: Hans von Storch, Anders Omstedt, Valeri Vuglinsky

**10.30 Break****11.00 Item 8: The BALTEX Science Steering Group: Future role, function, activities and membership**

The general role of the BALTEX SSG in view of the extended objectives of BALTEX Phase II will come up for discussion. This will include a discussion on the term of BSSG members, both in general and individually, and options for the implementation of a **BALTEX Task Force**, as suggested at an earlier BSSG meeting.

**Item 9: BALTEX Working Groups**

Several new BALTEX Working Groups were suggested or have already been implemented at or since the previous BALTEX SSG meeting, respectively. The designated WG chairs are expected to propose the respective Working Group's terms of reference and initial membership for approval by the SSG.

**9.1: Working Group on Energy and Water Budgets**

Lead: Daniela Jacob

**9.2: Working Group on BALTIC GRID**

Lead: Andreas Lehmann

**9.3: Working Group on Climate Change and Variability**

Lead: Hans von Storch

**9.4: Working Group BALTEX Public Website**

Lead: Marcus Reckermann

A brief summary of the status of two existing BALTEX Working Groups is expected to be given by the Working Group chairs.

**9.5: Working Group on Data Management**

Lead: Jörgen Nilsson

**13.00**

**Item 10: The 5<sup>th</sup> Study Conference on BALTEX in 2007**

Summary of preparation status: Hans-Jörg Isemer and Sirje Keevallik

**Item 11: BONUS for the Baltic Sea Science – Network of Funding Agencies: Towards an Article 169 funding programme in FP7**

Implications of item 1 of the agenda will be summarized.

**Item 12: Summary of previous BALTEX SSG meeting action items**

Hans-Jörg Isemer

**14.00**

**Date and Place of the next BSSG meeting****Any other business**

**14.30**

**Closing of the BSSG meeting**

**Appendix 2: Participants of the 19th BSSG meeting**

Prof. Dr. Hartmut **Graßl** grassl@dkrz.dk  
Max-Planck-Institute for Meteorology  
Hamburg, Germany

Dr. Hans-Jörg **Isemer** isemer@gkss.de  
GKSS Research Centre Geesthacht GmbH  
International BALTEX Secretariat  
Geesthacht, Germany

Dr. Daniela **Jacob** jacob@dkrz.de  
Max-Planck-Institute for Meteorology  
Hamburg, Germany

Dr. Sirje **Keevallik** sirje.keevallik@emara.ee  
Estonian Maritime Academy  
Tallinn, Estonia

Dr. Joakim **Langner** joakim.langner@smhi.se  
Swedish Meteorological and Hydrological Institute  
Norrköping, Sweden

Dr. Andreas **Lehmann** alehmann@ifm-geomar.de  
Leibniz-Institut für Meereswissenschaften  
Kiel, Germany

Mr. Jörgen **Nilsson** jorgen.nilsson@smhi.se  
Swedish Meteorological and Hydrological Institute  
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Kongens Lyngby, Denmark

Dr. Markku **Rummukainen** markku.rummukainen@smhi.se  
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Prof. Dr. Hans **von Storch** storch@gkss.de  
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Dr. Timo **Vihma**  
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timo.vihma@fmi.fi

Prof. Dr. Valery **Vuglinsky**  
State Hydrological Institute  
St. Petersburg, Russia

vvuglins@vv4218.spb.edu

**Appendix 3: Presentation of Kaisa Kononen on the current status of BONUS-169****BONUS - 169**

Kaisa Kononen  
Programme Manager  
BONUS ERA-NET Coordinator  
Academy of Finland

**Article 169 of the Treaty**

- ***"In implementing the multiannual Framework Programme, the **Community** may make provision, in **agreement with the Member States** concerned, for **participation** in research and development programmes **undertaken by several Member States**, including participation in the **structures** created for the execution of those programmes"***



## Three-partite decision

### European Commission

- prepared the proposal for the 7th Framework Programme & Specific programmes
- proposed four Article 169 programmes – BONUS as one of them

### European Parliament

- Decides about 7th Framework Programme & Specific Programmes during summer and early autumn

### European Council

- Decides about 7th Framework Programme & Specific Programmes during autumn (?)

