

IMBER SSC Executive Meeting
November 7 - 9, 2008
May Fair Hotel and Spa, Miami, USA

Present:

SSC members (and IPO):

Julie Hall
Coleen Moloney
Jing Zhang
Sylvie Roy (IPO)
Sophie Beauvais (IPO)
Elena Fily (IPO)

Joined on Saturday, Nov. 8th

Javier Aristegui
Hiroaki Saito

Apologies: Mike Roman and Wajih Naqvi

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1 Welcome from the IMBER chair

Julie welcomed everyone to the meeting. She also thanked the IPO for their hard work towards the preparation of the IMBER Executive meeting and IMBIZO.

Actions from the last SSC

Most actions have been completed. We need to send reminders about any actions that are not completed for example, Nancy and Jack to draft a message to the participants of the Shanghai meeting to update them on the progress of the writing of the science plan.

ACTION: IPO to send out reminders for outstanding actions from the last SSC meeting.

2 Update on the International Project Office activities

2.1 Support to IMBER activities

Sylvie gave an overview of the accomplishments of the IPO from May 2008 to November 2008 including working group support, organization of meetings and activities, meetings attended on behalf of IMBER and products developed.

Since May 2008 and in the coming months, the IPO had and will be involved with the organization of the following meetings:

- Summer School IMBER/EUR-OCEANS (Ankara, Turkey, August 11-16, 2008)
- SeaTech Week (Brest, France, October 14-16 2008)
- 2008 IMBER SSC Executive meeting (Miami, November 7-8, 2008)
- « BEER » Data integration training (Miami, November 9, 2008)
- IMBER IMBIZO 2008 (Miami, November 10-13, 2008)
- Second TTT meeting (Washington, December 14-17, 2008)
- Global-Scale Synthesis International Conference (lead by Niki Gruber, SIC) (Ancona, Switzerland, July, 2009)
- Summer School in Brest (IUEM, Brest, August 2010)

IMBER sponsored the following activities:

- Eastern Boundary Upwelling Ecosystems Symposium (Canary Islands, Spain) June 2-6, 2008
- Coping with global change in marine social-ecological systems: an international symposium (Rome, Italy) July 8-11, 2008
- Topic Session on "End-to-end food webs: Impacts of a changing ocean at PICES 17th Annual Meeting (Dalian, China) October 24-31, 2008
- GODAE Symposium (Nice, France) November 12-15, 2008

2.2 Funding

This year, the IPO has worked to find funds to support several IMBER activities:

Secured:

EUR-OCEANS funds for summer school (Analyses of the interactions between end-to-end marine food webs and biogeochemical cycles)	<u>36 K US\$</u>
OCB fund for Workshop (IMBIZO Mesopelagic)	<u>25 K US\$</u>
EUR-OCEANS funds for Workshop (IMBIZO End-to-End)	<u>5.8 K US\$</u>
SCOR Developing country travel funds (Decadal Variations of the ocean's interior carbon cycle in Switzerland)	<u>7.5 K US\$</u>
ESF Conference funds (Decadal Variations of the ocean's interior carbon	

cycle in Switzerland)

22.5 K US\$

Requested:

APN for Summer School in Brest, August 2010 (Understanding climate change impacts on the biogeochemical cycles and ecosystems of continental margins and open-oceans around the world)

max. 30K US\$

In preparation:

COST proposal for Cross cutting IMBER activities

max. 90K € /
year for 4 years

Identified sources for funds

Sylvie presented a list of potential sources for funding IMBER activities.

French sources: Workshop organization IUEM/UBO, and CNRS Summer School;

European Funds: FP7, ESF conferences, ESF exploratory workshop, COST actions, and ESF conferences on Global change research;

European Cooperation in the field of Scientific and Technical Research (COST) is a good way to support IMBER activities. Carol Robinson volunteered to help the IPO to prepare a proposal.

The committee suggested other sources to explore:

- Oceans and Climate change in Germany;
- NOAA funds to support GODAE/IMBER activities and the SIBER workshop;
- Inter American Institute for Global Change Research (IAI; <http://www.iai.int/>) to support American participants to capacity building and training activities;
- APN ARCP;
- PICES;
- ESF conferences on Global Change Research: Maybe a source of fund for next IMBIZO;
- FAO.

ACTION: Sylvie and Julie to talk to Carol about the preparation of a proposal for the next COST call. **(DONE)**

ACTION: Sylvie to explore the possibility of ESF conference on Global Change to fund IMBIZO. **(DONE)**

IMBER IPO fund renewal

The IPO has received support from a consortium of seven French agencies for three years for three full time staff salaries and some funds for IMBER activities for 2008-2011. An agreement is being prepared that will have to be signed by all contributing organizations before transferring the allocated funds to the University financial services. The intent is to have the agreement in place by January 1st, 2009.

ACTION: IPO to follow up the renewal process. **(UNDERWAY)**

2.3 National contacts and Endorsement

National contacts

Sylvie presented the list of current IMBER national contacts: 22 countries are now represented.

ACTION: Sophie to add a link toward endorsed projects in National contacts pages. **(DONE)**

ACTION: Sophie to put Alaska in green in the National contacts map. **(DONE)**

Endorsed projects

IMBER has endorsed 7 new endorsed projects in 2008. This is more in one year than in the 2 previous years. Two important projects were endorsed: Oceans 2025 and EPOCA. The question of how to stimulate projects and motivate them to become endorsed was discussed. One suggestion is to contact them directly when we circulate IMBER information (Newsletter, E-News). We should also approach National contacts for new projects that could be endorsed when we ask for reporting.

ACTION: Elena to send individual notifications for e-news (**DONE in Dec.**) and NL.

ACTION: IPO to contact national contacts to enquire about possible new projects to endorse in early 2009.

2.4 Products

Web site

The IMBER Web site is constantly being updated. Sophie created some new pages and also created web pages for conferences when there are no registration fees to manage. Sophie is also responsible to create the conference site using Conference Manager when registration fees are to be collected. Examples of those Web sites are:

- IMBER Web site (<http://www.imber.info/>) Ex: National contact pages
http://www.imber.info/national_activities.html
- CLIMECO Workshop http://www.imber.info/CLIMECO_home.html
- IMBIZO 2008 <http://www.confmanager.com/main.cfm?cid=1185>
- E2E EcoModel Summer School http://www.imber.info/E2E_EcoModel_home.html

IMBER Update and e-News Bulletin

IMBER key communication products are: brochure, newsletter, e-news, and posters. Two new posters were designed this year for the IGBP Congress. One presents the major IMBER activities for 2007. The IMBER *Update* format has been modified and is now published only in html. The IPO is now publishing 3 issues a year.

Sylvie asked the committee for comments and suggestions about the format and content of the *Update*. Is there a need to revise the content considering that IMBER is entering a phase where there should be more results? Should we include more scientific content to the *Update*? We have been able to get volunteers for science highlight articles from young scientists.

There was consensus that the *Update* should not be too scientific. SSC members prefer to read scientific articles than summaries in the *Update*. It is suggested to try to include more links to scientific articles in the content of the IMBER *Update*. Coleen suggested using a format similar to EUR-OCEANS that has links to papers. Maybe adding only a small abstracts, or few lines and a link would be good.

