

NATIONAL SCIENCE FOUNDATION (NSF) International Research Terms and Conditions (IRTC) Effective January 30, 2023

Effective January 30, 2023, new NSF international research awards and funding amendments to existing NSF international research grants will begin referencing, and are subject to, the *International Research Terms and Conditions* (IRTC) dated January 30, 2023.

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1. Awardee Responsibilities

- a. The grantee has full responsibility for the conduct of the project or activity supported under this award and for adherence to the award terms and conditions. Although the awardee is encouraged to seek the advice and opinion of NSF on special problems that may arise, such advice does not diminish the awardee's responsibility for making sound scientific and administrative judgments and should not imply that the responsibility for operating decisions has shifted to NSF. The awardee is responsible for notifying NSF about: (1) any allegation of research misconduct that it concludes has substance and requires an investigation in accordance with NSF misconduct regulations published at 45 Code of Federal Regulations (CFR) §689; or (2) any significant problems relating to the administrative or financial aspects of the award.
- b. The requirements of this award are contained in these *International Research Terms* and *Conditions* for grants and cooperative agreements unless otherwise specified in the award notice. The applicable Federal administrative standards are incorporated by reference and are contained in 2 CFR §200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). These *International Research Terms* and *Conditions* (IRTC) serve as the Foundation's implementation of 2 CFR §200. If the IRTC is silent on a specific area covered by 2 CFR §200, the requirements specified in 2 CFR §200 must be followed.
- c. By acceptance of this award, the awardee agrees to comply with the applicable Federal requirements for grants and cooperative agreements and to the prudent management of all expenditures and actions affecting the award, including the monitoring of subrecipients (if applicable). Specific guidance on subrecipient monitoring and management can be found in 2 CFR §§200.331-332.
- d. Documentation for each expenditure or action affecting this award must reflect appropriate organizational reviews or approvals that should be made in advance of the action. Organizational reviews are intended to help assure that expenditures are allowable, necessary and reasonable for the conduct of the project, and that the proposed action:
- 1. is consistent with award terms and conditions;
- 2. is consistent with NSF and awardee policies;
- 3. represents effective utilization of resources; and
- 4. does not constitute a project change which requires NSF prior written approval (see Article 8).
- e. The awardee is responsible for ensuring that the Principal Investigator (PI)¹ and co-PIs receive a copy of the award terms and conditions, including: the award notice, the budget, these general terms and conditions, any special terms and conditions, and any subsequent changes in the award terms and conditions.

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¹ For purposes of the award terms and conditions, the term Principal Investigator (PI) and co-PI also includes the term Project Director and co-Project Director.

These award terms and conditions are made available to the awardee by NSF in electronic form, and may be duplicated, copied, or otherwise reproduced by the awardee, as appropriate. This provision does not alter the awardee's full responsibility for conduct of the project and compliance with all award terms and conditions. Award notices are available electronically via Research.gov at https://www.research.gov/award-documents-web. Sponsored project offices are able to view, print, and/or download NSF award notices for their organizations, and PIs and co-PIs can access their individual award notices through use of Research.gov.

2. Prior Approval Requirements

a. The awardee must obtain written approval from NSF as specified in the *Research Terms* and Conditions Appendix A, Prior Approval Matrix.

Unless otherwise specified in the award notice, no additional NSF prior written approvals beyond those specified in Appendix A and these award terms and conditions are required.

b. Requests for NSF prior written approval in the matrix specified above must be submitted via the use of NSF's electronic systems. Those prior approval requirements that do not have a specific request type in NSF's electronic systems must be submitted via use of the "Other" category in Research.gov.

3. Pre-Award Costs

- a. The awardee may approve pre-award costs incurred within the 90- calendar day period before the start date of the award. Requests for approval of pre-award costs for periods greater than 90 calendar days must be submitted electronically via NSF's electronic systems. Pre-award expenditures prior to the funding of an increment within a continuing grant are not subject to this limitation or approval requirement but are subject to paragraph c. below.
- b. Pre-award costs must be necessary for the effective and economical conduct of the project, and the costs must be otherwise allowable in accordance with Article 11.
- c. Pre-award expenditures are made at the awardee's risk. Awardee authority to approve pre-award costs does not impose an obligation on NSF: (1) in the absence of appropriations; (2) if an award is not subsequently made; or (3) if an award is made for a lesser amount than the awardee anticipated.
- d. In accordance with 2 CFR §200.458, if pre-award costs are charged to the award, these costs must be charged to the initial budget period, unless otherwise specified in the award notice.

4. Extensions to the Award Period

a. If additional time beyond the end date of the award is required to assure adequate completion of the original scope of work within the funds already made available, then the awardee must submit a request for a no-cost extension via Research.gov at least 45 days prior to the end date of the award.

- b. The request must explain the need for the extension, include an estimate of the unobligated funds remaining, and a plan for use of the funds. The fact that unobligated funds may remain at the end of the award is not in itself sufficient justification for an extension. In addition, the awardee is not authorized to extend an award that has a zero balance.
- c. The plan for the extended period must adhere to the previously approved objectives of the project. Awardees are cautioned not to make new commitments or incur new expenditures after the end date of the award until the no-cost extension has been approved by NSF.
- d. Disposition of the approval will either be provided through electronic notification from the cognizant NSF Program Officer or an amendment to the award approved by the NSF Grants and Agreements Officer. If approved, the new end date of the award will be reflected in Researchg.gov.

5. Consultant Services (also referred to as Professional Service Costs)

Costs for professional and consultant services, including those who are members of a particular profession or possess a special skill and who are not officers or employees of the performing organization, are allowable when reasonable in relation to the services rendered and when not contingent upon recovery of costs from NSF. If not included in the award budget, anticipated services must be justified and information furnished on each individual's expertise, primary organizational affiliation, normal daily compensation rate, and number of days of expected service. Consultants' travel costs, including subsistence, may be included. If requested, the awardee must be able to justify that the proposed rate of pay is reasonable. Additional information on the allowability of consultant costs is available in 2 CFR §200.459.

6. Equipment

Equipment falls under the umbrella of property, which consists of real property and personal property (tangible and intangible). The standards for managing, tracking, and disposing of property funded by NSF or any property acquired for a project under an NSF award are outlined in 2 CFR §§200.310-316.

- a. Purchase. No item of equipment over \$5,000, other than items identified in the approved budget, may be purchased without the advance written approval of the cognizant NSF Program Officer.
- b. Title. Unless otherwise specified in the award, title to equipment purchased or fabricated with NSF award funds will vest with the awardee upon acquisition. Such equipment is considered exempt property and shall be acquired and used in accordance with paragraph c below. The awardee holds title to the property in trust consistent with 2 CFR §200.316, unless and until the expiration of 120 days from the award end date providing the government has not exercised its conditional interest as further described in paragraph c.7.
- c. Conditions for Acquisition and Use of Equipment
- 1. Awardee Assurance. The awardee will assure that for each purchase of equipment, it is:
- (a) necessary for the research or activity supported by the award;
- (b) not otherwise reasonably available and accessible;

- (c) of the type normally charged as a direct cost to sponsored agreements; and
- (d) acquired in accordance with organizational practice.
- 2. General Purpose Equipment. Expenditures for general-purpose equipment are typically not eligible for support (see PAPPG Chapter IX.E.2.b).
- 3. Equipment Usage. The equipment must remain in use for the specific project for which it was obtained in accordance with 2 CFR §200.313(c)(1), unless the provision in 2 CFR §200.313(c)(4) applies.
- 4. Equipment Sharing. The equipment must be shared on other projects or programs in accordance with 2 CFR §200.313(c)(1).
- 5. Property Management Requirements. The awardee shall maintain a property management system that, at a minimum, meets the requirements of 2 CFR §200.313(d), which requires a physical inventory every two years, ensures adequate safeguards to prevent loss, damage, or theft of the property, and provides for maintenance procedures to keep the property in good condition.
- 6. Competition. The awardee must not use equipment acquired with the Federal award to provide services for a fee that is less than private companies charge for equivalent services, unless specifically authorized by Federal statute for as long as the Federal government retains an interest in the equipment in accordance with 2 CFR §200.313(c)(3).
- 7. Right to Transfer Title. In accordance with 2 CFR §200.313(e), NSF may identify items of equipment having an acquisition cost of \$5,000 or more where NSF reserves the right to transfer the title to the Federal Government or a third party named by the Federal Government at any time during the award period. In cases where NSF elects to transfer the title, disposition instructions will be issued no later than 120 days after the end date of the NSF-supported project for which it was acquired.