In addition, a separate co-decision concerning Article 169 by EP & EC will be required



## Requirements

### 1. Scientific integration

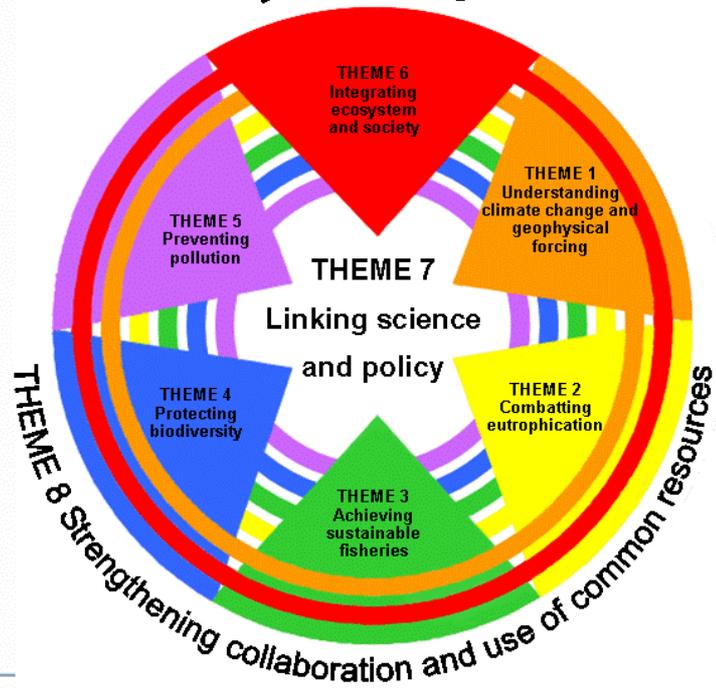
- common framework plan,
- common calls, evaluation, monitoring



# BONUS

for the Baltic Sea Science – Network of Funding Agencies

## BONUS - 169



# BONUS

for the Baltic Sea Science – Network of Funding Agencies

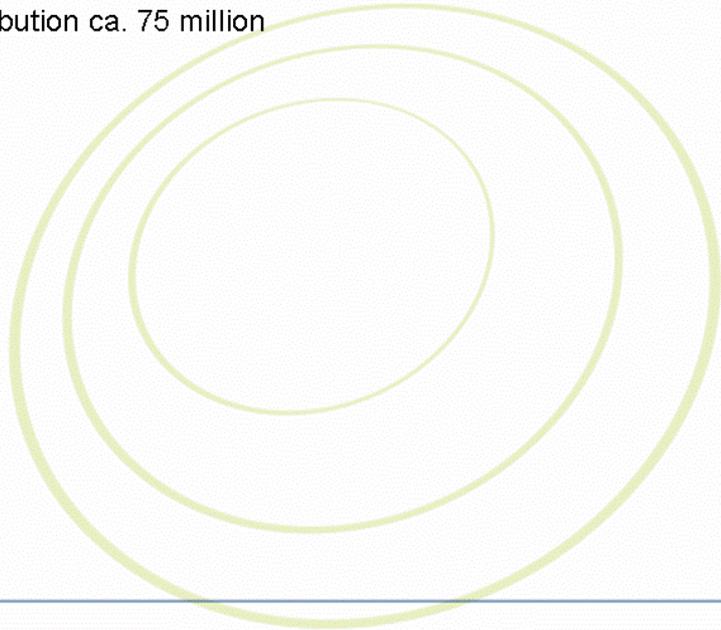
## Requirements

1. Scientific integration
  - common framework plan,
  - common calls, evaluation, monitoring
2. Financial intergration
  - commitment by Member States to allocate funds
  - (virtual) common pot
  - multiannual financial planning

