



**MEMORANDUM OF UNDERSTANDING BETWEEN THE EARTH SCIENCES SECTOR OF THE  
DEPARTMENT OF NATURAL RESOURCES OF CANADA AND THE GEOLOGICAL SURVEY OF  
DENMARK AND GREENLAND OF THE MINISTRY OF THE ENVIRONMENT OF DENMARK  
CONCERNING  
COOPERATION RELATING TO THE DELINEATION OF THEIR CONTINENTAL SHELVES**

The EARTH SCIENCES SECTOR OF THE DEPARTMENT OF NATURAL RESOURCES OF CANADA ("ESS") and the GEOLOGICAL SURVEY OF DENMARK AND GREENLAND OF THE MINISTRY OF THE ENVIRONMENT OF DENMARK ("GEUS"), hereinafter referred to as the "Participants",

Whereas Canada and Denmark have both ratified the "United Nations Convention on the Law of the Sea" (UNCLOS);

Whereas the Participants each have initiated a Program to delineate their continental shelves according to Article 76 of UNCLOS;

Whereas both countries have a mutual interest in demonstrating an extension of their continental shelves beyond 200 nautical miles, using the natural prolongation (area north of Ellesmere Island and northern Greenland) or sediment formula (Labrador Sea); and

Whereas the Participants believe that a coordinated and cooperative effort of data acquisition, interpretation and documentation will benefit both countries in their effort of substantiating such claims according to Article 76 of UNCLOS;

Have reached the following understanding:

**1. DEFINITIONS**

In this Memorandum of Understanding (MOU):

"MOU" refers to this Memorandum of Understanding and any attached Appendices and Annexes.

"Data" refers to data that are jointly collected and financed by the Participants for substantiating the shared question of natural prolongation.

"Proprietary Data" are such data that are collected and financed by one Participant during an operation carried out under this MOU

“Institutions” means the organizations, listed in Appendix 1, that have access to the Data collected under this MOU.

“Project” refers to the cooperative activities outlined under Paragraph 5. of this MOU.

## **2. PURPOSE**

The purpose of this MOU is to establish a framework for cooperation between the Participants on the basis of equality and mutual benefits.

## **3. BACKGROUND**

On the basis of existing knowledge, the Participants to this MOU are of the opinion that joint studies into selected geographical areas will constitute the most promising prospects of extending their continental shelves beyond 200 nautical miles. They concur that efficient and cost effective studies of these features could potentially be realized through a joint effort between Canada and Denmark. Studies of the prospective areas will benefit both Participants by:

- Significantly reducing the overall cost of the operation to each Participant;
- Minimizing mobilization and demobilization costs;
- Minimizing the amount of down time and maximizing the data collection period;
- Reducing competition for logistical platforms;
- Sharing of personnel resources and data base facilities;
- Better planning of data collection.

The cooperative work carried out under this MOU supports both the ESS Program “Delineating Canada’s Continental Shelf according to UNCLOS (United Nations Convention on the Law of the Sea)” and the Danish Continental Shelf Program, a cooperative effort between Denmark, Greenland and the Faroe Islands.

## **4. PRELIMINARY WORK PLAN**

This MOU is general in nature and is neither comprehensive nor exhaustive. A Preliminary Work Plan is attached (see Annex 1) which outlines in general terms the activities planned for under the Project.

## **5. COOPERATIVE ACTIVITIES**

The Participants concur that, subject to and dependent upon the availability of funds and resources from each Participant, it is in their mutual benefit to cooperate in the following activities:

- establishing the Data necessary to substantiate potential claims of extending the Canadian and Greenlandic continental shelves beyond 200 nautical miles into the Arctic Ocean beyond Ellesmere Island and North Greenland, as well

- as potentially the Labrador Sea;
- joint collection of Data needed to delineate such claims, where such cooperation is beneficial to both Participants; and
- joint Data interpretation and documentation to gain a better understanding of the area of mutual interest and its wider geological context.

In addition to the activities described above, the Participants, upon mutual written consent, may decide at a later stage that their case under Article 76 of UNCLOS will be strengthened through:

- Joint interpretation and selected publication efforts;
- Coordinated actions vis-à-vis third parties actively engaged in the Arctic Ocean;
- Joint preparation of submission material/joint submission.

## **6. DATA**

Pursuant to this MOU, the Participants may collect Data including, but not limited to:

- Seismic refraction and reflection data;
- Bathymetric data;
- Gravimetric and magnetic data;
- Analytical results from geological samples.

The Participants will jointly collect and process Data with the aim of fulfilling the conditions of Article 76. Each Participant will receive a copy of the Data in digital form that was collected and processed during activities conducted under this MOU.

Unless otherwise consented to in writing by the Participants, the Participants will treat all Data and Proprietary Data confidentially.

Upon Project completion or upon the mutual written consent of the Participants, whichever occurs first, the Participants will release Data collected into the public domain to be freely accessible by outside parties.

## **7. COORDINATION OF ACTIVITIES**

Joint committees whose organization and responsibilities are outlined in Appendix 1 will coordinate and manage the activities identified under this MOU.

## **8. FINANCIAL CONSIDERATIONS**

Each Participant will assume the costs incurred by it under this MOU unless otherwise accepted in writing by the Participants.