7. Participant Support Costs

- a. Participant support costs as defined in 2 CFR §200.1 are direct costs for items such as stipends or subsistence allowances, travel allowances and registration fees paid to or on behalf of participants (but not employees) in connection with NSF-sponsored conferences. NSF prior written approval is required for any additional categories of participant support costs, such as incentives, gifts, souvenirs, t-shirts, and/or memorabilia. The request must be submitted via Research.gov. NSF approval of such changes will be by an amendment to the award signed by the cognizant NSF Grants and Agreements Officer. The awardee must account for participant support costs separately. Indirect costs (Facilities and Administrative Costs (F&A)) are not allowed on participant support costs (see PAPPG Chapter II.D.2.f(v)).
- b. Funds provided for participant support may not be used by the awardee for other categories of expense without the specific prior written approval of the cognizant NSF Program Officer. Such requests must be submitted electronically via Research.gov.

8. Project Changes

Consistent with 2 CFR §200.308(c), the awardee is required to obtain NSF prior written approval whenever there are changes in the project as stipulated below.

- a. Subawarding or Transferring Part of an NSF Award (Subaward)
- 1. If the intention to subaward or transfer part of the project to another organization has been disclosed in the proposal, NSF authorization is not needed unless approval has been specifically withheld in the award notice.
- 2. If it becomes necessary to subaward or transfer part of an NSF award after an award has been made, notification of this intent should be submitted via use of NSF's electronic systems and must be electronically signed by an Authorized Organizational Representative (AOR). The request shall include a clear description of the work to be performed and a proposed budget (see PAPPG Chapter VII.B.4 for additional information). NSF approval of such changes will be by an amendment to the award.
- 3. The awardee remains responsible for monitoring of the activities of the subrecipient as necessary to ensure that the subaward is used for authorized purposes, in compliance with Federal statutes, regulations, and the award terms and conditions of the subaward as outlined in 2 CFR §§200.331-332. This includes ensuring necessary documentation for all subawards is maintained for the same retention period as the awardee's and making it available to NSF upon request. The awardee shall include subaward activities in the annual and final project reports that are submitted to NSF.
- 4. Consistent with the requirements specified in 2 CFR §200.332, the awardee must adhere to the requirements for pass-through entities in establishing and managing subawards issued under the award. In addition, the awardee shall ensure that the following articles, if applicable, flow down to all subrecipients, or are appropriately addressed in the subaward instrument: Articles 5, 9 through 11, 16, 17 through 21, 23 through 26, 31 through 40, 42 and 45 through 47.
- b. Changes in Objectives or Scope

A proposed change in the phenomenon or phenomena under study or the objectives of the project stated in the proposal or agreed modifications thereto should be communicated to NSF via Research.gov. NSF approval of such changes will be by an amendment to the award.

c. Long-Term Disengagement or Change of PI or co-PI

If a named PI or co-PI plans to or becomes aware that he or she will: (1) devote substantially less effort to the work than anticipated in the approved proposal (defined in 2 CFR §200.308(c)(3) as a reduction of 25% or more in time devoted to the project); (2) sever his or her connection with the awardee; or (3) be disengaged from the project for a continuous period of more than 3 months, or otherwise relinquish active direction of the project, he or she shall advise the appropriate official at the awardee organization, who shall initiate action appropriate to the situation in accordance with the guidelines described in PAPPG Chapter VII.B.2.

9. Travel

- a. Allowability of Travel Expenses
- 1. Expenses for transportation, lodging, subsistence, and related items incurred by project personnel and by outside consultants employed on the project (see PAPPG Chapter II.D.2.f(iv)) who are in travel status on business related to an NSF-supported project are allowable as prescribed in the governing cost principles. Except as noted in paragraph b. below, the requirements for NSF prior written approval specified in 2 CFR §200.475 are waived.
- 2. Except as provided in the governing cost principles, the difference between economy airfare and a higher-class airfare is unallowable. A train, bus, or other surface carrier may be used in lieu of, or as a supplement to, air travel at the lowest first-class rate by the transportation facility used. If such travel, however, could have been performed by air, the allowance will not normally exceed that for jet economy airfare.
- b. Travel Support for Dependents of Key Project Personnel

Travel support for dependents of key project personnel is allowable only under the conditions outlined in 2 CFR §475(c)(2). See also 2 CFR §432.

NSF prior written approval is required for travel costs for dependents and must be requested viaResearch.gov. NSF approval of such changes will be by an amendment to the award.

Temporary dependent care costs (as dependent is defined in 26 United States Code (USC) §152) above and beyond regular dependent care that directly results from travel to conferences is allowable as outlined in 2 CFR §200.475(c)(1).

- c. Use of United States (U.S.)-Flag Air Carriers
- 1. In accordance with the Fly America Act (49 USC §40118), any air transportation to, from, between, or within a country other than the U.S. of persons or property, the expense of which will be assisted by NSF funding, must be performed by or under a code-sharing arrangement with a U.S.-flag air carrier if service provided by such a carrier is available (see Comptroller General Decision B-240956, dated September 25, 1991). Tickets (or documentation for electronic tickets) must identify the U.S. flag air carrier's designator code and flight number.
- 2. For the purposes of this requirement, U.S.-flag air carrier service is considered available even though:
- (a) comparable or a different kind of service can be provided at less cost by a non-U.S. flag air carrier;
- (b) non-U.S. flag air carrier service is preferred by, or is more convenient for, NSF or traveler; or
- (c) service by a non-U.S.-flag air carrier can be paid for in excess foreign currency.
- 3. The following rules apply unless their application would result in the first or last leg of travel from or to the U.S. being performed by a non-U.S. flag air carrier:

- (a) a U.S.-flag air carrier shall be used to destination or, in the absence of direct or through service, to the farthest interchange point on a usually traveled route.
- (b) if a U.S.-flag air carrier does not serve an origin or interchange point, a non-U.S. flag air carrier shall be used only to the nearest interchange point on a usually traveled route to connect with a U.S. flag air carrier.

d. Use of Non-U.S. Flag Air Carriers

There are certain circumstances under which use of a non-U.S. flag air carrier is permissible. These circumstances are outlined below:

1. Airline "Open Skies" Agreements

A non-U.S. flag air carrier may be used if the transportation is provided under an air transportation agreement between the United States and a foreign government, which the Department of Transportation has determined meets the requirements of the Fly America Act. For information on "open skies" agreements in which the United States has entered, please refer to the General Services Administration (GSA) website.

Note on U.S./European Union Open Skies Agreement

In 2007, the U.S. entered into an "Open Skies" Agreement with the European Union ("EU"). This agreement was modified in June 2010. The current Agreement gives European Community airlines (airlines of Member States) the right to transport passengers and cargo on flights funded by the U.S. government, when the transportation is between: (1) any two points outside the United States; or (2) a point in the United States and any point outside the United States that the EU airline is authorized to serve under the "Open Skies" Agreement.

In 2011, two significant changes were made to the U.S./EU Open Skies Agreement. First, EU airlines are now granted the right to transport civilian agency-funded passengers who are NOT eligible to travel on GSA Airline City Pair Contract fares (e.g., awardees) between a point in the United States and a point outside the United States even if there is a GSA Airline City Pair Contract fare in effect between the origin and destination points. An individual, however, who is traveling on a route for which there is a City Pair Contract fare in effect, and who is eligible for such a fare (e.g., Federal employee), will be required to fly on a U.S. carrier, absent another applicable exception.

