

INTEGRATED OCEAN DRILLING PROGRAM 2003-2013

Rapid Response Drilling to the zone of the March 2011 Tohoku Earthquake - consensus statement

The IODP community is deeply saddened by the devastating effects of the March 11, 2011 Tohoku earthquake and resulting tsunami in Japan, and expresses its deepest concerns for the well being of all affected by this natural disaster.

The SPC recognizes the scientific challenges and responsibilities that this earthquake has created regarding the understanding about the nucleation of great earthquakes, associated tsunami, and submarine slide generation, to contribute to geohazard mitigation. Spearheaded by the International Continental Drilling Program (ICDP), past workshops have addressed the scientific rationale for rapid response drilling into large slip fault zones that have recently ruptured. The existing deliberations through international workshops to determine the time frame for rapid response drilling suggests that planning for this must be initiated immediately. Based on this scientific framework, the SPC therefore recommends that IODP in conjunction with colleagues from ICDP, contribute intellectual capacity by forming a detailed planning group (DPG) to provide a scientific assessment of the viability, strategy, and time period for a potential rapid response drilling effort within the region affected by the Tohoku mega-earthquake.

The DPG will be populated and supported by IODP as per IODP policies, recognizing the especially strong knowledge base, ongoing activities, and interest held by Japanese researchers and institutions. IODP-MI in consultation with the SPC chair and the Participant Member Organizations (PMOs) will populate the DPG based on already existing nominations provided by the community.

Terms of Reference

The rapid response drilling, Tohoku mega-earthquake detailed planning group (DPG) will:

- 1) Evaluate the overall scientific merits and feasibility of a rapid response drilling project addressing this unprecedented, unexpected, and truly extraordinary geohazard event
- 2) Assuming (1) suggests a strong scientific case can be made, outline a research and drilling plan including required pre-drilling survey data, draft locations and depths of drilling, and hole and observatory design

To accomplish this in a timely manner, the DPG will be formed by mid-April, 2011 and submit a first, interim report to IODP-MI by June 8, 2011. If justified by the interim report, a full proposal for drilling will be requested for submission with a tentative deadline of August 1, 2011. The DPG can work in part through electronic means, but at least one planning DPG meeting is anticipated to take place as per general IODP policies.