The use of SciENcv for the creation of NSF-required biographical sketch and current and pending support documents is a vast improvement for researchers over the static, NSF-WiSE formats. The benefits include:

- Pre-preparation of data: By linking accounts to ORCID, proposers may see a reduction in the administrative burden associated with preparing these sections of the proposal.
- Ability to have multiple versions: Proposers can easily access multiple versions of the NSF-required documents and customize them to align with the requirements of a specific funding opportunity.
- Ensures compliance with current NSF policy: Use of SciENcv ensures that proposers are using a compliant version of the biographical sketch and current and pending support documents.

In addition, the William M. (Bill) Thornberry National Defense Authorization Act for Fiscal Year 2021, Section 2202(a)(1) (40 USC 6403(a)(1)) requires all senior personnel identified on a proposal submitted to NS in to certify that the information provided in their Biographical Sketch and Current and Pending Support documents are accurate, current, and complete. SciENcv has developed an electronic signature mechanism that will meet this statutory requirement and ensure NSF compliance with this requirement. Other agencies that use SciENcv also will use this mechanism to collect the requisite electronic signature.

NSF does understand, however, that mandatory use of SciENcv will require organizations to train researchers to ensure implementation of this new requirement. To provide sufficient time for such training, NSF will be extending the implementation for TIPS requirement in the 2023 PAPPG until October 2023. The specific date will be announced to the NSF proposal community when available.

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The use of SciENcv for the creation of NSF-required biographical sketch and current and pending support documents is a vast improvement for researchers over the static, NSF-WiSE formats. The benefits include:

- Pre-preparation of data: By linking accounts to ORCID, proposers may see a reduction in the administrative burden associated with preparing these sections of the proposal.
- Ability to have multiple versions: Proposers can easily access multiple versions of the NSF-required documents and customize them to align with the requirements of a specific funding opportunity.
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The use of SciENcv for the creation of NSF-required biographical sketch and current and pending support documents is a vast improvement for researchers across the NSF. The benefits include:

- Ability to have multiple versions: Proposers can easily access multiple versions of the NSF-required documents and customize them to align with the requirements of a specific funding opportunity.
- Ensure compliance with current NSF policy: Use of SciENcv ensures that proposers are using a compliant version of the biographical sketch and current and pending support document.

In addition, the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Section 223(a)(1) (42 USC 6605(a)(1)) requires all senior personnel identified on a proposal submitted to NSF to certify that the information provided in their Biographical Sketch and Current and Pending Support documents is accurate, current, and complete. SciENcv has developed an electronic signature mechanism that will meet the statutory requirement and ensure NSF compliance with this requirement. Other agencies that use SciENcv will also use this mechanism to collect the requisite electronic signature.

NSF does understand, however, that mandatory use of SciENcv will require organizations to train their researchers to ensure implementation of this new requirement. To provide sufficient time for such training, NSF will be extending the implementation for this requirement in the 2023 PAPPG until October 2023. The specific date will be announced to the NSF proposal community when available.

Recent published literature makes clear that the field research environment is particularly challenging with respect to safety and inclusion. Organizations may develop resources that support that faculty to draft compelling PSI-FVARs. We see that as a positive. However, more so than laboratory work, field work varies in the specifics of the field location, project field activities themselves, personnel, and infrastructure. The PSI-FVARs are the ones best equipped to provide the appropriate preparation for the field work proposed in the project. The NSF considers that the submission of a two-page summary document of those preparations is not undue burden on PIs and together with the inclusion of the PSI-FVAR in the merit review process may contribute to more thoughtful approaches to all fieldwork, not just fieldwork supported by the NSF.

To travel to and from the field, an NSF proposal must be structured to be fully compliant with all requirements. The definition of field research is fieldwork (i.e., work to be undertaken in a field environment). Field research is off-site or off-campus research. If an organization defines work at another organization’s facility such as a nearby university as off-site or off-campus research then the requirements for field research apply to this work. The PSI-FVAR is designed to consolidate the preparation information required for the PSI-FVAR into a single document. The PSI-FVAR is a document that can be prepared by the PI(s) and submitted with the NSF Proposal. The PSI-FVAR is used to show how the research team plans to ensure the safety and inclusion of the research team members. The PSI-FVAR is a document that can be prepared by the PI(s) and submitted with the NSF Proposal. The PSI-FVAR is used to show how the research team plans to ensure the safety and inclusion of the research team members.
Thank you for your comment.

Comments Submitted in Response to the draft Federal Register Version of NSF 23-1, NSF Proposal and Award Policies Guide (PAPPG)

11 University Cooperation for Atmospheric Research

Plan for Safe and Inclusive Field/Vessel/Aircraft Research

ED 2.2(b)

Support the addition of a plan for safe and inclusive field/vessel/aircraft research.

II-20

The definition of field work to determine when a PSI-FVAR is required could be clarified as a combination of two or more of the following: 1) requires leaving
away from home 2 - environmental sample/data collection and the installation/removal of environmental sensors which return data to a lab 3 - limited access to
medical assistance: a) reasonably accessible through standard ambulance b) medical support required intervention and assistance from an institution 4 - limited access to private
unaffiliated phone and data communications.

Thank you for your comment.

12 University National Oceanographic Laboratory System

Plan for Safe and Inclusive Field/Vessel/Aircraft Research

ED 2.2(b)

II-20

The definition of field work to determine when a PSI-FVAR is required could be clarified as a combination of two or more of the following: 1) requires leaving
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unaffiliated phone and data communications.

Thank you for your suggestions. NSF will be issuing a set of FAQs to further provide examples supporting the Foundation's definition of field research.

13 Susan Poulton

Biographical Sketch

II-D.2.3(jj)

Throughout my twenty-five-year career as a senior Digital Media Strategist who works alongside the science and technology community, I have been invited to
participate in several NSF grant proposals in various capacities, from education and outreach to digital product strategy and development. As the NSF expands its
grants to grant opportunities to focus on innovation, the application and review process must offer a way to submit and make accomplishments of a non-academic nature
available for review. For example, the current NSF biographical format has applications in ‘‘Relevant Products’’; however, only products the academic community can
formally cite would be included. All of the accomplishments in any career that were highly applicable to the product at hand could not be included for review
because they happened in the private or nonprofit sector. Also, the mechanisms by which ‘‘contractors’’ and ‘‘staff’’ are handled is budgeting and staffing do not
allow for the potential that participants, even senior personnel and PIs, may be independent contractors for smaller organizations and not full-time staff at major
institutions. This creates an inherent bias in grant participants. Not all accomplished individuals who can lead or contribute to projects are employed by major
organizations. I applaud the efforts of the NSF to begin to target innovation and more agile solutions as the key to expanding science and research opportunities,
imcluding reaching individuals from non-academic sectors. But the review and application process must change to match. less rigid, less bureaucratic, and more
flexible and innovative. If not, it is innovation in name only and not in practice.

The Biographical Sketch format has been updated to include additional product categories that may be more relevant to non-NSF proposals.

14 Consortium for Ocean Leadership

Plan for Safe and Inclusive Field/Vessel/Aircraft Research

ED 2.2(b)

II-20

The proposed background and preparation sections of the PSI-FVAR, as outlined in the draft PAPPG, are clear and adhere to best practice recommendations.

Computing the PSI-FVAR for proposal submission will enable Principal Investigators clearly understand the unique circumstances of their proposed field
environment, the field participants, and the required policies, procedures, and resources for handling incidents in the field. We offer below a few suggestions to
improve the PSI-FVAR requirement.

1) Agree that multi-organizational efforts have extra challenges and ask that such structures be listed within the submitted PSI. For all collaborative proposals a single PSI for all field research efforts should be provided with the lead submission. 2) For awards that include a PSI
the PSI will be reporting on their PSI activities within each of their annual reports. 3) The NSF is developing internal training for PSI review, both for use in preparation of proposals as well as for annual reports. We will look to develop and support community development of
resources for PSI review by external reviewers as well. We are aware of the existence of such checklists for various communities and will draw
on those as well.

Responses to your comments are as follows:

1) Agree that multi-organizational efforts have extra challenges and ask that such structures be listed within the submitted PSI. For all collaborative proposals a single PSI for all field research efforts should be provided with the lead submission. 2) For awards that include a PSI
the PSI will be reporting on their PSI activities within each of their annual reports. 3) The NSF is developing internal training for PSI review, both for use in preparation of proposals as well as for annual reports. We will look to develop and support community development of
resources for PSI review by external reviewers as well. We are aware of the existence of such checklists for various communities and will draw
on those as well.