Second, under the amended Agreement, EU airlines are now authorized to transport passengers between points in the United States and points outside the EU if the EU airline is authorized to serve the route under the Agreement. This includes flights that originate, arrive, or stop in the EU. Prior to this change, EU airlines were limited to flying passengers between points in the U.S. and points in the EU.

2. Involuntary Rerouting

Travel on a non-U.S. flag air carrier is permitted if a U.S.-flag air carrier involuntarily reroutes the traveler via a non-U.S. flag air carrier, notwithstanding the availability of alternative U.S.-flag air carrier service.

3. Travel To and From the U.S. on non-European Community Airlines

Use of a non-European Community non-U.S. flag air carrier is permissible if the airport abroad is:

- (a) the traveler's origin or destination airport, and use of U.S.-flag air carrier service would extend the time in a travel status by at least 24 hours more than travel by a non-U.S. flag air carrier; or
- (b) an interchange point and use of U.S.-flag air carrier service would increase the number of aircraft changes the traveler must make outside of the U.S. by two or more, would require the traveler to wait four hours or more to make connections at that point, or would extend the time in a travel status by at least six hours more than travel by a non-U.S. flag air carrier.
- 4. Travel Between Points Outside the U.S. on non-European Community Airlines

Use of a non-European Community non-U.S. flag air carrier is permissible if:

- (a) travel by a non-U.S. flag air carrier would eliminate two or more aircraft changes en route:
- (b) travel by a U.S.-flag air carrier would require a connecting time of four hours or more at an overseas interchange point; or
- (c) the travel is not part of the trip to or from the U.S. and use of a U.S.-flag air carrier would extend the time in a travel status by at least six hours more than travel by a non-U.S. flag air carrier.

5. Short Distance Travel

For all short distance travel, regardless of origin and destination, use of a non-U.S. flag air carrier is permissible if the elapsed travel time on a scheduled flight from origin to destination airport by a non-U.S. flag air carrier is three hours or less and service by a U.S.-flag air carrier would double the travel time.

10. Rearrangement and Reconversion Costs

- a. Costs incurred for ordinary and normal rearrangement and alteration of facilities are allowable as indirect costs.
- b. Rearrangement and reconversion costs incurred specifically for the NSF award aggregating \$25,000 or less to adapt space or utilities within a completed structure to accomplish the objectives of the award, are allowable and approved, provided the:
- 1. building has a usable life consistent with project purposes and is architecturally suitable for conversion;
- 2. rearrangement and reconversion costs are essential to the project supported by the award; and

- 3. space involved will be occupied by the project. In situations where the space is rented, in order for the costs of the rearrangement and reconversion to be allowed, the awardee must secure a lease for the length of the project.
- c. Rearrangement and reconversion costs exceeding \$25,000 require NSF prior written approval via Research.gov. Note that Appendix II of 2 CFR §200 contains provisions that must be included in contracts made by the awardee.

11. Allowable Costs

- a. The allowability of costs² and cost allocation methods for work performed under this award, up to the amount specified in the award, shall be determined in accordance with the governing cost principles as specified below and must conform with NSF policies, award special provisions and awardee internal policies in effect on the start date of the award.
- b. The cost principles that govern Federal awards can be found in 2 CFR §200, Subpart E.
- c. Separate guidance for for-profit organizations can be found in the *Federal Acquisition Regulation*, Part 31.
- d. Certain prior approval requirements contained in the governing cost principles have been modified by Article 2.

12. Payments

- a. Except as noted in PAPPG Chapter VIII.C, NSF awardees are required to request payments electronically through the Award Cash Management Service (ACM\$). Under ACM\$, the awardee must provide award level detail at the time of the payment request. The awardee should request payments in amounts necessary to meet their current needs, pursuant to the guidelines contained in 31 CFR Part 205. Unless otherwise specified in the award, the awardee agrees to comply with all applicable Treasury regulations and National Science Foundation implementing and reporting procedures, which are outlined in PAPPG Chapter VIII.
- b. In accordance with 2 CFR §200.305, where appropriate, the awardee is required to maintain advances of Federal funds in interest-bearing accounts. The awardee may retain interest earned on amounts up to \$500 per year for administrative expenses. Any additional interest earned on Federal advance payments deposited in interest-bearing accounts must be remitted annually to the Department of Health and Human Services Payment Management System (PMS) through an electronic medium using either the Automated Clearing House (ACH) network or a Fedwire Funds Service payment. Instructions on submission of remittances is contained in 2 CFR §200.305(b)(9).

13. Continuing Grant Increments

Unless otherwise specified, each successive increment of a continuing grant will be funded at the level specified in the original award notice without a formal request from the awardee, provided an annual project report has been received from the Principal Investigator(s) and accepted by the cognizant NSF Program Officer.

² Consistent with 2 CFR §200.453(c), for computing devices, charging as a direct cost is allowable for devices that are essential and allocable, but not solely dedicated, to the performance of the award.

Continuing funding is contingent on (1) availability of funds; (2) satisfactory scientific/technical progress; and (3) any special conditions of the award.

14. Project Reporting Requirements

- a. Annual Project Reports
- 1. Submission Requirement. Annual project reports are required for standard and continuing grants and cooperative agreements.³
- 2. Content of Annual Project Reports. Unless otherwise specified in the award, the Research Performance Progress Report (RPPR), as implemented by NSF in Research.gov, must be used for preparation of annual project reports to address progress in all activities of the project, including any activities intended to address the Broader Impacts criterion that are not intrinsic to the research. The awardee shall include subaward activities in annual project reports that are submitted to NSF.
- 3. Timing of Annual Project Reports. Annual project reports must be submitted electronically, via Research.gov, no later than 90-days prior to the end of the current budget period to provide sufficient time for review and approval by the cognizant NSF Program Officer. The report becomes overdue the day after the end of the current budget period if it has not been submitted by the PI or co-PI and approved by the cognizant NSF Program Officer.

The report becomes overdue the day after the 90-day period ends. Failure to submit timely reports will delay NSF processing of additional funding and administrative actions, including, but not limited to, no-cost extensions. In the case of continuing grants, failure to submit timely reports will delay processing of funding increments.

It should be noted that the final annual report serves as the project's final report and must be submitted in accordance with paragraph b. below.

Continuing grants also are subject to the same policies regarding report submission as outlined in this Article. For continuing grants that have a duration of 18 months or more per increment, two annual reports are required. A report must be submitted for the first 12 months of the project, and then another report for the remaining months of the increment. Continuing grants which include an increment of 24 months will require an annual report for each 12-month period.

- b. Final Annual Project Report
- 1. Submission Requirement. A final annual project report is required for standard and continuing grants and cooperative agreements.
- 2. Content of Final Annual Project Report. The final annual project report is the last annual report of the project and should be written specifically for the most recently completed budget period. It should address progress in all activities of the project in its final year, including any activities intended to address the Broader Impacts criterion that are not intrinsic to the research.

³ Submission of an "interim" report via Research.gov does not constitute compliance with the annual reporting requirement.

This report is not cumulative. By submitting the final annual project report, the PI or co-PI is signifying that the scope of work for the project has been completed and that the PI or co-PI does not anticipate that any further research activities (including a no-cost extension, supplemental funding, or transfer of the award) need to be completed on the project. Submission of the final annual project report, however, does not preclude the awardee from requesting any further payments for costs incurred during the period of performance.

- 3. Timing of Final Annual Project Report. Unless otherwise specified in the award, the final annual project report must be submitted in Research.gov no later than 120-days following the end date of the award. As reflected in the Project Report System, the report is considered due during the 120-day period. If the report has not been submitted by the PI or co-PI and approved by the cognizant NSF Program Officer within the 120-day period, the report becomes overdue.
- 4. Additional Requirements. The awardee also shall provide to the cognizant NSF Program Officer, within 120-days following the end date of the award:
- any unique reports or other end items specified in the award, including any reporting requirements set forth in any NSF brochure, guide, solicitation, etc., referenced in the award as being directly related to either the award or the administration of the award.
- a final cost share notification documented and certified by the AOR for awards where there is mandatory cost sharing established for the program.
- c. Update of Current Support in Annual and Final Annual Project Reports

Pls and co-Pls on active NSF awards must indicate if there has been a change in active other support since submission of the proposal, or the last reporting period in their annual and final annual project report. If there has been a change, the individual must submit a revised current and pending (other) support document as part of their project report.