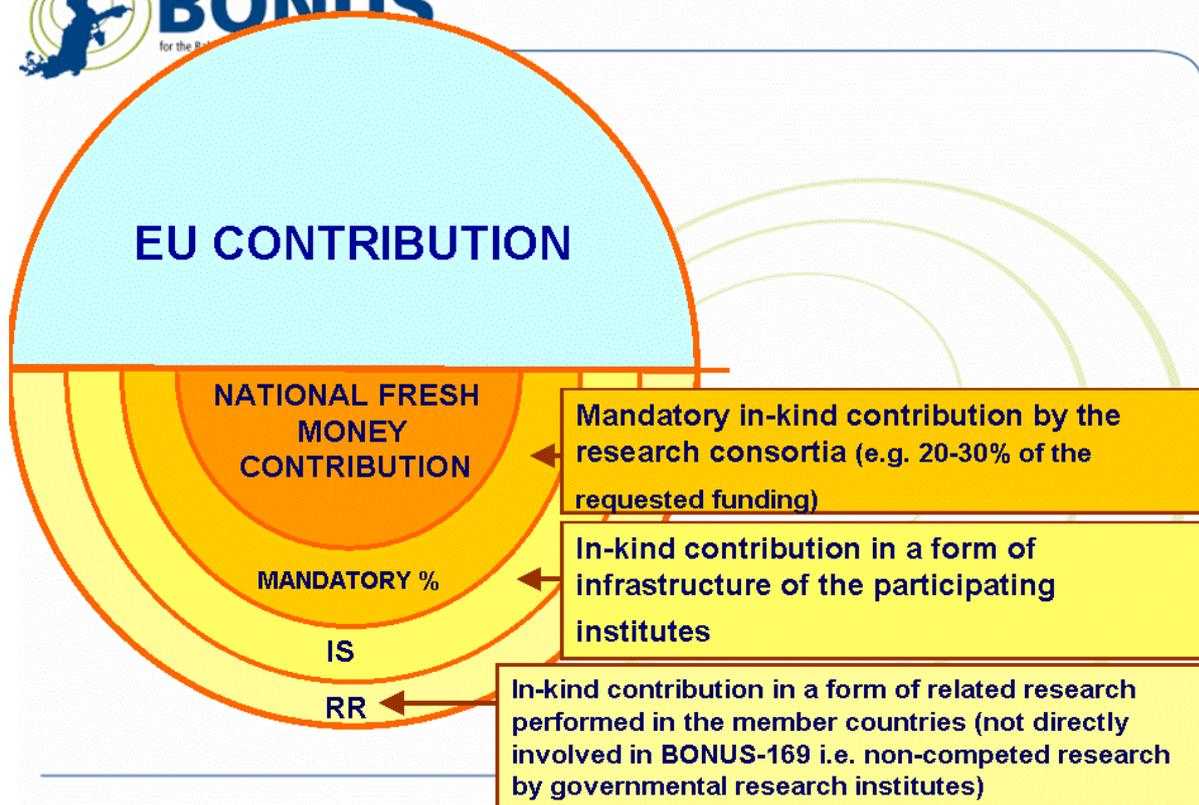


## Financial integration

- the national fresh money allocation amounts ca. 50 – 60 million
- the expected EC contribution ca. 75 million



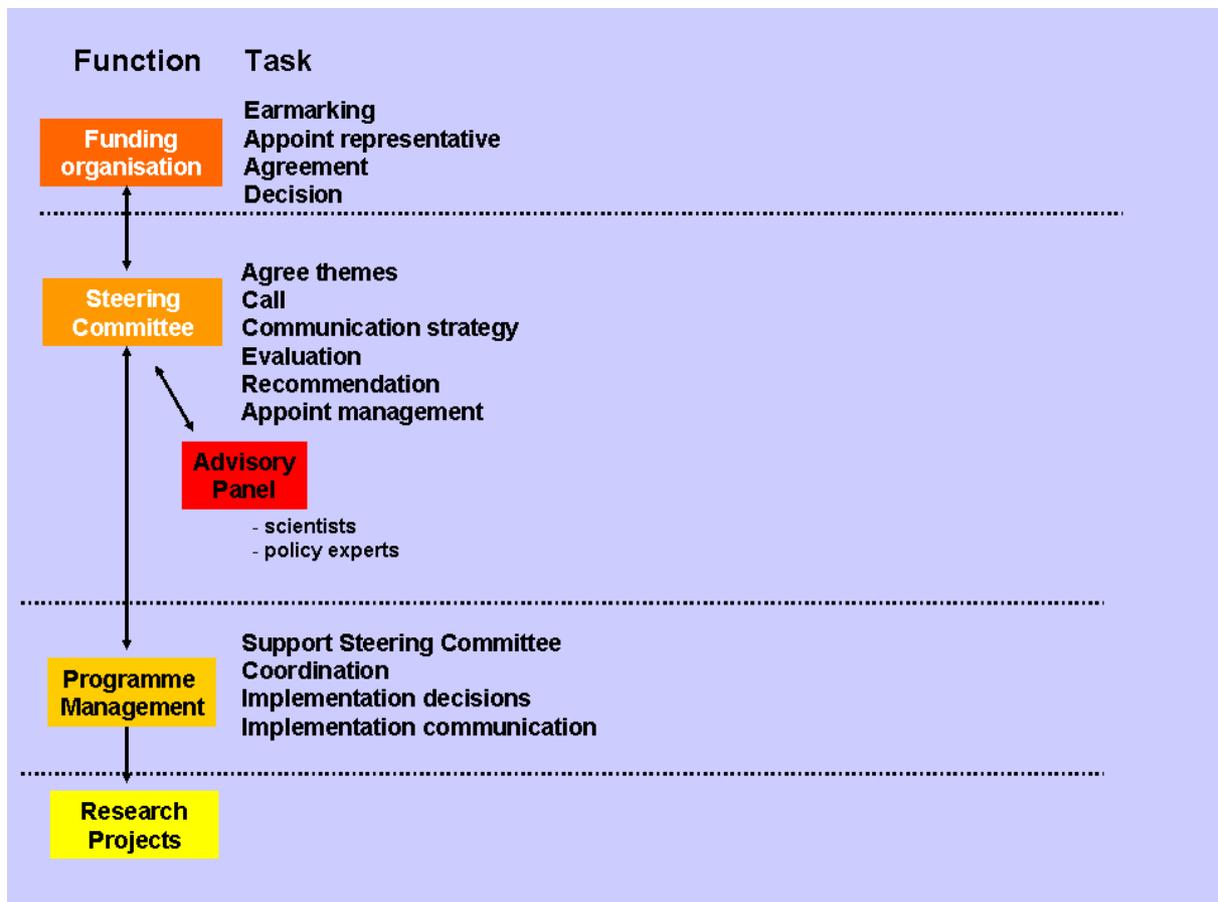
## FORMATION OF OF THE BONUS-169 'COMMON POT'





