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**ESONET**

**European Seas Observatory Network**

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**D33**

**Agreement on an International network**

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<b>PU</b>	Public	x
<b>PP</b>	Restricted to other programme participants (including the Commission Services)	
<b>RE</b>	Restricted to a group specified by the consortium (including the Commission Services)	
<b>CO</b>	Confidential, only for members of the consortium (including the Commission Services)	



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## **1 EXECUTIVE SUMMARY**

The expansion of co-operations between IFREMER and some International Parties (as Japan, Canada or USA) could contribute to promote development of deep sea observatory networks and data exchanges. The International Community have for common intention to improve scientific exchanges in order to extend knowledge on an international level and to have reliable technology and methods of data processing on networks.

The main objective of this deliverable is to detail the agreement prepared between IFREMER and the JAMSTEC, the University of VICTORIA... This agreement define all the conditions under which each party shall cooperate in order to develop co-operation in research and development on deep sea observatories networks.

This agreement is composed of 5 Articles:

- Article 1: Purpose
- Article 2: Methods of the co-operation
- Article 3: Confidentiality - Publication
- Article 4: Duration - Termination
- Article 5: Litigation – Applicable Law

Parties would sign this agreement before summer 2009 during one of the Conferences to which partners are participating.

## **2 INTRODUCTION**

The main objective of this agreement is to define the conditions under which the JAMSTEC, the University of VICTORIA.... and IFREMER shall cooperate in order to develop co-operation in research and development on deep-sea observatories networks.

Following the meeting organized by JAMSTEC in Tokyo on 10-11 March 2008, a first project of agreement circulated between ESONET, DONET and NEPTUNE Canada. A first proposal for an International Association of Sub-Sea Observatory Operators (IASSOO) was prepared by UNIABDN. This was circulated world-wide and discussions were held at the Scripps Institution of Oceanography, California with representatives from Japan 8-15 September 2008 and it was agreed that the proposal from ESONET NoE should be aligned with an existing parallel proposal from Japan. With help of IFREMER, a modified IASSOO proposal has been circulated between partners in Europe, USA, Japan, and Canada and has been accepted as a working framework for future co-operation. Regular IASSOO meetings are being scheduled between the coordinator of ESONET NoE and other parties. Participation in IASSOO has now been transferred to WP8 as a management activity by the coordinator of ESONET NoE for the third ESONET period.

## **3 PREAMBLE**

The early development of long-term sub-sea observatories was supported by the series of IEEE International Workshops entitled “Scientific Use of Submarine Cables (SSC) and Related Technologies” initiated by Alan Chave of Woodshole.

SSC 1          Hawaii,          1990

SSC 2	Okinawa	1997
SSC 3	Tokyo	2003

With the advent of the first European Union-funded observatory programs (ESONET and ESONIM) the Marine Institute in Ireland hosted SSC 4 in Dublin 7-10 February 2006. At that conference Chris Barnes, Project Director for NEPTUNE Canada, convened a meeting at which he proposed formation of an international group of observatory projects to facilitate mutual co-operation around the world. There was general agreement that this idea should be pursued.

Following that there was a hiatus for one year while Europeans waited for outcome of the funding proposal for ESONET (European Seas Observatory Network) Network of Excellence. There was also restructuring in the USA in the transition to the present NSF Ocean Observatories Initiative (OOI). ESONET NoE kicked off in March 2007 coordinated by Roland Person of IFREMER France and shortly afterwards funding was approved for EMSO-PP (European Multidisciplinary Seafloor Observatories, Preparatory Phase) coordinated by Paolo Favali, Italy. These two projects will support European activity through to 2011 and Deliverable 1e3 of ESONET NoE is to “*plan for signature of a memorandum of understanding or contracts at international level*”; essentially to implement the “Barnes proposal”. Some funding is available for travel and associated costs. Prof. Imants G. Priede is responsible for this work package.

In the mean time SSC 5 was held in Tokyo 17-20 April 2007 and many members of the international community attended the ESONET NoE conference in Barcelona in September 2007. A meeting with EUROSITES and DONET was held in Vienna in April 2008.

Then, discussions were held at the Scripps Institution of Oceanography, California with representatives from Japan 8-15 September 2008.

A meeting during AGU 2008 in San Francisco allows to precise the wording of the future agreement.

