

# **Memorandum of Understanding**

**between**

**The Regents of the University of California, as Management and Operating  
Contractor for  
Lawrence Berkeley National Laboratory**

**and**

**Ocean Networks Canada**

## **Concerning Collaboration in the Fields of Geophysics and Seismicity Monitoring**

This Memorandum of Understanding (MOU) is between The Regents of the University of California (The Regents), in its capacity as the manager and operator of the Lawrence Berkeley National Laboratory (LBNL), and Ocean Networks Canada (ONC).

LBNL is a U.S. Department of Energy (DOE) National Laboratory managed and operated by The Regents pursuant to DOE Contract No. DE-AC02-05CH11231.

ONC is a not-for-profit society owned by the University of Victoria and responsible for operating world-leading ocean observatories and other ocean observing assets collecting physical, chemical, biological and geological data supporting research on complex Earth processes.

The Regents and ONC are collectively herein referred to as the "Participants" or individually as a "Participant."

### **1. Objective**

The Participants intend to explore potential future collaboration in the fields of geophysics and monitoring seismicity.

### **2. Proposed Areas of Collaboration**

The Participants intend to collaborate in one or more of the following areas:

- A. Measuring seismicity associated with the Cascadia subduction zone
- B. Evaluating new techniques of borehole measurements and data exchange

The scope of the above activities and cooperation may be changed or extended to other areas by mutual written consent of the Participants.

### **3. Proposed Forms of Collaboration**

The Participants expect to collaborate through mutual visits, the exchange of publicly available information, exchanges of researchers and experts, training and planning for potential future joint research, with any future collaborative research to be undertaken only pursuant to an appropriate written agreement therefor.

#### **4. Proposed Mechanisms of Collaboration**

- a. To administer the implementation of this MOU, each Participant should designate one or more principal coordinators to be in charge of the collaboration, through whom all requests and plans of that Participant should be made.
- b. The principal coordinators may hold meetings when necessary to discuss matters related to collaboration under this MOU.
- c. The principal coordinator for The Regents is Jens Birkholzer, Division Director Energy Geosciences Division, or, in the alternative, Michelle Robertson, Program Manager. The principal coordinator for ONC is Ian Kulin, Associate Director Marine Operations or, in the alternative, Matthew Uganecz, Operations Support Manager.

#### **5. Commencement, Modification and Discontinuation**

- a. Cooperative activities under this MOU may commence upon signature of the Participants and continue for a five (5) year period, unless discontinued in accordance with paragraph b. of this Section, or extended in accordance with Paragraph c. of this Section.
- b. The Participants may discontinue this MOU at any time by mutual written consent. Alternatively, a Participant that wishes to discontinue its participation in this MOU should endeavor to provide at least thirty (30) days prior written notice to the other Participant.
- c. This MOU may be modified or extended for additional periods by mutual written consent of the Participants.

#### **6. Exchange of Information**

The Participants do not anticipate the exchange of business-confidential information or the creation of intellectual property. If the Participants determine that a particular activity may lead to the exchange of business-confidential information or the creation of intellectual property, they should consult with each other and enter into an appropriate written agreement therefor.

#### **7. General Provisions**

- a. This MOU does not create any legally binding obligations between the Participants.
- b. Each Participant should conduct the activities contemplated by this MOU in accordance with all applicable laws, regulations and other requirements to which it is subject, including by way of illustration and not by way of limitation: export control laws; environmental, health and

safety laws and regulations; and international agreements to which its Government is party.

- c. The conduct of cooperative activities contemplated by this MOU is subject to the availability of funding, personnel, and other resources.
- d. Each Participant is to be responsible for the costs it incurs in participating in cooperative activities under this MOU.

Signed in duplicate.

FOR THE REGENTS OF THE  
UNIVERSITY OF CALIFORNIA:

By: Michael Witherell

Name: Michael Witherell  
Director, Lawrence Berkeley

Title: National Laboratory

Date: 18 May 2017

Place: Berkeley, California, U.S.A.

FOR OCEAN NETWORKS CANADA:

By: Dr. Kate Moran

Name: Dr. Kate Moran

Title: President and CEO

Date: JUN 16 2017

Place: Victoria, BC