15 Council on Governmental Relations (COGR)

Research.gov

LA

II-1

We applaud and congratulate NSF for its implementation of Research.gov, and the upcoming retirement of Fastlane.gov, which introduced so many people to
the concept of online proposal submission more than 20 years ago!

Thank you for your comment.

16 Council on Governmental Relations (COGR)

BAAM

I-A I-2

We understand that NSF plans to launch a new concept outline system, ProSPECT, because the functionality for collecting concept outlines before submission of a
full proposal does not currently exist in Research.gov. On the other hand, NSF also proposes introducing a new submission portal - BAAM, which will appear to duplicates functions that already exist in Research.gov and Grants.gov. Principal Investigators and research administrators must use
separate systems of unique federal grants management systems, which perform similar functions in different ways. This creates significant overhead for recipient
institutions to learn, train, test, use, and maintain multiple grants management systems. It also introduces the potential for errors.

OSDR requests that NSF focus its resources and plans for new functionality in Research.gov and not duplicate functionality in BAAM. Given that BAAM appears to
be aimed at helping new groups of institutions apply for funding, the research community may be able to benefit from any streamlining planned for these non-
traditional recipients. Further, if concept outlines cannot be handled through Research.gov, then we urge NSF to design any new system with tight integration to
Research.gov, including common navigation and look and feel, to reduce the learning curve by the community.

NSF has started issuing broad agency announcements, or BAAs, as a new form of funding opportunity, which many other agencies currently
use regularly. The BAA can be issued in its offering and NSF can choose to fund proposals as grants, cooperative agreements, contracts, or
other arrangements; and each BAA will specify the award type. One goal of using BAAs, is to engage new communities of scientists and
engineers, including those who may be working beyond institutions of higher education, such as in industry, nonprofit, state, local and tribal
governments; civil society; and communities of practice and other organizations. NSF's use of BAAs supports the goal of broadening
participation of smaller institutions and groups new to NSF. The Broad Agency Announcement Management site (BAAM) was designed to
further the participation by using a streamlined application and submission system together to make it easier to apply to NSF, while reducing
administrative burden on the applicant with a simple application process. It's intended to save time and effort up front before an award is
issued by letting proposers focus more on developing their ideas and less on the nuts and bolts of applying. The BAAM system is not designed to
replace Research.gov but provide another opportunity.
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<tr>
<th>Number</th>
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<th>NSF Response/Resolution</th>
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<tr>
<td>17</td>
<td>Council on Governmental Relations (COGR)</td>
<td>Certifications Provided by the Organization</td>
<td>II.D.1.d</td>
<td>8-5</td>
<td>Under the new requirements, institutions must certify the “accuracy and completeness of the statements contained in the proposal.” While this is not a new change, there are significant new consequences related to errors in disclosing Current and Pending Support (page II-2). Under #2 of the definition of Senior Personnel (page II-2), the PAPPG states, “Faculty Associate (faculty member or equivalent)” – an individual other than the Principal Investigator(s) considered by the performing institution to be a member of faculty (or equivalent) who holds an appointment as a faculty member at another institution, and who will participate in the project being supported.” This means that applicant organizations are responsible for certifying the accuracy of the information in Senior Personnel that are not employed by the applicant organization and where there is no way to verify the accuracy of the information.</td>
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<tr>
<td>18</td>
<td>Council on Governmental Relations (COGR)</td>
<td>Biographical Search</td>
<td>II.D.2.b(i)</td>
<td>II-23</td>
<td>We appreciate the revision in the section to report only “current” positions instead of “all positions,” as stated in the current policy. This is very helpful regarding space limitations on the biosketch and harmonization with the NIH policy.</td>
<td></td>
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<tr>
<td>19</td>
<td>Council on Governmental Relations (COGR)</td>
<td>SciNCv</td>
<td>II.D.2.b(i)</td>
<td>II-24-26</td>
<td>We must again express how challenging these new system implementations are for smaller institutions. The burden is very heavy for institutions that don’t have the range and number of employees focused on research that larger institutions have. Each new federal requirement must often be implemented by the same few people, which takes resources and support away from the researchers. We appreciate that NSF has selected SciNCv as a unique persistent identifier.  OODR IDs are becoming more common and are valuable when linking to individual publications, patents, data sets, and other research products. SciNCv, OODR IDs are not widely used to connect federally funded awards to a particular individual. Therefore, this will not ease the administrative burden for awards in the short term. Nonetheless, we hope broader use of OODR IDs will enable efficiencies in the future.</td>
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<tr>
<td>20</td>
<td>Council on Governmental Relations (COGR)</td>
<td>SciNCv</td>
<td>II.D.2.b(ii)</td>
<td>II-24-26</td>
<td>(a) Resubmission of current and pending support before award – We exclusively develop and submit Current and Pending Support for an additional 12 months to provide time for NSF to make further refinements and for institutions to build efficient processes and interfaces to support Current and Pending Support disclosures through SciNCv.</td>
<td></td>
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<tr>
<td>21</td>
<td>Council on Governmental Relations (COGR)</td>
<td>Plan for Safe and Inclusive Field/Research &amp; Research</td>
<td>II.D.2.b(ii)</td>
<td>II-26-28</td>
<td>We appreciate the inclusion of this new section to require training and other precautions to protect the safety of researchers working in the field where these activities have been increased. We agree with NSF’s expectations and the responsibility of the researchers as described in sections. However, the community could benefit from some additional examples and resources related to the Preparation for Fieldwork, Training, Field Incident Support, and other areas of the plan which may not already exist. Additional resources would significantly benefit smaller research institutions that wish to compete with larger research institutions for Fieldwork support.</td>
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<tr>
<td>22</td>
<td>Council on Governmental Relations (COGR)</td>
<td>Human Subjects</td>
<td>R D S</td>
<td>II-35</td>
<td>We appreciate the recognition that a sponsored award may continue and before the research starts request human participant research approval. NSF has included several similar enhancements to policy in this version of the PAPPG, which align better with current research methods and processes. We appreciate these changes.</td>
<td></td>
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NCAR

Certifications (Produced by Senior Personnel)

II-D.2 (a)  I-D-2 (d)  I-D-2 (e)

23

"In accordance with the FY 2021, National Defense Authorization Act (NDAA), Section 223, senior personnel are required to certify in SciENcv that the information provided in their Biographical Sketch and Current and Pending Support documents are accurate, current, and complete. Senior personnel are required to update their Current and Pending Support disclosures prior to award, and at any subsequent time the agency determines appropriate during the term of the award."  

Comments Submitted in Response to the draft Federal Register Version of NSF 23-1, NSF Proposal Award Policies Procedures Guide (PAPPG)

Responses to your comments are as follows:  
1) Yes, the certification will be visible on the PDF downloaded. 2) Yes, metadata in the downloaded document will indicate to Research.gov if the document is valid. 3) It is not possible to include the certification in Research.gov as only Authorized Organizational Representatives have signing authority in Research.gov. Given the SciENcv will be the systems used by senior personnel to develop and upload the Biographical Sketch and Current and Pending Support, it is appropriate for the certification requirement to be implemented in this system. 4) Other organizations may develop resources that support their faculty to draft compelling PSI-FVARs. We see that as a positive. However, more so than laboratory work, field work varies in the specifics of the field location, project field activities themselves, personnel, and infrastructure.  
5) Yes, SciENcv will require acknowledgement of the required certification prior to download. 6) SciENcv will enforce the PAPPG requirements on all documents including those that are existing prior to the implementation.

NCAR

Current and Pending Support

II-D.2 (f)  I-D-2 (f)  09-25-26

"Except where specifically noted as non-reportable in the NSPM-33 Implementation Guidance section on "Disclosures and Requirements," as well as Table 2 as "Guidance for disclosure of personal and professional information within R&D award application processes, current and pending support includes all resources (both foreign and domestic) available to an individual in support of and/or related to all of the individual's research endeavors, regardless of whether or not they have monetary value, except as noted in paragraph (c) below. Current and pending support also includes linked-contributions (such as support for a laboratory space, equipment, supplies, employees, etc.). In-kind contributions not intended for use on the project/proposal being proposed must have associated time commitments also must be reported.

NCAR is a NSF Federally Funded Research and Development Center (FFRDC) sponsored by NSF within GEO/AGS. We appreciate clarification on how In-kind contributions are reflected in SciENcv. This may or may not include office/laboratory space, equipment, co-sponsored time, etc.