ACTION: Sophie to explore how to add links toward papers within the *Update* articles (i.e. EUR-OCEANS). (**DONE**)

ACTION: IPO to build a publication list for IMBER. (**UNDERWAY**)

ACTION: IPO to continue to identify potential contributions to the IMBER *Update* from young scientist awards and IMBER activities. (**DONE**)

ACTION: SSC members to review the *Update* and pass any comments to Elena and Sylvie

IPO report

The IPO report is circulated only to the IMBER SSC members to keep them informed of the activities happening in the project. So far it has been circulated roughly 4 times a year. Julie stated that it would be good if it was more frequent.

ACTION: IMBER Executive Officer to circulate the IPO report every 2 months. (Report circulated in November)

2.5 Communication strategy

We need to rethink our communication strategy, particularly develop a interactions with the working groups and outreach products. A revised Communications strategy should be prepared for the next SSC meeting. It is suggested that the capacity building working group prepares one page describing the capacity building activities. The document will be posted on the Web site.

ACTION: Subgroup of the SSC to redraft Communications plan to be considered at next SSC meeting Julie and IPO to co ordinate.

ACTION: Working group to prepare one page about what are capacity building activities and the IPO to post the document on the Web site.

2.6 Executive Officer's position

We have gone through a first round of interviews and selected a candidate that declined the offer. The second candidate was approached but also declined. The selection committee consisting of Julie, Jean-Pierre Gattuso, and David Nelson agreed to re-advertise the position for a second recruitment round. The advertisement is out and CV will be accepted until December 5th. It is suggested that the advertisement should be re-circulated 2 weeks and 1 week before the closing date. The plan is to hold interviews on January 5 & 6, 2009 in Brest.

ACTION: Elena to advertise the EO job announcement two weeks and one week before the closing of application. (DONE)

ACTION: Elena to send a specific e-mail to SSC members to motivate them to look for their networks for the future Executive Officer. (DONE)

2.7 Next SSC meeting

It was proposed to explore the cost for holding our next SSC meeting in Auckland, New Zealand. Dates have yet to be decided. Another possibility could be to hold it before the GLOBEC OSM in Victoria, maybe in Dunsmuir Lodge. The SSC should be held between April and June 2009.

ACTION: Elena to evaluate the cost of an SSC meeting in New Zealand. (DONE)

ACTION: IPO to contact SSC members to determine potential dates once we have received approval for SSC membership from IGBP. (DONE)

3 Working Groups and Task Teams

3.1 Carbon Working Group

The sub-group 1 chaired by Nicolas Metzl has been very active over the last year. The SOCOVV DSR II special volume is in press and partially online. It will be printed and published in early 2009. IMBER also sponsored the SOCAT-2 meeting in Paris.

Sub-group 2 chaired by Nicolas Gruber secured some funding for a conference in Switzerland in July 2009. The Conference will be entitled *Decadal Variations of the ocean's interior carbon cycle: synthesis and vulnerabilities*. More funding was requested from Nicolas to support travel and accommodation for participants. Funding for developing country scientist travel was allocated from SCOR to support this conference. (See section 6.4 Budget review: Expenses decisions)

The structure of the SICI! group was discussed. It was suggested to disband the group and keep the three sub-groups. The three working group chairs would represent IMBER and SOLAS on the IOCCP SSG. The membership and terms of reference for each sub-group will need to be revised. A list of future activities with a clear timeline should be prepared.

ACTION: Sylvie to finish the final SOCOVV special issue. **(DONE)**

ACTION: Sylvie to contact Niki to tell him about the funding decision of the Exec committee. **(DONE)**

ACTION: Sylvie to ask Niki if he needs support from the IPO for the organization of the *Decadal variation conference* in Switzerland and suggest including Capacity Building and/or Data Management activities. **(DONE)**

ACTION: Julie e-mail to Doug and Emily to confirm the Exec decision about disbanding the SIC! group and replacing it with the three sub-groups. **(DONE)**

ACTION: The IMBER SSC to inform the SIC! group of the decision after SOLAS's Exec meeting.

ACTION: Sylvie to work with SOLAS IPO and each group to re-write the Terms of References including a clear timeline for each sub-group.

ACTION: Sophie to re-organize the pages regarding the Carbon working Group on the Web site.

ACTION: Sophie to insert the Carbon Implementation Plan in all relevant places on the Web site.

The revision of the Carbon research science plan was not completed. This document is likely to evolve and the committee recommended not revising the plan now.

One outcome from the *High CO₂ symposium* was the urgent need to have international coordination ocean acidification research. It is suggested to organize a small meeting involving key people and projects in early 2009 to discuss about this idea.

ACTION: Julie to talk to Jean-Pierre and Niki about organizing a small meeting to discuss coordination of Ocean Acidification research. **(DONE)**

3.2 Continental Margins Working Group

Implementation Plan

Jack and Nancy are preparing the Continental Margins implementation Strategy. A draft document was included in the Executive meeting documents. A suggested way forward is to identify 5-6 people from the Shanghai Meeting to assist Jack and Nancy in finalizing the drafting of the Implementation Strategy. In addition to Jack and Nancy, this group could include Jing Zhang, Katia Philippart, and Boris Kerry-Gelley. This group could meet early 2009 in Shanghai for 4-5 days. Jing will estimate the budget for a meeting for 5-6 persons. There is 2.5 K USD left from the Shanghai meeting that could be used for this group to meet. Julie suggested adding further fund to allocate around 10K USD in total. We need to discuss this suggestion with Jack and Nancy and get some suggestions for names from LOICZ. There needs to be interactions regarding the Continental Margins Implementation Strategy with people who attended the OSC as soon as possible.

ACTION: Sylvie to inform LOICZ (Hartwig) about our suggested plan and ask for their comments (with cc to Julie). **(DONE)**

ACTION: IMBER and LOICZ SSC to contact Jack and Nancy to inform them about our recommendations about the Implementation Strategy. **(DONE)**

ACTION: Jing to estimate the budget to organize a meeting of 5-6 persons in Shanghai. **(CANCELLED)**

Chinese IMBER Office in Shanghai

The President of the East China Normal University (ECNU) welcomed the idea of hosting a satellite IMBER Secretariat in Shanghai. The responsibilities of this office will be as follows:

- support activities of IMBER Continental Margins
- promote IMBER in Asian Pacific Regions
- develop capacity building activities

We are seeking support for this office until the end of IMBER (2014). The needs in terms of staff, salaries, rooms, and materials must be defined. It is proposed to have one secretary and one Deputy Executive Officer. The Deputy Executive Officer must have a background in marine science

and in coordination and must be fluent in English. Julie will build up a list of skills and experiences required for the future Deputy Executive Officer in Shanghai and send it to Jing. In terms of infrastructure, the office will need support for communication, office, and salaries.

ACTION: Julie and Sylvie to build up a list of skills and experience required for the future staff in Shanghai and pass it to Jing. **(DONE)**

ACTION: Julie to contact Hartwig to have further information about salaries and general needs for the LOICZ office in China. **(DONE)**

3.3 Capacity Building Task Team

In 2009, there is no stand alone Capacity Building activity planned. We must ensure Capacity building activity is undertaken as part of the *Decadal Variations of the ocean's interior carbon cycle: synthesis and vulnerabilities* meeting. We also should suggest that Data management related capacity building be part of the meeting. Finally, endorsed and contributing projects should be strongly encouraged to develop capacity building activities.

ACTION: Sylvie to contact Niki to suggest the idea of including a capacity building activity and/or data management during the conference in Switzerland. **(DONE)**

ACTION: IPO to encourage future endorsed/contributing/regional projects to develop Capacity Building activities. **(UNDERWAY)**

ACTION: Sylvie to suggest including Capacity Building and/or Data Management activities in the Ascona meeting.