NSF may consult with the PI or co-PI and the AOR, if necessary, and determine the impact of the new information on the NSF-funded award, and, where necessary, take appropriate action.

- d. Project Outcomes Report for the General Public
- 1. Submission Requirement. A project outcomes report is required for standard and continuing grants and cooperative agreements.
- 2. Content of Project Outcomes Report. This report serves as a brief summary, prepared specifically for the public, of the nature and outcomes of the project.

Section Contents:

a. Describe the project outcomes or findings that address the intellectual merit and broader impacts of the work as defined in the NSF merit review criteria. This description should be a brief (generally, two to three paragraphs) summary of the project's results that is written for the lay reader. Pls or co-Pls are strongly encouraged to avoid use of jargon, terms of art, or acronyms.

- b. NSF will automatically include all publications associated with the award that are reported in annual and final annual project reports. Other products that have resulted from the award may also be listed. Examples of other products include collections, data sets, software, as well as educational materials.
- c. Information regarding anticipated publication of project results, as well as any other information that would be of interest to the public also may be included in this section.

Awardees are to ensure that the report does not contain any confidential, proprietary business information; unpublished conclusions or data that might compromise the ability to publish results in the research literature; or invention disclosures that might adversely affect the patent rights or those of the organization, in a subject invention under the award. The project outcomes report must not contain any personally identifiable information such as home contact information, individual demographic data or individually identifiable information collected from human research participants.

The report will be posted electronically by NSF exactly as it is submitted and will be accompanied by the following disclaimer:

"This Project Outcomes Report for the General Public is displayed verbatim as submitted by the Principal Investigator (PI) for this award. Any opinions, findings, and conclusions or recommendations expressed in this Report are those of the PI and do not necessarily reflect the views of the National Science Foundation; NSF has not approved or endorsed its content."

- 3. Timing of Project Outcomes Report. The project outcomes report must be submitted in Research.gov no later than 120 days following the end date of the award. The report becomes overdue the day after the 120-day period ends if it has not been submitted by the PI or co-PI. By submitting the project outcomes report, the PI or co-PI is signifying that the scope of work for the project has been completed and that the PI or co-PI does not anticipate that any further research activities (including a no-cost extension, supplemental funding, or transfer of the award) need to be completed on the project. Submission of the project outcomes report, however, does not preclude the awardee from requesting any further payments for costs incurred during the period of performance. For information about the content of the report, see PAPPG Chapter VII.D.3.
- e. Compliance with Reporting Requirements

In accordance with 2 CFR §200.344(i), if the awardee does not submit all required reports within one year of the period of performance end date, NSF must report the awardee's material failure to comply with the terms and conditions of the award with the Office of Management and Budget (OMB)-designated integrity and performance system (currently Federal Awardee Performance and Integrity Information System (FAPIIS)). NSF may also pursue other enforcement actions per 2 CFR §200.339.

15. Expenditure Reports

The awardee must submit final payment requests through ACM\$ no later than 120 calendar days after the end date of the award. This requirement applies to all current awards and funding amendments to existing NSF awards, as well as to all new NSF awards.

NSF uses the payment request entries in ACM\$ to collect the final financial data for awards paid through that system. No additional interim or final financial reporting is required.

For instructions regarding final disbursement reporting, see PAPPG Chapter VIII.E.

16. Responsible and Ethical Conduct of Research

The plan to provide appropriate training and oversight in the responsible and ethical conduct of research to <u>faculty and other senior personnel</u> who will be supported by NSF to conduct research will go into effect for new proposals submitted or due on or after July 31, 2023.

In accordance with Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (42 USC §1862o-1), as amended, NSF requires that the awardee must have a plan in place to provide appropriate training and oversight in the responsible and ethical conduct of research (RECR) to undergraduate students, graduate students, postdoctoral researchers, faculty, and other senior personnel who will be supported by NSF to conduct research. Such training must include mentor training and mentorship. Training plans are subject to review, upon request.

The awardee must designate one or more persons to oversee compliance with the RECR training requirement. The awardee is responsible for verifying that undergraduate students, graduate students, postdoctoral researchers, faculty, and other senior personnel supported by NSF to conduct research have received training in the responsible and ethical conduct of research, in accordance with the plan the awardee has put in place for their organization.

The awardee shall ensure that these RECR requirements flow down to all subrecipients or are otherwise appropriately addressed in the subaward.

17. Safe and Inclusive Working Environments for Off-Campus or Off-Site Research

For awards that conduct research off-campus or off site⁴, the awardee is required to have a plan in place for that awarded proposal that describes how the following types of behavior will be addressed:

- Abuse of any person, including, but not limited to, 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 unwelcome, offensive, indecent, obscene, or disorderly.

The plan should also identify steps the awardee will take to nurture an inclusive off-campus or off-site working environment, e.g., trainings; processes to establish shared team definitions of roles, responsibilities, and culture, e.g., codes of conduct; and field support, such as mentor/mentee support mechanisms, regular check-ins, and/or developmental events.

⁴ For purposes of this requirement, off-campus or off-site research is defined as data/information/samples being collected off-campus or off-site, such as fieldwork and research activities on vessels and aircraft.

Communications within team and to the awardee should be considered in the plan, minimizing singular points within the communications pathway (e.g., a single person overseeing access to a single satellite phone), and any special circumstances such as the involvement of multiple organizations or the presence of third parties in the working environment should be taken into account. The process or method for making incident reports as well as how any reports received will be resolved should also be accounted for.

The plan must be disseminated to individuals participating in the off-campus or off-site research prior to departure. Awardees are not required to submit the plan for review by NSF, however, the plan is subject to review, upon request.

18. Reporting Subawards and Executive Compensation

This award term was extracted verbatim from Appendix A to Part 170. For these purposes, the term "you" means the NSF awardee.

- a. Reporting of first-tier subawards
- 1. Applicability. Unless exempt as provided in paragraph d. of this award term, you must report each action that equals or exceeds \$30,000 in Federal funds for a subaward to a non-Federal entity or Federal agency (see definitions in paragraph e. of this award term).
- 2. Where and when to report
- (i) The non-Federal entity or Federal agency must report each obligating action described in paragraph a.1. of this award term to http://www.fsrs.gov.
- (ii) For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)
- 3. What to report. You must report the information about each obligating action that the submission instructions posted at http://www.fsrs.gov specify.
- b. Reporting total compensation of recipient executives for non-Federal entities.
- 1. Applicability and what to report. You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if:
- i. the total Federal funding authorized to date under this Federal award equals or exceeds \$30,000 or more as defined in 2 CFR §170.320;
- (ii) in the preceding fiscal year, you received—
- (A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
- (B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

- (iii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.)
- 2. Where and when to report. You must report executive total compensation described in paragraph b.1.of this award term:
- (i) As part of your registration profile at https://www.sam.gov.
- (ii) By the end of the month following the month in which this award is made, and annually thereafter.
- c. Reporting of Total Compensation of Subrecipient Executives
- 1. Applicability and what to report. Unless you are exempt as provided in paragraph d. of this award term, for each first-tier non-Federal entity subrecipient under this award, the recipient shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if-
- (i) in the subrecipient's preceding fiscal year, the subrecipient received—
- (A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
- (B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and
- (ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.)
- 2. Where and when to report. You must report subrecipient executive total compensation described in paragraph c.1.of this award term:
- (i) To the recipient.
- (ii) By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d. Exemptions

If, in the previous tax year, you had gross income, from all sources, under \$300,000, you are exempt from the requirements to report:

(i) Subawards,

and

- (ii) The total compensation of the five most highly compensated executives of any subrecipient.
- e. Definitions. For purposes of this award term:
- 1. Federal Agency means a Federal agency as defined at 5 U.S.C. 551(1) and further clarified by 5 U.S.C. 552(f)
- 2. *Non-Federal entity* means all of the following, as defined in 2 CFR part 25:
- (i) A Governmental organization, which is a State, local government, or Indian tribe;
- (ii) A foreign public entity;
- (iii) A domestic or foreign nonprofit organization; and,
- (iv) A domestic or foreign for-profit organization.
- 3. *Executive* means officers, managing partners, or any other employees in management positions.
- 4. Subaward:
- (i) This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
- (ii) The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see 2 CFR §200.330).
- (iii) A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.
- 5. Subrecipient means a non-Federal entity or Federal agency that:
- (i) Receives a subaward from you (the recipient) under this award; and
- (ii) Is accountable to you for the use of the Federal funds provided by the subaward.
- 6. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)).

