



NATIONAL SCIENCE FOUNDATION
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NSF 16-068

Frequently Asked Questions (FAQs) for NSF 16-546, Management and Operation of the National Geophysical Observatory for Geoscience (NGEO)

1. How, and how rapidly, does NSF intend to answer questions regarding this solicitation?
2. On page 6 of the solicitation it states that "NSF will entertain proposals to provide one or more of the desired capabilities described below". The solicitation then lists five categories of desired Foundational capabilities, with a description for each, and in a separate paragraph describes Frontier "capabilities of interest". Must a proposal address the full scope of any given Foundational capability? Can a proposal address a Frontier capability without addressing any of the Foundational capabilities?
3. The solicitation includes a Foundational capability of "M&O of portable geodetic, seismic, and related geophysical instrumentation primarily for use by NSF-funded investigators for targeted research projects", the description for which states in part that the "NGEO pool should include seismic systems geodetic systems and power, telemetry, and ancillary systems". No specific description is given of what "related geophysical instrumentation"; and/or "ancillary systems" means. Can you clarify?
4. Demobilization of existing elements of GAGE and SAGE is explicitly included neither as a requirement in the description of NGEO, nor as part of the NGEO budget guidelines. Will NSF develop an independent plan for demobilizing existing elements, or transitioning them to another entity or entities? How would these costs be handled, if necessary?
5. Do proposing organizations have some flexibility in the budget guidelines given on page six of the solicitation, provided the total first year budget does not exceed \$38.7 million? Also, is the 10-year maximum anticipated funding amount of \$387 million stated on page 2 of the solicitation intended to require flat budgets for 10 years at \$38.7 million per year?
6. Does the budget guidance include provided base funding expected from EAR only, or does it include anticipated funding from other NSF organizations?
7. Does the budget guidance provided include expected funding from other Federal agencies or is this figure only what is expected from NSF?
8. May an NGEO submission integrate NGEO-related scope beyond the NSF resource base, such as activities in support of another federal agency that would be intended for support by non-NSF resources? How should such aspects of any NGEO proposal be handled?
9. How should proposers include costs associated with modernization of existing GAGE or SAGE equipment and facility capabilities in order to ensure Foundational capabilities meet the future needs of the NGEO-supported community?
10. Can groups submit collaborative proposals in response to this solicitation?
11. The solicitation requests budget justifications be submitted with the budgets for each of 10 years in sufficient detail to show how the proposer reached the amounts specified in the budget. The Grant Proposal Guide and the solicitation limit the budget justification for the proposer and each major subawardee to a maximum of 3 pages. Does this mean that the budget justification for all 10 years must be addressed in 3 pages or can this be interpreted as a maximum of 3 pages per year of the proposal?
12. The solicitation provides a provision for a proposing organization other than the incumbent to

provide a separate budget for a transition period of up to 12 months preceding the new award. If an incumbent or incumbents are proposing a significantly different facility management and operational structure than presently exists would they be eligible for funding to transition to the new structure?

13. How and when will access to the Resource Library be provided to potential respondents?
14. Is it the intent of NSF that N GEO will ultimately be managed under a single organizational structure, and if so, on what timeline?
15. May a given proposing organization provide support to other organizations' potential proposals while developing its own proposal? What if the proposals incorporate overlapping elements?
16. Would it be appropriate to include in an N GEO proposal budget all or part of the research and development or procurement costs for marine geophysical instruments identified as emergent or frontier facility capabilities in the report Future Geophysical Facilities Required to Address Grand Challenges in the Earth Sciences?
17. Would ship time and other operational costs (e.g. telemetry costs) for deploying, operating, recovering or servicing of such marine geophysical instruments be appropriate to include in an N GEO proposal budget?
18. The budget guidance in the solicitation leads to a ratio of 3.3:1 for foundational capability funding vs. frontier capability funding. Must proposals maintain this ratio in each year or may this ratio vary over time, provided the total proposed budget in any given year does not exceed \$38.7M?
19. Will proposing organizations be given the opportunity to request deviations from formatting guidelines provided in the Grant Proposal Guide? Will NSF provide guidance on assembling N GEO proposals?
20. Should an organization propose to descope current elements of SAGE and or GAGE other than the Transportable Array stations in Alaska, would that organization be eligible for separate decommissioning funding?
21. Could you please clarify the length of the initial N GEO award that proposals should address, five years vs. ten years?

1. How, and how rapidly, does NSF intend to answer questions regarding this solicitation?

NSF expects to post an anonymized list of Frequently Asked Questions (FAQs), with answers, in April 2016, and will update it as necessary.

2. On page 6 of the solicitation it states that "NSF will entertain proposals to provide one or more of the desired capabilities described below". The solicitation then lists five categories of desired Foundational capabilities, with a description for each, and in a separate paragraph describes Frontier "capabilities of interest". Must a proposal address the full scope of any given Foundational capability? Can a proposal address a Frontier capability without addressing any of the Foundational capabilities?