## Requirements

1. Scientific integration
  - common framework plan,
  - common calls, evaluation, monitoring
2. Financial intergration
  - commitment by Member States to allocate funds
  - (virtual) common pot
  - multiannual financial planning
3. Management integration
  - dedicated structure – legal entity – signs the contract with the Commission
  - BONUS has decided that the dedicated structure will be an 'European Economic Interest Grouping' (EEIG) which will be registered in Helsinki
  - full participation of all states
  - appropriate governance model





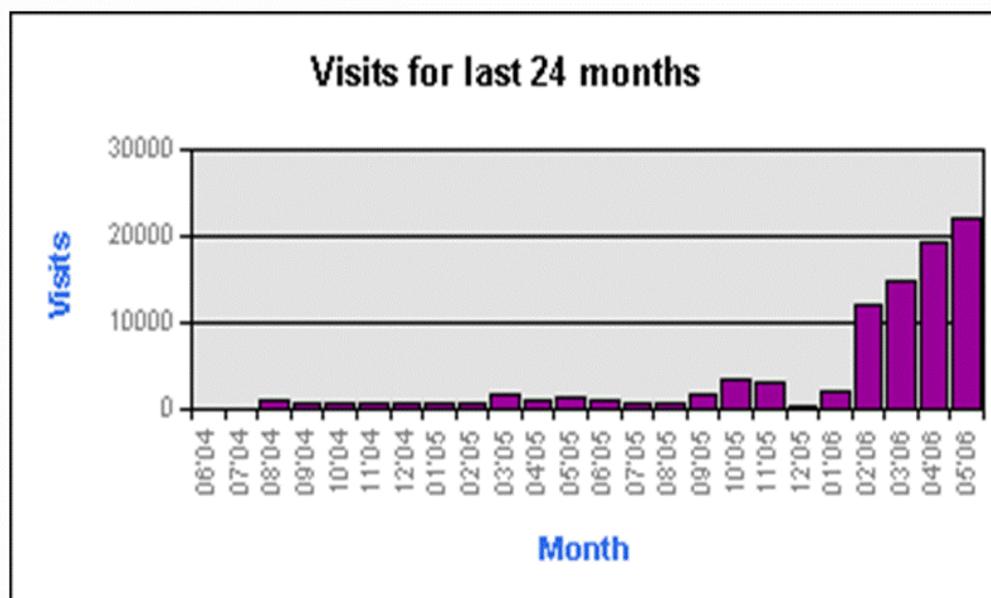
**BONUS**  
for the Baltic Sea Science – Network of Funding Agencies

Reality

- Breakdown of research funds for FP7 by one third from Commission's proposal
- Will all four proposed Article 169 initiatives will be funded? Or only some of them? Or with a different time schedule?
- Heavy lobbying is going on
  - meeting MEPs in Brussels, Strasbourg, countries
  - Baltic InterGroup of the European Parliament
  - Seminar on May 30th, 2006 in Brussels *Linking Science and Policy with Article 169 – A Regional Seas Demonstration Programme in the Baltic Sea*
- Member State commitments are crucial
- Plan B – go for ERA-NET Plus



**BONUS**  
for the Baltic Sea Science – Network of Funding Agencies



## Appendix 4: Presentation of Anna Tjörvar on the Swedish funding scheme SIDA



### Sidas assignment: The Baltic Sea unit

In the end of 2004 Sida was instructed by the Swedish Government to establish a Baltic Sea unit. Objectives: to strengthen the Swedish relations with Estonia, Latvia, Lithuania and Poland. The unit was officially established in Visby on June 22, 2005 and was fully operational in August.