There are occasions when NCAR NSF has funded FITs apply as an NSF solicitation and co-sponsored time on the proposed project. Currently, our interpretations of the PAPPG Guidance and Pre and Post Award Disclosure Table of is that a entry will be listed in the Project/Proposal sections under "Current or Pending" not categorized under in-kind, and the entry will be filled out in its entirety, listing the co-sponsored person months per year as that time is being committed to the project, though not necessarily funded through the proposal. The co-sponsored time effort will be also captured in the Facilities, Equipment and Other Resources Document if the effort is for the proposed project. Please confirm our understanding is correct.

Responses to your comments are as follows:  
(1) The 2-page PSI-FVAR was specifically chosen to reduce the burden on PIs and is intended to signal that the PSI is a high level overview document rather than the complete guidance that will be provided to participants in the field work. Thus, it should be an overview of key plan elements rather than an in depth study.  
(2) The second portion of your comment agrees entirely with the NSF perspective; the PSI-FVAR is not a required document for field proposals involving field/laboratory research. Yes, however, if such facilities are required to have their own oversight plans related to their infrastructure and operations, this will not be completely redundant with the plans submitted by the PI intending to use the facility.

NCAR

Plan for Safe and Inclusive Field/Vessel/Aircraft Research

II-D.2 (b)  I-D-2 (b)  II-29

"Each proposal that proposes to conduct research in the field, including on vessels and aircraft, must include, under "PSI-FVAR," in the supplementary documentation section of Research.gov, a plan that includes the elements specified below. There is a one page limitation on the PSI-FVAR. No embedded links may be included within the two page document. If multiple field research excursions (inclusive of multiple visits and/or sites) are proposed, only a single narrative PSI-FVAR must be submitted. If it requested within the PSI-FVAR PSI-FVAR, the proposal should specify that the section is not applicable.  

NCAR is supportive of this additional requirement. There have been several recent project PI teams that have worked diligently to initiate and normalize this requirement. We would continue to encourage submission of all future proposals containing field/laboratory intervention training, in particular for field work. Would NSF consider requiring a Safety and Inclusion plan for all future field study proposals?

NCAR expects that the plan will be submitted by the PI with each proposal in response to NSF's solicitation"Facility and Instrumentation Request Process (FIRP) 2021." Will the facility provider, such as a NCAR/EOS, also be required to provide a separate plan? Or is the plan provided by the PI sufficient for the field proposal? Or is it expected that facility providers will have a standard plan that applies to all field campaigns supported by the provider?

Responses to your comments are as follows:  
(1) The 2-page PSI-FVAR was specifically chosen to reduce the burden on PIs and is intended to signal that the PSI is a high level overview document rather than the complete guidance that will be provided to participants in the field work. Thus, it should be an overview of key plan elements rather than an in-depth study.  
(2) The second portion of your comment agrees entirely with the NSF perspective; the PSI-FVAR is not a required document for future proposals involving field/laboratory research. Yes, however, if such facilities are required to have their own oversight plans related to their infrastructure and operations, this will not be completely redundant with the plans submitted by the PI intending to use the facility.

1 Los Alamos National Laboratory

Indicate/clarify the plan of Award Materials

B.E  I.B-19

NSF's PAPPG language already permits a wide variety of costs to be charged under this cost category. See draft PAPPG Chapter II-D.2 (b) (vii)

Anonymous

Plan for Safe and Inclusive Field/Vessel/Aircraft Research

II-D.2 (b)  I-D-2 (b)  II-29

"I am concerned about the new document "Plan for Safe and Inclusive Field/Vessel/Aircraft Research" that will be required for any proposal including this type of work. I fully support the importance of safe and inclusive field work and am fully aware that this has been a problem for a variety of reasons. However, I feel this is a misguided effort to make an impact, and there is a better alternative. Like the other supplemental documents that have become required (pedestal monitoring plan, data management plan, etc.) it could very well devolve into a box-checking operation where people copy and paste a template having written it once, or perhaps copying from somewhere else. No such document is required for the rest of the research effort taking place in the lab or office, despite the clear fact that many troubling issues of harassment and inclusion take place there. As such, requiring this document creates the false impression that field work is where the problem is, which I do not believe to be the case. It is much more pervasive than that.

Anonymous

Plan for Safe and Inclusive Field/Vessel/Aircraft Research

II-D.2 (b)  I-D-2 (b)  II-29

"Allow me to suggest an alternative: The responsible conduct in research training should be modified to include a discussion of how to stringently uphold safety regulations. That modification should include specific ways in which such pedagogical steps are taken. For instance, the Triad involves lab environments that provide some unique dangers, too, which should also be included. The work to prepare an NSF proposal is already extraordinarily, with a new "required document" or "standard template" appearing every year. I think it's important that these supplemental documents be restricted to those truly necessary to reviewers to evaluate the proposal. It doesn't lessen the importance of safe and inclusive field work to say that it is not necessary for the reviewers to evaluate the proposal. As far as I know there are very few people that will be requiring this. For them, this will save time. I seriously doubt that anyone outside of NSF is going to require it. If it exists at all, that would mitigate it a bit. In many cases, we need to ensure that administration is held to a standard of care that matches that of the faculty and the researcher in the eyes of the private sector. Otherwise, there is the possibility that this document will devolve into a box-checking operation. Not all people will have complete knowledge of what they are responsible for. Thus, the proposal submitter will be Bradford if he does not have the complete knowledge of the proposal. In this case, isn't the proposal submitter responsible for the accuracy of the submitted document? I will seriously doubt acceptance of the proposal if it is not consistent with the submitted document. This document must be as clear as possible. I am concerned that this document will devolve into a box-checking operation where people copy and paste a template having written it once, or perhaps copying from somewhere else. No such document is required for the rest of the research effort taking place in the lab or office, despite the clear fact that many troubling issues of harassment and inclusion take place there. As such, requiring this document creates the false impression that field work is where the problem is, which I do not believe to be the case. It is much more pervasive than that.

"Given the specificity to an existing award, NSF will discuss these questions with NCAR.

Recent published literature makes clear that the field research environment is particularly challenging with respect to safety and inclusion. Organizations may develop resources that support their faculty to draft compelling PSI-FVARs. We see that as a positive. However, more so than laboratory work, field work varies in the specifics of the field location, project field activities themselves, personnel, and infrastructure. The PSI are the ones best equipped to provide the appropriate preparation for the field work proposed in the project. The NSF considers that the knowledge of a Principal Investigator and the research team is superior to the knowledge of reviewers to evaluate the proposal. It doesn't lessen the importance of safe and inclusive field work to say that it is not necessary for the reviewers to evaluate the proposal. As far as I know there are very few people that will be requiring this. For them, this will save time. I seriously doubt that anyone outside of NSF is going to require it. If it exists at all, that would mitigate it a bit. In many cases, we need to ensure that administration is held to a standard of care that matches that of the faculty and the researcher in the eyes of the private sector. Otherwise, there is the possibility that this document will devolve into a box-checking operation. Not all people will have complete knowledge of what they are responsible for. Thus, the proposal submitter will be Bradford if he does not have the complete knowledge of the submitted document. If this is already fully included in KIR training, then I would argue that the inclusion of this new document is not necessary and will have no impact, per my earlier comments.

Comments Submitted in Response to the draft Federal Register Version of NSF 23-1, NSF Proposal Award Policies Procedures Guide (PAPPG)

Responses to your comments are as follows:  
(1) The 2-page PSI-FVAR was specifically chosen to reduce the burden on PIs and is intended to signal that the PSI is a high level overview document rather than the complete guidance that will be provided to participants in the field work. Thus, it should be an overview of key plan elements rather than an in-depth study.  
(2) The second portion of your comment agrees entirely with the NSF perspective; the PSI-FVAR is not a required document for future proposals involving field/laboratory research. Yes, however, if such facilities are required to have their own oversight plans related to their infrastructure and operations, this will not be completely redundant with the plans submitted by the PI intending to use the facility.
I am concerned about the new document “Plan for Safe and Inclusive Field/Vessel/Aircraft Research”. It will be required for any proposal including any field work. It fully support the importance of safe and inclusive field work and am fully aware that this has been a problem for a variety of reasons. However, I think this is a misguided effort to make an impact, and there is a better alternative. Like the other supplemental documents that have become required (postdoc mentoring plans, data management plan, etc) it could very well devolve into a binging operation where people copy and paste a template helping written on it, or perhaps copying from somewhere else. No such document is required for the rest of the research effort taking place in the lab or office, so the idea that many troubling issues of harassment and inclusion issue, but this is misleading and not where the problem is. It is much mor prevalent than that. We need to do something about harassment & safe and inclusive field work. That said, I do not believe the document as presented is the right approach. The responsible end of conducting research training should be modified to include a discussion of how to stringently uphold safety and inclusion. That modification should include specific week in which field work presents unique dangers. The lab environment also provides some unique challenges, too, which should also be included. The work to prepare an NSF proposal is already extraordinary, and with new “required document” or “standard template” appearing seemingly every year. I think it’s important that these supplemental documents be restricted to those needed by reviewers to evaluate the proposal. It does not loan the importance of safe and inclusive field work by itself, so it is not necessary for the reviewers to evaluate the proposal. As Prof. Musta almost always write more proposals than they are awarded, this additional course will reduce the administrative burden while at the same time having a more focused impact precisely at the stage it is needed. Moreover, it reduces not only the proposal or proposal proposers, but anyone involved extensively in the awarded project. If this is already fully integrated in NSF's RCR training, then I would argue that the inclusion of this new document will not be necessary and will have no impact, per my earlier comments.