A proposal may address any subset or all of the Foundational capabilities, including a subset of any given Foundational capability. A proposal may address any subset or all of the Frontier capabilities of interest described on page 6. Proposals do not need to address Foundational capabilities in order to address Frontier capabilities, or vice versa.

3. The solicitation includes a Foundational capability of "M&O of portable geodetic, seismic, and related geophysical instrumentation primarily for use by NSF-funded investigators for targeted research projects", the description for which states in part that the "N GEO pool should include seismic systems geodetic systems and power, telemetry, and ancillary systems". No specific description is given of what "related geophysical instrumentation"; and/or "ancillary systems" means. Can you clarify?

NGEO is intended to provide Foundational capabilities that the community has identified as key to the science of the next decade; to provide Frontier capabilities to support experiments targeting future scientific goals; and to enhance capabilities to explore, develop, and apply next-generation and emerging instrumentation and methods to problems of community interest. The description of the NGENO pool's desired capabilities is intended both to define minimum requirements and to enable proposing organizations to request support for the instrumentation they deem necessary to meet community-defined goals, without overly limiting and prescriptive requirements.

4. **Demobilization of existing elements of GAGE and SAGE is explicitly included neither as a requirement in the description of NGENO, nor as part of the NGENO budget guidelines. Will NSF develop an independent plan for demobilizing existing elements, or transitioning them to another entity or entities? How would these costs be handled, if necessary?**

NSF does not intend to develop “an independent plan” for demobilizing or transitioning existing elements of GAGE or SAGE, **except for the SAGE Transportable Array stations, which NSF intends to treat separately**. No NGENO proposal should include costs associated with demobilizing TA stations. NSF anticipates that the scientific goals underlying some proposals in response to the NGENO solicitation may lead responding organizations to propose decommissioning of other elements of what are now GAGE and/or SAGE; if so those costs should be incorporated in NGENO submissions in accordance with the guidance given in item 9c of the proposal preparation instructions (page 10 of the solicitation) and in the budget preparation instructions on page 11.

5. **Do proposing organizations have some flexibility in the budget guidelines given on page six of the solicitation, provided the total first year budget does not exceed \$38.7 million? Also, is the 10-year maximum anticipated funding amount of \$387 million stated on page 2 of the solicitation intended to require flat budgets for 10 years at \$38.7 million per year?**

The maximum funding available for the first year of NGENO activities is anticipated not to exceed \$38.7 million; the maximum 10-year funding available for the 10-year anticipated duration of NGENO activities is not expected to exceed \$387 million. Proposers have flexibility to develop their budgets as appropriate for the proposed scope provided neither limit is exceeded and that all other guidance provided in the solicitation or these answers is met.

6. **Does the budget guidance include provided base funding expected from EAR only, or does it include anticipated funding from other NSF organizations?**

The \$38.7 million budget guidance includes the total anticipated support for the first year of NGENO activities, from all NSF sources. Any non-EAR sources of NSF support that might be recommended are subject to the described scope of any proposal, outcome of the review process, internal NSF negotiations, and budget availability.

7. **Does the budget guidance provided include expected funding from other Federal agencies or is this figure only what is expected from NSF?**

The NGENO budget guidance does not include any anticipated funding from non-NSF sources.

8. **May an NGENO submission integrate NGENO-related scope beyond the NSF resource base, such as activities in support of another federal agency that would be intended for support by non-NSF resources? How should such aspects of any NGENO proposal be handled?**

Proposals to this competition may integrate NGENO-related scope beyond the NSF resource base. Any such scope must be identified explicitly throughout the proposal, and any required support must be identified explicitly and distinctly from the support requested from NSF, including in the budget justification and WBS dictionary. Any proposal incorporating such activities must demonstrate that the proposer has consulted with the appropriate non-NSF agencies or groups.

9. **How should proposers include costs associated with modernization of existing GAGE or SAGE equipment and facility capabilities in order to ensure Foundational capabilities meet**

the future needs of the NGEO-supported community?

The NGEO budget guidance is intended to include any costs associated with modernization of such existing capacities, as needed to ensure proposed Foundational capabilities meet the future needs of the NGEO-supported community.

10. Can groups submit collaborative proposals in response to this solicitation?

Yes; see page 9 of the solicitation for further details.

11. The solicitation requests budget justifications be submitted with the budgets for each of 10 years in sufficient detail to show how the proposer reached the amounts specified in the budget. The Grant Proposal Guide and the solicitation limit the budget justification for the proposer and each major subawardee to a maximum of 3 pages. Does this mean that the budget justification for all 10 years must be addressed in 3 pages or can this be interpreted as a maximum of 3 pages per year of the proposal?

The intention is to allow a maximum of three pages per year of the proposal.