Web Conference Service

EUR-OCEANS has developed a tool which allows to broadcast conferences live. IMBER has used this tool during CLIMECO Training and the Summer School in Turkey last August. This web broadcasting of conferences allows more people to attend the talks than just the participants physically attending the activity. This is seen as a very powerful outreach tool that IMBER could use in all its capacity building activities. So far, IMBER has used the tools for free through collaboration with EUR-OCEANS. Since the EUR-OCEANS program is ending, it is envisaged that IMBER could keep this web broadcasting capacity active for its capacity building activities. In order to be able to continue to use the capacity, IMBER would need to support the cost of web service that allows multiple connections and acquire minimal portable equipment like webcam, microphone and dedicated laptop.

ACTION: IPO to explore the cost of tools for web broadcast and the technical needs and ask for discussion at Marine Projects meeting in March. **(DONE)**

SCOR Capacity Building Working group

SCOR created a Committee on Capacity Building chaired by Venu Ittekkot to coordinate SCOR's activities in capacity building, develop new activities, and help develop funding for these activities. It is suggested to ask Venu for an update about the ongoing activities of the group.

ACTION: Sylvie to get feedback from Venu Ittekkott about SCOR Capacity building committee.

Capacity Building Membership

It is time to revise the membership of this group to have more active and younger participants. It is suggested to keep a similar number of members but also involve satellite people closely related to the activities being organized. One name that was suggested is Juliet Hermes (South Africa) who was involved in the IMBER/SOLAS meeting in Cape Town and participated to CLIMECO. Coleen knows someone from Brazil who could be a proposed member. We should also find someone from South East Asia.

ACTION: Sylvie and Jing to revise the proposed membership of Capacity Building and ask agreement at the next SSC. **(UNDERWAY)**

E2E EcoModel Summer School

(http://www.imber.info/E2E_EcoModel_home.html)

IMBER has supported the organization of the E2E EcoModel Summer School held in Ankara (Turkey, 11-16 August 2008). Coleen, Wajih, Temel Oguz, Mike Roman, Mike St John and Jing were members of the organizing committee. The lecturers were Icarus Allen from (Plymouth Marine Laboratory, United Kingdom), Mike St. John (Hamburg University, Germany), Jing Zhang (East China Normal University, China), and Temel Oguz and Baris Salihoglu (METU, Institute of Marine Sciences, Turkey). This Summer School was funded by EUR-OCEANS (23K€) and hosted by METU. The IMBER IPO developed the E2E EcoModel Web site and helped with the communication. The programme focused on global change and its impacts on marine biogeochemical cycles and end-to-end food webs. The special emphasis was on new methods, techniques and models on emerging fields of research for studying the combined effects of forcings (physical, biological) on marine biogeochemical cycles and ecosystems. The overall course structure was designed in the form of formal lecture series on fundamentals of biogeochemical cycles (5 hours), fundamentals of ecosystem modelling (6 hours), and advances in end-to-end food web modelling (6 hours). Twenty-one students from 10 different countries participated in the very successful Summer School. Temel Oguz has gathered the feedback from participants. We should make a synthesis with CLIMECO's feedback in order to improve the future IMBER training activities.

The presentations from lecturers are not currently available on the Web site as Mike St John raised the problem of Copyright. In the future, we should get agreement from the lecturers to share their lectures. Sharing teaching material is an IMBER legacy and we should write some IMBER policy for Summer Schools that will be available on the Web site. We should work to get the presentations from the Turkey Summer School onto the IMBER Web site.

ACTION: Sophie to prepare a synthesis of the E2E EcoModel and CLIMECO feedbacks/comments for the next SSC meeting. **(DONE)**

ACTION: Sophie to get agreement from E2E EcoModel lecturers retrospectively, to have presentations available on the Web site. **(DONE)**

ACTION: Sylvie to modify the Capacity Building policy to include that teaching material from an IMBER Summer School. Sophie to post on the Web site for next SSC meeting.

ACTION: IPO to ensure that future lecturers of Summer Schools are aware of the new IMBER Capacity Building policy.

Summer School in Brest (August 2010)

The IPO is working together with Wajih and the IUEM to organize a Summer School in August 2010. We proposed an instructional program for young researchers in ocean sciences, including doctoral students and post-docs, presenting comprehensive information on the linkages between the Earth's climate, and the circulation, ecology and biogeochemistry of the oceans, and their impacts on human societies. We have submitted a proposal to APN on Oct. 22, 2008, in order to involve students and scientists from Asian Pacific area. We have requested 30K\$ from APN. Wajih, Jing and Hiroaki were involved in the writing of the proposal. Further national funds must be raised. The executive committee suggests involving a Social Scientist in the Summer School organizing committee. It is suggested to invite Bonny McRay that participated in the FAO GLOBEC meeting last July.

ACTION: Organizers of the Brest Summer School to invite a Social Scientist on the organizing committee.

ACTION: Hiroaki to help the IPO to seek further funds (START, JPS Japanese Governmental fellowship for students).

ACTION: Sophie to explore POGO funding for IMBER Capacity Building activities fellowships. **(DONE)**

3.4 Data Management

The Data Management Committee profited to held a short meeting during the Executive meeting. Attendees to this meeting were: Sophie Beauvais, Bob Groman, Julie Hall, Gwen Moncoiffé, Todd O'Brien, Raymond Pollard, Sylvie Roy and Jing Zhang. To discuss the way forward with the Cookbook.

BEER workshop and Plenary on Data Integration at IMBIZO

The BEER workshop ("BEER: The secret to a successful project") was held on Nov 9th from 1:00 to 5:00 pm at MayFair Hotel (Miami) prior to the IMBIZO Meeting. About 20 participants attended the workshop which was co-chaired by Raymond Pollard (UK) and Todd O'Brien (USA) with organizing committee members Gwen Moncoiffé (UK) and Sophie Beauvais (France). The speakers presented the benefits of adding a Data Integration Scientist to any project, and introduced the various data integration and handling techniques illustrated in the draft IMBER Data Cookbook.

The program included the following topics:

- Being a Data Scientist is FUN! (Raymond Pollard)
- Has data management gone main stream? (Robert Groman, BCO-DMO, USA)
- Data integration made easier (Gwen Moncoiffé)
- Better data, better science! (Todd O'Brien)

A discussion session focused on the Data Cookbook followed.

On Nov. 12th, 2008, Raymond presented a Plenary on Data Integration to all IMBIZO participants in order to summarize inputs from the BEER workshop. The Power-Point presentations are available on the IMBER Web Site.

ACTION: Sophie to post BEER presentations and Raymond's plenary presentation about Data Management on the IMBER Web site. **(DONE)**

ACTION: Sophie to ask BEER organizers if they want a post BEER publication in EOS. **(DONE)**

Cookbook for good data practices

The IMBER DMC is currently preparing an electronic guide to help scientists to share their data. This guide will be made accessible for any project that gathers data and wishes to share them and make them available on a long-term base. The guide includes the following sections: What is a data scientist?, Project planning, Cruise planning, During the cruise, After the cruise. Templates on Cruise Summary Report (CSR) and guidelines on how to create DIFs are also available. Julie suggested adding Power-Point presentations from BEER workshop into the Cookbook. During the BEER workshop it was proposed to add metadata guidelines, to show good examples, electronic templates, and links to other Web sites.