#### Staff:

Thomas Johansson, Director  
 Birgitta Hallberg, Deputy Director/financial administrator  
 Eleonor Lindstedt, Secretary/administrative assistant  
 Piret Hedin, Coordinating desk officer  
 Josefin Dahlander, Coordinating desk officer  
 Mattias Svensson, Coordinating desk officer  
 Anna Tjörvar, Coordinating desk officer  
 Andreas Söderlund, Administrative assistant  
 Linda Jansdotter, Communications officer



During 2005 the work was focused on:

- Making the Baltic Sea Unit well known
- Defining the demands as concerns the services of the unit
- Recruiting staff
- Developing instruments for project financing



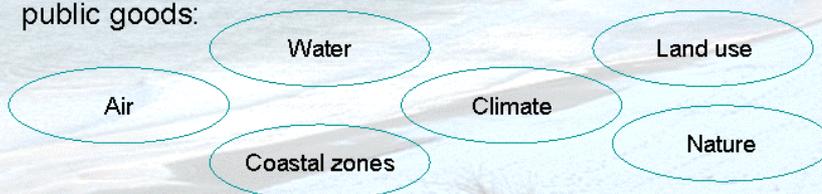
## Annual directives and letter of appropriations of the government

- The comprehensive objective of the unit: to secure Swedish interests in relations with the countries in the Baltic Sea region
- Actors supported by the unit: Government agencies, municipalities, regions and NGOs in Sweden
- The unit shall increase the possibilities for the actors to maintain, supplement and develop forms for cooperation, principally with the new EU member states in the Baltic Sea region: Estonia, Latvia, Lithuania and Poland

## Special attention

... are given to areas important from a comprehensive regional or national perspective, which concerns more than one interest group on the Swedish side.

For example - administration of collective public goods:



... and also some cross-sector fields:



## The Unit's instruments

The Baltic Sea unit can offer financial assistance for:

- Workshops, seminars, study visits and studies
- Initial project funding
- Project assistance funds

Our staff contribute with know-how:

- Events in the Baltic sea region
- Development of networks and relations
- Developing theoretical methods
- Provide support as concern personal resources



### Some of our activities:

#### Accomplished and finished activities:

Wind power seminar  
Conference  
Safety at sea conf.

Collage of Gotland  
RFSL  
The Swedish Maritime  
Administration.

#### Carrying through:

Baltic Challenge  
Addicts care, Poland  
Culture/handicraft  
Countryside develop.  
Transparent Timber F  
Nordic Training prog  
Lithuanian art  
Forestry in school

County adm. board  
Stockholm  
County council  
Stockholm/MBC  
Handicraft of Gotland  
County adm. Board  
Jönköping  
The National Board  
of Forestry  
NGO Norden  
BAC, Visby  
The National Board of  
Forestry

#### In progress:

Political conf.  
Baltic Sea profile  
Food Security  
Building preservation  
Addicts care, Poland  
Folk high-school network,  
Mapping networks  
"Atlas of the Baltic Sea  
region", Collage of Södertörn  
and University of Uppsala  
Norrtälje Municipality  
Collage of Gotland

Sw. municipalities and  
county councils  
Embassys in Tallinn,  
Riga, Vilnius (coop. The Swedish  
Trade Council)  
Livstek  
Museum of Gotland  
The National Swedish Board  
of Health and Welfare

Hamper Corruption -  
growth  
County adm. Board  
Stockholm and the police



### More activities:

#### Confirmed inquiries:

Hospital cooperation	The County council Stockholm
Business corruption	TI Sweden
Shippings effects on the envir.	The Collage of Gotland/Kjell Larsson
NGO conf. autumn -06	Forum Syd

#### Inquiries, discussions:

Network Women and small busin	Rådgivarna/Almi Kronoberg
Region network contacts China	The Region of Kalmar
The week of Almedalen	The Region of Blekinge and Embassys
Environmental campaign, schools, Innovation	The Foundation Keep Sweden Clean Vinnova
Archipelago environment	Archipelago trade fair
Journalist network	The Swedish Union of Journalists
HBT conf. Riga	EKHO
Education seminar	The Swedish Union of Ocean Racers
Marine Biological Center	The Trading house of Österlen



