



**U.S. NATIONAL SCIENCE FOUNDATION (NSF)
International Research Terms and Conditions (IRTC)**

Effective for all new NSF awards and funding amendments on existing awards made on or after October 1, 2024¹

U.S. National Science Foundation website address: <http://www.nsf.gov>

Award Conditions website address: https://www.nsf.gov/awards/managing/special_conditions.jsp

Revision of the IRTC

The primary purpose of the revision of the *International Research Terms and Conditions* (IRTC) is to implement the revised 2 CFR published in the [Federal Register](#) on April 22, 2024, by the Office of Management and Budget.

A summary of the changes is included below. Any questions regarding these changes may be directed to the Policy Office, Division of Institution and Award Support, at policy@nsf.gov.

Summary of Changes

Overall Document

- Editorial changes have been made throughout to either clarify or enhance the intended meaning of a sentence or section.
- Updates have been made to ensure consistency with terminology contained in 2 CFR.
- The term “article” has been changed to “term and condition” throughout for consistency with Government-wide terminology.
- Numbering has been updated as a result of the reordering of certain terms and conditions.

¹ Unless otherwise specified

Changes to Individual Terms and Conditions

- **Recipient Responsibilities, Term and Condition Number (No.) 1.** The term and condition has been updated to cross-reference Term and Condition No. 13 for recipient responsibilities to notify NSF when a significant development that could impact the award occurs between project reporting dates.
- **Prior Approval Requirements, Term and Condition No. 2.** The previous Project Changes term and condition text has been revised to consolidate the prior approval requirements into the same location in the document. Specific information on flow down provisions has been removed, given that the recipient is responsible for addressing the relevant requirements in subaward instruments.

The *Prior Approval Matrix* has been updated for consistency with the revised 2 CFR part 200. The document also has been revised to solely list those requirements that are applicable to NSF awards and has been renamed the *NSF Prior Approval Matrix*.

- **Participant Support Costs, Term and Condition No. 3.** This term and condition has been moved up to sequentially provide prior approval coverage in order. The term and condition also has been updated to incorporate the revised definition of participant support costs specified in 2 CFR § 200.1.
- **Rearrangement and Reconversion Costs, Term and Condition No. 4.** This term and condition has been moved up to sequentially provide prior approval coverage in order. The reference to Appendix II of 2 CFR part 200 has been relocated to Term and Condition No. 2.
- **Equipment, Term and Condition No. 8.** This term and condition has been streamlined by removing redundant coverage provided in 2 CFR §§ 200.310-316.

The term and condition also has been revised to specify that, unless specifically identified in the award as exempt property, title to equipment purchased or fabricated under the award conditionally vests upon acquisition in the recipient for consistency with 2 CFR § 200.313(a).

Unless NSF provides alternative disposition instructions no later than 120 days after the end date of the NSF-supported project for which it was acquired, NSF grants unconditional title to equipment in the recipient or subrecipient.

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 or in disposition instructions issued no later than 120 days after the end date of the NSF-supported project for which it was acquired.

- **Allowable Costs, Term and Condition No. 10.** Guidance regarding indirect costs has been added to this term and condition.
- **Payments, Term and Condition No. 11.** Coverage on recipient requests for payment has been updated to emphasize the requirements in 2 CFR § 200.305 regarding timing of payments.

- **Project Reporting Requirements, Term and Condition No. 13.** Language addressing significant developments that occur between project reporting due dates has been added. In addition, the OMB designated integrity and performance system has changed from the Federal Awardee Performance and Integrity Information System to SAM.gov.
- **Expenditure Reports, Term and Condition No. 14.** A footnote has been added regarding the timeframe for completing final payment requests when all funds on an award will be canceling at the end of the Federal fiscal year.
- **Reporting Subawards and Executive Compensation, Term and Condition No. 17.** This term and condition has been updated to incorporate the revised award term from Appendix A to Part 170.
- **System for Award Management (SAM.gov) and Universal Identifier Requirements, Term and Condition No. 18.** This term and condition has been updated to incorporate the revised award term from Appendix A to Part 25.
- **Copyrighted Material, Term and Condition No. 20.** The term “nontransferable” has been deleted and the royalty-free license rights language has been updated for consistency with the revised 2 CFR part 200.
- **Program Income, Term and Condition No. 22.** The full definition of program income from 2 CFR § 200.1 has been incorporated for greater transparency.
- **Publications, Term and Condition No. 23.** Guidance on costs for publication or dissemination of research results has been added to this term and condition.
- **Intangible Property, Term and Condition No. 24.** Links to the National Institute of Standards and Technology (NIST) Bayh-Dole Regulations for Federal Funding Inventions and the current Interagency Domestic Manufacturing Waiver Form have been added to this term and condition.
- **Audit and Records, Term and Condition No. 26.** Language has been added from 2 CFR § 200.337 regarding right of access to records of the recipient and subrecipient pertinent to the Federal award.
- **Termination and Enforcement, Term and Condition No. 28.** This term and condition has been updated for consistency with the suspension and termination requirements contained in the revised 2 CFR part 200.
- **Whistleblower Protection, Term and Condition No. 36.** Information on the overall requirements and applicability of 41 U.S.C. § 4712 has been incorporated for greater transparency.
- **Build America, Buy America, Term and Condition No. 37.** Updates have been made to this term and condition for consistency with 2 CFR part 184.
- **Foreign Financial Disclosure Report (FFDR) (CHIPS and Science Act of 2022), Term and Condition No. 45.** This term and condition has been incorporated into the IRTC and applies only to Institutions of Higher Education.

- **Resolution of Conflicting Conditions, Term and Condition No. 47.** This term and condition has been updated to indicate if the IRTC is silent on a specific area covered by 2 CFR (including 2 CFR part 200), 2 CFR applies.

A new provision also has been added indicating the order of precedence should there be an inconsistency between 2 CFR (including 2 CFR part 200) and the NSF *Proposal and Award Policies and Procedures Guide* (PAPPG).²

² The new provision was added because there will be an interim period where the PAPPG has not yet been updated to implement the revised 2 CFR.