The cookbook will be circulated for feedback to 1) the IMBER SSC and 2) to the wider community. We will contact the data management community (ex. CYBER-France, PANGAEA/WDC-MARE, BCO-DMO, MMI, SCOR, Data Centres in India, China, MEDS in Canada, etc...) to encourage review and comment. Sophie will approach the IMBER national contacts to know the relevant national data centers in each country.

The final version will be published on the IMBER Web site with a printable version and a CD-ROM will be made available on request for PIs to take on cruises. The cookbook should be a citable IMBER publication (example: IMBER Report#3) and needs an ISSN number.

ACTION: The DMC to finalize the cookbook adding the following items: presentations from the BEER workshop, metadata guidelines, DIF templates, form to fill in, useful links. **(DONE)**

ACTION: Sophie to circulate the cookbook to the SSC members and the wider community (data centers, national contacts, SCOR, etc...) for feedback. **(DONE)**

ACTION: Sophie to publish the cookbook on the IMBER Web site (including a printable version) and make CD-ROM including all forms for PIs.

ACTION: Sophie to explore how to get an ISSN Number for the cookbook publication so that this product will be cited properly. **(DONE)**

IMBER Data Portal (including GCMD Portal)

The IMBER Data Portal is now available through the IMBER web site at: http://www.imber.info/DM_home.html

The sections already developed are: What's new?; Committee; Data Policy; Benefits; Cookbook; Meetings & Trainings and Useful links. The portal will include a direct link to IMBER Global Change Master Directory (GCMD) Portal (centralizing IMBER Metadata). The IMBER GCMD Portal is currently being set up with the help of Mélanie Meaux at NASA and the GCMD Office (<http://gcmd.nasa.gov/KeywordSearch/Home.do?Portal=imber&MetadataType=0>).

Funds are available at the IPO for training for Sophie. Training should include dealing with technical issues surrounding DIF's and how to support scientists to write DIF for submission to the GCMD Portal.

ACTION: Sophie and Gwen to continue to work on the GCMD Portal with the support of Mélanie Meaux. **(DONE)**

ACTION: Sophie and Sylvie to explore funds from the IPO for training Sophie on DIF at GCMD. **(DONE)**

ACTION: Sophie to contact Mélanie Meaux to check if training is available at GCMD. **(DONE)**

Data Policy

The IMBER Data Policy must be circulated to the SSC before the next SSC meeting. It should include the following topics: data collection, data sharing, data protection, gain of credit, support from DLO etc...It should highlight that projects will gain value and credit if they share data. The official version will be published on the Web site after agreement by the IMBER SSC.

ACTION: Raymond to finalize the IMBER Data Policy by the next SSC Meeting (with the help of the DMC). **(UNDERWAY)**.

CSR to DIF Conversion: Technical issue

As part of the SeaDataNet project, BODC will have produced by the end of the year a mapping infrastructure which will enable conversion from CSR to DIF to operate. Unfortunately, there is no immediate need in the community to develop a converting tool from CSR to DIF. Considering the current work load and high priority tasks at BODC, they will not be able to put any time/resource towards this. Roy Lowry suggests that a summer student should be hire to do this. He estimates that 4-5 weeks will be needed. As part of its International Cruise Information Web site for ocean-going research vessels, POGO is adopting the CSR as a standard for post-cruise reporting and could be approached as a possible source of funds. ICES and PICES should also be approached as possible funders. Roy could provide the technical support for this if required after January 2009.

ACTION: Raymond to talk to SCOR for their feedback about CSRs to DIFs conversion tool. **(DONE)**

ACTION: The IPO (with the help of Gwen) to explore fund sources to hire a student working on CSR to DIF Conversion. **(UNDERWAY)**.

Perspectives for DM

In the future, in order to make IMBER data management more visible, we should:

- Insert Data Management section in Newsletter;
- Include Data Management activity in each IMBER meeting and during Summer Schools (ex: *Decadal variations Meeting* in Switzerland, July 2009, Summer School 2010 in Brest);
- Include Data Management activity in IMBIZO 2010.

3.5 End to End Food Web Activities

See Annex 1 "Joint IMBER/GLOBEC Executive Meeting" (p. 20).

4 Interactions with projects and programmes on joint activities

4.1 GODAE

The GODAE-IMBER Task Team met in Paris on June 12-13, 2007. This meeting was co-chaired by Patrick Monfray. Three main axes of interactions were identified:

1. Improving GODAE products for applications in IMBER research;
2. Ocean Observing Systems: development needs from a GODAE-IMBER perspective;
3. IMBER STATE ESTIMATION: Offline coupling of Ecosystem-Biogeochemistry;

Nicolas Gruber is now acting as the IMBER SSC link with GODAE. Nicolas attended the final GODAE Symposium held in Nice, France on Nov 12-15, 2008. GODAE is nearing the end of its lifetime while IMBER is just about to gear up to address issues of IMBER-GODAE interactions. It is hence critical for IMBER to provide leadership/input for the planning of data-model integration activities beyond the lifetime of GODAE

The most important activity of the GODAE-IMBER group was the writing of a white paper on the present status and future development of methods to integrate biogeochemical and ecological observations into data assimilation models. This paper builds on the discussions of the GODAE-IMBER group over the last few years and outlines the pre-requisites needed to fully integrate biogeochemical and ecological quantities into ocean data assimilation systems, both from the point of view of observations and modeling expertise.

ACTION: Sylvie to send Niki the latest report from the IMBER-GODAE initiative and ask him to get some feedback about those activities. **(DONE)**

ACTION: Sylvie to get feedback from Niki about the GODAE meeting in Nice. **(Will submit an article in IMBER Update)**

4.2 OOPC

Last year, there was a request from OOPC to identify a non-carbon geochemist observationalist for representation on the OOPC meetings. It has been suggested to find someone with an expertise on nitrogen fixation but no one has been identified yet.

Ed Harrison invited Niki to represent IMBER at the next OOPC SSC Meeting in Buenos Aires. Although neither Niki nor Arne was able to attend this meeting, IMBER agreed to pay travel for Niki or Arne as IMBER representative to next OOPC meetings.

OceanObs'09 (<http://www.oceanobs09.net/>)

This symposium will be held in Venice, Italy, 21-25 Sept 2009 and will celebrate the benefits of the existing initial ocean observing system and highlight its potential, developing a consensus plan for sustaining and evolving systematic and routine global ocean observations in the coming decades. Previous meeting was very focused on climate and set up the stage for observation. This meeting will consider not only climate but biogeochemical and biological observations.

The draft programme can be found at <http://www.oceanobs09.net/agenda/index.php>. The organizers ask for contribution on the draft agenda by November 15, 2008. They are also soliciting short proposals for Community White Papers by Nov 15, 2008. The IMBER Executive members reviewed the different themes suggested. Themes 3 (Delivering services to society) and 4 (Frontiers of global ocean observations) seem the most relevant to IMBER. Theme 3 includes a session on Ocean Analysis with expected contributions from the GODAE community. Theme 4 will include platforms mobile (including ships, Argo and gliders), fixed platforms (Eulerian observations, tide gauges, benthic observatories) and sensor developments.

Observations are very important to IMBER and we should contribute to the Oceans Obs'09 Conference. Niki Gruber is a member of the organizing committee. Julie will contact Niki regarding IMBER involvement and will ask an extension of the deadline for white papers.

