



NATIONAL SCIENCE FOUNDATION
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NSF 20-037

Dear Colleague Letter: Competition of Operations and Management of an NSF-supported Geophysical Facility to Succeed the GAGE and SAGE Facilities

January 23, 2020

Dear Colleague:

The Division of Earth Sciences (EAR) in the Directorate for Geosciences (GEO) at the National Science Foundation (NSF) is gathering information in preparation for a competition for a future cooperative agreement to support a single, unified geophysical facility as the successor to SAGE (Seismological Facility for the Advancement of Geoscience) and GAGE (Geodetic Facility for the Advancement of Geoscience). These facilities provide seismic, geodetic, and related geophysical instrumentation; data archiving, quality control, and distribution; and education and outreach activities that serve a wide range of audiences. NSF envisions that a successor facility will provide access to a suite of geophysical instrumentation, data services, and education and outreach capabilities that sustain scientific progress and address future opportunities to advance understanding of Earth processes.

In April 2018, EAR commissioned the National Academies of Sciences, Engineering, and Medicine (NASEM) to undertake a consensus study for the Earth Sciences entitled "*Catalyzing Opportunities for Research in Earth Sciences: A Decadal Survey for NSF's Division of Earth Sciences*" (CORES) to provide input on priorities and strategies for NSF investments in research, infrastructure, and training for the coming decade. Within the context of this decadal survey, NASEM led a workshop in 2019 entitled "*Management Models for Future Seismological and Geodetic Facilities and Capabilities*" that reviewed different management models for future seismological and geodetic facility capabilities. A fundamental aspect of the [workshop proceedings](#) is the consensus that continued support of geophysical facility capabilities is critical to meet emerging and frontier science goals.

The planned competition will be held via an open, merit-based, external peer-review process. This process will be consistent with the [NSF Proposal & Award Policies & Procedures Guide](#) (PAPPG) and [NSF Major Facilities Guide](#) (MFG). EAR is currently preparing the

program solicitation for this competition, which is expected to lead to a single cooperative agreement for a geophysical facility at the end of the current SAGE and GAGE cooperative agreements on 30 September 2023.

This Dear Colleague Letter (DCL) provides general information regarding the upcoming competition and invites interested members of the community to submit comments on desired capabilities for a future facility resulting from the planned competition.

PROGRAM DESCRIPTION

The range of seismic, geodetic, and/or related geophysical capabilities that a SAGE and GAGE successor facility would support has not yet been fully defined. However, the current capabilities comprising SAGE and GAGE may serve as a preliminary guide for the types of facility capabilities for which proposals may be sought via the planned competition.

SAGE comprises a distributed, multi-user, national facility for the development, deployment, and operational support of modern digital seismic and related geophysical instrumentation to serve national goals in basic research and education in the Earth sciences. GAGE comprises a distributed, multi-user, national facility for the development, deployment, and operational support of modern geodetic and related geophysical instrumentation to serve national goals in basic research and education in the Earth sciences.

SAGE is currently managed by the Incorporated Research Institutions for Seismology (IRIS) (www.iris.edu), and GAGE is currently managed by UNAVCO, Inc. (www.unavco.org). Each facility is managed under a cooperative agreement with NSF that began 1 October 2018 and is anticipated to end 30 September 2023. The National Science Board (NSB) has authorized maximum five-year total funding of \$93.7 M for SAGE and \$80.8 M for GAGE.

OPPORTUNITY TO PROVIDE COMMENTS

NSF welcomes comments on desired capabilities and the associated rationale for the future facility resulting from the planned solicitation referenced above. Comments should be submitted as a PDF document not to exceed 3 pages in length, sent as an attachment to an email to the Primary Contact listed below.

For those interested, please submit non-proprietary comments by 1 June 2020 to earfacilities@nsf.gov. All submissions are subject to the Privacy Act. NSF does not intend to respond to individual submissions. NSF plans to share information regarding the submissions with the GEO Advisory Committee.

ANTICIPATED COMPETITION SCHEDULE

This notice does not constitute a solicitation; therefore, no award of any kind will result from

this notice. Although the competition is still in the planning stage, NSF intends to follow this general schedule:

Second quarter of calendar year 2021: Release of program solicitation.

First quarter of calendar year 2022: Anticipated due date for full proposals in response to the solicitation.

NSF anticipates that any award recommendation made following the merit review of proposals submitted under the expected solicitation would require NSB approval. NSF further anticipates that any resulting award would commence on or before 1 October 2023.

SOURCE FOR ADDITIONAL INFORMATION

NSF Major Facilities Guide (MFG):

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf19068

PRIMARY CONTACT

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Sincerely,
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