

SII-Center Frequently Asked Questions

Updated May 22, 2020

Note: Please see Webinar recording for more discussion of various questions. At this time, we are focusing on posting FAQs related to the upcoming Planning Grant proposal deadline and the broader vision. We will post a more extensive list of FAQs related to the SII-Center in the Fall.

Planning Grant Questions:

Scope Questions

1. What is a good proposal for a SII planning grant?

A good proposal should lay out the thoughts for the proposed core team, why they have the relevant experience to eventually lead the SII-Center, and what activities they plan to prepare for the SII-Center proposal.

2. Should the planning grant proposal focus on more technical details or more on organization details for the center?

Planning grants should focus on the process of developing a forward-looking research vision and strategy, as well as developing concrete plans for development of integrative and multidisciplinary research teams and meaningful stakeholder engagement. We are hoping for the planning grants to aid teams in developing high-quality full SII-Center proposals.

3. For planning grants proposals, how much emphasis should be given to the education/outreach aspect? How closely should that align with the proposed research topics? What is the role of education plans and community outreach within the planning grant proposals?

Planning grants, among other aspects, should focus on the process of developing concrete plans for meaningful stakeholder engagement, and education/outreach is one such activity. We are hoping for the planning grants to aid teams in developing high-quality full Center proposals, and activities should be balanced accordingly.

4. In a Planning proposal, how much effort should be allocated towards planning activities vs. research activities? What is the appropriate balance between foundational and use-inspired research?

We would like the research agenda for the Center to be far-reaching and forward-looking. The balance of activities within a Planning Grant proposal should reflect the current level of preparedness of the proposing team to meet the goals of the Center solicitation for the full proposal. Planning Grant funds should be utilized to build capacity where the team feels more effort will be needed.

5. Can a planning grant focus on only a subset of areas mentioned in the solicitation?

Yes, as long as the intent is to explore the suitability of these topics as part of a Center-scale research agenda.

6. How are the expectations about the Planning Grant work affected by the Planning and Full-Proposal submission deadlines?

Submission of a planning grant proposal is not necessary to submit a center proposal. While the planning grants are intended to facilitate creation of a center, they are not dependent upon each other. Thus, the deadlines do not reflect a sequential process.

7. Is the grant to support the purchase of equipment and tools? If yes, what the kind of equipment and tools?

Proposers should identify the appropriate equipment and tools needed for the successful pursuit of the activities identified in the proposal.

8. Is the main intent of the planning grants for team formation beyond academic partnerships?

The main intent is team formation and planning, both academic partnerships and beyond.

Teaming Questions

9. Do you allow collaborative proposals for the planning grants?

No, collaborative proposals are not allowed. See “Additional Eligibility Info.” under Section “IV. ELIGIBILITY INFORMATION” in the solicitation.

10. For a multi-university effort, will the planning grant fund only one of the participating universities?

While formal “collaborative proposals” are not allowed, additional institutions can be funded via a sub-award. Also, the proposal can include travel funds for participants from other institutions.

11. Is it beneficial to write in the planning grant that a team is co-ordinating with another team from a different institution that is also submitting a planning grant proposal?

It is not required to provide this information, but it is helpful to show that co-ordination efforts are already underway.

12. Can non-academic organizations participate as a prime?

Any institution that can satisfy the eligibility requirements outlined in the solicitation can submit a proposal. See Section “IV. ELIGIBILITY INFORMATION” in the solicitation.

13. Is there a limit on the number of Co-PIs who can serve on the planning grant proposal? Center proposal?

There are no limits. Please note that the cover page can only support listing 4 co-PIs. However, additional co-PIs can be listed in other parts of the proposal.

14. Can individuals from organizations other than the lead (submitting) organization be listed as co-PI?

Yes, individuals who are not from the submitting organization can be listed as co-PIs.

15. Can international partners participate in the planning grant proposals? Do all participating investigators need to be based in the US?

International collaborators are allowed; letters of collaboration are not allowed in planning grants proposals. Funding cannot flow to international partners/institutions through sub-awards.

16. I am submitting a proposal with multiple subawardees. Should I provide information for them in the "result from prior NSF support sections"?

"Results from prior NSF support" is only required for the PI and co-PIs of the proposal, and not for the sub-awardees on the project. However, please note that the SII-Center Planning Grant proposal and SII-Center proposals both have requirements for specific sections that request the relevant prior experience of the project team members.