12. The solicitation provides a provision for a proposing organization other than the incumbent to provide a separate budget for a transition period of up to 12 months preceding the new award. If an incumbent or incumbents are proposing a significantly different facility management and operational structure than presently exists would they be eligible for funding to transition to the new structure?

On page 10 under Supplementary Documentation, the solicitation states that "[p]roposing organizations, other than the incumbent responsible for an element of GAGE or SAGE that forms an element of a proposal from that incumbent, may be funded for an additional transition period". It further states that "[o]rganizations other than the incumbent for a given capacity must provide a detailed transition plan and budget". The answer to this question therefore depends on (a) whether a proposed NGEO capability currently is part of GAGE or SAGE and (b) whether the organization proposing it is not currently the incumbent for that capability. If the answer to both those questions is yes, then the organization would be eligible to request transitional support for that capability.

13. How and when will access to the Resource Library be provided to potential respondents?

NSF anticipates that a password-protected Resource Library will be set up within the next few weeks and will be updated as needed. Potential proposers to the NGEO solicitation should email the Agency Contacts listed in the solicitation, requesting a username and password for access.

14. Is it the intent of NSF that NGEO will ultimately be managed under a single organizational structure, and if so, on what timeline?

That is one possible outcome, but only one. As stated on page 6 of the solicitation, "NSF believes that multiple viable NGEO management structures may exist".

15. May a given proposing organization provide support to other organizations' potential proposals while developing its own proposal? What if the proposals incorporate overlapping elements?

The solicitation imposes no limits on the number of submissions per organization or per PI or co-PI. NSF anticipates that proposals may include overlapping scope as part of the open competition for NGEO.

16. **Would it be appropriate to include in an NGE0 proposal budget all or part of the research and development or procurement costs for marine geophysical instruments identified as emergent or frontier facility capabilities in the report Future Geophysical Facilities Required to Address Grand Challenges in the Earth Sciences?**

Procurement costs for such marine geophysical equipment, as well as limited prototype network deployment costs, are appropriate for inclusion in an NGE0 proposal budget. Research-related costs to analyze, publish, and disseminate results from data stemming from any marine geophysical equipment supported under NGE0 are not appropriate in an NGE0 proposal budget, but should instead be directed to appropriate research program competitions.

17. **Would ship time and other operational costs (e.g. telemetry costs) for deploying, operating, recovering or servicing of such marine geophysical instruments be appropriate to include in an NGE0 proposal budget?**

All costs associated with deploying, operating, recovering, and/or servicing of such marine geophysical instruments must be included in the NGE0 proposal budget and are subject to the \$38.7 million maximum annual budget and \$387 million maximum 10-year budget caps.

It is essential that any NGE0 proposal requesting use of sea-going facilities, such as ships, submersibles, remotely operated vehicles, autonomous underwater vehicles, etc. be thoroughly examined by the OCE Ship Operations program with an emphasis on the fieldwork plan, feasibility, and other logistical considerations. Proposers planning such proposals are strongly encouraged to consult with the OCE Ship Operations Program early in the proposal development process.

Any NGE0 proposal requesting use of sea-going facilities, such as ships, submersibles, remotely operated vehicles, autonomous underwater vehicles, etc. must include as supplemental documentation the Ship Time Request Form (STR; available from https://strs.unols.org/public/diu_login.aspx).

PIs for NGE0 proposals that include use of research vessels and supporting facilities that are not part of the University National Oceanographic Laboratory System (UNOLS) are strongly encouraged to refer to the document "Clarifications on National Science Foundation Division of Ocean Sciences (OCE) Facilities Costs and Coordination", available from http://www.nsf.gov/geo/oce/pubs/oce_facility-use-clarification-may12-rev6.pdf.

18. **The budget guidance in the solicitation leads to a ratio of 3.3:1 for foundational capability funding vs. frontier capability funding. Must proposals maintain this ratio in each year or may this ratio vary over time, provided the total proposed budget in any given year does not exceed \$38.7M?**

Please see the answer to FAQ #5 above.

19. **Will proposing organizations be given the opportunity to request deviations from formatting guidelines provided in the Grant Proposal Guide? Will NSF provide guidance on assembling NGE0 proposals?**

NSF expects to provide additional guidance on proposal formatting following receipt of Letters of Intent pursuant to the NGE0 solicitation.

20. **Should an organization propose to descope current elements of SAGE and or GAGE other than the Transportable Array stations in Alaska, would that organization be eligible for separate decommissioning funding?**

Please see the answer to FAQ #4 above.

21. Could you please clarify the length of the initial N GEO award that proposals should address, five years vs. ten years?

NSF anticipates that initial N GEO award commitment(s) would be for five years, with a continuation for a maximum of a further five years contingent on the availability of funds and the successful facility and awardee performance. Proposals should include a request for each year of the ten-year period (five year initial award period plus a potential five year extension). If awarded, and if the determination is to extend the award for the second five-year period, the proposer would be asked to submit a refined proposal for those five years.