ACTION: Sylvie to insert the support for travel to OOPC SSC meeting under representation to meeting in the budget. (DONE)

ACTION: Julie to contact Niki to push the OceanObs 09 contribution deadline. (DONE)

ACTION: IPO to circulate the call for white papers for the OceanObs'09 conference to the SSC members. (DONE)

4.3 IGBP: ICSU review

The IGBP Secretariat has a new Executive Director, Sybil Seitzinger.

IGBP has been reviewed by its sponsor, the International Council for Science (ICSU). The IGBP Review Panel recognizes the many important achievements of this international scientific research Programme and concludes that IGBP-type research will continue to play a significant role in the science of global environmental change (GEC) and in helping society to meet the urgent GEC-related challenges. But, at the present time, IGBP is lacking the focus and is planning to meet these challenges. The review panel made 12 recommendations.

IGBP asked for comments from programs on the review. Recommendation #6, ICSU suggests "reconfiguring the IGBP Scientific Committee (SC) so that its size and composition become practical for the strategic decision-making purposes. Chairs of the Core Projects should not be members of the SC, but their views should clearly inform its decision". Julie has concerns regarding possible prioritizations and reconfiguration of IGBP SC committee and the disconnection between core projects and IGBP SC.

ACTION: IMBER SSC to give IGBP its feedback about ICSU recommendations. (DONE)

4.4 SCOR: 50th anniversary symposium

SCOR convened a symposium to celebrate SCOR's 50th Anniversary on 20-21 October 2008 in Woods Hole (USA). Chairs of SCOR projects were asked to present future scientific tracks. Julie gave a presentation on IMBER. The objective was to rise what is important as future way forward. Julie and Coleen developed ideas about making science relevant to policy makers and resources managers. This was well received and SCOR will take this forward and start facilitating stronger communication and outreach activities.

The next Ocean Marine Project Meeting will be held in March 2009 in Delaware. SCOR will pay for 1 person from IMBER to attend. IMBER will ask to add two topics to the agenda: 1) the support of tools for Web broadcasting lectures from Summer Schools and instructional activities from marine projects and 2) the improvement of Conference Manager services for conference Web sites.

ACTION: Julie to ask SCOR to add issues on Web broadcasting lectures at Summer Schools and Conference Manager to the SCOR marine projects meeting Agenda. (DONE)

4.5 GEOTRACES

GEOTRACES asked for our input regarding biogeochemistry and biological measurements to be made on hydrographic lines. There is one berth available to make these measurements. So far, core measurements are radioisotopes and traces measurements:

- Trace elements: Fe, Al, Zn, Mn, Cd, Cu
- Stable isotopes: $\delta^{15}\text{N}$ (nitrate), $\delta^{13}\text{C}$
- Radioactive isotopes: ^{230}Th , ^{231}Pa
- Radiogenic isotopes: Pb isotopes, Nd isotopes
- Other parameters: Particles, Aerosols

The committee highlighted some missing measurements such as: macronutrients, DOC, POC, DOM, organic phosphorus and nitrogen.

ACTION: Sylvie to send Carol the list of suggested biological measurements for GEOTRACES cruises. (DONE)

ACTION: Carol to communicate those proposed measurements to GEOTRACES on behalf of IMBER. (DONE)

4.6 PICES

Hiroaki reported on the PICES 17th Annual Meeting (October 24 - November 2, 2008, Dalian, PR China). Two hundred and ninety Scientists attended this meeting. IMBER co-sponsored the session S9: "BIO Topic Session: End-to-End food webs: Impacts of changing Ocean", co-chaired by George Hunt, Sinjae Yoo and Hiroaki Saito. Many studies were focused on the indirect influences on climate change on the target species through the changes in physical oceanographic condition and the food-web structure. Presentations on the feedback from marine ecosystems to terrestrial ecosystem and atmosphere showed that the change in marine food-web dynamics have influence outside of the oceans. A study of whale's habitat using satellite images showed a new direction to investigate the impact of environmental change in marine ecosystems. Presentations covered many food-web processes with adequate overlaps and were quite useful to review the present state of knowledge.

FUTURE, Forecasting and Understanding Trends, Uncertainty and Responses of North Pacific Marine Ecosystems, is a 10 year scientific program focused on understanding how marine ecosystems in the North Pacific respond to climate change and human activities, to forecast ecosystem status based on a contemporary understanding of how nature functions, and to communicate new insights to its members, governments, stakeholders and the public. The Science Plan was approved early 2008 and is now downloadable (http://www.pices.int/members/scientific_programs/FUTURE/FUTURE_final_2008.pdf).

The Implementation Plan will be submitted in February-March 2009 to the Scientific Board for approval. The FUTURE Science kick-off should be held in April 2009.

What are the next steps in building relationship with IMBER?

FUTURE is a regional programme in North Pacific. The FUTURE Science Plan is linked to IMBER (ex: wide focus on ecosystem responses) and could become a regional project under IMBER. FUTURE will last until 2019. We need to consider the different timescales with IMBER. It is important that IMBER strengthens collaborations with PICES and both organizations consider the potential for FUTURE to be a regional project of IMBER. IMBER will approach Alex Bychkoiv (Secretariat SG-RAM) and Sinjae Yoo (Science Board Vice-Chairman) to discuss about IMBER recommendations and how to strengthen collaborations.

ACTION: Hiroaki to contact Sinjae and Alex to explore how to establish the relationship between IMBER and FUTURE.

PICES and ICES are establishing a working group on forecasting fisheries responses to global warming (shellfish and fishes) to be involved in the next ICCP Report (AR5). The working group is writing a synthesis paper (25 year target) that will be cited by AR5 (2013).

5 Update on contributing projects and regional activities

5.1 EUR-OCEANS

The EUR-OCEANS Network of Excellence is almost completed. The final meeting of the Principal Investigators (PIs), "a European Conference on Global Change and Marine Ecosystems", will be held on November 25-27; 2008 in Rome, Italy, followed by the last meeting of the Network Steering Committee (NSC). Coleen will attend this meeting.

Beyond the Network's end (31 December 2008), the newly founded EUR-OCEANS Consortium will maintain collaboration among 28 organizations from 14 countries. The Consortium was created in Brest, France, on 12 July 2008. The Consortium aims at facilitating the long-term harmonization of the efforts of European marine research institutes and universities on ocean ecosystem research under anthropogenic and natural forcings.

IMBER had very productive interactions with EUR-OCEANS. It is important to formalize new collaborations with the Consortium.

ACTION: Sylvie to write a letter to Paul Tréguer and Caroline Gernez to thank EUR-OCEANS for the fruitful past collaborations and to explore the way to continue collaborations with consortium and multi-site institute. The letter should highlight what we have done and what we could develop in terms of education and outreach.

5.2 CARBOOCEAN

Two major data synthesis projects are supported significantly through CARBOOCEAN and the IMBER SIC sub-groups:

- (1) The Atlantic 3-D carbon data set CARINA.
- (2) The global surface ocean pCO₂ raw data set SOCAT.

In his report to IMBER Christoph Heinze pointed that it becomes evident, that the current ocean observing systems for carbon need to be extended to include more time series stations. These are urgently needed. Also more systematically planned 3D data sets have to be collected in future. Work has to be coordinated among other via the SOLAS/IMBER carbon group and IOCCP (ex of interest: the carbon budget of Southern Ocean).

CARBO-OCEAN also raised that while the situation for standardized carbon data sets has improve, the establishment of highest quality nutrient data sets is an important task to be followed up. This question could be looked at through GEOTRACES which asked IMBER for suggestions for biological and biogeochemical parameters to measure. We need to determine if GEOTRACES is already planning to sample macro-nutrients.