17. How big should the Planning grant team be?

It is ok to have a smaller core team when submitting an SII-Center planning grant proposal. The number of participants and scope may be widened during full proposal submission. Since formal "collaborative proposals" are not allowed this is a reasonable thing to do. Please note that "An SII-Center Planning Grant proposal or award is not a requirement to submit an SII-Center proposal." The Fall "Spectrum Innovation Workshop" is required for those with a planning grant. However, registration will be open for anyone interested to attend.

The size of the SII-Center Planning grant team should be determined by the applicant.

18. Is the intention that several teams from the one-year grant be put together and encouraged to form a team?

Individual planning grant teams may collaborate and merge to form a stronger single team for the large SII-Center proposal. We encourage teaming to bring out synergies across proposers.

19. Can an existing institute or center participate in the program?

Institutions that can meet the eligibility requirements identified in the solicitation can participate in the program.

20. Does NSF have mechanisms to facilitate team formation?

NSF will host a workshop in Fall 2020 for planning grant teams and other potential proposers to meet each other and hear from industry leaders and federal agencies. The planning grant time period is meant to allow for team formation and planning an agenda for the Center that can be submitted as part of the full proposal.

Workshop Related Questions

21. The planning proposals are focusing on workshop organization. Will NSF coordinate the planning grants among multiple institution?

NSF will organize a workshop (planned in Fall 2020) to bring the planning grantees and other potential proposers together with other stakeholders from industry and federal agencies, to stimulate partnerships. Attending this workshop is a requirement for Planning Grant awardees, but registration will be open for others to attend.

22. Will NSF organize a kick-off workshop for all planning grant recipients? Should I budget travel funds for this workshop?

Yes. The workshop will be open to planning grant awardees as well as to other potential proposers who have not received planning grant awards. Planning grant awardee teams are required to attend. **This workshop is now being planned to be all-virtual in Fall 2020, and planning grant awardees might have to pay a nominal registration fee, not to exceed \$300, for the workshop. Details of the workshop will be posted on the program page as soon as they are finalized.**

COVID-19 Related Questions

23. How much money should be allocated for travel (given the uncertainty due to COVID-19)?

The ongoing pandemic is creating large amounts of uncertainty for travel plans, making specification of travel funding difficult. We recommend applicants take CDC, State Department, local and institutional guidelines into account. Proposers are encouraged to be strategic about the kinds of planning grant activities that can be effectively accomplished during the duration of the award. For NSF guidance related to COVID-19, see https://www.nsf.gov/news/special_reports/coronavirus/.

24. How will COVID-19 affect the funding chances?

COVID-19 does not impact funding at this time. We still anticipate awarding 12-15 planning grants.

25. Will Academic 2020-2021 semester start delay impact the deadlines in the solicitation?

At this point, delays in academic calendars are not envisioned as reasons to delay the solicitation deadlines. NSF will review the circumstances as COVID-19 develops and may revise the timeline if necessary. Updates will be posted on the SII-Center Program Page. Additionally, NSF-wide updates and guidance related to COVID-19 are available at https://www.nsf.gov/news/special_reports/coronavirus/.

General Questions

26. How many planning meetings are recommended vs. funding development of the proposal and individual collaborative efforts?

This is up to the proposing team.

27. I have a collaborator and wish to obtain a letter of collaboration from them. Is this allowed, and what are the requirements?

Letters of collaboration are strongly encouraged for full center proposals, but not required. They help to ensure the collaborators indicate their commitment to the project and attest to their participation in the project in the manner indicated. Follow the requirements in the PAPPG, Chapter II, Section C.2.j. https://www.nsf.gov/pubs/policydocs/pappg20_1/pappg_2.jsp#IIC2j

28. Are letters of interest/support from individuals or organizations permitted?

Letters of support are not permitted. Letters of collaboration are permitted in Full Center proposals, but not in planning grants.

29. Can you provide more information on the review process that will be used to evaluate proposals? How will proposals that touch on multiple themes be reviewed?

Standard NSF Merit Review Process will apply. The solicitation states that proposals submitted in response to this program solicitation will be reviewed by Panel Review and/or Site Visit Review, or Reverse Site Review. See solicitation for additional details on the review process.