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³ Unless otherwise specified

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1. Recipient Responsibilities

a. The recipient 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 recipient is encouraged to seek the advice and opinion of NSF on special problems that may arise, such advice does not diminish the recipient's responsibility for making sound scientific and administrative judgments and should not imply that the responsibility for operating decisions has shifted to NSF. The recipient 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) part 689; or (2) any significant problems relating to the administrative or financial aspects of the award. (See also paragraph a. of Term and Condition No. 13 for further information regarding the requirement to notify NSF when a significant development that could impact the award occurs between project reporting due dates.)

b. The requirements of this award are set forth in these *International Research Terms and Conditions* for grants and cooperative agreements unless otherwise specified in the award notice. NSF has adopted 2 CFR part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, and those requirements are hereby incorporated by reference. These *International Research Terms and Conditions* (IRTC) implement 2 CFR part 200 for this award.

c. By acceptance of this award, the recipient agrees to comply with the applicable Federal requirements 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 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 recipient policies;
3. represents effective utilization of resources; and
4. does not constitute a project change which requires NSF prior written approval (see paragraph c.1 of Term and Condition No. 2).

e. The recipient is responsible for ensuring that the Principal Investigator (PI)⁴ 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. These award terms and conditions are made available to the recipient by NSF in [electronic form](#), and may be duplicated, copied, or otherwise reproduced by the recipient, as appropriate. This provision does not alter the recipient'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>.

⁴ 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.

2. Prior Approval Requirements

a. The recipient must obtain written approval from NSF as specified in the [NSF Prior Approval Matrix and these award terms and conditions](#) unless otherwise specified in the award notice.

b. Requests for NSF prior written approval in accordance with the matrix specified above must be submitted via Research.gov. 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.

c. The NSF *Proposal & Award Policies & Procedures Guide* (PAPPG) reference that specifies the applicable processing instructions for certain significant prior approval requirements is provided below:

1. Changes in Objectives or Scope – [PAPPG Chapter VII.B.1.a](#);

2. Change of PI or co-PI – [PAPPG Chapter VII.B.2](#);

3. Long-Term Disengagement of the PI or co-PI ([PAPPG Chapter VII.B.2.a](#)) or Changes in Person Months Devoted to the Project ([PAPPG Chapter VII.B.2.b](#)); and

4. Subawarding or Transferring Part of an NSF Award (Subaward) - [PAPPG Chapter VII.B.4](#).

a. If it becomes necessary to subaward or transfer part of an NSF award after an award has been made, notification of this intent must be submitted via Research.gov. NSF approval of such changes will be by an amendment to the award.

b. The recipient remains responsible for monitoring 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 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 recipient's and making it available to NSF upon request. The recipient shall include subaward activities in the annual and final annual project reports that are submitted to NSF.

c. Consistent with the requirements specified in [2 CFR § 200.332](#), the recipient must adhere to the requirements for pass-through entities in establishing and managing subawards issued under the award. In addition, the recipient must ensure that the requirements specified in these terms and conditions (if applicable) are appropriately addressed in the subaward instrument. If the recipient issues contracts under the award, the appropriate clauses identified in 2 CFR part 200, Appendix II, "Contract Provisions for Non-Federal Entity Contracts Under Federal Awards," also must be included in applicable contracts.

3. Participant Support Costs

a. Participant support costs as defined in [2 CFR § 200.1](#) are direct costs for items that support participants (see definition for *Participant* in § 200.1) and their involvement in a Federal award, such as stipends, subsistence allowances, travel allowances, registration fees, temporary dependent care, and per diem paid directly to or on behalf of participants in connection with NSF-sponsored conference and training activities.

NSF prior written approval is required for funding of any additional categories of participant support costs, such as incentives, gifts, souvenirs, t-shirts and/or memorabilia and the request must be submitted via Research.gov. The recipient must account for participant support costs separately. Indirect costs are not allowed on participant support costs (see [PAPPG Chapter II.D.2.f\(v\)](#)).

b. Funds provided for participant support must not be used by the recipient for other categories of expense without specific NSF prior written approval. Such requests must be submitted electronically via Research.gov.

4. 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 recipient must secure a lease for the entire period of performance as set forth in the award notice.

c. Rearrangement and reconversion costs exceeding \$25,000 require NSF prior written approval via Research.gov.

5. Pre-Award Costs

a. The recipient 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 Research.gov. 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 Term and Condition No. 10.

c. Pre-award expenditures are made at the recipient's risk. Approval of 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 recipient 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.

6. No-Cost Extensions

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 available⁵, then the recipient must submit a request for a no-cost extension via Research.gov at least 45 days prior to the end date of the award. Requests for no-cost extensions must follow the procedures set forth in the NSF [PAPPG Chapter VI.D.3.c](#).

7. Professional Service Costs

Costs for professional and consultant services, rendered by persons who are members of a particular profession or possess a special skill and who are not officers or employees of the recipient or subrecipient, are allowable subject to paragraphs (b) and (c) of [2 CFR § 200.459](#) 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. The consultants' travel costs, including subsistence, may be included. The recipient 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.

8. Equipment

Equipment falls under the umbrella of property, which consists of real property and personal property. 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](#). See also [2 CFR § 200.439](#).

Unless specifically identified in the award as exempt property, title to equipment purchased or fabricated under the award will conditionally⁶ vest upon acquisition in the recipient subject to the conditions identified in 2 CFR § 200.313(a).

Consistent with 2 CFR § 200.316, property acquired under or improved with the NSF award must be held in trust by the recipient or subrecipient for the beneficiaries of the project or program under which the property was acquired or improved.

In implementation of 2 CFR § 200.313(e), unless NSF provides alternative disposition instructions no later than 120 days after the end date of the NSF-supported project for which it was acquired,

⁵ The recipient is not authorized to extend an award that contains a zero balance.

⁶ A conditional title means a clear title is withheld by NSF until the conditions and requirements specified in the terms and conditions of the award have been fulfilled.

NSF grants unconditional title to equipment in the recipient or subrecipient, and the recipient or subrecipient may retain equipment, with no further obligation to the Federal Government. Prior to the 120-day deadline, NSF may identify items of equipment with a current fair market value in excess of \$10,000 for which NSF will provide alternative disposition instructions.

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 or in disposition instructions issued no later than 120 days after the end date of the NSF-supported project for which it was acquired.

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 via Research.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 (U.S.C.) § 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 U.S.-Flag Air Carriers

1. In accordance with the Fly America Act (49 U.S.C. § 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. 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., recipients) 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 at least double the scheduled travel time.

10. Allowable Costs

a. The allowability of costs⁷ 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 specified below and must also conform with NSF policies, award special provisions and recipient internal policies in effect on the start date of the award. Certain prior approval requirements contained in the governing cost principles have been modified by Term and Condition No. 2.

b. The cost principles that govern this award can be found in [2 CFR part 200, Subpart E](#).