19. System for Award Management and Universal Identifier Requirements

This award term was extracted verbatim from Appendix A to Part 25. For these purposes, the term "you" means the NSF awardee.

A. Requirement for System for Award Management

Unless you are exempted from this requirement under 2 CFR §25.110, you as the recipient must maintain current information in the SAM. This includes information on your immediate and highest level owner and subsidiaries, as well as on all of your predecessors that have been awarded a Federal contract or Federal financial assistance within the last three years, if applicable, until you submit the final financial report required under this Federal award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another Federal award term.

B. Requirement for Unique Entity Identifier

If you are authorized to make subawards under this Federal award, you:

- 1. Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward from you until the entity has provided its Unique Entity Identifier to you.
- 2. May not make a subaward to an entity unless the entity has provided its Unique Entity Identifier to you. Subrecipients are not required to obtain an active SAM registration but must obtain a Unique Entity Identifier.
- C. Definitions

For purposes of this term:

- 1. System for Award Management (SAM) means the Federal repository into which a recipient must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the SAM Internet site (currently at https://www.sam.gov).
- 2. Unique Entity Identifier means the identifier assigned by SAM to uniquely identify business entities.
- 3. *Entity* includes non-Federal entities as defined at 2 CFR §200.1 and also includes all of the following, for purposes of this part:
- a. A foreign organization;
- b. A foreign public entity;
- c. A domestic or foreign for-profit organization; and
- d. A Federal agency.

- 4. Subaward has the meaning given in 2 CFR §200.1.
- 5. Subrecipient has the meaning given in 2 CFR §200.1.

20. Information Collection

Information collection activities performed under this award are the responsibility of the awardee, and NSF support of the project does not constitute NSF approval of the survey design, questionnaire content, or information collection procedures. The awardee shall not represent to respondents that such information is being collected for or in association with the National Science Foundation or any other U.S. Government agency without the specific written approval of such information collection plan or device by NSF. This requirement, however, is not intended to preclude mention of NSF support of the project in response to an inquiry or acknowledgment of such support in any publication of this information.

21. Copyrighted Material

a. Definition

Subject writing means any material that:

- 1. is or may be copyrighted under Title 17 of the USC; and
- 2. is produced by the awardee or its employees in the performance of work under this award.

Subject writings include such items as reports, books, journal articles, software, databases, sound recordings, videotapes, and videodiscs.

b. Copyright Ownership, U.S. Government License

Except as otherwise specified in the award or by this paragraph, the awardee may own or permit others to own copyright in all subject writings. The awardee agrees that if it or anyone else does own copyright in a subject writing, the U.S. government will have a nonexclusive, nontransferable, irrevocable, royalty-free license to exercise or have exercised for or on behalf of the U.S. throughout the world all the exclusive rights provided by copyright. Such license, however, will not include the right to sell copies or phonorecords of the copyrighted works to the public.

c. Awards Affected by International Agreements

If the award indicates it is subject to an identified international agreement or treaty, NSF can direct the awardee to convey to any foreign participant or otherwise dispose of such rights to subject writings as are required to comply with that agreement or treaty.

d. Awardee Action to Protect U.S. Government Interests

The awardee agrees to acquire, through written agreement or an employment relationship, the ability to comply with the requirements of the preceding paragraphs and, in particular, to acquire the ability to convey rights in a subject writing to a foreign participant if directed by NSF under the previous paragraph. The awardee further agrees that any transfer of copyright or any other rights to a subject writing, by it or anyone whom it has allowed to own such rights, will be made subject to the requirements of this article.

22. Public Access to Copyrighted Material

NSF's policy on public access to copyrighted material (<u>Public Access Policy</u>) reflects the Foundation's commitment to making certain that, to the extent possible, the American public, industry and the scientific community have access to the results of federally funded scientific research. Pursuant to this policy, the awardee must ensure that all articles in peer-reviewed scholarly journals and papers in juried conference proceedings:

- are deposited in a public access compliant repository (as identified in the Public Access Policy);
- are available for download, reading and analysis within 12 months of publication;
- possess a minimum set of machine-readable metadata elements as described in the Public Access Policy;
- are reported in annual and final annual reports with a persistent identifier.

Either the final printed version or the final peer-reviewed manuscript is acceptable for deposit.

23. Program Income

a. Definition

The following provisions implement applicable portions of 2 CFR §200.307. *Program income* means gross income earned by the awardee that is directly generated by a supported activity or earned as a result of the award during the period of performance.

Except as otherwise provided in Federal statutes, regulations, or the terms and conditions of the award, program income does not include rebates, credits, discounts, and interest earned on any of them. Note that registration fees collected under NSF-supported conferences are considered program income.

b. NSF Policy

1. Standard Treatment

Unless otherwise specified in the award, program income received or accruing to the awardee during the period of the award is to be retained by the awardee, added to the funds committed to the project by NSF, and thus used to further project objectives. The awardee has no obligation to NSF with respect to program income received beyond the period of the award. The awardee also shall have no obligation to NSF with respect to program income earned from license fees and royalties for copyrighted material, patents, patent applications, trademarks, and inventions produced under an award (see PAPPG Chapter VIII.D.4). However, Patent and Trademark Amendments (35 USC §18) shall apply to inventions made under an award.

Efforts should be made to avoid having unexpended program income remaining at the end date of the award. Program income earned during the project period should be expended prior to requesting reimbursement against the award. In the event an awardee has unexpended program income remaining at the end of the award, it must be remitted to NSF by crediting costs otherwise chargeable against the award. If it is not possible to record the credit via ACM\$, the excess program income must be remitted to NSF electronically or by check payable to the National Science Foundation.

2. Special Treatment

In exceptional circumstances, NSF may approve use of a special award provision to restrict or eliminate an awardee's control of income earned through NSF-supported activities if it determines that this would best serve the purposes of a particular program or award. The special provisions may require treatment of the program income via use of the deductive method, the Federal share of program income be kept in a separate account or reported on and/or remitted for such periods as may be reasonable under the circumstances.

If, in accordance with the award terms and conditions program income is designated for deductive treatment, it must be remitted to NSF by crediting costs otherwise chargeable against the award. Program income in excess of the award will be remitted to NSF electronically or by check payable to the National Science Foundation.

c. Records Retention

The awardee is required to retain appropriate financial and other records relating to program income earned during the award period of performance and for three years beyond the date of submission of the final financial disbursements in ACM\$. For instructions regarding final disbursement reporting, see PAPPG Chapter VII.E.

d. Reporting Requirements

On an annual basis, the awardee is required to submit a Program Income Reporting Worksheet to NSF in order to report program income earned and expended for any of their awards or to validate that they did not earn and expend program income for any of their awards during the applicable period.

The Program Income Reporting Worksheet utilizes the standard OMB-approved Government-wide data elements from the Program Income section of the Federal Financial Report (SF 425) and is due 45 days after the end of the Federal Fiscal Year. The Program Income Reporting Worksheet and related instructions are available through Research.gov (http://research.gov/programincome).