The definition of field research is off site or off-campus research. If an organization defines work at another organization's facility as such, then the proposal, the same as any other proposal, would need to be submitted as a separate proposal and the scientific merit and plan for safe and inclusive field work would need to be evaluated separately. As support network at home, work is integral to the scientific project (where conference travel might be more optional), timing of travel is usually constrained to specific times, long hours and right shifts create the need for some “unattention” that can facilitate unsafe behavior. There is pressure to use a strictly limited time for collecting as much data as possible "wherever it takes us".

Thank you for your comments. The NSF will be issuing a Set of FAAs to further provide examples supporting the NSF-developed definition of "field research.

I applaud the NSF for the requirement for PIs to include a plan for fieldwork safety (the PSI-FVAR). As a PI who conducts field research I believe this is essential for producing high-quality, ethical research and I will gladly propose it in my future applications. It may be outside the scope of the present revision, but in the future I would love to see another amendment or addition asking PIs to also describe their plans for establishing relationships, involving local researchers, etc, to avoid procrastinate science when collaborating research - - in Canada and abroad. In doing so, it will be in the best interest of human community at the field location. Establishing positive relationships with local community members, whether on international, indigenous, or local sites, is a safety and inclusivity matter.

Recent published literature makes clear that the field research environment is particularly challenging with respect to safety and inclusion. Organizations may develop resources that support that faculty to draft compelling PSI-FVARs. We see that as a positive move. However, more than simply laboratory work, field work varies in the specifics of the field location, project field activities themselves, personnel, and infrastructure. The PSI is the one best equipped to propose the appropriate preparation for the field work proposed in the project. The NSF considers that the submission of a 2-page summary document of those preparations is not undue burden on PSI and together with the inclusion of the PSI-FVAR in the merit review process may contribute to thoughtful approaches to all field work, not just field work supported by the NSF.
Comments Submitted in Response to the draft Federal Register Version of NSF 23-1, NSF Proposal and Award Policies Procedures Guide (PAPPG)

I.12

Anonymous

Plan for Safe and Inclusive Field/Vessel/Aircraft Research

II.2-(d)

11-20

In regards to the new requirement for a supplemental document (PSI-FVAR): There is no doubt that NSF is simply attempting to further ensure that research is done in a transparent and human environment. I would support such an approach for both field research (where I work), and more generally for the foundation role of science, especially in the case of complex and sensitive areas of research. For field research, however, I am not sure that this additional paperwork at the time of proposal submission is in any way helpful. Indeed, it seems an unhelpful and onerous burden on the proposers, and likely on the reviewers and the funding agencies. I do not believe that the new PSI-FVAR is necessary in the way that it is being proposed. NSF should consider revising the proposal template to allow for more flexibility and less administrative burden.

However, I am not sure that additional paperwork at the time of proposal submission is in any way helpful. Indeed, it seems an unhelpful and onerous burden on the proposers, and likely on the reviewers and the funding agencies. I do not believe that the new PSI-FVAR is necessary in the way that it is being proposed. NSF should consider revising the proposal template to allow for more flexibility and less administrative burden.

II.13

Bigelow Laboratory for Ocean Sciences

Plan for Safe and Inclusive Field/Vessel/Aircraft Research

II.2-(d)

11-20

Overall, I agree that the proposal requires some change to make sure the performance of the functions of the agency and the process are practical and achievable. However, it is unclear if the large and diverse research community will be able to adopt the new template. The scientific community is diverse and the adoption will vary based on the research discipline.

Recommendation #1: Please clarify the definition of “in the field” on page II-29 (Chapter II Section D 2 i xi) where details are provided about what is required in the supplemental document. A definition for “research in the field” is defined on page 10-12 as “data/information/collection being collected off-campus or off-site.” Please bring this same definition to page II-29, to again emphasize that fieldwork means any data collection done off-site, even if it is a relatively small sampling done by a small team in a remote location.

Recommendation #2: Consider including in the guidelines for the PSI-FVAR that proponents could include assessment mechanisms on the effectiveness of implementation of the PSI-FVAR.

Recommendation #3: Consider including in the guidelines the PSI-FVAR that proponents could document implementation of the PSI-FVAR in project annual reports.

Recommendation #4: Consider including in the guidelines what the specific review criteria will be for the new PSI-FVAR supplemental document.

II.14

Anonymous

SciENcv

I.2.2(x)

04-26

The NSF should continue to support the fillable PDF forms for the biosketches and current & pending. SciENcv has had a number of issues with the NSF forms, and I believe it will be valuable to have a fillable PDF form to ensure the utility, and I believe it will enhance the quality, utility, and clarity of the information from respondents. Below I offer four specific recommendations that may further clarify the utility of this new supplemental requirement.

Recommendation #1: Please clarify the definition of “in the field” on page II-29 (Chapter II Section D 2 i xi) where details are provided about what is required in the supplemental document. A definition for “research in the field” is defined on page 10-12 as “data/information/collection being collected off-campus or off-site.” Please bring this same definition to page II-29, to again emphasize that fieldwork means any data collection done off-site, even if it is a relatively small sampling done by a small team in a remote location.

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Recommendation #4: Consider including in the guidelines what the specific review criteria will be for the new PSI-FVAR supplemental document.

II.15

University of Texas

SciENcv

I.2.2(x)

04-26

I am writing to express my concerns about the requirement that SciENcv be used for Current & Pending Support documents. As a departmental research administrator who assists with proposal compliance and submission, I have found the adoption of SciENcv to be slow for biosketches and worse for current and pending documents. Nearly all of the researchers at our institute use the NSF fillable template, which will no longer be permitted for proposal submissions. I would ask NSF to reconsider its decision to allow the NSF fillable template to continue to be used.

I am writing to express my concerns about the requirement that SciENcv be used for Current & Pending Support documents. As a departmental research administrator who assists with proposal compliance and submission, I have found the adoption of SciENcv to be slow for biosketches and worse for current and pending documents. Nearly all of the researchers at our institute use the NSF fillable template, which will no longer be permitted for proposal submissions. I would ask NSF to reconsider its decision to allow the NSF fillable template to continue to be used.

The use of SciENcv for the creation of NSF-required biographical sketch and current and pending support documents is a vast improvement for researchers over the static, NSF fillable formats. The benefits include:

- Pre-population of data: By linking accounts to ORCID, proposers may see a reduction in the administrative burden associated with preparing these sections of the proposal.
- Ability to have multiple versions: Proposers can easily access multiple versions of the NSF-required documents and customize them to align with the requirements of a specific funding opportunity.
- Ensures compliance with current NSF policy: Use of SciENcv ensures that proposers are using a compliant version of the biographical sketch and current and pending support documents.
- Increased utility and clarity: Proposers can easily access multiple versions of the NSF-required documents and customize them to align with the requirements of a specific funding opportunity.

In addition, the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Section 223(a)(1) (42 USC 6605(a)(1)) requires all senior personnel identified on a proposal submitted to NSF to certify that the information provided in their biographical sketch and current and pending support documents are accurate, current, and complete. SciENcv has developed an electronic signature mechanism that will meet this statutory requirement and ensure NSF compliance with this requirement. Other agencies that use SciENcv also will use this mechanism to collect the requisite electronic signature.

