Quarterly Report Template¹

- << Insert NSF Engines Award Title, Proposal ID>>
- << Insert Month, Year>>
- <<DELETE this reference text in the final version of report. The quarterly report shall cover the period of the first of the month through the last day of the third month. It is due no later than the fifth day of the first month in the following three-month period. If the due date listed above falls on a weekend or government holiday, the report will be due on the following business day. Note that the reporting sections listed in this template are the required sections for quarterly reports described in each Engine award's Terms and Conditions. The purpose of this template is to provide additional guidance on the requested format for these reports. Note that all documents noted as having a template are or will be uploaded to each Engine's SharePoint site. The completed quarterly report, and accompanying documents noted in this template, should be uploaded by the Engine team to the same SharePoint Site within the quarterly report folder. Quarterly reports should also be uploaded to research.gov>>
- **A. Governance and Management.** The staffing, activities, and effort associated with Governance and Management, e.g., hiring, restructuring.
 - << DELETE this reference text in the final version of report. Engines should submit with their first quarterly report a spreadsheet (template provided) and organizational chart illustration. The organizational chart illustration should outline the key entities comprising the Engine and at minimum include the Lead Organization, the Engine's Leadership Team, Governance Board, and Advisory Board. The organizational chart must list the individual positions comprising each entity, denote if they are full-time or part-time, and show the reporting lines to convey how authority, reporting and responsibility are allocated across the Engine.</td>

Pursuant to 5 CFR 1320.5 (b), an agency may not conduct or sponsor, and a person is not required to respond to an information collection unless it displays a valid OMB control umber. The OMB control number for this collection is 3145-XXXX. Public reporting burden for this collection of information is estimated to average 10 to 20 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to:

¹Information from this data collection system will be retained by the National Science Foundation (NSF), a Federal agency, and will be an integral part of its Privacy Act System or Records In accordance with the Privacy Act of 1974. All individually identifiable information supplied by individuals or institutions to a Federal agency may be used only for the purposes outlined in the system of records notice and may not be disclosed or used in identifiable form for any other purpose, unless otherwise compelled by law. These are confidential files accessible only to appropriate NSF officials, their staffs, and their contractors responsible for monitoring, assessing, and evaluating NSF programs. Only data in highly aggregated form or data explicitly requested "for general use" will be made available to anyone outside of NSF for research purposes. Data submitted will be used in accordance with criteria established by NSF for monitoring research and education grants, and in response to Public Law 99-383 and 42 U.S.C. 1885c.

These files should be named, "Engine management team_[Q1, Q2, Q3, or Q4]_[2024 or 2025]_[Engine name].xls" and "Engine organizational chart_[Q1, Q2, Q3, or Q4]_[2024 or 2025]_[Engine name].pdf". Teams should submit updated documents with their quarterly report, only if there are changes.

Within the quarterly report, teams should:

- Note if they have submitted updated versions of the above two documents along with additions, restructuring, or other modifications to staffing, positions and/or the individuals. Suggested length: up to two paragraphs for this section, if applicable.
- Describe significant efforts undertaken by the following Engine entities: Leadership
 Team, Governance Board, and Advisory Board. Suggested length: up to two paragraphs
 for each entity. If any of these efforts correspond to Ecosystem Building Projects noted
 in the "Engine Activities" file (see section C of this quarterly report document), make
 note of the efforts in the context of those projects.>>
- B. Progress on the Engine's Five-year Strategic and Implementation Plan's component plans. Activities undertaken toward developing and/or modifying the required component plans should be described, in addition to implementation and notable outcomes for each.
 - << DELETE this reference text in the final version of report. Engines will be provided several guidance documents related to this Plan:
 - A table with the list of component plans and their due dates.
 - Resource documents for "best practices" for each plan that will typically include a rubric, associated template, and guidance document; these will be provided at a minimum three months prior to the initial due date for that component plan and will be accompanied by a webinar.

