Regional Framework Plan for R/V Marcus G. Langseth

(Status as of September 2017)

The regional framework plan is designed to reduce overall data acquisition costs by developing an efficient plan that minimizes transit costs. It is also designed to:

- Stimulate science interests compatible with the plan from US and international academic users, as well as potential commercial applications.
- Provide guidance on the timing of proposal submissions.
- Coordinate with other major science initiatives, such as IODP.
- Provide rotating access to all regions of scientific interest within a timeframe of 4-5 years.

In pursuit of these objectives, there are a few considerations.

The plan is not entirely rigid and can flex somewhat in response to demand, particularly in the outlying years. MSROC recommends NSF proposal submissions at least 18 months prior to Langseth's expected arrival to field areas outlined by the plan, and as early as approximately 30 months. Details of the path can evolve as proposals are funded and opportunities emerge, but MSROC expects that the main regions defined in the plan will not change. The length of time Langseth operations will be conducted in any specific region will reflect demand, considerations for operations and opportunities in subsequent region(s) within the plan, and availability of funds. This framework is intended to guide planning, including planning of proposal submissions by PIs, ~4 years into the future. Subsequent path route(s) will be announced approximately biennially, based on NSF's understanding of projected areas of interest that are to be developed by MSROC with community input.

It is important to note that NSF has recently issued a solicitation aimed at moving to a new operational model for active-source marine seismic acquisition as early as March 2018 (see the NSF announcement included below). As part of the transition to a new operational mode, *R/V Langseth* cruises are not being scheduled for at least 12 months following the last currently scheduled cruise offshore New Zealand, which will be completed in March 2018. However, non-NSF funded operations could be added to the 2018/2019 schedule provided that any mobilization and demobilization costs needed to deviate from the plan are covered from sources outside of NSF. As a consequence of the new operational model, marine seismic acquisition after March 2018 may not necessarily be conducted by the *Langseth*. However, MSROC anticipates operations will resume with an equivalent capability and in keeping with the regional framework plan.

NSF announcement regarding solicitation for the provision of seismic capabilities to the U.S. research community:

The Division of Ocean Sciences (OCE) of the National Science Foundation (NSF) has recently issued an important solicitation (NSF 17-563) regarding the provision of marine seismic capabilities to the U.S. research community. Proposals are solicited to support needs of the marine seismic research community that are currently provided by the specialized seismic research vessel R/V Marcus G. Langseth. The vessel is owned by the National Science Foundation and operated by the Lamont Doherty Earth Observatory of Columbia University (LDEO).

NSF has determined that the current operational model is unsustainable and, with this solicitation, seeks proposals that provide comparable access to marine seismic capability through innovative approaches to R/V Marcus G. Langseth use or by other means. The successful proposal will be administered as a Cooperative Agreement over the five-year period of performance. For additional information, please visit:

HTML: https://www.nsf.gov/pubs/2017/nsf17563/nsf17563.htm?WT.mc_id=USNSF_25&WT.mc_ev=click PDF: https://www.nsf.gov/pubs/2017/nsf17563/nsf17563.pdf?WT.mc_id=USNSF_25&WT.mc_ev=click

Long-Term Langseth Cruise Track