Finally, Christoph mentioned in his report that marine O₂ data can critically help to improve the quantification of carbon fluxes (discrimination of biogenic fluxes and inorganic cycling). The need for data syntheses applies also here. Many more automated oxygen measurements should be carried out in future, as the relevant sensor and float technology is now available. The committee agreed that this should be done jointly with the sub-group 2 of SIC.

CARBOOCEAN will hold its 4th annual meeting 8-12 December 2008 in Dourdan, France. The final CARBOOCEAN meeting will be held 5-9 October 2009 near Bergen, Norway.

5.3 SIBER

The SIBER Science Plan is now 98% completed. The 6 major science themes have been written and thoroughly edited. Raleigh would like the feedback from the Executive Meeting but prefers it is not circulated yet.

General comments:

- Themes are sensible and quite focused but too long;
- The text is sometimes too broad
- The implementation sections are repetitive;
- There are no indications about what SIBER is going to do;
- Insert table of contents and figures;

- Themes 1, 2 and 4 are more linked to geographic focuses while themes 3, 5 and 6 are more specific targeted (phytoplankton, biology etc...). It is recommended to restructure the Implementation plan to clarify this approach. This can be solved by grouping: 1) geographic regions on one side and 2) phytoplankton, human impact and high trophic levels as cross cutting on other side;
- Theme 5 is too wide: it should be more focused on biogeochemistry instead of trying to do all about human activities;
- Theme 5 is a string of questions. All is being looked at in terms of impact, no consideration of mitigation and how to change the response;
- The strong link with Indian Ocean CLIVAR panel is good but we need to approve jointly with CLIVAR. CLIVAR will last until 2013;
- We have not a lot of information about top predators in Indian Ocean. CLIOTOP has an "Indian Ocean" aspect. WIOMSA (West Indian Ocean Marine Science Association; <http://www.wiomsa.org/>) promotes the educational, scientific and technological development of all aspects of marine sciences throughout the Western Indian Ocean region with a view toward sustaining the use and conservation of its marine resources. The Sixth WIOMSA Scientific Symposium will be held in La Reunion 24-29th August 2009. The connection between SIBER and WIOMSA should be made.

Issues on interactions between SIBER and GEOTRACES

Core measurements are not decided yet for SIBER. There is a room for coordination with GEOTRACES.

ACTION: Julie to summarize the recommendations from Exec about SIBER SPIS and get back to Raleigh. **(DONE)**

ACTION: SIBER to make links with WIOMSA.

6 Implementation of IMBER

6.1 Future tasks for next 12 months

Working Group activities

- **E2E activities:** Coleen will identify people to form a new small task team for co-ordination of future activities. This group will meet in 2009. The End-to-end workshop participants will prepare publication for a special issue as an outcome of the IMBIZO.
- **SIC:** It is proposed to disband the group and restructure it. Julie will have to discuss this and get an agreement with SOLAS about this proposed action. The Terms of reference would have to be rewritten. We need to coordinate a small group to start an initiative on ocean acidification. Sub-group 2 will organize a conference on "*Decadal Variations of the ocean's interior carbon cycle: synthesis and vulnerabilities*" in Switzerland in July 2009.
- **Continental Margins:** It is proposed to form a small writing group to help Jack and Nancy to finalize the writing of the implementation strategy. This group could meet in Shanghai in early 2009. We will also continue the approach with East China Normal University to facilitate the development of an IMBER office in China.
- **Capacity Building:** The membership of this group will be reviewed. The group was asked to prepare a one page document describing what a capacity building activity is. The group will be involved in the preparation of the Summer School in Brest in 2010.
- **DMC:** The Data Cookbook will be finalized by the end of 2008. The data management policies will be shortened and finalized by the next SSC meeting. Work will continue with the preparation of the GCMD portal.

Regional projects and Links with other Projects/Sponsors

- **ICED:** The IMBER IPO will distribute a copy of the ICED Science plan to the SSC. IMBER will also support the ICED modelling workshop planned for 2009.

- **SIBER**: The IMBER SSC will send comments and suggestions to the SIBER science plan writing team to help improve and finalize the document.
- **EUR-OCEANS**: Establish future possible interactions between IMBER and the new EUR-OCEANS consortium.

Meetings

IMBIZO-2

Topics

This meeting is planned for the first quarter of 2010 in Europe. We need to determine a venue prior to the next SSC meeting. We also need to identify the workshop themes and the main sources of funding. From the last SSC meeting in Cape Town, it has been decided that Integration of biogeochemistry and ecosystems should be the global theme.

It was proposed to include the following topics:

- **Reconcile biogeochemistry and ecological estimates in the ocean** (co-conveners: Mary-Elena and Javier). This topic would include methodological problems, problems of estimation of parameters such as respiration, bacterial production, primary production etc...It will also include implications of methodology in a global context such as the global carbon cycle. It could be interesting that people arrive with their own data at the meeting and test calculations to compare several methodologies. It is important to strengthen the interactions with the other workshops such as workshop 2 on comparative ecosystems.
- **Comparative ecosystems structure and biogeochemistry** (convener: Mike). This workshop is a good next step for the E2E working Group.
- **Oxygen depletion–Ecosystem impacts** (co-conveners: Arne and Niki). This topic is maybe too focused for IMBIZO. Moreover there is a SCOR WG dealing with this question. Some suggestions should come from IMBIZO in Miami. We will also ask CLIOTOP, ESSAS and ICED for suggestions.

Two overarching themes were suggested for IMBIZO-2:

Integrating Biogeochemistry and Ecosystems in a changing Ocean

Or

Integration of Biogeochemistry and Ecosystems: Regional comparisons

Themes were suggested for workshop for IMBIZO-2: we need to consider key issues for the implementation of IMBER

- Regional comparison:
 - vertical integration (epi-meso-bathy); size spectra, stoichiometrics, energetics
 - high latitudes, Upwelling, gyres: with specific questions
- Size spectra
- Comparison of biogeochemistry and ecosystem measurements
- Low O₂ systems: impacts on biogeochemistry and ecosystems
- Linking microbial diversity, metabolism and organic matter composition
- Human dimensions – comparing ecosystems

Some issues were raised that also need to be considered for the selection of themes for workshops:

- Physics
- Integration between workshops
- Size of workshop and global IMBIZO

It was suggested to set a regional overarching themes “*Integration of biogeochemistry and ecosystems in a changing ocean: Regional comparison*” and ask for suggestions from the community. We will ask for contribution of about half a page for workshop themes.

Venue

Three venues were proposed:

- Spain: Santiago de Compostelle (compare with SOLAS OSM in Barcelona), Barcelona and Valencia
- Greece (Crete): we have received an offer from Alexandra Gogou.
- France: Brest

Date

The IMBIZO-2 should be about 18 months from now which makes it March/April 2010.

Potential sources of funding must be explored as soon as possible.