NSF does understand, however, that mandatory use of SciENcv will require organizations to train researchers to ensure implementation of this new requirement. To provide sufficient time for such training, NSF will be extending the implementation for this requirement in the 2022 PAPPG and beyond. This specific date will be announced to the NSF proposal community when available.
Because NSF “advocates and encourages” open science communication, we request that the policy guide explicitly allow for public support for open access repositories, including voluntary contributions, to be charged against NSF awards. In the current document, the guidance regarding open access fees is contradictory. On page II-10 (I.D.1 and I.D.2), the document states: “NSF advocates and encourages open scientific and engineering communication,” and “Cost of documenting, preparing, publishing, disseminating, and sharing research findings and supporting material are allowable charges against the award.” However, costs related to “prior or early publication” are explicitly prohibited on page II-17 (vi.b.) in the draft.

This concern applies to the open access provisions that many NSF principal investigators (PIs) and principal investigator teams (PI teams) will find so valuable. Rapid open science communications, including open peer review, are becoming increasingly important for many researchers to meet major mission goals. NSF’s support for open access during the planning stage is absolutely essential for their work. Many researchers also tell us that they would like to donate to arts as part of their open access funding lines “because they love the profound experience their research work has had for global dissemination. And they feel that, given the current generation of mechanism, they have no mechanism to use NSF grant funding to make such a contribution, even though fees to commercial publishers and cloud providers are placed. As long as, in place of a defined and regular open access manuscript route, researchers will be faced with a decision on how to cover costs associated with open access. NSF’s current coverage on the publication/dissemination cost category is very flexible with regard to the types of costs that may be charged. However, costs related to prior or early publication present challenges with regard to phốiability and, as such, is not NSF’s intention to cover the expansion in this category.

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Thank you for your comment.

This section states in part that “Senior personnel are required to update their Current and Pending Support disclosures prior to award, and at any subsequent time in the term of the award.” While it appears that the concept outline tool could be useful in terms of tracking program interest in certain submissions, it is concerning that the ProSPCT tool is locked so that PIs would have the ability to check “Other Proposal.” As such, this could be used by a researcher who wants to see if there is a research topic that may be relevant to a collaborative or contractual relationship that NSF should identify (e.g., Establish Core Programs) before. It might be helpful to provide additional details on what information would be needed when using the ProSPCT tool. Please confirm that this PI has the ability to submit a Concept Outline using the ProSPCT tool and that ‘PI or AIR’ do not have the ability to submit or be at fault of a PI.

While it appears that the concept outline tool could be useful in terms of tracking program interest in certain submissions, it is concerning that the ProSPCT tool is locked so that PIs would have the ability to check “Other Proposal.” As such, this could be used by a researcher who wants to see if there is a research topic that may be relevant to a collaborative or contractual relationship that NSF should identify (e.g., Establish Core Programs) before. It might be helpful to provide additional details on what information would be needed when using the ProSPCT tool. Please confirm that this PI has the ability to submit a Concept Outline using the ProSPCT tool and that ‘PI or AIR’ do not have the ability to submit or be at fault of a PI.

Login.gov is shared service required for a growing number of public facing federal business systems. Research.gov accounts can already be associated with Login.gov credentials, and a single Login.gov username and password allows access to Research.gov, Baltcom, and Research.gov as well as other services from other agencies.

The ProSPCT form was developed specifically because historical email-based approaches presented multiple operational risks and could not be extended to the current system. The ProSPCT approach allows all necessary information to be made available online in a single form, which significantly reduces the data entry requirements for all parties involved. It can be configured to permit submissions with fewer instances of the potential user who may or may not have an established account in Research.gov. NSF seeks to continually improve our systems and is exploring future integration into the Research.gov system.

NSF concurs that discussion of research ideas between potential proposers and NSF Program Officers are valuable. And, we believe the ProSPCT will encourage more of these interactions. ProSPCT provides a clear entry point for potential proposers who do not have well-established relationships with Program Officers while also ensuring that for proposal- and funding-related requiring concepts, NSF has the flexibility to use a wide range of information in its integration.

NSF revised the language in the draft PAPPG to specifically state “whilst not required,” so that the Foundation understands that the recommended language is not appropriate for use in all letters of collaboration.

Notes:
- NSF currently does not support this. Additionally, it would be extremely difficult to implement since SciENcv heavily relies on automatically generating citations from identifiers. In a world where proposers have to type everything out this isn’t an issue, but it is when you are to fill that burden.

In accordance with the PAPPG, a solicitation can deviate or supplement the guidance provided in the PAPPG.

Thank you for your comment.

In accordance with the PAPPG, a solicitation can deviate or supplement the guidance provided in the PAPPG.

Thank you for your comment.
The use of SciENcv for the creation of NSF-required biographic sketch and current and pending support documents is a vast improvement for researchers over the static, NSF-Friendly format. The benefits include:

- Pre-population of data by linking accounts to ORCID; proposers may see a reduction in the administrative burden associated with preparing these sections of the proposal.

- Ability to have multiple versions. Proposers may easily access multiple versions of the NSF-required documents and customer to align with the requirements of a specific funding opportunity.

- Ensure compliance with current NSF policy. Use of SciENcv ensures that proposers are using a compliant version of the biographic sketch and current and pending support documents.

In addition, the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Section 2222(a)(2)(D) (leaves 413) requires all senior personnel identified on a proposal submitted to NSF to certify that the information provided in their Biographical Sketch and Current and Funding Support documents are accurate, current, and complete. SciENcv has developed an electronic signature mechanism that will meet this statutory requirement and ensure NSF compliance with this requirement. Other agencies that use SciENcv will also use the mechanism to collect the required electronic signature.

NSF does understand, however, that mandatory use of SciENcv will require organizations to train researchers to ensure implementation of this new requirement. To provide sufficient time for such training, NSF will be extending the implementation for this requirement in the 2023 PAPPG until October 2023. The specific date will be announced to the NSF proposer community when available.

The definition of “in the field” is data/information/samples being collected off-campus or off-site. It does not include virtual meetings or research training sessions held off-campus unless it was training in field methodologies. NSF believes that a 2-page limit, similar to other required supplementary documents such as the Data Management Plan, provides sufficient space for the required information.

The PSI-FVAR is not meant to supplant or duplicate the Environmental Health and Safety (EHS) acts or institutions of higher education. The PSI-FVAR is invited to safety from harassment in field situations. The page supplementary document will be reviewed as an integral part of the proposal, and will be considered under intellectual merit or broader impacts, or both, as appropriate for what is being proposed. Updates, concerns, or changes on an individual PSI-FVAR should be documented in Annual Project Reports and by communication with the cognizant NSF Program Officer.

NSF does not have the authority to require organizations to establish such an entity. However, because the PSI-FVAR is now required for all proposals with field work, organizations may decide to develop new training programs targeted to field environments. NSF has funded conferences to facilitate the development of best practices and their broad dissemination.

- Staying and Resource Availability: Researchers in field settings often benefit from the defined safety structures and administrative oversight that is in place for laboratory, biosafety, and animal research, as field research safety programs with dedicated staffing on certain non-research and non-research-related at institutions. Adding the requirement that an institutional responsible entity be established, in-clinical with other safety areas such as biosafety, would push institutions to improve overall management of risks in these areas.

- Most available institutional training (e.g., harassment, discrimination, etc.) is not tailored to field environments. Confounding factors such as lack of reporting mechanisms, no access to emergency services, or alternate legal landscapes can render the training inadequate for field research applications. We think it is important for the NSF to develop standardized training content for field researchers in these areas. Alternatively, additional funding opportunities to tailor training content and improve access could be made available through the NSF.

- Inclusion and Anti-Discrimination for All: While we agree that field environments have a higher degree of risk and that harassment can be problematic for researcher mental health (e.g., Clancy and others, 2014), the current fields of research (e.g., Nelson and others, 2017) indicated that rules and enforcement of those rules are essential for safe and successful field work. Thus, a description of consequences for non-compliance must be added to ensure that researcher teams meet this goal.

In order to accommodate this expansion in scope, it is recommended that the page limit be increased by one page to a total of three pages.

Tied into this expansion would be the inclusion of researcher mental health. The same challenging circumstances that can exacerbate the risk of harassment can also be problematic for researcher mental health (e.g., Clancy and others, 2014). Thus, a description of consequences for non-compliance must be added to ensure that researcher teams meet this goal.

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29 Campus Safety, Health and Environmental Management Association (SHEMA)

Plan for Safe and Inclusive Field/Vessel/Aircraft Research

II.D.2(ii) II-20

Suggested Language: Field research is a necessary component of many STEM fields. Fieldwork presents unique challenges to managing the safety and security of field researchers. The likelihood of harassment can also be increased in these areas, including but not limited to, changing physical conditions, social isolation, and limited communication methods. All research should be done in a safe environment that is free from harassment.