## Appendix 5: Minutes of the BWGD meeting

### Minutes of the meeting of the *BALTEX Working Group on Data Management* at Wallenberg Conference Centre of Göteborg University on 23 May 2006

*Present Working Group members:*

**Jörgen Nilsson**, SMHI Norrköping, Sweden (Chair)

**Philip Axe**, SMHI Göteborg, Sweden (Oceanographic Data Centre)

**Andreas Lehmann**, IfM-GEOMAR Kiel, Germany (Oceanographic Data Centre)

**Marcus Florup** (for Bengt Carlsson), SMHI Norrköping, Sweden (Hydrological Data Centre)

**Valery Vuglinsky**, State Hydrological Institute, Russia (Hydrological Data Centre)

**Timo Vihma**, FMI Helsinki, Sweden (Meteorological Data Centre)

**Marcus Reckermann**, BALTEX Secretariat, Germany

*Not present:*

**Michael Lautenschläger**, MPI-HH, Germany (Meteorological Data Centre)

**Franz Berger**, DWD Lindenberg, Germany (Remote Sensing)

**Daniel Michaelson**, SMHI Norrköping, Sweden (Radar Data Centre)

Representatives of the data centres provided an overview over the activities and developments in the respective data centres. The status reports are reports are given below.

#### 1. Report of the Oceanographic Data Centre

Oceanographic Data Centre for BALTEX

Status report (to the BALTEX Working Group on Data Management)

22 May, 2006

Philip Axe

#### Summary

Since the 18th BSSG meeting, no new BALTEX data have been delivered to the data centre. No data have been requested from the centre, though several additional scientists have registered as BALTEX data users.

#### Virtual Data Centre

At the first meeting of the BALTEX Working Group on Data Management (BWGD) it was suggested that the Oceanographic Data Centre for BALTEX should try to work as a virtual data centre, connecting BALTEX data users with data originators and data banks around the Baltic. The reason for this was the reduction in data deliveries after the end of the BRIDGE period, together with the understanding that National Oceanographic Data Centres and International Data Centres in the BALTEX region were well generally well developed, so data were safe with them. To physically archive data at an additional data centre has the potential to create problems associated with double storage and traceability. For example, when a National Data Centre finds a problem with data, it updates its own archive, informs the data originator and ICES, but at present does not inform all previous data users. As data are presently not stored at data centres outside of the NODC/ICES/WDC system, there has been no requirement for the NODC to ensure that data stored outside of the NODC/ICES/WDC system are of the very best quality. This problem with maintaining data

quality is one reason why data supplied by data centres (including the ODCB) may only be used by the registered data user, and not forwarded to any third party.

There are two problems with this approach for the ODCB, however. The first is that the Oceanographic Data Centre for BALTEX may not be able to obtain data for users in accordance with the Baltex Data Policy, as the NODCs have the right to decide their own data policy. Researchers are also obliged to contact the NODC directly, because of their requirements that data are not forwarded to a third person.

The second problem with the approach is that the ODCB appears passive when it does not act as a physical data centre.

An activity to solve the first problem would be the drawing up of agreements between the NODCs in the Baltex region and the ODCB, whereby the ODCB can request data from an NODC and forward it to a researcher (or the researcher can receive it directly from the NODC) while the NODC receives a description of how the data are to be used, and suitable acknowledgement (including a list of publications arising from use of the data).

Assuming the first problem can be solved in this way, a solution to the second problem could be for the ODCB to monitor submissions to the regional NODCs, and inform the BALTEX community of new data accessions through the ODCB web pages.

It should be noted that the ODCB is still willing to archive data as before, if users wish to submit data.

### **Related activities of benefit to the ODCB**

SMHI has been appointed data centre for the national marine biological monitoring data. These data include phytoplankton, primary productivity & bio-sedimentation, benthos, monoporeia (indicator species), sea mammals (seal counts).

The Swedish Oceanographic Data Centre at SMHI has developed a new database structure, initially for physical oceanographic data, though in fact sufficiently robust to store most types of oceanographic data without further modification. The quality control module is particularly well developed, and has since been adopted by other groups within SMHI. ODCB data will be used to populate the database. The Swedish Environmental Protection Agency has requested development of SMHI's web data services. Currently under discussion is whether this will include the implementation of web map services (Map Server) in the autumn of 2006. Synergy between this work and BALTEX can result in BALTEX data (that is, those data physically held by the ODCB) being made directly available through a web portal, if this was desired by the BALTEX community. The work for the Swedish Environmental Protection Agency will take place in the fourth quarter of 2006.