In this section of the quarterly report, Engines should indicate which component plans have been updated since the last reporting period. Engines should then summarize activities undertaken toward developing and/or modifying the component plans. Be sure to use the section numbering noted in the table to refer to the component plans. Suggested length: up to two paragraphs per component plan.>>

Component Parts of Strategic and Implementation Plan	Plan Updated Since Last Reporting Period (List "Updated")
I. Mission and Vision	
II.A. Governance and Management Plan	
II.B. Partnership Agreement Plan	
II.C. Workforce Development Agreement	
II.D. IP Management Plan	
II.E. Financial and Resource Sustainability Plan	
III.A. SWOT Analysis: R&D and Translation	
III.B. SWOT Analysis: WFD	
III.C. SWOT Analysis: Inclusive Engagement	
IV.A. R&D and Translation Strategic Plan	
IV.A subsection: Report on R&D and translation	
benchmarks, baselines, SMART goals and targets	

IV.B. WFD Strategic Plan	
IV.B subsection: Report on WFD benchmarks,	
baselines, SMART goals and targets	
IV.C. Inclusive Engagement Strategic Plan	
IV.C subsection: Report on inclusive engagement	
benchmarks, baselines, SMART goals and targets	
V.A. R&D and Translation Implementation Plan	
V.B. WFD Implementation Plan	
V.C. Inclusive Engagement Implementation Plan	
VI. Evaluation Plan	
Appendix A: IP Agreements	
Appendix B: Partnership Agreements	

- C. Engine Activities and Projects: Use-Inspired R&D, Translation, Workforce Development, and Ecosystem Building. This section should provide a status update of all Engine-funded projects and initiatives, reported against the Engine's milestones.
 - << DELETE this reference text in the final version of report. Engines should submit with their first quarterly report a separate document that describes the Engine's activities, using the provided "Engine Activities Template". The file should be named, "Engine Activities_[Q1, Q2, Q3, or Q4]_[2024 or 2025]_[Engine name].pdf". Teams should submit updates of these documents with their quarterly report, if there are changes.

In this section of the quarterly report, Engines should provide a status update of up to two paragraphs for each activity or project, including notable outcomes of each against the milestones and objectives outlined in the above referenced document. This section should also note termination of activities or projects or selection of new ones during the reporting period, including the rationale for changes. Each activity or porject should be referenced in a separate subsection below using the abbreviation of the activity or project (e.g. R/D-1 ACTIVITY, WFD-3 ACTIVITY, EB-1 PROJECT) and name for the activity or project.>>

- **D. Partners.** This section should document any changes to the set of partners and any changes in the nature of the partners' activities and commitments to the Engine.
 - << DELETE this reference text in the final version of report. These changes should be documented in the Budget and Resources Spreadsheet noted in section E of this report. For each noted change in partners, provide up to two paragraphs explanation in the quarterly report, listing the name of the organization followed by the explanation.>>
- **E. Budget Expenditures.** Summary of significant budget expenditures for the specified quarterly reporting period(s).
 - << DELETE this reference text in the final version of report. Engines should submit an updated Budget and Resources Spreadsheet together with their first quarterly report (template

provided). In subsequent quarters, an updated version should be submitted with the report, if applicable. The file should be names "Budget and Resources_[Q1, Q2, Q3, Q4]_[2024 or 2025]_[Engine name].xls".

In this section of the quarterly report, Engines should summarize significant budget expenditures for the specified quarterly reporting period(s) using the below two tables, one organized by NSF budget cost category (i.e. NSF form 1030) and one by programmatic core function (Use-inspired R&D, Translation, Workforce Development, Ecosystem Building, Governance and Management). The cumulative amount should be compared against the planned budget for each reporting period. Variances from plans, positive or negative, and mitigation steps or rationale to address variance, if needed, should be discussed. If actuals are not available due to the organization's internal accounting reporting cycles, "estimated actuals" should be used. For each noted budgeted item, provide up to two paragraphs explanation.>>

TABLE OF SIGNIFICANT EXPENDITURES BY NSF COST CATEGORY

Budget Expenditure (NSF Budget Cost Category)	Description	Total Planned Budget for Period (\$K)	Total Actual Budget for Period (\$K)	Variance (\$K)	Mitigation Steps or Rationale

TABLE OF SIGNIFICANT EXPENDITURES BY ENGINE CORE FUNCTION

Budget Expenditure by Core Function	Description**	Total Planned Budget for Period (\$K)	Total Actual Budget for Period (\$K)	Variance (\$K)	Mitigation Steps or Rationale

^{*} List one of the following core functions: R&D, Translation, WFD, Governance and Management, or Other Ecosystem Building

F. Commitments and Resources.

<< DELETE this reference text in the final version of report. This section should describe changes in commitments and resources made available to Engine activities by non-NSF sources. These commitments should be documented in the Budget and Resources Spreadsheet noted in section E of this report and summarized in the below table.