It is NSF's expectation that:
- All personnel will treat others with dignity and respect, will exercise the highest level of professional and ethical behavior, within the team and with respect to the surrounding community and environment; and
- It is everyone's responsibility to provide a safe and inclusive workplace. While not exhaustive, the following acts are examples of conduct that do not meet NSF's expectations:
  - Abuse of any person, including, but not limited to, assault, harassment, stalking, bullying, or hazing of any kind, whether the behavior is carried out verbally, physically, electronically, or in written form; or
  - Conduct that is unbecoming, non-consensual, offensive, indecent, obscene, disorderly, or vulgar; or
  - Conduct that is derogative to individuals based on their race/ethnicity, sexual orientation, disability, gender identity, and/or religion whether the behavior is carried out verbally, physically, electronically, or in written form.

Thank you for your comment.

30 Campus Safety, Health and Environmental Management Association (SHEMA)

Plan for Safe and Inclusive Field/Vessel/Aircraft Research

II.D.2(ii) II-20

Suggested Language: The PIF-FUIM will document background information, pre-deployment activities, and plans for conduct while in the field and must include the following sections:

1. Background Information
   - Description of Field Locations – (Note: only one PIF-FUIM is required per proposal if the research involves multiple locations).
   - Description of the physical, health, field/aircraft, and personal security hazards and safety risk factors present at the field locations.
   - Description of the likelihood of hazards and risk factors external to the group. For example, diversity differences between local community and group, illegal system differences or barriers, cultural customs, and access to emergency and/or healthcare services.
   - Description of hazards and risk factors internal to the group. For example, accommodations, power dynamics/interactions, off-duty time, relationships, and privacy expectations.

2. Preparation for Fieldwork
   - Training: include description of required training courses related to safety, first aid, anti-harassment, risk management, etc. that will be assigned to researchers.
   - Planned processes to establish team definitions of roles, responsibilities, and culture (these identified executive summaries do not replace the need for specific detailed plans should be developed for distribution and training for field researchers).

3. Executive Summary of Safety and Conduct Policies
   - Executive summary of how safety expectations and conduct rules are defined and how a culture of safety and inclusivity will be maintained.
   - Executive summary of risk assessment which describes how probability and severity of possible negative events were calculated.
   - Executive summary of field safety plan which identifies mitigation strategies to reduce risks.
   - Executive summary of communication plans. For example, description of means of communication, check-in plans, escalation communication procedures, specific if multiple organizations involved, involvement of field safety organization(s).

   - Field Support Plan: include information related to active monitoring of conditions and support of field researchers. Also includes details related to the support of safety expectations and conduct rules, such as disciplinary procedures.

Thank you for your comment but your recommended changes are beyond the scope of the PSI.

31 Campus Safety, Health and Environmental Management Association (SHEMA)

Plan for Safe and Inclusive Field/Vessel/Aircraft Research

II.D.2(i) II-20

Suggested Language (continued from #29):

1. Emergency Response and Recovery
   - Incident Response Plan: Should cover response activities surrounding situational scenarios related to potential risks identified in previous sections including but not limited to:
     - Medical or health related incident, mental health related incident, missing person, search and rescue event, natural disaster, security threats/events, terrorism, global health event, civil unrest event, weather emergency, or
     - Significant conduct that is non-consensual or violates any of the established expectations.
   - Reporting Plan: Should cover mandatory reporting requirements and support assistance resources (e.g., points of contact, hotlines).
   - Recovery Plan: Should include procedures for resolving field activities post-incident, if possible include survivor support resources available. Identify conditions that trigger an immediate cessation of research activities. If cessation of activities is necessary, consider identification of consents to return to home institutions.

2. It is everyone's responsibility to provide a safe and inclusive workplace. While not exhaustive, the following acts are examples of conduct that do not meet NSF's expectations:
   - Conduct that is derogative to individuals based on their race/ethnicity, sexual orientation, disability, gender identity, and/or religion whether the behavior is carried out verbally, physically, electronically, or in written form.
   - Conduct that is unbecoming, non-consensual, offensive, indecent, obscene, disorderly, or vulgar; or
   - Conduct that is derogative to individuals based on their race/ethnicity, sexual orientation, disability, gender identity, and/or religion whether the behavior is carried out verbally, physically, electronically, or in written form.

Thank you for your comment.

32 University of Arizona

NSF Proposal Award Policies Procedures Guide (PAPPG)

I.D.2.2 II-22

Suggested Language: Since the January 2022 release of the Office of Science and Technology Policy Guidance for Implementing NSPM-33, we have eagerly awaited federal agency guidance and clues to next steps. We are grateful that the draft PAPPG addresses the core principle from the OSTP document that policies and consequences be applied without discrimination. While the PAPPG has referenced non-discrimination, the Sections M in Chapter 8 reinforces the point.

Thank you for your comment.

33 University of Arizona

Disclosure Requirements

I.B. II-2

An appropriate addition of Section E, "NSF Disclosure Requirements to Chapter I - Proposal Preparation Instructions. Creating an additional section for this information is very useful to ensure the utmost clarity with regard to the policies and procedures relating to disclosure of conflict of interest. The addition would also be consistent with the requirements currently outlined in the Funding Opportunities Announcements, should be updated to ensure appropriate and consistent implementation of NSF policies and procedures.

Thank you for your comment.

34 University of Arizona

Proposal Preparation Provided by the Organization and Assisted by Senior Personnel

I.D.1 and I.D.1.a II-8

The separation of proposal preparation into two pieces is a great solution to issues raised once the comment period for NSF PAR20-103. There will always be a need to train the information on waiver institutions can certify on behalf of their investigators and senior personnel. It is important to have a certificate of the senior personnel and distinguish it from the institution-level certifications that are needed on behalf of the grantee. Authorized Organizational Representative (AOR) certify the investigator's ability to support the proposal project, and compliance with several regulatory items. Information in the biographical sketch and current & pending support documents is only partially held in AOR institutional systems, even the most comprehensive ones. Senior Personnel must bear responsibility for accurate and truthful disclosures of their activities.

Thank you for your comment.

35 University of Arizona

Senior Personnel Documents

I.D.2 II-24

Suggested Language: We are encouraged by the move to use Guide F for both the biographical sketch and current and pending support forms. We hope this step will encourage other federal agencies to do the same. GCR must be enhanced with more testing and user experience work that includes faculty to ensure it can support them. While having an ORCID record makes the ORCID process easier, work should be done to ensure that data that may not be in the ORCID record (Synergistic Activities, for instance) is searchable. The faculty and their delegates must be able to move back and forth between the two systems easily.

Thank you for your comment.
We strongly support the use of DRCIs in reducing administrative burden. As noted above, work on faculty-centric user experience in SciEnNe will be critical in
DRCI adoption and proving the reduced burden. While we understand that not all NSF grantees will embrace DRCIs, we hope that NSF systems and forms
will be updated to collect the DRCI in a prominent (even optional) way, as which can be reviewed as a soft requirement.

In-kind Contributions both identified/not identified for the current proposal: The NSPE-33 guidance directly addresses that in-kind contributions may not have monetary value, so the current and pending support forms should not require a value if one cannot be determined. In-kind contributions also may not require the appointment of any effort above the effort already listed on the current proposal. Gifts, additional funds to meet cost sharing requirements, institutional startup funds, and similar items do not automatically create a need for more of the researcher’s effort. We would appreciates more clarification and examples for items more properly reported as Facilities, Equipment, and Other Resources vs. Current and Pending Support.

It would be very helpful if the forms allowed for the selection of value ranges, including 50 or 0% when addressing overlap of funding or effort for items that do not have a measurable amount for either.

NSPE-33 requires disclosure of venture or other capital financing. NSF’s Awarded COI Policy requires such disclosure to a responsible representative of the awardee (NSPE-CHAP 4.K.). Since disclosure is made to the awardee, it is the awardee’s responsibility to protect such disclosure. NSF’s Awarded COI Policy requires disclosure of information sufficient to determine whether a COI could affect the design, conduct, or reporting of NSF funded research. The awardee can determine what information is sufficient. The awardee only reports information to NSF if a COI is unmanageable or if the research will proceed without conditions or restrictions when a COI exists.

Addition of “venture or other capital financing” to Significant Financial Interest (SFI) Definition: It important venture or other capital financing can create financial conflicts of interests as well as other research security risks, regardless of monetary value. It was placed, placing a monetary value on this NSPE-33 would likely lead to financing caps that are designed to avoid disclosure. The minimum disclosure requirement for venture or other capital financing should be the full name and address of the individual(s) and/or entity(ies) that provided the financing, regardless of the amount of the financing. This would provide institutions with the initial information they need to conduct their due diligence in determining whether the venture or other capital financing creates a financial conflict of interest or could otherwise improperly influence research or create a research security risk.