⁷ 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.

c. Reimbursement of indirect costs should be calculated by applying the approved, negotiated indirect cost rate(s) to the appropriate base(s). Excess indirect costs charged to an NSF award due to use of an incorrect rate will be disallowed.

11. Payments

a. Except as noted in [PAPPG Chapter VIII.C](#), the recipient is required to request payments electronically through the Award Cash Management Service (ACM\$). Under ACM\$, the recipient must provide award level detail at the time of the payment request. The recipient must request payments in amounts necessary to meet their current needs, pursuant to the timing of payments as defined in [2 CFR § 200.305](#) and the guidelines contained in [31 CFR part 205](#). Unless otherwise specified in the award, the recipient agrees to comply with all applicable Treasury regulations and NSF implementing and reporting procedures, which are outlined in [PAPPG Chapter VIII](#).

b. In accordance with 2 CFR § 200.305, where appropriate, the recipient is required to maintain advances of Federal funds in interest-bearing accounts. The recipient 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).

12. 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 recipient, provided an annual project report has been received from the Principal Investigator(s) and accepted by the cognizant NSF Program Officer.

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

13. Project Reporting Requirements

a. Annual Project Reports

1. **Submission Requirement.** Annual project reports are required for standard and continuing grants and cooperative agreements.⁸

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 and final 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 recipient shall include subaward activities in annual project reports that are submitted to NSF.

⁸ Submission of an "interim" report via Research.gov does not constitute compliance with the annual reporting requirement.

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 term and condition. 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.

The recipient also is required to notify NSF when a significant development that could impact the award occurs between project reporting due dates. Significant developments include events that enable meeting milestones and objectives sooner or at less cost than anticipated or that produce different beneficial results than originally planned. Significant developments also include problems, delays, or adverse conditions which will impact the recipient's or subrecipient's ability to meet milestones or the objectives of the award. When significant developments occur that negatively impact the award, the recipient must include information on their plan for corrective action and any assistance needed to resolve the situation. Such significant developments must be submitted via the Significant Changes, Delays or Events of Unusual Interest notification in Research.gov.

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.

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 recipient 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 recipient 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

PIs and co-PIs 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. Certification Requirements for Annual and Final Annual Project Reports

In submission of each annual and final annual project report, the PI or co-PI is certifying that:

- the statements provided (excluding scientific hypotheses and scientific opinions) are true and complete, and the text and graphics in the report as well as any accompanying publications or other documents, unless otherwise indicated, are the original work of the signatories or individuals working under their supervision; and
- each postdoctoral scholar and graduate student receiving substantial support from the award has an individual development plan that maps educational goals, career exploration, and professional development (see also Term and Condition No. 44).

False representations may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

e. 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. The content of the report should include:

(a) A description of 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. PIs or co-PIs 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 the project outcomes report.

PIs and co-PIs must 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 U.S. 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 recipient 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.2](#).

f. Compliance with Reporting Requirements

In accordance with [2 CFR § 200.344\(i\)](#), if the recipient does not submit all required reports within one year of the period of performance end date, NSF must report the recipient’s material failure to comply with the terms and conditions of the award in SAM.gov. NSF may also pursue other enforcement actions per [2 CFR § 200.339](#).

14. Expenditure Reports

The recipient must submit final payment requests through ACM\$ no later than 120 calendar days after the end date of the award.⁹ 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 final disbursement reporting requirements, see [PAPPG Chapter VIII.E](#).

15. Responsible and Ethical Conduct of Research

This term and condition applies only to recipients that are Institutions of Higher Education.

In accordance with Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (42 U.S.C. § 1862o–1), as amended, NSF requires that each recipient institution 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/key 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 recipient institution must designate one or more persons to oversee compliance with the RECR training requirement. The recipient institution is responsible for verifying that undergraduate students, graduate students, postdoctoral researchers, faculty, and other senior/key personnel supported by NSF to conduct research have received training in the responsible and ethical conduct of research, in accordance with the plan the recipient institution has put in place for their organization.

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

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

For awards that conduct research off-campus or off site¹⁰, the recipient 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.

⁹ Any award in which all funds will be canceling (in accordance with 31 U.S.C. § 1552(a)) at the end of the Federal fiscal year must complete final payment requests on or before the last day ACM\$ is available for drawing down funds in September regardless of the award end date.

¹⁰ 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.

The plan should also identify steps the recipient 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.

Communications within team and to the recipient 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. Recipients are not required to submit the plan for review by NSF, however, the plan is subject to review, upon request.

If the recipient rebudgets funds to support off-campus or off-site research and a Plan for Safe and Inclusive Working Environments was developed for the original proposal, no further documentation is necessary. If a Plan for Safe and Inclusive Working Environments was not developed for that proposal, then the recipient must develop and maintain the plan in the organization's records as described in [PAPPG Chapter II.E.9](#).

If supplemental funding is requested to support off-site or off-campus research and the original proposal did not require a Plan for Safe and Inclusive Working Environments, then the recipient must develop and maintain the plan in the organization's records as described in PAPPG Chapter II.E.9.

17. 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 recipient.

(a) Reporting of first-tier subawards.

(1) *Applicability.* Unless the recipient is exempt as provided in paragraph (d) of this award term, the recipient must report each subaward that equals or exceeds \$30,000 in Federal funds for a subaward to an entity or Federal agency. The recipient must also report a subaward if a modification increases the Federal funding to an amount that equals or exceeds \$30,000. All reported subawards should reflect the total amount of the subaward.

(2) Reporting Requirements.

(i) The entity or Federal agency must report each subaward described in paragraph (a)(1) of this award term to the Federal Funding Accountability and Transparency Act Subaward Reporting System (FSRS) at <http://www.fsrs.gov>.

(ii) For subaward information, report no later than the end of the month following the month in which the subaward was issued. (For example, if the subaward was made on November 7, 2025, the subaward must be reported by no later than December 31, 2025).

(b) *Reporting total compensation of recipient executives for entities.*

(1) *Applicability.* The recipient must report the total compensation for each of the recipient's 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;

(ii) in the preceding fiscal year, the recipient received:

(A) 80 percent or more of the recipient's annual gross revenues from Federal procurement contracts (and subcontracts) and Federal awards (and subawards) subject to the Transparency Act; and

(B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal awards (and subawards) subject to the Transparency Act; 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 after receiving this subaward. (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) *Reporting Requirements.* The recipient must report executive total compensation described in paragraph (b)(1) of this appendix:

(i) As part of the recipient's registration profile at <https://www.sam.gov>.