## **9. TITLE TO PROPERTY**

Any and all property or equipment of whatever nature or kind furnished by either Participant in connection with work under this MOU is and will remain the property of the Participant furnishing such property or equipment unless otherwise consented to in writing.

## **10. PUBLICATIONS**

The Participants may release into the public domain general information regarding the Project such as its title, the names of the Participants and the level of support provided by each Participant.

The Participants will jointly publish the scientific and technical results arising from the Data unless otherwise consented to in writing by the Participants.

## **11. CORRESPONDENCE**

The Participants will send their correspondence in regards to any aspect of this MOU to the following representatives of both Participants, unless otherwise mutually consented to in writing:

For GEUS:

Name: Mr. Kai Sørensen  
Address: Øster Voldgade 10, DK-1350 Copenhagen K, Denmark  
Phone: +45 38 14 20 00  
Fax: +45 38 14 20 50  
E-mail: ks@geus.dk

For ESS:

Name: Dr. Jacob Verhoef  
Address: 1 Challenger Drive, Dartmouth, Nova Scotia, Canada, B2Y 4A2  
Phone: 1-902-426-3448  
Fax: 1-902-426-1466  
E-mail: jverhoef@nrcan.gc.ca

## **12. ACKNOWLEDGMENT**

Each Participant will acknowledge the role and contribution of the other Participant in any publications and/or announcements relating to the Project.

## **13. DISPUTE RESOLUTION**

Any disputes regarding the interpretation or implementation of the MOU will be resolved only by consultation among the Participants.

#### 14. GOVERNING LAW

All activities under this MOU will be carried out in accordance with the respective laws and regulations of the Participants.

#### 15. LEGAL OBLIGATIONS

This MOU does not create any obligations between the Participants, and is not binding under international law.

#### 16. COMING INTO EFFECT & DURATION

This MOU will come into effect upon signature and will remain in effect until March, 31, 2014, or the date on which Canada and Denmark will have made their submission to CLCS, whichever comes earlier, unless terminated earlier in accordance with the provisions of this MOU.

#### 17. AMENDMENT

This MOU may be amended and/or extended by the mutual written consent of the Participants.

#### 18. TERMINATION

Either Participant may terminate this MOU by giving to the other Participant ninety (90) days written notice of its intent to terminate. Upon termination, each Participant will immediately return the other Participant's papers, materials or other property held for the purpose of carrying out the Project.

Signed in duplicate at Ottawa on the 27<sup>th</sup> day of June, 2005, in the English, French and Danish languages, each version being equally valid.

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**FOR THE  
DEPARTMENT OF NATURAL  
RESOURCES OF CANADA**

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**FOR THE  
MINISTRY OF THE ENVIRONMENT OF  
DENMARK**

**LIST OF APPENDICES/ANNEXES**

Appendix 1: Institutions and Coordination of Activities  
Annex 1: Preliminary Work Plan

## APPENDIX 1: INSTITUTIONS AND COORDINATION OF ACTIVITIES

### Institutions:

The Institutions listed below will have access\* to Data collected under this MOU. The Institutions are formally integrated into the ESS Program "Delineating Canada's Continental Shelf according to UNCLOS (United Nations Convention on the Law of the Sea)" and the Danish Continental Shelf Program respectively. The Participants will forward a formal letter to the Institutions with a copy of the MOU to inform them about the content. The Participants may ask that the Institutions sign a non-disclosure agreement before being granted access to the Data.

From Denmark: Bureau of Minerals and Petroleum, Nuuk  
Danish National Space Center  
Royal Danish Administration of Navigation and Hydrography (RDANH)

From Canada: Canadian Hydrographic Service (CHS) of Fisheries and Oceans

\* For the purposes of this MOU, access refers to the ability to use, copy, and/or modify for internal purposes only.

### Coordination of Activities:

The Joint Management Committee (JMC) will have one (1) representative from each Participant, each with a designated alternate. This committee will formally meet at least once per year and will function during the year through regular conference calls or email exchanges whenever required to make decisions. The program managers of the two lead organizations (ESS and GEUS) will be members of the Joint Management Committee (JMC). The country which is not heading the Joint Technical Committee (see below) will head the JMC. All decisions in the JMC will be reached by consensus.

#### Tasks:

- Appoint members to the Joint Technical Committee;
- Approve work-plan and modifications of the work-plan identified in associated Annexes;
- Approve requests for additional opportunity research from third parties during expeditions; and
- Approve budget and changes to budget.

The Joint Technical Committee (JTC) will provide the planning, execution and technical follow up of the Project's technical activities, and will have equal representation from both Participants. The chair of this committee will also function as the chief scientist during the field operations. The JMC will appoint the members of the JTC including potentially members from the Institutions listed above. The JTC may call in experts from other institutions or private companies on an ad hoc basis. The Participants may ask those experts (along with members from Institutions) to sign a non-disclosure agreement to protect any confidential information that may be discussed. All decisions in the JTC will be reached by consensus. Disagreements can be brought up to the JMC.

**Tasks:**

- **Planning and execution of field work;**
- **Selection of personnel participating in technical activities;**
- **Yearly budgeting; and**
- **Interpretations and publications.**