We would like additional clarity on how confidential financing information will be protected when it is disclosed. This information could be considered a competitive advantage in the wrong hands, and researchers may understandably be unwilling to disclose it for this reason. We will expect awardees to report this to the National Science Foundation.

The forms should be updated to be flexible in accommodating situations where things like dollar amounts or measurable levels of effort will not apply. This should be relevant for all requests for this information at the proposal stage, just-in-time, postaward, and project reporting. Some examples:

- Support in the form of visiting Scholars or Students/Postdoctoral Researcher funded by other entities. While these relationships have a clear monetary value, many researchers will not be able to assign a level of effort to these interactions. If they are the scholar/student/Postdoc’s direct supervisor, they will certainly have a level of managing them. But, the Current and Pending Support forms do not ask the researcher to articulate the person-months devoted to team management or supervisory responsibilities. Requiring a separate reporting item for effort here is inconsistent with the way the rest of their management duties are treated. If they are not the direct supervisor of these individuals, they may not have effort at all for this interaction. Guidance should also clarify the treatment of visiting scholars/students who are funded via NSF mechanisms, such as Research Experiences for Teachers/Undergraduate Students (REU/TEU).

- Additions of co-investigator, mentors, and other support. These individuals could be individuals who are not the direct supervisors of the scholar/student/postdoc but who are supporting them in a meaningful way. Guidance should also clarify the treatment of these individuals.

- In-kind Contributions both identified/not identified for the current proposal: The NSPE-33 guidance directly addresses that in-kind contributions may not have monetary value, so the current and pending support forms should not require a value if one cannot be determined. In-kind contributions also may not require the appointment of any effort above the effort already listed on the current proposal. Gifts, additional funds to meet cost sharing requirements, institutional startup funds, and similar items do not automatically create a need for more of the researcher’s effort. We would appreciates more clarification and examples for items more properly reported as Facilities, Equipment, and Other Resources vs. Current and Pending Support.

- It would be very helpful if the forms allowed for the selection of value ranges, including 50 or 0% when addressing overlap of funding or effort for items that do not have a measurable amount for either.

The proposed addition of a plan for safe and inclusive field/vessel/aircraft research to NSF proposals that conduct research in the field is critical to ensure that every research and/or education experience that is safe and inclusive.

We are heartened that the National Science Foundation is taking an important step in ensuring safe and inclusive research and educational environments.

On June 6 2022 and attended by 98 individuals.

We are eight professionals who have dedicated a large part of our careers in leadership roles working to make teaching and learning in the field a positive, safe

We appreciate the National Science Foundation’s work with the Federal Demonstration Partnership (FDP) on research security. Thank you for the opportunity to comment. The University of Arizona values how open, available, and collaborative the NSF Policy Office has always been.

Thank you for your comment.
42 ESA-USRN
Plan for Safe and Inclusive Field/Vessel/Aircraft Research
E.2.1-5 (ff) 11-20

Accountability: It is critical that the policy be enacted, but equally important is ensuring accountability. Possible starting points regarding accountability include:

- The plan presented in the PSI-FVAR supplement should be a living document. Involving everyone, from undergraduate student participants and graduate student field instructors to MOSP investigators, in developing and maintaining the plan improves both communication and accountability.
- The proposed plan should make the expectations for each person in the team clear and explain in detail how they will be communicated and upheld. The proposed plan should include a mechanism for feedback and for resolving any issues that arise from implementation.
- The plan should be made publicly available to support accountability. In the same way that annual reports are required to provide progress in meeting project goals, they also could include a description of how the PSI-FVAR plan was implemented over the reporting period. Any issues that came up in the safety plan could be explained, including the steps taken to address them. Whatever reporting mechanisms are decided, they should be broadly shared with the community at the time the new policy is announced, in order to increase confidence in the effectiveness of the policy.

43 ESA-USRN
Plan for Safe and Inclusive Field/Vessel/Aircraft Research
E.2.1-5 (ff) 11-20

- Proposed plans may need guidance on what constitutes appropriate and effective plans for safe and inclusive fieldwork. Such guidance should be presented in evidence-based research. It is critical that reporting and accountability do not increase the burden on the most vulnerable. Intentional plans should be expected to allow for reporting and for supporting (e.g., Anadu et al., 2021) and the potential for retaliation. Reporting unsafe or exclusionary field practices should not result in loss of funding or opportunity.

45 ESA-USRN
Plan for Safe and Inclusive Field/Vessel/Aircraft Research
E.2.1-5 (ff) 11-20

Comprehensive: The new policy should encourage and support field research teams to take an explicit and comprehensive view of workplace climate, identity-based harassment, discrimination and aggression, including those based on race and ethnicity, gender identity, sexual orientation, ability, religion, citizenship status, or immigrant status. Plans for safe and inclusive fieldwork also should include language about accessibility. Effective plans recognize disproportionate risk for different people, and include specific language on the role of identity. There is a body of literature on suggested practices and guidelines that field research programs should consider for their own use. The program director should consider these resources.

The PSI-FVAR policy should identify the type and approach of training and its relevance to the proposed work as well as who in the research team will participate.

- NSF should provide criteria for effective training so that proposals can indicate how they meet those criteria in their plans, especially given research that shows how trainings that do not use evidence-based practices may be counter effective (NASEM 2018).

- The PSI-FVAR plan should be integral to the proposed fieldwork; rather than a rigid checklist, it should be an actionable, integrated framework. The proposed plan should be aligned with the goals and scope of the project and project teams (and what is likely is most needed for the context of the research).

- The plan should be a living document that is relevant, addressing time and place, making changes as needed with input from everyone involved.

46 ESA-USRN
Plan for Safe and Inclusive Field/Vessel/Aircraft Research
E.2.1-5 (ff) 11-20

NSF intends the PSI-FVAR to be integral to the proposal and an opportunity for organizations to describe how their specific fieldwork program will be implemented in a safe and inclusive manner.

In NSF’s intention to develop and post FAQs for the preparation of the PSI-FVAR, NSF believes that these FAQs will assist the community in further understanding of the PAPPG language.

47 ESA-USRN
Plan for Safe and Inclusive Field/Vessel/Aircraft Research
E.2.1-5 (ff) 11-20

- PIs should follow the written or verbal guidance provided by the responsible program officer.

We suggest that approval for exceptions to the deadlines date policy only be provided in writing rather than also allowing for the option of verbal approval. Additionally, we recommend that any verbal approvals must be followed by a written approval within five days to be valid. Many Program Officers are inclined through informal conversations and may be open to a question about the approval being later in the week, or after an award’s conclusion. Thus, it is in NSF’s best interest to have the approval documented in writing.

Thank you for sharing your concerns regarding organizations’ participation in field research. Beyond the coverage specified in the 2023 PAPPG, NSF’s implementation of the PSI-FVAR will include the development and posting of FAQs, as well as instructional materials for use by both NSF program staff as well as NSF’s reviewer community, and instructions to merit reviewers. NSF anticipates that lessons learned from this implementation will produce useful feedback on PSI-FVAR, and inform any future modifications to NSF’s implementation strategy.
Comments Submitted in Response to the draft Federal Register Version of NSF 23-1, NSF Proposal & Award Policies & Procedures Guide (PAPPG)

NSF respectfully disagrees with the proposed revision as the current and pending support document is not used by NSF for budgeting purposes. Rather, it is used by program officers to: 1) determine whether PI's have bandwidth to perform the proposed research effort; and 2) avoid duplication of support of same research (federally and internationally). NSF believes the proposed language revision is not appropriate because there is no incentive for grantees to be "dissent" up front in their budgeting. If more than 2 months salary is received, grantees may request and justify it. Post-award, if PI's need more effort than was approved, grants may reallocate authority without NSF approval, if the scope is unchanged. Finally, it is important to note that research needs and staffing are very fluid during the period of performance. Such changes can often impact the direction of the research and affect the level of effort required.

NSF deliberately states that the Proposal Preparation Checklist will be updated upon resolution of comments. Current and pending support will require a statement on any potential overlap. How it will be resolved must occur on a case-by-case basis.

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**S5 NSF OIG**

Senior Personnel Salaries & Wages Policy

E.D.2.3(ii)

II-14

As a general policy, NSF limits the salary compensation requested in the proposed budget for senior personnel to no more than two months of their regular salary for any one year. If anticipated, any compensation for such personnel in excess of two months must be disclosed in the proposal budget, justified in the budget justification, and must be specifically approved by NSF in the award notice budget.