(ii) No later than the month following the month in which this Federal award is made, and annually after that. (For example, if this Federal award was made on November 7, 2025, the executive total compensation must be reported by no later than December 31, 2025.)

(c) *Reporting of total compensation of subrecipient executives.*

(1) *Applicability.* Unless a first-tier subrecipient is exempt as provided in paragraph (d) of this appendix, the recipient must report the executive total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if:

(i) The total Federal funding authorized to date under the subaward equals or exceeds \$30,000;

(ii) 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 awards (and subawards) subject to the Transparency Act; and,

(B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal awards (and subawards) subject to the Transparency Act; and

(iii) The public does not have access to information about the compensation of the executives through periodic reports filed under §§ 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 after receiving this subaward. (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) *Reporting Requirements.* Subrecipients must report to the recipient their executive total compensation described in paragraph (c)(1) of this appendix. The recipient is required to submit this information to the Federal Funding Accountability and Transparency Act Subaward Reporting System (FSRS) at <http://www.fsrs.gov> no later than the end of the month following the month in which the subaward was made. (For example, if the subaward was made on November 7, 2025, the subaward must be reported by no later than December 31, 2025).

(d) *Exemptions.*

(1) A recipient with gross income under \$300,000 in the previous tax year is 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:

Entity includes:

(1) Whether for profit or nonprofit:

(i) A corporation;

(ii) An association;

(iii) A partnership;

(iv) A limited liability company;

(v) A limited liability partnership;

(vi) A sole proprietorship;

(vii) Any other legal business entity;

(viii) Another grantee or contractor that is not excluded by subparagraph (2); and

(ix) Any State or locality;

(2) Does not include:

(i) An individual recipient of Federal financial assistance; or

- (ii) A Federal employee.

Executive means an officer, managing partner, or any other employee holding a management position.

Subaward has the meaning given in [2 CFR § 200.1](#).

Subrecipient has the meaning given in [2 CFR § 200.1](#).

Total Compensation means the cash and noncash dollar value an executive earns during an entity's preceding fiscal year. This includes all items of compensation as prescribed in [17 CFR § 229.402\(c\)\(2\)](#).

18. System for Award Management (SAM.gov) 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 recipient.

(a) *Requirement for System for Award Management.* (1) Unless exempt from this requirement under [2 CFR § 25.110](#), the recipient must maintain a current and active registration in SAM.gov. The recipient's registration must always be current and active until the recipient submits all final reports required under this Federal award or receives the final payment, whichever is later. The recipient must review and update its information in SAM.gov at least annually from the date of its initial registration or any subsequent updates to ensure it is current, accurate, and complete. If applicable, this includes identifying the recipient's immediate and highest-level owner and subsidiaries and providing information about the recipient's predecessors that have received a Federal award or contract within the last three years.

(b) *Requirement for Unique Entity Identifier (UEI).* (1) If the recipient is authorized to make subawards under this Federal award, the recipient:

(i) Must notify potential subrecipients that no entity may receive a subaward until the entity has provided its UEI to the recipient.

(ii) Must not make a subaward to an entity unless the entity has provided its UEI to the recipient. Subrecipients are not required to complete full registration in SAM.gov to obtain a UEI.

(c) *Definitions.* For the purposes of this award term:

System for Award Management (SAM.gov) means the Federal repository into which a recipient must provide the information required for the conduct of business as a recipient. Additional information about registration procedures may be found in SAM.gov (currently at <https://www.sam.gov>).

Unique entity identifier means the universal identifier assigned by SAM.gov to uniquely identify an entity.

Entity is defined at [2 CFR § 25.400](#) and includes all of the following types as defined in [2 CFR § 200.1](#):

- (1) Non-Federal entity;
- (2) Foreign organization;
- (3) Foreign public entity;
- (4) Domestic for-profit organization; and
- (5) Federal agency.

Subaward has the meaning given in [2 CFR § 200.1](#).

Subrecipient has the meaning given in [2 CFR § 200.1](#).

19. Information Collection

Information collection activities performed under this award are the responsibility of the recipient, and NSF support of the project does not constitute NSF approval of the survey design, questionnaire content, or information collection procedures. The recipient 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.

20. Copyrighted Material

Except as otherwise specified in the award or by this paragraph, the recipient may own or permit others to own copyright in all subject writings. *Subject writing* means any material that:

1. is or may be copyrighted under [Title 17 of the U.S.C.](#); and
2. is produced by the recipient 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.

a. Copyright Ownership, U.S. Government License

The recipient agrees that if it or anyone else does own copyright in a subject writing, the Federal government will have a nonexclusive, irrevocable, royalty-free license to use, reproduce, distribute (including distribution by transmission) to the public, perform publicly, prepare derivative works, and display publicly the subject writing in whole or in part and in any manner for Federal purposes and to permit others to do so for Federal purposes only. Such license, however, will not include the right to sell copies or phonorecords of the copyrighted works to the public.

b. Awards Affected by International Agreements

If the award indicates it is subject to an identified international agreement or treaty, NSF can direct the recipient 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. In such cases, the standard clauses for Copyrighted Material or Intangible Property will be modified through the addition of the following:

“This project is supported under the cooperative program listed below. Your rights in inventions, writings and data may be affected.”

The applicable agreement or treaty will be identified immediately beneath that sentence.

c. Recipient Action to Protect U.S. Government Interests

The recipient 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 recipient 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 term and condition.

21. Public Access to Copyrighted Material

NSF’s policy on public access to copyrighted material ([Public Access Policy](#)) 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 recipient 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; and
- 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.

22. Program Income

The following provisions implement applicable portions of [2 CFR § 200.307](#).

a. Definition

Program income means gross income earned by the recipient that is directly generated by a supported activity or earned as a result of the award during the period of performance. Program income includes but is not limited to income from fees for services performed, the use or rental of

real or personal property acquired under the award, the sale of commodities or items fabricated under the award, license fees, and royalties on patents and copyrights, and principal and interest on loans made with award funds.

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 recipient during the period of the award is to be retained by the recipient, added to the funds committed to the project by NSF, and thus used to further project objectives. The recipient has no obligation to NSF with respect to program income received beyond the period of the award. The recipient 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 U.S.C. § 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 a recipient 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 U.S. National Science Foundation.

2. Special Treatment

In exceptional circumstances, NSF may approve use of a special award provision to restrict or eliminate a recipient'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 U.S. National Science Foundation.

c. Records Retention

The recipient 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 VIII.E](#).

d. Reporting Requirements

On an annual basis, the recipient 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.