Failure to report program income or to validate that no program income was earned/expended could result in suspension of future award payments.

24. Publications

a. Acknowledgment of Support

The awardee is responsible for assuring that an acknowledgment of NSF support:

1. is made in any publication (including World Wide Web sites) of any material based on or developed under this project, in the following terms:

"This material is based upon work supported by the National Science Foundation under Award No. (NSF award number)."

2. is orally acknowledged during all news media interviews, including popular media such as radio, television, and news magazines.

b. News Releases

The awardee is strongly encouraged to consult with and notify the cognizant NSF Program Officer or designee prior to issuing news releases concerning NSF-supported activities.

c. Disclaimer

The awardee is responsible for assuring that every publication of material (including World Wide Web pages) based on or developed under this award, except scientific articles or papers appearing in scientific, technical, or professional journals, contains the following disclaimer:

"Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation."

d. Copies for NSF

The awardee is responsible for assuring that the cognizant NSF Program Officer is provided access to, either electronically or in paper form, a copy of every publication of material based on or developed under this award, clearly labeled with the award number and other appropriate identifying information, promptly after publication.

25. Intangible Property

Unless otherwise specified in the award notice, if this award is for experimental, developmental, or research work, the clause found in PAPPG Chapter XI.D.1 (implementing the Bayh-Dole Act, [35 USC §200 et seq.]) applies. The awardee will include that clause in all subawards for experimental, developmental, or research activities.

26. Cost Sharing or Matching

a. General

- 1. The awardee must cost share in accordance with any amount specified on Line M of the award budget. Cost sharing participation in other projects may not be counted towards meeting the specific cost sharing requirements of the award and must come from non-Federal sources.
- 2. Should the awardee become aware that it may be unable to provide the cost sharing of at least the amount identified on Line M of the NSF award budget, it must: a) immediately provide written notification to the cognizant NSF Grants and Agreements Officer of the situation; and b) indicate steps it plans to take to secure replacement cost sharing; or c) indicate the plans it has to either continue or phase out the project in the absence of the approved level of cost sharing.
- 3. Should NSF agree to the organization's proposed plans, the cognizant NSF Grants and Agreements Officer will modify the award accordingly, including, if appropriate, reducing the amount of NSF support. Should the organization's plans be unacceptable to NSF, the award may be subject to termination. NSF modifications to proposed cost sharing revisions are made on a case-by-case basis.
- 4. Failure by the organization to notify NSF, in accordance with paragraph 2. above, may result in the disallowance of some or all of the costs charged to the award; the subsequent recovery by NSF of some or all of the NSF funds provided under the award; possible termination of the award; and may constitute a violation of the terms of the award so serious as to provide grounds for subsequent suspension or debarment.

b. Cost Sharing Records

The awardee must maintain records of all project costs that are claimed by the awardee as cost sharing as well as records of costs to be paid by the Government. Such records are subject to audit. Acceptable forms of cost sharing contributions are those that meet the criteria identified in 2 CFR §200.306. Unless otherwise specified in the award, approval is given to include unrecovered indirect costs as part of cost sharing or matching contributions. If the awardee's cost participation includes in-kind contributions, the basis for determining the valuation for volunteer services and donated property must be documented.

c. Cost Sharing Reports

The amount of mandatory cost sharing must be documented (on an annual and final basis), certified by the Authorized Organizational Representative, and reported to the cognizant NSF Program Officer via Research.gov. Such notifications must be submitted no later than 90 days prior to the end of the current budget period to meet the annual notification requirement, and no later than 120 days following the end date of the award to meet the final notification requirement. The cost share notification is considered due during the 90- or 120-day period respectively. The notification becomes overdue the day after the respective 90- or 120-day period ends.

27. Audit and Records

- a. Financial records, supporting documents, statistical records, and other records pertinent to this award must be retained by the awardee for a period of three years from submission of the Final Annual Project Report specified in Article 14b.
- 1. Records that relate to audits, appeals, litigation, or the settlement of claims arising out of the performance of the project must be retained until final disposition of such audits, appeals, litigation, or claims has been reached.
- 2. Records relating to projects subject to special project income provisions must be retained until three years from the end of the awardee's fiscal year in which the award requirement for reporting income expires.
- b. Unless court action or audit proceedings have been initiated, the awardee may substitute electronic copies of original records.
- c. The Director of the National Science Foundation and the Comptroller General of the U.S., or any of their duly authorized representatives, shall have access to any pertinent books, documents, papers, and records of the awardee and of the performing organization, if different, to make audits, examinations, excerpts, and transcripts. Further, any negotiated contract in excess of the simplified acquisition threshold (currently \$250,000) made by the awardee shall include a provision to the effect that the awardee, the Director of the National Science Foundation, the Comptroller General of the U.S., or any of their duly authorized representatives shall have access to pertinent records for similar purposes.
- d. In order to avoid duplicate record keeping, NSF may make special arrangements with the awardee to retain any records that are needed for joint use. NSF may request transfer to its custody of records not needed by the awardee when it determines that the records possess long-term retention value. When the records are transferred to or maintained by NSF the three-year retention requirement is not applicable to the awardee. In the rare event that this provision is exercised, NSF will negotiate a mutually agreeable arrangement with the awardee regarding reimbursement of costs.

28. Site Visits

NSF, through authorized representatives, has the right, at all reasonable times, to make site visits to review project accomplishments and management control systems and to provide such technical assistance as may be required. If any site visit is made by NSF on the premises of the awardee or a subrecipient under an award, the awardee shall provide and shall require its subrecipients to provide all reasonable facilities and assistance for the safety and convenience of the U.S. Government representatives in the performance of their duties. All site visits and evaluations shall be performed in such a manner that will not unduly delay the work.

29. Termination and Enforcement

- a. Any suspension or termination action taken by NSF must be issued by a cognizant NSF Grants and Agreements Officer and will be in accordance with this article, 2 CFR §200.340, and PAPPG Chapter XII.A.
- b. The award may be suspended or terminated in whole or in part in any of the following situations:
- 1. By NSF, if the awardee fails to comply with the terms and conditions of a Federal award;
- 2. By NSF, to the greatest extent authorized by law, if an award no longer effectuates the program goals or agency priorities;
- 3. By NSF, with the consent of the awardee, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated.
- 4. By the awardee upon sending to NSF written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if NSF determines in the case of partial termination that the reduced or modified portion of the NSF award will not accomplish the purposes for which the NSF award was made, NSF may terminate the Federal award in its entirety;
- 5. By NSF, pursuant to termination provisions included in the NSF award; or
- 6. By NSF, when ordered by the Deputy Director under NSF's Regulation on Research Misconduct [45 CFR Part 689].
- c. Normally, action by NSF to suspend or terminate an award will be taken only after the awardee has been informed by NSF of any deficiency on its part and given an opportunity to correct it. NSF, however, may immediately suspend or terminate the award without notice when it believes such action is reasonable to protect the interests of the Government.
- d. No costs incurred during a suspension period or after the effective date of a termination will be allowable, except those costs which, in the opinion of NSF, the awardee could not reasonably avoid or eliminate, or which were otherwise authorized by the suspension or termination notice, provided such costs would otherwise be allowable under the terms of the award and the governing cost principles.

- e. Within 30 days of the termination date, the awardee will furnish a summary of progress under the award and an itemized accounting of costs incurred prior to the termination date or pursuant to d, above. Final allowable costs under a termination settlement shall be in accordance with the terms of the award, including this article, and the governing cost principles, giving due consideration to the progress under the award. In no event will the total of NSF payments under a terminated award exceed the award amount, or the NSF pro rata share of the total project costs when cost sharing was anticipated, whichever is less.
- f. When an NSF award is terminated or partially terminated, both NSF and the awardee remain responsible for compliance with the requirements in 2 CFR §§200.344 and 200.345.
- g. A notice of termination other than by mutual agreement and/or the final settlement amount may be subject to review pursuant to Article 30.
- h. NSF will report award terminations to the OMB-designated integrity and performance system in accordance with Federal regulation, but only after the awardee has had an opportunity to exhaust the review procedures contained in PAPPG Chapter XII.B. See also Article 14.e for additional information on FAPIIS.

