

## **Marine Working Group Meeting**

13 April 2013 10:00-18:00

(Lunch 12.30-14.30, Coffee Breaks 11.00-11.15 and 16.10-16.30)

Krakow, Poland Dom Polonii

## Agenda

#### Participants:

#### **WG MEMBERS PRESENT:**

MIQUEL CANALS - SPAIN

BERT RUDELS - FINLAND, CHAIR JINPING ZHAO - CHINA, VICE CHAIR ROLF GRADINGER - USA, VICE CHAIR SAVITHRI NARAYANAN – PAST CHAIR, CANADA OLEG DITRICH - CZECH REPUBLIC NAJA MIKKELSEN - DENMARK KARI STRAND - FINLAND HEIDI KASSENS - GERMANY MICHIEL RUTGERS VAN DER LOEFF - GERMANY **GUDRUN MARTEINSDOTTIR - ICELAND** JÓNSSON STEINGRIMUR - ICELAND K.P. KRISHNAN - INDIA STEFANO ALIANI - ITALY KOJI SHIMADA – JAPAN HAJIME YAMAGUCHI - JAPAN SUNG-HO KANG - KOREA BAEK MIN KIM – KOREA HEIN J.W. DE BAAR - THE NETHERLANDS MARIT REIGSTAD - NORWAY RANDI INGVALDSEN - NORWAY JAN M. WESLAWSKI - POLAND WALDEMAR WALCZOWSKI - POLAND

FRANSCISCO GORDILLO - SPAIN LIEF ANDERSON - SWEDEN JEREMY WILKINSON – UK SHELDON BACON – UK MARY-LOUISE TIMMERMANS – USA

#### **GUESTS AND OBSERVERS:**

MONIKA KEDRA (ART EXECUTIVE COMMITTEE) JACKIE GREBMEIER (PAG REPRESENTATIVE) HARALD LOENG (EPB)

#### WG MEMBER NOT PRESENT:

MORTEN HOLTEGAARD NIELSEN-DENMARK

#### **SECRETARIAT**

VOLKER RACHOLD (IASC EXECUTIVE SECRETARY)



## **Table of Content**

1	OPENING AND REPORTING	. 3
1.1	WELCOME AND INTRODUCTIONS	3
1.2	REPORT FROM THE CHAIR	3
1.3	APPROVAL OF THE MINUTES OF THE LAST MEETING	3
1.4	ADOPTION OF AGENDA	3
2	MAIN ISSUES	. 3
2.1	REPORTS ON MWG ACTIVITIES	
2.1.1	Arctic in Rapid Transition (ART)	3
2.1.1.1	Cruise Planning	
2.1.1.2	Report of Sopot Workshop	4
2.1.2	Distributed Biological Observatory	4
2.1.3	Gas Hydrate Workshop	4
2.1.4	ICES	
2.2	REVIEW OF IASC ACTIVITIES RELATED TO MWG	5
2.2.1	MOSAiC	5
2.2.2	ACSNet	5
2.2.3	IASC Data Policy Group	5
2.2.4	IASC Geosciences Group	6
2.3	OTHER MARINE ACTIVITIES EXTERNAL TO IASC	6
2.3.1	Pacific Arctic Group (PAG)	6
2.4	NEW ACTIVITIES FROM IASC CROSS-CUTTING FUNDING ROUND	. 6
2.5	THIRD INTERNATIONAL CONFERENCE ON ARCTIC RESEARCH PLANNING	6
2.6	REVIEW OF WG FOCI	7
2.7	PROPOSED ACTIVITIES	7
2.7.1	New activities/Task brought forward by members	7
2.7.1.1	Internal Mixing Processes of the Arctic Ocean and their Importance for Water Mass Formation and Heat and Freshwater Fluxes	
2.7.2	New activities from external input	7
3	NEXT MEETING	. 8
3.1	ASSW 2014	8
32	ASSW 2015	8



### 1 OPENING AND REPORTING (10.00-10.30)

#### 1.1 WELCOME AND INTRODUCTIONS

**BERT RUDELS** 

#### 1.2 REPORT FROM THE CHAIR

**BERT RUDELS** 

#### 1.3 APPROVAL OF THE MINUTES OF THE LAST MEETING

**VOLKER RACHOLD** 

> The minutes of the 2012 meeting is given in ANNEX 1.3

#### 1.4 ADOPTION OF THE AGENDA

**BERT RUDELS** 

### 2 MAIN ISSUES (10.30-16.00)

#### 2.1 Reports on MWG Activities

#### 2.1.1 ARCTIC IN RAPID TRANSITION

Monika Kedra from the ART Executive Committee will present the following agenda items on ART activities.