23. Publications

a. Acknowledgment of Support

The recipient is responsible for ensuring that an acknowledgment of NSF support is made in alignment with [PAPPG Chapter XI.E](#), [NSF Policy on Brand Standards](#) and the [NSF Brand Standards Manual](#)¹¹ including:

1. Written and visual acknowledgment on any publication (including World Wide Web pages) of any material based on or developed under this project, by including the NSF logo along with written acknowledgement in the following terms:

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

2. Instrumentation/equipment must be marked with the NSF logo by the recipient if the purchase price is \$150,000 or more, in accordance with the guidance specified in the NSF Brand Standards Manual.

3. Awards of \$1 million or more must follow additional guidelines found in the NSF Policy on Brand Standards related to:

- (a) use and naming conventions;
- (b) signage;
- (c) websites;
- (d) social media; and
- (e) filming and advertising.

4. Oral acknowledgment of NSF support during all media interviews including, but not limited to, social media, podcasts, radio, television, film and other publications.

¹¹ Any questions regarding the NSF Policy on Brand Standards or the NSF Brand Standards Manual should be addressed to the NSF Office of Legislative and Public Affairs at: NSFbranding@nsf.gov.

b. Disclaimer

The recipient is responsible for ensuring 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 U.S. National Science Foundation."

See [PAPPG Chapter XI.E](#) for additional information on Publication/Distribution of Award Materials.

c. Copies for NSF

The recipient is responsible for ensuring 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.

d. Costs for Publication or Dissemination of Research Results

In accordance with [2 CFR § 200.461](#), costs for publication or dissemination of research results may be charged to this award during closeout if the costs are not incurred during the period of performance. If charged to the award during closeout, these costs must be charged to the final budget period, unless otherwise specified by NSF.

24. Intangible Property¹²

The following Intangible Property term and condition (implementing the Bayh-Dole Act 35 U.S.C. § 200 et seq.) shall apply to all awards for scientific or engineering research unless special provisions have been negotiated. The recipient shall include this term and condition in all subawards for scientific or engineering research activities.

a. Definitions

1. *Invention* means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the U.S.C., to any novel variety of plant which is or may be protected under the Plant Variety Protection Act ([7 U.S.C. §§ 2321 et seq.](#))

2. *Subject Invention* means any invention of the recipient conceived or first actually reduced to practice in the performance of work under this award, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d)) must also occur during the period of performance.

3. *Practical Application* means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and

¹² The recipient is reminded that, in view of the U.S. Supreme Court decision in *Stanford v. Roche*, employee assignment agreements should include a present conveyance of rights ("I hereby assign" rather than a promise or intent to assign) in order to effectively convey patent rights to the institution, allowing the institution to meet its responsibility under the Bayh-Dole Act to provide the agency with a license of patented inventions.

that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.

4. *Made* when used in relation to any invention means the conception or first actual reduction to practice of such invention.

5. *Small Business Firm* means a small business concern as defined at section 2 of Public Law 85-536 (15 U.S.C. § 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this term and condition, the size standards for small business concerns involved in government procurement and subcontracting at 13 CFR § 121.3-8 and 13 CFR § 121.3-12, respectively, will be used.

6. *Non-profit Organization* means a domestic university or other institution of higher education or an organization of the type described in Section 501(c)(3) of the Internal Revenue Code of 1954 ([26 U.S.C. § 501\(c\)](#)) and exempt from taxation under Section 501(a) of the Internal Revenue Code ([26 U.S.C. § 501\(a\)](#)) or any domestic non-profit scientific or educational organization qualified under a State non-profit organization statute.

7. *Statutory Period* means the one-year period before the effective filing date of a claimed invention during which exceptions to prior art exist per 35 U.S.C. § 102(b) as amended by the Leahy-Smith America Invents Act, Public Law 112-29.

8. *Contractor* means any person, small business firm or nonprofit organization, or, as set forth in section 1, paragraph (b)(4) of Executive Order 12591, as amended, any business firm regardless of size, which is a party to a funding agreement.

b. Allocation of Principal Rights

The recipient may retain the entire right, title and interest throughout the world to each subject invention subject to the provisions of this Intangible Property term and condition and [35 U.S.C. § 203](#). With respect to any subject invention in which the recipient retains title, the Federal Government shall have a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the U.S. the subject invention throughout the world. If the award indicates it is subject to an identified international agreement or treaty, NSF also has the right to direct the recipient to convey to any foreign participant such patent rights to subject inventions as are required to comply with that agreement or treaty.

c. Invention Disclosure, Election of Title and Filing of Patent Applications by Recipient

1. The recipient will disclose each subject invention to NSF within two months after the inventor discloses it in writing to recipient personnel responsible for the administration of patent matters. The disclosure to NSF shall be in the form of an invention disclosure form and shall identify the award under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding of the nature, purpose, operation and, to the extent known, the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to NSF, the recipient will promptly notify NSF of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the recipient.

2. The recipient will elect in writing whether or not to retain title to any such invention by notifying NSF within two years of disclosure to NSF. However, in any case where a patent, a

printed publication, public use, sale or other availability to the public has initiated the one-year statutory period wherein valid patent protection can still be obtained in the U.S., the period for election of title may be shortened by NSF to a date that is no more than 60 days prior to the end of the statutory period.

3. The recipient will file its initial patent application on an invention to which it elects to retain title within one year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the U.S. after a publication, on sale, or public use. If the recipient files a provisional application as its initial patent application, it shall file a non-provisional application within 10 months of the filing of the provisional application. The recipient will file patent applications in additional countries or international patent offices within either ten months of the first filed patent application, or six months from the date when permission is awarded by the Commissioner of Patents to file foreign patent applications when such filing has been prohibited by a Secrecy Order.

4. For any subject invention with NSF and recipient co-inventors, where NSF determines that it would be in the interest of the government, pursuant to 35 U.S.C. § 207(a)(3), to file an initial patent application on the subject invention, NSF, at its discretion and in consultation with the recipient, may file such application at its own expense, provided that the recipient retains the ability to elect title pursuant to 35 U.S.C. § 202(a).