#### **4 DEFINITION OF OBSERVATORIES**

It should not be the aim of the association to duplicate organizations such as GOOS (Global Ocean Observing System) and ION (International Ocean Network). Here we are concerned with the installation, maintenance and operation of fixed sea floor infrastructure for long-term operation. The aim is cabled systems with real-time data in a variety of disciplines. Many systems are developing using alternatives to cables, these should be included as well as neutrino astronomy. The idea is to include members addressing common sets of problems and to exclude Lagrangian methods, gliders and ship-borne measurements.

#### **5 MEMBERSHIP MODELS**

1. Single representative from each state or federal political entity.

This would give:

ESONET-EMSO            - Europe - Roland Person

NEPTUNE - Canada - Chris Barnes  
OOI- Regional nodes - USA - John Delaney  
DONET - Japan - Yoshiyuki Kaneda

Bilateral MOUs or a common MOU could link these organizations forming a committee of 4-6 covering the world.

## 2. Membership by recognized projects e.g:

ESONET Europe - Roland Person  
EMSO Europe - Paolo Favali  
NEPTUNE- Canada - Chris Barnes  
OII-regional nodes – USA John Delaney and component projects/  
KM3NeT (Kilometer Cube Neutrino Telescope) Uli Katz or deputy  
ANTARES- Neutrino Telescope- France  
NEMO-SN1- Italy  
NESTOR- Greece  
EUROSITES – Europe - Richard Lampitt Southampton  
DELOS - Deep Sea Long Term Observatories- Angola, Phil Bagley  
MARS - Monterey Bay Aquarium Research Institute. USA.  
DONET – JAMSTEC – Japan - Yoshiyuki Kaneda  
MACHO; Taiwan –Shu-Kun Hsu

Tongi University could represent the Chinese observatory program.

The idea should be that the committee meets once per year at conferences such as SSC where we are all likely to participate. ESONET NoE over the next few years can provide the secretariat.

## 6 RECOGNISED PROJECTS

The aim is to have representatives of all operational projects plus other active groups aspiring to operational status or making a significant technical contribution.

### Functions

1. Exchange of information.
2. Collaboration.
3. Exchange of personnel
4. Represent observatory operators to international bodies such as United Nations Agencies, (Law of the Sea, Seabed Authority, defense agencies)
5. Education.
6. Organize conferences

### Domains:

1. Underwater Technology
2. Standards
3. Legal issues
4. Data management
5. Cyber-infrastructure

**7 INTERNATIONAL ASSOCIATION OF SUB SEA OBSERVATORY OPERATORS (IASOO) AGREEMENT**

**AGREEMENT N°09/1217610/B**

BETWEEN

The INSTITUT FRANÇAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER, a French public agency of industrial and commercial nature, SIRET n° 330 715 368 00297, hereinafter called IFREMER, whose headquarters are located at 155, rue Jean-Jacques Rousseau - 92138 – ISSY-LES-MOULINEAUX Cedex, FRANCE and represented by its Deputy managing director, Jacques SERRIS its

Acting in his own name in quality of coordinator of the project and on behalf of the members of the Network of Excellence ESONET (European Sea Observatories Network) funded by the European Commission thru the contract GOCE 036851,

On the one hand,

AND

The UNIVERSITY of VICTORIA, hereinafter called the UNIVERSITY, whose headquarters are at University of Victoria, NEPTUNE Canada Project, P.O. Box 1700, STN CSC Victoria, BC V8W 2Y2, CANADA and represented by Prof. Chris BARNES (NEPTUNE Canada Program Director) et Dr. Martin TAYLOR (VP Research)

On the other hand,

AND

The JAPANESE ..... , hereinafter called the JAMSTEC, .....

On the other hand

AND

.....

hereinafter together referred to as « the Parties », or individually: “the Party”.



## WHEREAS:

- The expansion of cooperation between the Parties could contribute to promote oceanographic research especially through development of deep sea observatory observatories networks and data exchanges.
- The common intention of the Parties to improve scientific exchanges, and to have reliable technology and methods of data processing on networks, with the aim to extend knowledge on an international level.
- The involvement of the XXX entities IFREMER, JAMSTEC and the University of VICTORIA in deep-sea observatories projects.
  - ESONET, at a European level for IFREMER
  - DONET, for the Japan
  - NEPTUNE, for the University of VICTORIA.
  - ....
- IFREMER, JAMSTEC, ... and the university of VICTORIA are willing to carry out common operations to consolidate their potential forces to deal with problems that may arise as common problems in the communities of deep ocean observatory related scientists and engineers. For this purpose the Parties find out the interest to formalize the main orientations of the planned research within a cooperative agreement.