ACTION: Julie to write a letter asking suggestions for workshops for IMBIZO-2. **(DONE)**

ACTION: Elena to circulate the IMBIZO 2 call for contribution to IMBIZO 1 participants and the entire IMBER e-mail list. **(DONE)**

ACTION: IPO to start looking for funds for IMBIZO 2. **(UNDERWAY)**

ACTION: IPO to detail a list of specific requests for IMBER meeting venues (what we need, what we would like etc...) such as broadcast, audio-visual, prices. **(DONE)**

ACTION: IPO to explore venue with Alexandra Gogou (Crete) and Javier (Spain) to get information about Crete and Spain. **(UNDERWAY)**

ACTION: IPO to find out from Caroline about the venue used by EUR-OCEANS in Athens (venue and pricing). **(DONE)**

Other meetings

In 2009 and 2010, IMBER IPO will be involved with the following meetings:

- 2009 IMBER SSC meeting (venue and date t.b.d.)
- Possible "Continental Margins" small writing group meeting (venue and date t.b.d.)
- Possible "End-to-end" small group meeting ((venue and date t.b.d.)
- IMBER/SOLAS French meeting (Paris, France, June 23-25, 2009)
- Global-Scale Synthesis International Conference (Ancona, Switzerland, July 13-17, 2009)
- IMBER IMBIZO-2 (venue t.b.d., 2010)
- Summer School in France (Brest, August, 2010)

6.2 SSC Membership Rotation

Five members are rotating off the IMBER SSC in December 2008: Jay Cullen, Arne Körtzinger, Jack Middleburg, Hiroaki Saito and Wilco Hazeleger. Proposed new members are: Eugene Murphy, Alberto Piola, Hiroshi Ogawa, Sinjae Yoo, Katja Phillipart and Ken Drinkwater. Final approval by IGBP and SCOR will come in November 2008.

6.3 Next SSC Meeting

The next SSC Meeting must take place before the GLOBEC OSM (22-26 June 2009), that is to say in April or May 2009. A possible venue is in Auckland (New Zealand).

ACTION: Elena to explore possible venue in Auckland with Julie for the next SSC meeting (rooms costs, flights, suggestions for hotels, catering, lunches, audio-visual etc...). **(DONE)**

ACTION: Sylvie to ask Wendy about the approval of SSC membership as soon as possible to send out invitation for setting up date for SSC meeting. **(DONE)**

ACTION: Elena to determine a date for the next SSC meeting using Meet-o-Matic. **(DONE)**

6.4 IMBER Budget Review

Sylvie reviewed the budget for 2008 and 2009.

The IPO has secured funds from CNRS, IRD, IFREMER, Brittany region, City of Brest and UBO for 2008-2011. Funds for three full time staff, office support and activities will be available as of January 2009.

IMBER sources of funds

- IMBER benefits from a SCOR/NSF support of 50K USD/year until September 2009.
- IGBP is facing financial problems and reduced our block grant to 16K USD per year.
- SCOR allocated 10K USD for developing country scientists' travel for the conference on *Decadal Variations of the ocean's interior carbon cycle: synthesis and vulnerabilities* in Ancona, Switzerland.

There is a clear need to find funds for the IMBER activities.

Expenses decisions

Discretionary expenses approved for 2008 are (all values are in USD):

- SOCOVV DSR II special volume contribution (2K)
- SOCAT-2 meeting (2.5K)
- Upwelling symposium (10K)
- DMC BEER workshop meeting (3K)
- IMBER IMBIZO (10K)
- Addendum writing team (second TTT meeting) (7.5K)
- Social-ecological symposium FAO (Rome) (3K)
- ICED science plan printing (1.5K)
- PICES Special session (China) (1.5K)
- ASI VIII (2K)

Discretionary expenses approved for 2009 are:

- SIC! group Meeting (10K)
- Coastal CO₂ meeting (Kiel) (3K)
- Decadal variation of interior carbon, Ancona (SCOR Developing Country travel funds, 7.5K)
- Hydrography Advisory Panel GO-SHIP meeting (2.5K)
- Possible "Continental Margins" writing meeting (10K; ask for contribution from LOICZ)
- Possible "End to end" meetings: 2 small working group meetings (10K)
- ICED SSC meeting (5K)
- ICED modelling workshop (10K)
- SIBER SSC meeting (5K)
- PICES Annual meeting sponsorship (3.5K)

ACTION: IPO to communicate funding decisions to people requesting funds. **(DONE)**

Sources of funding to explore

- COST actions (100K€ per year). The next deadline is May 2009;
- APN ARCP could be a possible source of funding for the Chinese office;
- START for IMBIZO;
- NATO-ASI for Summer School;
- Oceans and Climate change in Germany;
- NOAA funds to support GODAE/IMBER activities and the SIBER workshop;
- Inter American Institute for Global Change Research (IAI; <http://www.iai.int/>) to support American participants to capacity building and training activities;
- PICES;
- ESF conferences on Global change research: Maybe a source of fund for next IMBIZO;
- FAO.

ACTION: IPO to contact Carol Robinson to prepare a COST letter of intent. **(UNDERWAY)**

ACTION: IPO to explore APN ARCP as possible source of funding for the Chinese Office.

Annexe 1

Joint IMBER/GLOBEC Executive Meeting

May Fair Hotel, Coconut Grove, Florida, USA

8 November 2008

Present:

IMBER members

Julie Hall, Coleen Moloney, Jing Zhang, Javier Aristegui, Hiroaki Saito Sylvie Roy, Sophie Beauvais et Elena Fily (IPO)

GLOBEC members

Ian Perry

1 End-to-End Food Web activities

The task team has finalized 2 manuscripts: one submitted to Theoretical Ecology and the second will be submitted as a synthesis paper within the IMBIZO End-to-end special issue. The Task team was involved with the organization of the IMBER Summer School in Ankara Turkey in August 2008. This activity was focused on *Analyses of end-to-end marine food webs and biogeochemical cycles*. Coleen also organized an End-to-end session at the IGBP Congress (Cape Town, May, 2008) and an End-to-end workshop at the IMBIZO (Miami, November, 2008).

Mike St. John gave a presentation at AMEMR in Plymouth (June 2008) and submitted a manuscript to Theoretical Ecology. This paper was submitted twice and has been revised. The TT had a specific task that they have done. Members of committee have not yet been thanked for their work and the status of this group is not clear. The SSC is waiting to see those papers published before closing the activity. IMBER and GLOBEC will send a thank you note to the TT members once the two publications are submitted.

The E2E food web group requires co-ordination and synthesis. There is some discussion about forming a small task team to move end-to-end topics forward. Coleen will start identifying people that could be members of this group during the IMBIZO. The E2E TT requested 10K USD for the organization of two small working group meetings in 2009. The IMBER Exec approved the funding.

ACTION: IMBER and GLOBEC to send a letter to thank the members of the joint end-to-end task team for their work.

1.1 Future activities

Mike and Coleen will coordinate the publication of a special volume on E2E topics following the IMBIZO. The journal is not identified yet (it will depend on the number of contributions submitted). It is likely to be MEPS or DSR. The realistic timeline for publication is early 2010.

1.2 E2E summer School

See section Capacity building (p. 8).

ACTION: Coleen to identify E2E people to form a new small group for co-ordination of future activities.

ACTION: Julie and Ian to draft a letter to thank the E2E TT for their work. **(DONE)**

ACTION: Sylvie to inform the E2E TT about the funding decision. **(DONE)**

2 ICED

2.1 Science Plan and Implementation strategy

The ICED Science Plan and Implementation Strategy is now completed and 600 copies were printed and will be provided to ICED, IMBER and GLOBEC for distribution to their merged mailing lists (to not duplicate mailings). IMBER and GLOBEC are sharing the cost of printing the SPIS (1741 GBP). The document will be distributed and available for download. Some hard copies will be available on request at the IMBER IPO.