5. Requests for extension of the time for disclosure to NSF, election and filing under subparagraphs 1., 2. and 3 may, at the discretion of NSF, be awarded. When a recipient has requested an extension for filing a non-provisional application after filing a provisional application, a one-year extension will be awarded unless NSF notifies the contractor within 60 days of receiving the request.

d. Conditions When the Government May Obtain Title

The recipient will convey to NSF, upon written request, title to any subject invention:

1. if the recipient fails to disclose or elect the subject invention within the times specified in paragraph c. above, or elects not to retain title;

2. in those countries in which the recipient fails to file patent applications within the times specified in paragraph c. above, provided, however, that if the recipient has filed a patent application in a country after the times specified in paragraph c. of this term and condition, but prior to its receipt of the written request of NSF, the recipient shall continue to retain title in that country; or

3. in any country in which the recipient decides not to continue the prosecution of any non-provisional patent application for, to pay a maintenance, annuity or renewal fee on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.

e. Minimum Rights to Recipient

1. The recipient will retain a non-exclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the recipient fails to disclose the subject invention within the times specified in paragraph c. above. The recipient's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the recipient is a party and includes the right to award sublicenses of the same scope to the extent the recipient was legally obligated to do so at the time the award was made. The license is transferable only with the approval of NSF except when transferred to the successor of that part of the recipient's business to which the invention pertains.

2. The recipient's domestic license may be revoked or modified by NSF to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at [37 CFR § 404](#). This license will not be revoked in that field of use or the geographical areas in which the recipient has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at discretion of NSF to the extent the recipient, its licensees or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

3. Before revocation or modification of the license, NSF will furnish the recipient a written notice of its intention to revoke or modify the license, and the recipient will be allowed 30 days (or such other time as may be authorized by NSF for good cause shown by the recipient) after the notice to show cause why the license should not be revoked or modified. The recipient has the right to appeal, in accordance with applicable regulations in [37 CFR § 404](#) concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

f. Recipient Action to Protect Government's Interest

1. The recipient agrees to execute or to have executed and promptly deliver to NSF all instruments necessary to: (i) establish or confirm the rights the Government has throughout the world in those subject inventions for which the recipient retains title; and (ii) convey title to NSF when requested under paragraph d. above, and to enable the Government to obtain patent protection throughout the world in that subject invention.

2. The recipient agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the recipient each subject invention made under this award in order that the recipient can comply with the disclosure provisions of paragraph c. above, to assign to the recipient the entire right, title and interest in and to each subject invention made under the award, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information requested by paragraph c.1 above. The recipient shall instruct such employees through the employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

3. For each subject invention, the recipient will no less than 60 days prior to the expiration of the statutory deadline, notify NSF of any decision: not to continue the prosecution of a non-provisional patent application; not to pay a maintenance, annuity or renewal fee; not to defend a

reexamination or opposition proceeding on a patent, in any country; to request, be a party to, or take action in a trial proceeding before the Patent Trial and Appeals Board of the U.S. Patent and Trademark Office, including but not limited to *ex parte* reexamination, post-award review, , *inter partes* reexamination, and derivation proceeding; or to request, be a party to, or take action in a non-trial submission of art or information at the U.S. Patent and Trademark Office, including but not limited to a pre-issuance submission, a post-issuance submission, and supplemental submissions.

4. The recipient agrees to include, within the specification of any U.S. patent application and any patent issuing thereon covering a subject invention, the following statement:

“This invention was made with Government support under (identify NSF award number) awarded by the U.S. National Science Foundation. The Government has certain rights in this invention.”

5. The recipient or its representative will complete, execute and forward to NSF a confirmation of a License to the U.S. Government and the page of a United States patent application that contains the Federal support term and condition within two months of filing any domestic or foreign patent application.

g. Subawards

1. The recipient will include this Intangible Property term and condition, suitably modified to identify the parties, in all subawards, regardless of tier, for experimental, developmental or research work. The subrecipient will retain all rights provided for the recipient in this Intangible Property term and condition, and the recipient will not, as part of the consideration for awarding the subaward, obtain rights in the subrecipients' subject inventions.

2. In the case of subawards, at any tier, when the prime award by NSF was a contract (but not a cooperative agreement), NSF, subrecipient and contractor agree that the mutual obligations of the parties created by this Intangible Property term and condition constitute a contract between the subrecipient and the Foundation with respect to those matters covered by this Intangible Property term and condition.

h. Reporting on Utilization of Subject Inventions

Upon request, the recipient agrees to submit periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the recipient or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the recipient and such other data and information as NSF may reasonably specify. The recipient also agrees to provide additional reports in connection with any march-in proceeding undertaken by NSF in accordance with paragraph j. of this Intangible Property term and condition. As required by [35 U.S.C. § 202\(c\)\(5\)](#), NSF agrees it will not disclose such information to persons outside the Government without the permission of the recipient.

i. Preference for United States Industry

Notwithstanding any other provision of this Intangible Property term and condition, the recipient agrees that neither it nor any assignee will award to any person the exclusive right to use or sell any subject invention in the U.S. unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the U.S. However, in individual cases, the requirement for such an agreement may be waived by NSF upon a showing by the recipient or its assignee that reasonable but unsuccessful efforts have been made to award licenses on similar terms to potential licensees that would be likely to manufacture substantially in the U.S. or that under the circumstances domestic manufacture is not commercially feasible. The current waiver form can be found at: [Interagency Domestic Manufacturing Waiver Form.pdf \(nist.gov\)](#).

j. March-in Rights

The recipient agrees that with respect to any subject invention in which it has acquired title, NSF has the right in accordance with procedures at [37 CFR § 401.6](#), the NSF [PAPPG Chapter XI.D.1.I.](#), and [the Interagency March-In Framework](#) to require the recipient, an assignee or exclusive licensee of a subject invention to award a non-exclusive, partially exclusive or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances and if the recipient, assignee or exclusive licensee refuses such a request, NSF has the right to award such a license itself if NSF determines that such action is necessary:

1. because the recipient or assignee has not taken or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;
2. to alleviate health or safety needs which are not reasonably satisfied by the recipient, assignee, or their licensees;
3. to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the recipient, assignee, or licensee; or
4. because the agreement required by paragraph I. of this Intangible Property term and condition has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the U.S. is in breach of such agreement.

k. Special Provisions for Awards with Non-profit Organizations

If the recipient is a non-profit organization, it agrees that:

1. rights to a subject invention in the U.S. may not be assigned without the approval of NSF, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the recipient;
2. the recipient will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when NSF deems it appropriate) when the subject invention is assigned in accordance with [35 U.S.C. § 202\(e\)](#) and [37 CFR § 401.10](#);

3. the balance of any royalties or income earned by the recipient with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific or engineering research or education; and

4. it will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms and that it will give preference to a small business firm if the recipient determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided that the recipient is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal.