### 2.1.1.1 ART CRUISE PLANNING

**MONIKA KEDRA** 

An Arctic in Rapid Transition (ART) meeting with 22 participants including the European members of the ART Executive Committee and Arctic scientists from Alfred Wegener Institute for Polar and Marine Research (AWI) was held February 29- March 1, 2012 at AWI in Bremerhaven, Germany. The main objective of the meeting was to design a focused collaboration for a full expedition proposal for the German RV "Polarstern" in 2015 dedicated to "Transitions in the Seasonal Sea Ice Zone (TRANSSIZ)" in the European Arctic Ocean within the framework of ART.



A second Arctic in Rapid Transition (ART) meeting with the European members of the ART Executive Committee Meeting was held in June 25-26, 2012 at the Geological Survey of Denmark and Greenland in Copenhagen (GEUS) to finalize cruise planning for TRANSSIZ.

A report on both planning meetings and the TRANSSIZ proposal will be provided.

## 2.1.1.2 ART SOPOT WORKSHOP MONIKA KEDRA

The ART Executive Committee held its first science symposium from 22 - 26 October 2012 in Sopot, Poland. A report on the Symposium will be provided.

➤ The Symposium Executive Summary is provided in ANNEX 2.1.1.2.

# 2.1.2 DISTRIBUTED BIOLOGICAL OBSERVATORY (DBO) JACKIE GREBMEIER

PAG, in collaboration with the MWG, held a DBO data workshop in Seattle on February 27-March 1, 2013. The workshop brought together DBO scientists, managers and data experts to discuss issues related to data interoperability, availability and access. A report on the workshop will be provided and the MWG will discuss its continued involvement in the DBO effort.

## 2.1.3 GAS HYDRATE WORKSHOP NAJA MIKKELSEN

During the 2012 meeting, the MWG approved funding for a gas hydrate workshop to be organized by Naja Mikkelsen of Denmark. The workshop was intended to be held in January 2013, but due to availability of experts and additional funding sources, the workshop has been delayed until later in 2013. Naja Mikkelsen will provide an update on workshop planning.

➤ The workshop agenda and list of potential participants is attached at ANNEX 2.1.3.

#### 2.1.4 ICES

#### **BERT RUDELS**

ICES held its annual workshop on September 17-21, 2012 in Bergen, Norway and AOSB/MWG was invited to co-host two of the sessions, both dealing with



the Arctic. The first session, co-chaired by Dr. Loeng and Dr. Bogi Hansen, focused on the Arctic and North Atlantic from a climate change perspective as they play an important role in the global climate system. The second session, co-chaired by ICES/PICES/ESSAS and AOSB/MWG examined the influence of subarctic inflows on the physical conditions and biology in the Arctic basin and shelves, as well as the role of fluxes of water from the Arctic basin onto the surrounding shallow shelves and into the subarctic.

➤ A workshop summary is provided at ANNEX 2.1.4. The MWG will discuss other collaborative efforts with ICES.

#### 2.2 Review of IASC Activities Related to the MWG

# 2.2.1 MULTI-DISCIPLINARY DRIFTING OBSERVATORY FOR THE STUDY OF THE ARCTIC CLIMATE (MOSAiC) MICHAEL TJERNSTRÖM

This workshop followed meetings in Potsdam and Denver during 2011, and represented a key step for producing project documentation (a science plan and implementation plan) necessary to formally propose such an observatory to science directorates and funding agencies in the participating countries. This workshop was held in Boulder, Colorado, USA, on June 27-30, 2012. The WG will hear a report on MOSAiC plans and developments and will discuss its role in the future of the activity which is led by the AWG.

➤ The MOSAiC workshop report is given in ANNEX 2.2.1.