30. Termination Review Procedure

- a. A request for review of a notice of termination or settlement should be addressed to the Division Director, Division of Grants and Agreements, National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA, 22314. It must be postmarked no later than 30 days after the date of the letter notifying the awardee of the termination or settlement.
- b. The request for review must contain a full statement of the awardee's position with respect to the disputed matter and the facts and rationale that support the awardee's position.
- c. Review of a notice of termination or settlement will be conducted in accordance with PAPPG Chapter XII.B.3.
- d. Pending resolution of the request for review, the notice of termination shall remain in effect.

31. Human Research Subjects

The awardee is responsible for the protection of the rights and welfare of any human subjects involved in research, development, and related activities supported by this award. The awardee agrees to comply with the NSF regulation, entitled, "*Protection of Human Subjects* [45 CFR Part 690]."

32. Potential Life Sciences Dual Use Research of Concern (DURC)

This Article applies to all research, for which NSF award funds may be used, that potentially falls within the scope of the *US Government Policy for Institutional Oversight of Life Sciences Dual Use Research of Concern*, as published in September 2014, and/or would fall under the Department of Health and Human Services *Framework for Guiding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens*, as published in January 2017, hereafter referred to as the "Policy". See also PAPPG Chapter XI.B.5.

The awardee is responsible for monitoring the research progress and for implementation of all appropriate biosafety and biosecurity risk mitigation measures including compliance with all applicable laws and regulations related to that implementation, including the Policy specified above. While the White House Office of Science and Technology Policy has lifted the research funding pause on gain of function research as of January 2017, NSF will not consider funding research that would lead to a gain of function for agents associated with the U.S. Government Policy on Dual Use Research of Concern. NSF will not fund research that involves the creation, transfer or use of enhanced potential pandemic pathogens except under special circumstances where the potential benefits to society far outweigh the risks and all other conditions of the Policy are met.

- Each organization involved in the conduct of NSF-supported research that utilizes select agents or other enhanced potential pandemic pathogens, as defined by the Policy, must have a standing Institutional Biosafety Committee (IBC) or other Institutional Review Entity (IRE) whose role is the review of research involving agents covered by the Policy.
- Use of the select agents or other potential pandemic pathogens as defined by the Policy must be registered with the U.S. Centers for Disease Control and Prevention or the U.S. Department of Agriculture as directed under the Select Agent Regulations.
- In the rare cases where NSF funds research that involves the creation, transfer, or use of enhanced potential pandemic pathogens, then special award conditions will be applied to ensure adequate oversite by the cognizant NSF Program Officer or other NSF official. Award terms and conditions also will specify the establishment of a risk mitigation plan for the research that must be reviewed and approved by the IRE and NSF, as well as the requirement of maintenance of records of institutional review of the research and risk mitigation activities for three years after completion of the project.

33. Investigator Financial Disclosure Policy

If the awardee employs more than 50 persons, the awardee must maintain an appropriate written and enforced policy on conflict of interest consistent with the provisions of PAPPG Chapter IX.A.

34. Animal Welfare

Awards involving the care or use of live vertebrate animals shall comply with all applicable laws in the foreign country where the activities will be conducted and the International Guiding Principles for Biomedical Research Involving Animals will be followed.

35. Trafficking in Persons

Awardees shall comply with the Trafficking Victims Protection Act of 2000 (22 USC §7104(g)) as implemented by 2 CFR §175.

36. Research Involving Recombinant or Synthetic Nucleic Acid Molecules Outside the U.S.

If this award supports research involving recombinant or synthetic nucleic acid molecules that is performed outside of the U.S. using funds provided by NSF for transportation, salaries, or direct research expenses, the awardee agrees to comply with the *Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules* (NIH Guidelines) including the procedural requirements and any subsequent revisions as they are published in the Federal Register or host country standards. If the research is to be carried out in a country that has adopted guidelines comparable to those of the U.S., a document with information and endorsements assuring compliance to the host organization standards must be submitted to the cognizant NSF Program Officer.

NSF funds may not be used to carry out research using recombinant or synthetic nucleic acid molecules research in a country that has not adopted national guidelines unless the research is in full compliance with the NIH Guidelines and the procedures required for NSF-supported research within the U.S. Further information on research awards that involve recombinant or synthetic nucleic acid molecules can be found in PAPPG Chapter XI.B.2.

37. Whistleblower Protection

The awardee is notified of the applicability of 41 USC §4712, as amended by Public Law (P.L.) 112-239, providing protection for whistleblowers.

38. Build America, Buy America

a. The awardee is subject to the Buy America Sourcing requirements under the Build America, Buy America provisions of the Infrastructure Investment and Jobs Act (IIJA) (P.L. 117-58, §§70911-70917) when using Federal funds for the purchase of goods, products, and materials on any form of construction, alteration, maintenance, or repair of infrastructure in the United States regardless of the appropriation.

These sourcing requirements require that all iron, steel, manufactured products, and construction materials used in Federally funded infrastructure projects must be produced in the United States. The awardee must implement these requirements in its procurements, and this article must flow down to all subawards and contracts at any tier. For legal definitions and sourcing requirements, the awardee must consult NSF's Implementation of the Act on the Build America, Buy America website.

b. When supported by rationale provided in IIJA §70914, the awardee must submit a waiver request to the cognizant NSF Program Officer and Grants and Agreements Officer. Non-compliant purchases must not be made in advance of waiver approval. Guidance on the submission of an NSF waiver request is available on the Build America, Buy America website.

39. Recipient Integrity and Performance Matters

The awardee must fully comply with the requirements stipulated in Appendix XII to Part 200 of 2 CFR §200, entitled "Award Term and Condition for Recipient Integrity and Performance Matters." See also Article 29 of these award terms and conditions for NSF's responsibilities regarding reporting award terminations to the OMB-designated integrity and performance system in accordance with Federal regulation. In addition, Article 14.e specifies NSF responsibilities to report in FAPIIS an awardee's failure to submit all required reports.

40. Notification Requirements Regarding Sexual Harassment, Other Forms of Harassment, or Sexual Assault

The PI and any co-PI(s) identified on an NSF award are in a position of trust. These individuals must comport themselves in a responsible and accountable manner during the award period of performance, whether at the awardee institution, on-line, or at locales such as field sites, facilities, or conferences/workshops.

For purposes of this award term and condition, the following definitions apply:

Sexual Harassment: May include but is not limited to gender or sex-based harassment, unwelcome sexual attention, sexual coercion, or creating a hostile environment, as set forth in organizational policies or codes of conduct, statutes, regulations, or executive orders.

Other Forms of Harassment: Non-gender or non-sex-based harassment of individuals protected under federal civil rights laws, as set forth in organizational policies or codes of conduct, statutes, regulations, or executive orders.

Finding/Determination: The final disposition of a matter involving sexual harassment or other form of harassment under organizational policies and processes, to include the exhaustion of permissible appeals exercised by the PI or co-PI, or a conviction of a sexual offense in a criminal court of law.

Administrative Leave/Administrative Action: Any temporary/interim suspension or permanent removal of the PI or co-PI, or any administrative action imposed on the PI or co-PI by the awardee under organizational policies or codes of conduct, statutes, regulations, or executive orders, relating to activities, including but not limited to the following: teaching, advising, mentoring, research, management/administrative duties, or presence on campus.

The awardee is required to notify NSF of: (1) Any finding/determination regarding the PI or any co-PI⁵ that demonstrates a violation of awardee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault; and/or (2) if the PI or any co-PI is placed on administrative leave or if any administrative action has been imposed on the PI or any co-PI by the awardee relating to any finding/determination or an investigation of an alleged violation of awardee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault.⁶ Such notification must be submitted by the AOR to NSF's

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⁵ If a co-PI is affiliated with a subawardee organization, the Authorized Organizational Representative of the subawardee must provide the requisite information directly to NSF, as instructed in this paragraph.