## 2. Report of the Hydrological Data Centre

### Hydrological Data Centre for BALTEX: Report May 2006

Bengt Carlsson and Marcus Flarup

#### Summary

The hydrological data centre continues to support BALTEX activities as previous years. During 2005 the centre has banked runoff data from Sweden, Finland, Russia, and Denmark.

#### Data Acquisitions

During 2005 the data centre has received:

#### Monthly runoff data:

- Sweden as 40 coast sections based on best choice of runoff stations.
- Finland: 31 stations
- Russia: 2 stations (Neva and Luga).
- Estonia : 8 stations. **No more data will be delivered.**
- Latvia: no stations.
- Lithuania: no stations.
- Belarus: no stations
- Poland: no stations
- Germany: Calculations will be done based on new choice of stations..
- Denmark as 9 coast sections based on best choice of runoff stations.

#### Daily runoff data:

- Sweden: 55 stations.
- Finland: 64 stations
- Russia: 0 stations
- Estonia : 0 stations.
- Latvia: 0 stations
- Lithuania: 0 station.
- Belarus: 0 stations
- Poland: 0 stations
- Germany: 7 stations.
- Denmark 19 stations.

#### The daily meteorological data base over the BALTEX area.

Updated on request.

#### Data deliveries 2005-06:

Fredrik Wetterhall and Sven Halldin, Uppsala University, Sweden. New Users.

Anders Engqvist, KTH, Stockholm, Sweden. New User.

W Matthaus, Kari Eilola, SMHI, Sweden. New Users

Jouko Launiainen, Dep. of Physical Oceanography, Finland.

#### Del. 2006

Anna Eklund, SMHI. New users.

Dorothy Furberg, KTH, Stockholm, Sweden. New User.

### **3. Report of the Radar Data Centre**

#### **BALTEX Radar Data Centre: Status Report**

Daniel Michelson, May 22, 2006

#### **Summary**

The data centre continues to support BALTEX activities. Production of datasets continues with new infrastructure which was phased in during 2005. The datasets are now being generated in real time! Emphasis is now placed on generating the BALTRAD composite and gauge-adjusted accumulated precipitation products. With the increased availability of wind profiles over the GTS, through the successes of EUMETNET OPERA, availability of wind profiles at the BRDC is now less important.

Datasets have now been generated continuously for over five years! This is an extraordinary length of time for weather radar based datasets.

#### **Data Acquisitions**

The BRDC receives data from NORDRAD (Sweden, Norway, Finland, Estonia), Denmark, and Poland. Data delivery from Poland was re-established in early 2005, with full-depth CAPPI products from all eight radars in POLRAD. Data delivery of the PL product from DWD was discontinued in 2005 and work is now ongoing to introduce a German prototype 8-bit pseudo-CAPPI from five of DWD's radars. This pseudo-CAPPI is much more suitable for the BRDC and the BALTEX Working Group on Radar can be credited for providing the impetus for stimulating the development of this product within the framework of the DEKLIM project.

#### **Data requests**

There is continued interest in using BRDC datasets in meteorology (NWP data assimilation and validation), hydrology (HBV), and satellite remote sensing (AQUA and GPM preparations). Datasets are being made available when possible. The last remaining hurdle is making BRDC datasets generally available within BALTEX. Availability through SMHI's website is one possibility which is being evaluated. An alternative solution would be to keep production at SMHI but let another organisation take care of distribution, preferably through an interactive web-based system.

#### **Plans for the next 12 months**

- Re-introduce German data to BRDC production.
- Introduce Russian data to BRDC production.
- Make available all datasets through a common web-based interface.
- Continue to actively support and participate in BALTRAD/NORDRAD development initiatives.

#### **4. Other topics**

##### **MARE database**

The MARE data base at Stockholm University may possibly be transferred to the SMHI, and may then be incorporated into the BALTEX data base pool. The main outcome of the MARE project ([www.mare.su.se](http://www.mare.su.se)) is the development of the Decision Support System NEST. The data base includes environmental (hydrographical and biological) data from the entire Baltic Sea.

##### **UNI-DART**

The UNI-DART programme of the German Weather Service DWD has as its main goal the development of a meteorological web portal to provide uniform access to meteorological data and products through the Internet ([www.dwd.de/UNIDART](http://www.dwd.de/UNIDART)). The usability for BALTEX data bases will be evaluated by the BWGD and a connection via the BALTEX web site will be established.

##### **Data management workshop**

The different BALTEX specific databases were in the beginning created to simplify the retrieval of data needed for the research community accepted by BALTEX. It worked well in the beginning but today it is obvious that there are great difficulties in getting these databases updated and some countries are unwilling to provide data. The effect of this situation is that existing data can not be fully used by the BALTEX research community and that is harmful to the result of the research and consequently weakening the bases for the decision makers.