**THE FOLLOWING HAS BEEN AGREED:**

**ARTICLE 1 PURPOSE**

- 1.1. The purpose of this Agreement is to set forth the conditions under which the JAMSTEC, UNIVERSITY, ... and IFREMER shall cooperate to develop co-operation in research and development on deep-sea observatories networks.
- 1.2. For this purpose, the Parties decide to create an International Association of Sub Sea observatory operators related Earth Science and Technology, hereafter called the Association.
- 1.3. And to support a permanent secretary for this Association, hereafter called the Permanent Secretary.

**ARTICLE 2 METHODS OF THE CO-OPERATION**

- 2.1. Within this Agreement, the Parties will support researches of common interest, on deep-sea observatory networks technology, and associated methods of data processing agreed upon between the Parties. The list of the scheduled operations is given in the enclosed Appendix 1.

Any common research operation will be carried out under coordination of the Permanent Secretary.

The information to be given for the implementation of a proposed operation is enclosed in Appendix 2.

- 2.2. The Permanent Secretary will be chosen among the members of the Alliance for a period of one year. The mandate could be renewed once time.
- 2.2. The operations planned to be carried out in co-operation by the Association may include:
  - The organization of an annual meeting of its members
  - The exchange between researchers through visits, conferences and seminars,

- The implementation of specialized working groups :
  - \* On standardization sensor interfaces
  - \* Data exchange format
  - \* Quality control procedures
  - \* Procedures for deep-sea intervention
  - \* Tests and calibration procedures
  - ...
- The producing of documents for diffusion in the public to promote deep-sea observatory sciences (TV films, public conferences...)
- The management of a website giving information about deep sea observatory activities and promoting these activities

- 2.3. Each year the Parties shall meet in the annual meeting of the Association to decide of all the operations to be carried out. After validation by the competent authority in accordance with their internal rules, the Parties shall select the priorities by common agreement.
- 2.4. The operations are financed by the Parties within the limit of the annual budget, and by common agreement. The financing plan includes the whole expenses necessary to carry out the Permanent Secretary operation, the organization of the annual general meeting, two annual thematic workshops and one annual meeting for the 6 working groups.
- 2.5. Other specific action will fund specifically.
- 2.6. For each cooperative activity in Appendix n°1, the Parties may agree to conclude an implementation agreement which shall be drawn up in a separate writing. These implementation agreements shall outline the subject of the cooperative activity, including the sharing of expenses, the publication of research results, the ownership of research output or industrial or commercial issues (e.g. patenting), and other relevant matters. All implementation agreements shall be subject, unless otherwise agreed, to the terms and conditions of this Agreement.

### **ARTICLE 3 CONFIDENTIALITY – PUBLICATIONS:**

Each Party agrees to maintain in confidence and not to disclose any confidential information received from the other Party to third parties without the prior written consent of the disclosing Party.

This obligation of confidentiality shall remain in force for all the duration of this Agreement, and for five years following termination. It shall not apply for information which:

- At the time of disclosure is, or thereafter becomes, through no fault of the receiving Party, part of the public domain by publication or otherwise,
- Can be shown by the receiving party to have legally received this information from a third party without restriction of disclosure,
- Can be shown by the receiving Party to have been in its possession prior to disclosure to it by the other Party.

Any publication based on the results arising out of this Association, will be issued jointly by their authors. Publications shall mention the participation of the relevant laboratories, together with the name of the authors.

#### **ARTICLE 4 DURATION – TERMINATION**

This agreement shall come into force upon its signature by both Parties and shall remain valid for five years. Renewal conditions if any, shall be discussed between the Parties at least three months before the expiration.

Should one of the Parties intend to cancel this agreement within the initial period or renewal periods, it shall have to inform the other Party by registered letter. Then the agreement shall expire at the end of a three months delay following information. In case of cancellation, specific agreements entered into the Parties with reference to the above article 2.5. shall remain in force for their own duration.

#### **ARTICLE 5 LITIGATION – APPLICABLE LAW**

If any dispute arises out of researches jointly performed, or of the use of the relevant results, the Parties will attempt to settle it amicably.

If the Parties are unable to settle any dispute by negotiation, they will attempt to settle it by mediation in accordance with the Conciliation and Arbitration Rules of the International Chamber of Commerce in Paris.

## **8 CONCLUSION**

The objective to create an International Association to promote development of deep-sea observatories would be reached in 2009. The needs to cooperate on technological aspects and data management methods are similar for all the projects of deep-sea observatories in complement of existing scientific international structures. IASSOO seems a good tools to progress in this way.