Center-Proposal-Structure Questions:

30. Are center funds intended to support collaborators in federal agencies?

The planning and center awards are only intended to fund domestic institutes of higher education and nonprofit, non-academic organizations directly associated with educational and research activities. This restriction also applies to subawardees.

31. Will industrial involvement be a key issue?

Partnership across federal agencies, industry and academia is seen a core function of the Center. We do not prioritize one sector over the other. It is up to the proposers to justify the types of partnerships that they propose.

32. Can the center be multi-university? Does it require industry participation?

This program will not accept collaborative proposals. There needs to be a single lead Institution. However, multiple Universities may be involved via subawards. Unfunded collaborations are at the discretion of the proposers. Evidence of industry and other stakeholder engagement is desirable as part of the full proposal but is not required for the planning grant proposal.

33. Do you allow cost-sharing with industry partners?

Inclusion of voluntary committed cost sharing is prohibited.

34. Although explicit matching funding is prohibited, does this include in-kind contributions from partner organizations?

Inclusion of voluntary committed cost sharing is prohibited. The PAPPG Chapter II.C.2.g(xii) states the following:

“In order for NSF, and its reviewers, to assess the scope of a proposed project, all organizational resources necessary for, and available to, a project must be described in the Facilities, Equipment and Other Resources section of the proposal (see Chapter II.C.2.i for further information). While not required by NSF, the grantee may, at its own discretion, continue to contribute voluntary uncommitted cost sharing to NSF-sponsored projects. However, these resources are not auditable by NSF and should not be included in the proposal budget or budget justification.”

35. Will an optional list of individuals interested in this solicitation be compiled such that folks can form teams? Will "match making" of proposals be done as part of review process?

All NSF awards are published and available to the public. In addition, we encourage participation in the Fall 2020 Spectrum Innovation Initiative Center Planning Workshop for potential match-making opportunities.

36. Do all the co-PIs need to hail from each of the communities supporting this effort? For example, one person from NSF/AST, one from NSF/ENG, another from NSF/CISE

Proposing teams need to demonstrate that they have the diverse expertise needed to support the research agenda of the Center. The research agenda should drive the team formation.

37. Does the administrative home of the Center need to co-ordinate all of the activities (e.g., research, workforce development) or can partner groups house different parts?

It is up to the Center proposal to outline the plan, so any requirements not explicitly stated in the solicitation will be left up to the Center team to decide and justify.

38. Should one of the PI/CO-PIs be affiliated with a Platforms for Advanced Wireless Research program (PAWR) site?

There are no such requirements; the solicitation notes the requirements on PI/co-PIs.

Center-Vision-and-Scope Questions:

39. How do you define and measure the success of the center?

A far-reaching and forward-looking scientific research agenda, interdisciplinarity and translation to societal outcomes are the metrics by which success of the Center will be measured. This cannot be done by a combination of individual proposals.

40. Can you please discuss the requirements for multi-university centers in more detail? Thank you

A successful national-level Center should bring together multiple stakeholders to serve as a pre-eminent place for spectrum research. The solicitation goes into further details in the Program Description.

41. In terms of capabilities required, can you please describe the top 3-5 in your opinion?

1. The ability to cast a vision and choose the most important and relevant research challenges to approach.
2. The ability to bring together diverse stakeholders and individual efforts; to make the whole greater than the sum of its parts
3. Technical experience

NSF funds research projects with budgets of up to \$3M. The Center is not supposed to be an aggregation of 6 – 8 of such projects. It is not just research alone, but also being able to lead in multiple dimensions of: a) being able to set a far-reaching and forward-looking agenda; b) able to conduct interdisciplinary research across the various dimensions observed in the spectrum domain; and c) translation of research outputs to societal outcomes

42. What kind of projects should a SII-Center proposal address in the regulatory arena?

Proposers have wide leeway in the kinds of research projects that they would like to consider, overall. The description needs to provide sufficient evidence that the proposed activities will shed light on the underlying questions by developing appropriate methodologies and datasets in a timely fashion.

43. Would Optical Wireless Spectrum (VLC, UV, TeraHertz) be relevant to this solicitation?

Potentially. The THz regime through the visible spectrum can be used for networking and can also be used for passive sensing and be subject to interference issues. VLC and UV by themselves might not be relevant, but when considered as part of a concerted effort across multiple spectrum regions, these can be considered as well.