Therefore the BALTEX Working Group on Data Management is planning a workshop to be held in St. Petersburg in connection with BSSG meeting. The workshop will discuss how new technology developed in the UNIDART project, in combination with other international projects, like WMO Information System (WIS) and International Oceanographical Data Exchange (IODE) of IOC/UNESCO can be used as a bases for a ONE STOP SHOP FOR DATA from the region.

In addition to using UN systems, local, national and regional resources like the German WDCC could be used. The World Data Centre Climate (WDCC) provides WWW-based data to its more than 240 TB tape archive. Emphasis is on data from climate modelling and related observational data.

In the planning process, co-operation will be search with HELCOM and BONUS169. Financial support will hopefully be provided by SIDA.

**List of Acronyms and Abbreviations**

AQUA	Earth Science satellite for hydrological data
BALTEX	Baltic Sea Experiment
BALTRAD	BALTEX Radar Network
BRDC	BALTEX Radar Data Centre
BRIDGE	The Main BALTEX Experiment 1999 - 2001
BSSG	BALTEX Science Steering Group
BWGD	BALTEX Working Group on Data Management
CAPPI	Constant Altitude Plan Position Indicator
COSMOS	Community Global Earth System Model
DEKLIM	German Climate Research Programme
DWD	Deutscher Wetterdienst (German Meteorological Service)
EUMETNET	Network of European Meteorological Services
FMI	Finnish Meteorological Institute
GEWEX	Global Energy and Water Cycle Experiment
GPM	Global Precipitation Measurement
GTS	Global Telecommunication System
HBV	Hydrological model of the SMHI
ICES	International Council for the Exporation of the Seas
IfM-GEOMAR	Leibnitz Institute for Marine Research, Kiel, Germany
KTH	Royal Institute of Technology, Stockholm Sweden
MARE	Marine Research on Eutrophication
MPI-HH	Max Plancl Institute for Meteorology, Hamburg, Germany
NEST	Decision Support System of MARE
NOAA	National Oceanic and Atmospheric Administration, U.S.
NODC	National Oceanographic Data Center of NOAA, U.S.
NORDRAD	Nordic Weather Radar Network
NWP	Numerical Weather Prediction
ODCB	Open DataBase Connectivity, a standardised data interface
OPERA	Operational Programme for the Exchange of Weather RADar Information
PL	Local radar product of the DWD
POLRAD	Polish Radar Network
SMHI	Swedish Meteorological and Hydrological Institute
WDC	World Data Center

**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.
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- No. 14:** BALTEX – BASIS Data Report 1998. Editor: Jouko Launiainen, 96 pages. March 1999.
- No. 15:** Minutes of 8<sup>th</sup> Meeting of the Science Steering Group held at Stockholm University in Stockholm, Sweden, 8-10 December 1998. May 1999
- No. 16:** Minutes of 9<sup>th</sup> Meeting of the BALTEX Science Steering Group held at Finnish Meteorological Institute in Helsinki, Finland, 19-20 May 1999. July 1999.
- No. 17:** Parameterization of surface fluxes, atmospheric planetary boundary layer and ocean mixed layer turbulence for BRIDGE – What can we learn from field experiments? Editor: Nils Gustafsson. April 2000.
- No. 18:** Minutes of 10<sup>th</sup> Meeting of the BALTEX Science Steering Group held in Warsaw, Poland, 7-9 February 2000. April 2000.
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- No. 21:** Minutes of 11<sup>th</sup> Meeting of the BALTEX Science Steering Group held at Max-Planck-Institute for Meteorology in Hamburg, Germany, 13-14 November 2000. July 2001.
- No. 22:** Minutes of 12<sup>th</sup> Meeting of the BALTEX Science Steering Group held at Royal Netherlands Meteorological Institute (KNMI), De Bilt, The Netherlands, 12-14 November 2001. April 2002.
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- No. 25:** Minutes of 14<sup>th</sup> Meeting of the BALTEX Science Steering Group held at Lund University, Department of Physical Geography and Ecosystems Analysis, Lund, Sweden, 18 - 20 November 2002. May 2003.
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- No. 27:** Minutes of 15<sup>th</sup> 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. 33:** Minutes of 18<sup>th</sup> Meeting of the BALTEX Science Steering Group held at Meteorological Observatory Lindenberg – Richard Aßmann Observatory, Germany, 18 – 20 October 2005. February 2006.
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