ACTION: Sophie to publish the ICED SPIS on the Web site. **(DONE)**

ACTION: IMBER IPO to distribute a copy of the ICED SPIS to all SSC members.

2.2 ICED SSC membership

The new revised SSC member list came back to both SSCs (IMBER and GLOBEC) in August 2008. GLOBEC is happy with the group. The ICED SSC shows good links with CLIOTOP, ESSAS, GLOBEC, EUR-OCEANS. Javier suggested Carlos Duarte as potential member as Carlos is involved in SOLAS too and works on exchanges of gases. The IMBER Executive approves the ICED SSC membership in principle but will discuss with Eileen and Eugene at the IMBIZO meeting.

ACTION: IMBER IPO to send a letter (with signatures by Hall and Perry) to ICED confirming acceptance of their proposed Steering Committee membership.

3. GLOBEC 3rd OSM

Ian Perry presented an update:

GLOBEC is holding its third OSM in Victoria, Canada 22-26 June 2009.

(<https://www.confmanager.com/main.cfm?cid=1345&nid=9839>)

This conference will culminate the integration and synthesis activities of the international GLOBEC programme by providing a new mechanistic understanding of the functioning of the marine ecosystem, in order to develop predictive capabilities and propose a framework for the management of marine ecosystems in the era of global change.

Registration is opened. The deadline for abstract submission is January 31, 2009.

The conference will comprise workshops, plenary and poster sessions. The first two days will be devoted to topical workshops proposed by the GLOBEC community. Some of the workshops will be targeted on CLIOTOP and ESSAS issues and should come up with future looking activity; This will be followed by three days of plenary, contributed sessions will follow, along these themes:

- GLOBEC achievements
- Ecosystem structure, function and forcing
- Ecosystem monitoring and prediction
- Ecosystem management and human dimensions
- Marine ecosystem science: into the future

Posters will be up through out the meeting.

Invited speakers are: Ken Denman, Liz Gross, Roger Harris, Eileen Hofmann, Coleen, Ian Perry, John Steele and Yashuiro Yamanaka.

Sponsors are: PICES, ICES-CIEM, Norwegian Res. Council, NSF Polar, SCAR, IOC, Univ. Victoria, ICOR, exhibitors. IMBER has been invited to co-sponsor this GLOBEC OSM.

Session 7 “Into the future” will aim at gathering “outsiders” view of GLOBEC. John Steele will give a talk about next major issues.

During Session 8 “Closing ceremony”, comments of GLOBEC chairs, co-sponsors (IOC, IGBP, SCOR) and linked projects chairs such as IMBER are expected. There is a slot reserved for IMBER on last day: Julie suggested that a minimum of 30 minutes would be needed to provide an overview of the science and structure of IMBER, along with an invitation to participate in the new IMBER program. Julie suggested that a small group of IMBER people may be needed to develop this presentation.

Discussions:

- The GLOBEC Synthesis book will not be available until the fall but will be advertised; however, the SPACC synthesis book will be available for the GLOBEC Symposium.
- A discussion whether to have an OSM banquet was held and the suggestion was Yes,. Its is proposed to asked participants to pay their own meals.
- comment on invitation to John Steele to give a presentation on GLOBEC and the way forward: he should be provided with a copy of the final Transition Task Team report and other relevant documents well-prior to his OSM talk, so that he is aware of what has been proposed for “the way forward” and that it does not conflict (radically) with that proposed by the Transition Task Team and agreed upon by IMBER and GLOBEC.
- A slot for presentation of the Transition Task Team report is included in the early conference program. It was recommended not to have this report at the OSM (since the report will have been available for several months prior) but instead to include the recommendations into the IMBER presentation.
- What is expected from IMBER at the OSM? GLOBEC expects a mix of science and programmatic issues. We should include a report from the IMBER/GLOBEC TTT. It is important that the community be convinced that activities will continue. We must emphasize the continuity. IMBER title will be something like: “Biogeochemistry and Ecosystems into the future” presented by 2-3 people from IMBER.

ACTION: Julie Hall to prepare IMBER presentation for GLOBEC OSM;
Ian Perry to confirm available time (duration of presentation) (DONE)

ACTION: Ian Perry to confirm with John Field that there will not be a formal report of the TTT at the OSM, but its contents will be included in the IMBER presentation (DONE).

4. IRD/EUR-OCEANS/IMBER/GLOBEC Upwelling Symposium

This meeting was a great success. People appreciated the focus on comparative approaches (4 upwelling systems) and integration. There were controversial discussions on the activity of coastal upwelling regions (increasing versus decreasing activities). It was a good opportunity to put together physical oceanographers and fisheries oceanographers, and people from different regions. A Special issue is in preparation in Progress in Oceanography (75 to 80 papers). It is entitled: “Eastern Boundary Upwelling Ecosystems: Integrative and Comparative approaches” P. Freon, M. Barange and J. Aristegui. The Special issue will include 4 review papers from upwellings (one per region) including perspectives. It could be good to have a conclusion chapter from SPACC.

There may be another meeting in 3 years time.

5. Coping with Global change in Marine Social-Ecological Systems

The symposium assembled 150 participants from 38 countries from a broad swath of the natural and social sciences. The interdisciplinary nature of the symposium allowed to identify gaps in

current knowledge and fruitful avenues for developing a dynamically-coupled, humans-in-ecosystems perspective on marine resource management. Publications of the symposium proceedings are expected in both a book format and a special issue in "Marine Policy" (2010). The deadline for manuscript submission was 31 October 2008. The Symposium was very focused on inshore, industrial fisheries. This is a good perspective for the TTT. There was a great involvement of scientists from developing countries.

6. TTT activities and plan

The joint IMBER/GLOBEC Executive Committees discussed the content of the report that was circulated to the SSC from the task team. Julie will pass on the comments from the discussion to John Field.

ACTION: GLOBEC and IMBER to provide their comments to the TTT prior to the TTT Meeting in December 2008 (Washington, USA). (DONE)

7. CLIOTOP, ESSAS and SPACC: making links with IMBER

Coleen presented a request for support for secretariat from CLIOTOP. Olivier is part of the E2E organizing committee so there is a link with IMBER. However, there is a need for further discussion.

Julie spoke to Ken Drinkwater (chair of ESSAS): there will have some further discussion about integrating ESSAS activities under IMBER. ESSAS has a secretariat in Norway (part time). ESSAS gets approximately \$30K from GLOBEC yearly so funding is an issue for them. In regards to the issue of whether these in-coming programs should revise their science plans to include IMBER issues that were not central to GLOBEC, it was recognised that IMBER has to be flexible; we can not ask them to rewrite their SPIS. However there is a need to have consistent alignment with the IMBER SPIS.

SPACC-2: There is an interest to discuss with SPACC for a future collaboration.

ACTION: IPO to invite ESSAS, CLIOTOP and SPAC at our next SSC meeting.

8. Links to funding issue

There was a discussion about the options for funding IMBER activities post-GLOBEC, once former GLOBEC Regional programs will join IMBER. There is possibility for funding from NERC, NSF (track the money to get it), IOC, and SCOR. We have to convince the existing sponsors that programs are continuing.

ACTION: Ian Perry and Julie Hall, plus Chairs of GLOBEC Regional Programs, to contact funders to ensure they understand that some GLOBEC programs they have supported in the past are on-going. Be sure to invite these funders to the GLOBEC OSM so they can understand the relationship of these programs with IMBER once GLOBEC has concluded.

ACTION: Julie to talk to NERC about funding post-GLOBEC.