44. Does spectrum include optical spectrum, e.g. free space optics? Or is spectrum limited to RF?

One of the cutting-edge areas of spectrum research is the high frequency ranges (275 GHz up to 3 THz and beyond). While the primary focus is the radio spectrum, if a compelling case is made why free space optics should be included in the scope, that would not be ruled out.

45. What kind of balance are you looking for between basic spectrum science and wireless technology?

The Spectrum Innovation Initiative is intended to advance the state of the art in multiple areas. A successful center should bring together cross-disciplinary know-how and serving as a hub to address spectrum efficiency, access, and use. Such improvements could entail quite a few research areas depending upon ongoing need, so it's difficult from the outset to specify such a balance. It is important to note that NSF-funded science activities that involve spectrum use do not only involve wireless networks, but passive uses and other active uses that do not involve data communications. We hope that the Center proposals will strike a similar balance as well.

46. How much emphasis is the center expected to put on spectrum sharing with RAS, weather radar etc?

Sharing with passive services, and on a larger scale public-good use of the radio spectrum, is among the most challenging of spectrum efficiency issues. NSF envisions key purpose of the SII, and a successful center, being working towards the means for all users of the spectrum to have necessary access.

47. Can we propose spectrum innovation in potentially new areas of research/applications?

Absolutely! The SII is intended to foster exactly this, as well as the application of existing technologies.

48. The RFP seems overly focused on spectrum sharing and not on optimizing use of spectrum?

These two goals are related. Increasing the efficiency of spectrum is one of our primary goals of this Center, and while spectrum sharing is one approach to do so, there might be others. Proposers are free to propose what they believe is appropriate for the research agenda that they envision.

49. Other than cellular networks, is this program interested in other wireless applications, such as sensor networks?

Definitely. The SII is intended to support both basic research and application of technology toward spectrum efficiency. This may include both environmental sensing and monitoring of the radio spectrum to assist with spectrum use coordination and management. These efforts are likely to be very wide ranging, as spectrum use itself is wide ranging.

50. What is envisioned as the role of the National Center for Wireless Spectrum Research within Washington, DC?

The Center should address relevant questions to federal agencies, other spectrum stakeholders, and the Nation through its research outputs by being proactive in anticipating future and emerging spectrum needs and challenges.

51. Will this funding opportunity support innovative proposals designed to mitigate interference from 5G RF interference?

Such ideas can be pursued as part of a forward-looking research agenda for a Center.

52. What is the scope of antenna research in this solicitation?

Antenna research may be relevant. The Center should demonstrate leadership and vision in selecting which research topics are the most critical to address national challenges, as part of a forward-looking agenda.

53. Do you envision centers focused on hardware, algorithms, and demos merging these?

Such ideas can be pursued as part of a forward-looking research agenda for a Center.

54. Will the program be solely focused on high frequency bands or possible consider mid-band spectrum as well?

Applicable work is envisioned as encompassing all radio frequency bands, and potentially optical interference and communication issues, as well. Innovation in spectrum use and increasing efficiency is not a solved problem in either the mid-band or high-bands, and there are significant open-problems across the board.

55. Are unconventional (e.g., NON-cellular type) waveforms and multiple access of interest?

Certainly. The purpose is to advance the state of the art in both spectrum management and spectrum use.

56. Details on the scope would be helpful.

Please see solicitation for details, specifically the Program Description section.

57. Would wireless power transfer be an eligible topic for this RFP?

EM Compatibility of wireless power transfer can be pursued as part of a forward-looking research agenda for a Center. While not a radiocommunication use per se, it does entail use of the electromagnetic spectrum, and compatibility could be part of the work.

58. What are the differences between this initiative and the Platforms for Advanced Wireless Research program (PAWR)?

These are completely different programs. PAWR focuses on city-scale testbeds that allow for validation of research outcomes. Center proposals can leverage PAWR testbeds as part of their overall research vision and stakeholder engagement strategy.

59. Should the proposals focus on the developing new testbed capabilities? If testbed is a required component, how big is the testbed component expected to be?

Proposals should identify activities and infrastructure that are deemed necessary for the research agenda identified as part of the Center's goals. Proposers will be expected to leverage existing testbed capabilities (including those funded by NSF and other publicly available resources) to the best extent possible. See also [NSF 20-079](#).