Chapter II, Sec. D.2.3(ii)(c) [Current and Pending Support] states, "Person-month information included in current and pending support may differ from the person-months reported on the award budget on the NSF Grant Proposal. The information contained on the budget is separate and distinct from the information entered on current and pending support regarding how much time the individual is or is planning or has committed to spend on a project."

This allows for a situation in which salaries for senior personnel are budgeted for no more than 2 months per year simply to comply with the budgeting limitation when the facts is the individual is to spend more than 2-person months per year on the project. In those cases where the budget reflects a lower senior personnel commitment than truly anticipated, suggested NSF require that the budget justification clearly state that the senior personnel salary budget does not reflect the anticipated salary for senior personnel and the actual salary charged to the award will be greater than budgeted.

We recommend NSF adopt similar language to NIH Form PHS 398/2590 Other Support, which requires explicit statements to address any potential overlap in scientific effort, budget level and how it would be resolved.

*Note: Carried over from 2020.*

**S1 NSF OIG**

Proposal Preparation Checklist

Exhibit B-1

I-60

If the project (or any part of the project) now being submitted has been funded previously by a source other than NSF, provide the required information describing the last period of funding.

We recommend NSF adopt similar language to NIH form PHS 398/2590 Other Support, which requires explicit statements to address any potential overlap in scientific, budget, effort level and how it would be resolved.

*Note: Carried over from 2020.*

**S2 NSF OIG**

Facilities, Equipment and Other Resources

E.C.2.g

II-23

Proposers should include an aggregated description of the internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project, should it be funded.

We recommend instructing applicants to distinguish which facilities, equipment, and resources are coming from which project participants so it is clear what is coming from the grantee versus subawardee versus collaborators. These different schemes have implications for grantsmanship and continued access to facilities necessary to carry out the project. Additionally, facilities, and which facilities are the grantee's versus collaborators' have been at issue in a number of our cases and requiring this information to be disclosed upfront would increase transparency, decrease the likelihood for misrepresentations, and increase our ability to pursue these cases.

*Note: Carried over from 2018 and 2019.*

**S3 NSF OIG**

NSF Award Conditions

Part II Overview

VI-1

"When NSF Grant General Conditions or an award notice reference a particular section of the PAPPG, then that section becomes part of the award requirements through incorporation by reference."

This sentence is confusing in light of the preceding sentences, which state, "Part II of the NSF Proposal & Award Policies & Procedures Guide sets forth NSF policies regarding the award, administration, and monitoring of grant and cooperative agreements. Coverage includes the NSF award process, from issuance and administration of an NSF award through closeout. Guidance is provided regarding other grant requirements or considerations that either are not generally applicable or do not follow the award cycle. NSF General Grant Conditions require recipients to comply with NSF policies (NSF General Grant Conditions, Article I.D.3.), which are set forth in this document. The sentence in question could wrongly lead one to believe that only sections of the PAPPG specifically mentioned in award terms and conditions need to be followed. We strongly suggest that this sentence be removed.

*Note: Carried over from 2018 and 2019.*

**S4 NSF OIG**

NSF Award Conditions

VI.C

VI-2

"When these conditions reference a particular PAPPG section, that section becomes part of the award requirements through incorporation by reference."

We suggest clarifying guidelines to the National Institutes of Health that defines change of scope and provides potential indications. This guidance can be found in section 8.1.2.5 of the NIH Grants Policy Statement. Alternatively, we suggest adding a list of circumstances that could be considered a change of scope. For example, significant increase/decrease in a PI's effort allocated to the project, a significant decrease in research opportunities for graduate and undergraduate students, and significant (>20%) reallocation of costs among budget categories, which indicates a material change in the research methodology.

*Note: Carried over from 2018 and 2019.*

**S5 NSF OIG**

Changes in Objectives or Scope

VI.B.1.a

VI-2

The objectives or scope of the project may not be changed without prior NSF approval.

We suggest adopting similar guidance to the National Institutes of Health that defines change of scope and provides potential indications. This guidance can be found in section 8.1.2.5 of the NIH Grants Policy Statement. Alternatively, we suggest adding a list of circumstances that could be considered a change of scope. For example, significant increase/decrease in a PI's effort allocated to the project, a significant decrease in research opportunities for graduate and undergraduate students, and significant (>20%) reallocation of costs among budget categories, which indicates a material change in the research methodology.

*Note: Carried over from 2018 and 2019.*

**S6 NSF OIG**

Significant Changes in Methods or Procedures

VI.B.1.b

VI-2

Significant changes in methods or procedures should be reported to appropriate grantee office/ies. The PI also must notify NSF via use of NSF's electronic systems.

We suggest that NSF provide guidance to awardees to determine whether a proposed action is "significant" enough to warrant NSF notification. For instance, how does an alteration to the number of students involved in a project, or an expected change in the project's scope impact the project? How would this impact the project's scope impact the project's budget? We see situations in which the awardee's existing facilities and equipment were sufficient indicate a "significant change in methods or procedures?"

*Note: Carried over from 2018 and 2019.*
61 NSF OIG Annual Project Reports VII.D.1 VII-8 NSF recommends that annual project reports be submitted no later than 30 days prior to the end of the current budget period. The report becomes overdue the day after the end of the current budget period if it has not been submitted by the PI and approved by the cognizant NSF Program Officer. NSF's policy is that the annual project report is due at least 60 days prior to the end of the budget period. We concur that the additional language added to the PAPPG may be confusing to reviewers. The language has been modified to address this issue.

62 NSF OIG Research Security IX.C IX-4

63 NSF OIG Endangered Species Act IX.D.3(i) IX-28

The proposal should include details regarding the use of human subjects, their data, or their specimens; in Section A of the budget, they should be removed from Section A of the budget.  Through the document, Penn State highlights sections that we believe should be labeled as “MUST” and not “SHOULD”.  Support and clarity to the PI’s is the primary responsibility of the PI as the institution?  NSF is clearly articulating the font requirements and providing a warning when the PI is in danger of violating those requirements which could result in nonacceptance of the proposal.  This is the standard for the entire NSF proposal and award process, and further amplification is not necessary.

- Penn State Research Community

Global Comment

N/A

N/A

- Penn State Research Community

Global Comment

N/A

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- Penn State Research Community

Global Comment

N/A

N/A

- Penn State Research Community

Global Comment

N/A

N/A

- Penn State Research Community

Global Comment

N/A

N/A

93 Penn State Research Community

Proposal Processing

LH

I-1D

Proposers should allow up to six months for programmatic review and processing (see Chapter III for additional information on the NSF merit review process). In addition, proposers should be aware that the NSF Division of Grants and Agreements generally makes awards within 30 calendar days after the proposal division/office makes its recommendation. In the solicitation specifies otherwise.

- Penn State Research Community

Proposal Form, Spacing and Margin Requirements

R.C.2.a

B-6

Using Arial 10-point font generates a warning in research.gov every time a document with it is uploaded, saying that it might exceed 6 lines per inch which might cause the proposal to be rejected. Why not make it an 11-point instead? This warning is always giving to PI.
The use of SciENcv for the creation of NSF-required biographical sketches and current and pending support documents is a vast improvement for researchers over the static, NSF fillable formats. The benefits include:

- Ability to have multiple versions: Proposers can easily access multiple versions of the NSF-required documents and customize them to align with the requirements of a specific funding opportunity.

- Pre-population of data: By linking accounts to ORCID, proposers may see a reduction in the administrative burden associated with preparing these sections of the proposal.

- Language has been modified.

The William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Section 223(a)(1) (42 USC 6605(a)(1)) requires all senior personnel identified on a proposal submitted to NSF to certify that the information provided in their Biographical Sketch and Current and Pending Support documents are accurate, current, and complete. SciENcv has developed an electronic signature mechanism that will meet this statutory requirement and ensure NSF compliance with this requirement. Other agencies that use SciENcv also use this mechanism to collect the requisite electronic signature.

In addition to these benefits, SciENcv also provides:

- Pre-population of data: By linking accounts to ORCID, proposers may see a reduction in the administrative burden associated with preparing these sections of the proposal.

- Ability to have multiple versions: Proposers can easily access multiple versions of the NSF-required documents and customize them to align with the requirements of a specific funding opportunity.

- Ensures compliance with current NSF policy: Use of SciENcv ensures that proposers are using a compliant version of the biographical sketch and current and pending support documents.

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Language has been modified.

The specific date will be announced to the NSF proposer community when available.

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