⁶ Grantee findings/determinations and placement of a PI or co-PI on administrative leave or the imposition of an administrative action must be conducted in accordance with organizational policies and processes. They also must be conducted in accordance with federal laws, regulations, and executive orders.

Office of Equity and Civil Rights at www.nsf.gov/harassment within ten business days from the date of the finding/determination, or the date of the placement of a PI or co-PI by the awardee on administrative leave or the imposition of an administrative action, whichever is sooner.⁷ Each notification must include the following information:

- NSF Award Number;
- Name of PI or co-PI being reported;⁸
- Type of Notification: Select one of the following:
- Finding/Determination that the reported individual has been found to have violated awardee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault; or
- Placement by the awardee of the reported individual on administrative leave or the imposition of any administrative action on the PI or any co-PI by the awardee relating to any finding/determination or an investigation of an alleged violation of awardee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault.
- Description of the finding/determination and action(s) taken, if any; and
- Reason(s) for, and conditions of, placement of the PI or any co-PI on administrative leave or imposition of administrative action.

The awardee, at any time, may propose a substitute investigator if it determines the PI or any co-PI may not be able to carry out the funded project or activity and/or abide by the award terms and conditions. The awardee is reminded of its responsibility to obtain prior written approval from NSF in the event the investigator will be disengaged from the project for a period greater than three months. See PAPPG Chapter VII.B.2.a. for additional information.

In reviewing the notification, NSF will consider, at a minimum, the following factors:

- a. The safety and security of personnel supported by the NSF award;
- b. The overall impact to the NSF-funded activity:
- c. The continued advancement of taxpayer-funded investments in science and scientists; and
- d. Whether the awardee has taken appropriate action(s) to ensure the continuity of science and that continued progress under the funded project can be made.

⁷ Such notification must be provided regardless of whether the behavior leading to the finding/determination, or placement on administrative leave, or the imposition of an administrative action occurred while the PI or co-PI was carrying out award activities.

⁸ Only the identification of the PI or co-PI is required. Personally identifiable information regarding any complainants or other individuals involved in the matter must not be included in the notification.

Upon receipt and review of the information provided, NSF will consult with the AOR, or designee. Based on the results of this review and consultation, the Foundation may, if necessary, assert its programmatic stewardship responsibilities and oversight authority to initiate the substitution or removal of the PI or any co-PI, reduce the award funding amount, or where neither of those previous options is available or adequate, to suspend or terminate the award.

Other personnel supported by an NSF award must likewise remain in full compliance with awardee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault. With regard to any personnel not in compliance, the awardee must make appropriate arrangements to ensure the safety and security of other award personnel and the continued progress of the funded project. Notification of these actions is not required under this award term and condition.

41. Post-award Disclosure of Current Support and In-Kind Contribution Information

If an organization discovers that a PI or co-PI on an active NSF award failed to disclose current support or in-kind contribution information⁹ as part of the proposal submission process (see PAPPG Chapter II.D.2.h(ii)), the AOR must submit the following information within 30 calendar days of the identification of the undisclosed current support or in-kind contribution through use of the Notification and Request Module in Research.gov.

Post-award Disclosure of Project Support Information

- PI/co-PI Name:
- Project Title:
- Award Number (if available):
- Source of Support:
- Primary Place of Performance:
- Project Start and End Date:
- Total Award Amount (including Indirect Costs): \$
- Brief Description of the Major goals of the project:
- Description of any Overlap/Duplication of the project with the NSF award:
- Impact on the ability of the PI/co-PI to carry out the NSF award:
- Person-Month(s) (or Partial Person-Months) Per Year Committed to the Project:
- Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

■ Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

■ Enter the applicable year (e.g., 2023, 2024):

⁹ The post-award disclosure requirement applies to current support (including in-kind contributions) that was active as of the date the proposal was submitted to NSF. See <u>NSF Pre-award and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending Support</u> which has been developed to assist users in determining the types of activities that must be disclosed.

Enter the number of person-month(s) (or partial person-months):

■ Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

Post-award Disclosure of In-Kind Contribution Information

- PI/co-PI Name:
- Source of Support:
- Primary Place of Performance:
- Summary of In-kind Contributions:
- Description of any Overlap/Duplication of the project with the NSF award:
- Impact on the ability of the PI/co-PI to carry out the NSF award:
- Person-Month(s) (or Partial Person-Months) Per Year Committed to the Project:
- Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

■ Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

■ Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

■ Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

Dollar Value of In-kind Contribution: \$

Upon receipt and review of the information provided, NSF may consult with the AOR, or designee, if necessary. Based on the results of this review, the Foundation will determine the impact of the new information on the NSF-funded award, and, where necessary, take appropriate action.

42. Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019

Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019 (Public Law 115-232) prohibits the head of an executive agency from obligating or expending loan or award funds to procure or obtain, extend, or renew a contract to procure or obtain, or enter into a contract (or extend or renew a contract) to procure or obtain the equipment, services, or systems as identified in section 889 of the NDAA for FY 2019.

- (a) In accordance with 2 CFR §200.216 and §200.471, for all awards that are issued on or after August 13, 2020, recipients and subrecipients are prohibited from obligating or expending loan or award funds to:
- (1) Procure or obtain;
- (2) Extend or renew a contract to procure or obtain; or
- (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.
- (iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.
- (b) In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.
- (c) See Public Law 115-232, section 889 for additional information.

43. Debarment and Suspension

The awardee shall fully comply with the requirements stipulated in Subpart C of 2 CFR Part 180, entitled "Responsibilities of Participants Regarding Transactions" as supplemented by NSF's regulations at 2 CFR Part 2520. The awardee is responsible for ensuring that any lower tier covered transaction, as described in Subpart B of 2 CFR Part 180, entitled "Covered Transactions," includes an award term or condition requiring compliance with Subpart C. The awardee also is responsible for further requiring the inclusion of a similar award term or condition in any subsequent lower tier covered transaction. The awardee acknowledges that failing to disclose the information required under 45 CFR §180.335 may result in the termination of the award, or pursuance of other available remedies, including suspension and debarment.

44. Resolution of Conflicting Conditions

- a. If the IRTC is silent on a specific area covered by 2 CFR §200, the requirements specified in 2 CFR §200 must be followed.
- b. Should there be any inconsistency between the IRTC and the NSF *Proposal and Award Policies and Procedures Guide*, the IRTC governs.
- c. Should there be any inconsistency between any special condition(s) specified in the award notice and the IRTC, the special conditions in the award notice shall govern.
- d. Should there be any inconsistency between the IRTC and any NSF solicitation cited or incorporated by reference in the award notice, the matter should be referred to the cognizant NSF Grants and Agreements Officer for guidance.

Other Considerations

45. Liability

NSF cannot assume any liability for accidents, bodily injury, illness, breach of contract, any other damages or loss, or any claims arising out of any activities undertaken pursuant to the award, whether with respect to persons or property of the awardee or third parties. The awardee is advised to insure or otherwise protect itself or others, as it may deem desirable.

46. Sharing of Findings, Data and Other Research Products

- a. NSF expects significant findings from research and education activities it supports to be promptly submitted for publication, with authorship that accurately reflects the contributions of those involved. It expects investigators to share with other researchers, at no more than incremental cost and within a reasonable time, the data, samples, physical collections, and other supporting materials created or gathered in the course of the work. It also encourages the awardee to share software and inventions or otherwise act to make the innovations they embody widely useful and usable.
- b. Adjustments and, where essential, exceptions may be allowed to safeguard the rights of individuals and subjects, the validity of results, or the integrity of collections or to accommodate legitimate interests of investigators.

47. Government Permits and Activities Carried On Outside the U.S.

The awardee should assure that award activities carried on outside the U.S. are coordinated as necessary with appropriate U.S. and foreign government authorities and that necessary licenses, permits or approvals are obtained prior to undertaking proposed activities. NSF does not assume responsibility for awardee compliance with the laws and regulations of the country in which the work is to be conducted.