The decision whether to give a preference in any specific case will be at the discretion of the recipient. However, the recipient agrees that NSF may review the recipient's licensing program and decisions regarding small business applicants, and the recipient will negotiate changes to its licensing policies, procedures or practices with NSF when NSF's review discloses that the recipient could take reasonable steps to implement more effectively the requirements of this paragraph k.4. In accordance with 37 CFR § 401.7, NSF or the recipient may request that the Secretary review the recipient's licensing program and decisions regarding small business applicants.

l. Communications. All communications required by this Intangible Property term and condition must be submitted through the [iEdison Invention Information Management System](#) maintained by the National Institute of Standards & Technology unless prior permission for another form of submission is obtained from NSF at patents@nsf.gov or at Office of the General Counsel, ogcallinquiries@nsf.gov, U.S. National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA 22314.

25. Cost Sharing

a. General

1. The recipient 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 recipient 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 recipient must maintain records of all project costs that are claimed by the recipient 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 specified in [2 CFR § 200.306](#). Unless otherwise specified in the award, approval is given to include unrecovered indirect costs as part of cost sharing contributions. If the recipient'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.**

26. Audit and Records

a. Financial records, supporting documents, statistical records, and other records pertinent to this award must be retained by the recipient for a period of three years from submission of the Final Annual Project Report specified in Article 13b.

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 recipient's fiscal year in which the award requirement for reporting income expires.

b. Unless court action or audit proceedings have been initiated, the recipient may substitute electronic copies of original records.

c. In accordance with [2 CFR § 200.337](#), NSF, Inspectors General, the Comptroller General of the United States, or any of their authorized representatives must have the right of access to any records of the recipient or subrecipient pertinent to the Federal award to perform audits, execute site visits, or for any other official use. This right also includes timely and reasonable access to the recipient's or subrecipient's personnel for the purpose of interview and discussion related to such documents or the NSF award in general.

d. In order to avoid duplicate record keeping, NSF may make special arrangements with the recipient to retain any records that are needed for joint use. NSF may request transfer to its custody of records not needed by the recipient 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 recipient. In the rare event that this provision is

exercised, NSF will negotiate a mutually agreeable arrangement with the recipient regarding reimbursement of costs.

27. 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 recipient or a subrecipient under an award, the recipient 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.

28. 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 term and condition, [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 recipient fails to comply with the terms and conditions of the Federal award;
2. By NSF with the consent of the recipient, in which case the two parties must agree upon the termination conditions. These conditions include the effective date and, in the case of partial termination, the portion to be terminated;
3. By the recipient upon sending NSF a written notification of the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if NSF determines that the remaining portion of the award will not accomplish the purposes for which the award was made, the NSF may terminate the award in its entirety;
4. By NSF if an award no longer effectuates the program goals or agency priorities; or
5. By NSF, when ordered by the Deputy Director under NSF's Regulation on Research Misconduct (45 CFR § 689).

c. Normally, action by NSF to suspend or terminate an award will be taken only after the recipient 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 recipient 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 recipient 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 term and condition, 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 recipient 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 29.

h. NSF will report award termination in SAM, but only after the recipient has had an opportunity to exhaust the review procedures contained in [PAPPG Chapter XII.B](#). See also paragraph f of Term and Condition No. 13 for additional information on the responsibility/qualification information in SAM.gov.

29. Termination Review Procedure

a. A request for review of a notice of termination or settlement must be addressed to the Division Director, Division of Grants and Agreements, U.S. 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 recipient of the termination or settlement.

b. The request for review must contain a full statement of the recipient's position with respect to the disputed matter and the facts and rationale that support the recipient'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.

30. Human Research Subjects

The recipient 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 recipient agrees to comply with the NSF regulation, entitled, "*Protection of Human Subjects* (45 CFR § 690)."

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

This term and condition 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 recipient 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 oversight 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.

32. Investigator Financial Disclosure Policy

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

33. Animal Welfare

Awards involving the care or use of live vertebrate animals must 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](#) must be followed.

34. Trafficking in Persons

Recipients must comply with the Trafficking Victims Protection Act of 2000 (22 U.S.C. § 7104(g)) as implemented by [2 CFR § 175](#).

35. 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 recipient 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 ensuring 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](#).

36. Whistleblower Protection

The recipient is notified of the applicability of 41 U.S.C. § 4712, Enhancement of contractor protection from reprisal for certain disclosures of information, which protects employees of recipients and subrecipients from reprisals for making certain disclosures. Recipients are notified that they must inform their employees in writing of the rights and remedies provided under this law, in the predominant native language of the workforce. This requirement and notification must be included in any subaward documents.

37. Build America, Buy America

a. The recipient is subject to the Buy America Sourcing requirements under 2 CFR part 184, Buy America Preferences for Infrastructure Projects, 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 recipient must implement these requirements in its procurements, and this term and condition must flow down to all subawards and contracts at any tier. For legal definitions and sourcing requirements, and construction material standards, the recipient must consult [2 CFR § 184.7](#). Additional guidance may be found on NSF's Implementation of the Act on the [Build America, Buy America website](#).

b. When supported by rationale provided in [2 CFR § 184.7](#), the recipient 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](#).

38. Recipient Integrity and Performance Matters

The recipient must fully comply with the requirements stipulated in [Appendix XII to Part 200](#) of 2 CFR part 200, entitled "*Award Term and Condition for Recipient Integrity and Performance Matters*." See also Term and Condition No. 28 for NSF's responsibilities regarding reporting award terminations in SAM. In addition, paragraph f. of Term and Condition No.13 specifies NSF responsibilities to report in SAM.gov a recipient's failure to submit all required reports.

39. 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. The PI and co-PI(s) and all award personnel must comport themselves in a responsible and accountable manner during the performance of award activities whether at the recipient organization, on-line, or conducted outside the organization, such as at field sites, facilities, or during conferences and workshops.

For purposes of this 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 recipient 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 recipient is required to notify NSF of: (1) Any finding/determination regarding the PI or any co-PI¹³ that demonstrates a violation of recipient 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 recipient relating to any finding/determination or an investigation of an alleged violation of recipient policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault.¹⁴ Such notification must be submitted by the AOR to NSF's 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 recipient on administrative leave or the imposition of an administrative action, whichever is sooner.¹⁵ Each notification must include the following information:

- NSF Award Number;
- Name of PI or co-PI being reported;¹⁶
- Type of Notification: Select one of the following:

¹³ If a co-PI is affiliated with a subrecipient organization, the Authorized Organizational Representative of the subrecipient must provide the requisite information directly to NSF, as instructed in this paragraph.