#### 2.2.2 ACSNET

#### **MARY-LOUISE TIMMERMANS**

The introductory ACSNet meeting was held during the IPY2012 Conference in Montreal on 23 April 2012. The goal of the meeting was to set a course for activities under ACSNet that would promote and strengthen international, interdisciplinary research collaborations in the Western Arctic. A report on ACSNet will be provided by Mary-Louise Timmermans.

## 2.2.3 IASC DATA POLICY GROUP VOLKER RACHOLD

To reinforce IASC's commitment to robust data management and sharing activities, IASC Council decided to from a small advisory group of external experts and interested Council members that would develop and recommend



a data policy, including steps toward implementation of the policy that would provide guidance for IASC supported activities. At its meeting in January 2013, the Action Group developed a draft IASC data policy which will be presented to IASC Council at the ASSW 2013.

➤ The draft IASC Data Policy is given in ANNEX 2.2.3.

# 2.2.4 IASC GEOSCIENCE GROUP NAJA MIKKELSEN

To address the issue that geological research is under-represented in the current WG structure, IASC Council agreed to form an Action Group on Geosciences (AGG) with the terms of reference to provide strategic advice on both long-term opportunities and priorities in the field of Geoscience research in a broader sense. At its meeting in February 2013, the Action Group developed a report, including a set of recommendations, which will be presented to IASC Council at the ASSW 2013.

➤ The draft of the IASC Action Group of Geosciences is given in ANNEX 2.2.4

#### 2.3 OTHER MARINE ACTIVITIES EXTERNAL TO IASC

#### 2.3.1 PAG

JACKIE GREBMEIER

Dr. Grebmeier, chair of PAG, will give an update on PAG activities.

# 2.4 NEW ACTIVITIES FROM IASC CROSS-CUTTING FUNDING ROUND VOLKER RACHOLD

A call for new cross-cutting proposals has been launched in November last year. Under this agenda item, the Secretariat will introduce the initiatives that have been selected for funding.

# 2.5 3<sup>RD</sup> INTERNATIONAL CONFERENCE ON ARCTIC RESEARCH PLANNING (ICARP III) BERT RUDELS

Under this agenda item, the Chair will introduce the draft concept for IASC's 25th Anniversary Celebration, including the Third International Conference on Arctic Research Planning (ICARP III).



➤ The ICARP III concept paper is given in ANNEX 2.5.

The IASC WGs are expected to play an important role in the ICARP III.

#### 2.6 REVIEW OF WG FOCI BERT RUDELS

The Scientific Foci of the Working Group had been discussed and agreed upon at the first WG meeting in Potsdam (Germany) in January 2011. Under this agenda item, the WG is asked to revisit these foci and to discuss possible changes or additions.

#### 2.7 Proposed Activities

#### 2.7.1 New activities/Task brought forward by members

Under this agenda item, new suggestions and proposals on WG activities will be brought forward by members of the Working Group. This will include short presentations followed by a discussion. Bert Rudels will introduce a workshop proposal for consideration by the MWG

# 2.7.1.1 INTERNAL MIXING PROCESSES IN THE ARCTIC OCEAN AND THEIR IMPORTANCE FOR WATER MASS FORMATION AND HEAT AND FRESHWATER FLUXES BERT RUDELS

The deep Arctic Ocean is a low energy environment and the processes determining the mixing and water mass transformations could be different from the mechanically generated turbulence dominating in most of the world ocean. Although often invoked, few hard numbers about the efficiency of these internal processes exist. The aim of the workshop is to identify and examine these mechanisms and determine if they play a major role in the physics and the circulation of the Arctic Ocean.

➤ The workshop proposal is given in ANNEX 2.7.1.1 The MWG will be asked to consider the workshop proposal.

## 2.7.2 New activities from external input Bert Rudels

An invitation to submit ideas and proposals on WG activities will be brought forward by members of the Working Groups. This will include short presentations followed by a discussion.



## 3 NEXT MEETING (16.00-16.10)

**VOLKER RACHOLD** 

#### 3.1 ASSW 2014

The next meeting of the WG will be held in conjunction with the ASSW 2014 in Helsinki (Finland) on 7-12 April 2014.

#### 3.2 ASSW 2015

The 2015 meeting will be held at the ASSW 2015 in Japan, in conjunction with IASC's 25<sup>th</sup> Anniversary, the ICARP III and the 4<sup>th</sup> International Symposium on Arctic Research