¹⁴ Recipient 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.

¹⁵ 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.

¹⁶ 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.

- Finding/Determination that the reported individual has been found to have violated recipient 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 recipient of the reported individual on administrative leave or the imposition of any administrative action on the PI or any co-PI by the recipient relating to any finding/determination or an investigation of an alleged violation of recipient 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 recipient, 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 recipient 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 recipient has taken appropriate action(s) to ensure the continuity of science and that continued progress under the funded project can be made.

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 recipient 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 recipient 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 term and condition.

40. 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 information¹⁷ 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., 2024, 2025):

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

- Enter the applicable year (e.g., 2024, 2025):

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

- Enter the applicable year (e.g., 2024, 2025):

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

- Enter the applicable year (e.g., 2024, 2025):

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

- Enter the applicable year (e.g., 2024, 2025):

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

¹⁷ 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 [NSTC Pre-award and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending \(Other\) Support](#) which has been developed to assist users in determining the types of activities that must be disclosed.

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., 2024, 2025):

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

- Enter the applicable year (e.g., 2024, 2025):

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

- Enter the applicable year (e.g., 2024, 2025):

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

- Enter the applicable year (e.g., 2024, 2025):

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

- Enter the applicable year (e.g., 2024, 2025):

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.

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

Section 889 of the NDAA for 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.

42. Malign Foreign Talent Recruitment Program Certification

Pursuant to Section 10632 (42 U.S.C. § 19232) of the CHIPS and Science Act of 2022, each PI and co-PI identified on a proposal submitted or due on or after May 20, 2024, that results in an award, must certify annually in Research.gov, for the duration of the award that such individual is not a party to a malign foreign talent recruitment program.

These certifications shall not apply retroactively to proposals submitted prior to May 20, 2024.

False representations may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

43. Postaward Additions of Postdoctoral Scholars or Graduate Students

If the recipient rebudgets funds to support a postdoctoral scholar or graduate student and the original proposal included a mentoring plan, no further documentation is necessary. If the original proposal did not include a mentoring plan, then the recipient must email the cognizant NSF Program Officer the requisite mentoring plan, as described in [PAPPG Chapter II.D.2.i\(i\)](#).

If supplemental funding is requested to support a postdoctoral scholar or graduate student and the original proposal did not include a mentoring plan, then the supplemental funding request must include the requisite mentoring plan, as described in PAPPG Chapter II.D.2.i(i). The plan should be uploaded to the “Other Supplementary Documents” section of the Research.gov Supplemental Funding Request module.

In all cases, a PI or co-PI must report on the mentoring activities provided to the individual in the annual and final annual project reports.

44. Individual Development Plans for Postdoctoral Scholars and Graduate Students

In accordance with Section 10313 (42 U.S.C. § 18993) of the CHIPS and Science Act of 2022, for each NSF award that provides substantial support to postdoctoral scholars and graduate students, each individual must have an individual development plan, which is updated annually, that maps the educational goals, career exploration, and professional development of the individual. NSF defines “substantial support” as an individual that has received funding for one person month or more during the annual reporting period under the NSF award. See also paragraph d. of Term and Condition No. 13 for the annual certification requirement.

45. Foreign Financial Disclosure Report (FFDR) (CHIPS and Science Act of 2022)

This term and condition applies only to recipients that are Institutions of Higher Education.

a. **Submission Requirement.** In accordance with Section 10339B, *Foreign Financial Support*, of the CHIPS and Science Act of 2022, (42 U.S.C. § 19040), each “recipient institution of higher education” must annually report all “current financial support, the value of which is \$50,000 or more¹⁸, including gifts and contracts, received directly or indirectly from a foreign source” which is “associated with a foreign country of concern,” as defined in the [PAPPG Introduction, Section D](#). The annual report requirement is per institution, not per award. Negative reports are required to be submitted.

This requirement applies only to direct recipients of NSF funding. This does not include entities that receive subawards or individuals that are the beneficiaries of the award.

The FFDR must be submitted electronically via Research.gov by an AOR or by an individual(s) authorized by the recipient to submit the foreign financial disclosure report to NSF.

b. **Content of Foreign Financial Disclosure Report.** [PAPPG Chapter VII.D.3](#) provides additional instructions regarding completion of the FFDR and those instructions are hereby incorporated into this term and condition.

¹⁸ The reporting requirement is a cumulative value of \$50,000 or more per source during the reporting period.

c. Timing of Foreign Financial Disclosure Report. The report must be submitted by July 31 of each calendar year. The first report was due July 31, 2024, and covered the reporting period from July 1, 2023, through June 30, 2024, to provide the institution with a 30-day period for finalization and submission of the requisite information. Subsequent years' reporting periods will run from July 1st of the previous year to June 30 of the reporting year.

d. Additional Requirements. The institution will maintain a copy of the relevant records subject to the disclosure requirement until the latest of --

- (1) the date that is four years after the end date of the award;
- (2) the date on which the agreement terminates; or
- (3) the last day of any period that applicable State public record law requires a copy of such agreement to be maintained.

Upon review of a submitted disclosure, NSF may request that copies be submitted of any contracts, agreements, or documentation of financial transactions associated with disclosures submitted under this term and condition.

46. Debarment and Suspension

The recipient shall fully comply with the requirements stipulated in [Subpart C of 2 CFR part 180](#), entitled "[Responsibilities of Participants Regarding Transactions Doing Business With Other Persons](#)" as supplemented by NSF's regulations at 2 CFR part 2520. The recipient 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 recipient also is responsible for further requiring the inclusion of a similar award term or condition in any subsequent lower tier covered transaction. The recipient 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.

47. Resolution of Conflicting Conditions

a. If the IRTC is silent on a specific area covered by 2 CFR (including 2 CFR part 200), the requirements specified in 2 CFR part 200 must be followed.

b. Should there be any inconsistency between 2 CFR (including 2 CFR part 200) and the NSF *Proposal and Award Policies and Procedures Guide*, 2 CFR applies.

c. Should there be any inconsistency between the IRTC and the NSF *Proposal and Award Policies and Procedures Guide*, the IRTC governs.

d. 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.

e. 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

48. 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 recipient or third parties. The recipient is advised to insure or otherwise protect itself or others, as it may deem desirable. Costs associated with insurance and liabilities are addressed in the applicable cost principles.

49. 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 recipient 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.

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

The recipient 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 recipient compliance with the laws and regulations of the country in which the work is to be conducted.