Include new commitments of cash and in-kind resources by such sources during this period, and the impact (high, moderate and low) of these commitments to the Engine core functions (use-inspired R&D, Translation, Workforce Development, Ecosystem Building, and Governance and Management). The Authorized Organizational Representative (AOR) of the Lead Organization must attest to the accuracy of reported changes. For each noted new resource, provide up to two paragraphs explanation in the quarterly report, listing the header by the name of the institution providing the resource.>>

TABLE OF SIGNIFICANT NEW RESOURCES

Institution	Resource Description	Resource Value	Associated Core Function(s)*	Impact to Core Function**

^{*} List one of the following core functions: R&D, Translation, WFD, Governance and Management, or Other Ecosystem Building. Where applicable, also list the associated activity(ies) or project using the naming convention in the Budget and Resources spreadsheet (e.g. TR-1, WFD-2, etc.).

G. Award-Specific Terms and Conditions

<< DELETE this reference text in the final version of report. Each Engine award has a list of Terms and Conditions that are specific to their award. This list of award specific Terms and Conditions can also be found in each Engine's SharePoint site. In this section, Engines should describe progress on these items since the last reporting period. Include a separate subsection for each</p>

^{*} Where applicable, include the associated activity or project using the naming convention in the budget and resources spreadsheet (e.g. TR-1, WFD-2, etc.)

^{**} Include impact to the associated activity or project, where applicable.

term and condition where there is progress to report; include the full text of the given item. Suggested length: up to two paragraphs for each item.>>

- **H. Risk Assessment and Monitoring.** Within sixty days of the award start date, a comprehensive formal risk assessment should be performed of the Engine using widely accepted standards with details captured in a risk register, specifically any key risks identified and how those risks plan to be addressed, e.g., mitigate, transfer, eliminate, accept. Status reporting of the identified risks shall be included in the quarterly reports to NSF.
 - << DELETE this reference text in the final version of report. A qualitative risk analysis should be conducted to determine the risks, the probability of occurrence and impact to the Engie, the priority, risk response and planning for future.

Note that efforts described in this section can be considered an Ecosystem Building Project, refer to the Engines Activities document in section C of this quarterly report template.

The register or tracking tool should be organized in a tabular format, "Engine Risk Tracking_[Q1, Q2, Q3, or Q4]_[2024 or 2025]_[Engine name].xls" and organized by risk category. It must include at minimum, risk i.d.s, the individual risks (structured "if-then" risk statement), risk ranking, risk responses, risk category, risk owner, timing when the risk is likely to occur, response plans should the risk materialize or when it may no longer be relevant, risk triggers or early warning signs, current risk status. Definitions for the meta data as defined by the Engine should be included as a separate tab in the submitted file.

In addition to the risk register, a narrative report should be included in this report to summarize: i) the status of the high priority risks and planned actions ii) changes in ranking of other risks, to elevate or reduce ranking and iii) risks that have been retired with rationale. The length of the narrative should be no more than two paragraphs. >>

- **I. Research Security.** Research security efforts of the lead organization and sub-awardee organizations pertinent to the activities on the Engine award, if any.
 - << DELETE this reference text in the final version of report. In this section of the quarterly report, the narrative must include, at minimum:
 - i) Changes, if any, to the security point of contact, i.e., individual appointed "with responsibility for research security oversight of the Engine's research activities".
 - ii) Status of submissions (via NSF research.gov) that indicate changes in active other support, consistent with NSF PAPPG Chapter C. Post-award Disclosure of Current Support and In-Kind Contribution Information and PIs and co-PIs on active NSF awards.
 - iii) In the annual and final report, provide an update of the current support since the submission of the proposal consistent with consistent with NSF PAPPG Chapter C.
 - iv) A list of relevant research security training or activities undertaken by Engines PI and co-PIs.

The narrative for this section should be no more than two paragraphs.>

- J. Cybersecurity Incidents. Description of all reportable cybersecurity incidents pertinent to the activities on the Engine award. This may require coordination with each entity's cybersecurity official to identify the information assets pertinent to the Engine.
 - << DELETE this reference text in the final version of report. Reporting in the quarterly report should include at minimum a tabular list "Cybersecurity Incidents _[Q1, Q2, Q3, Q4]_[2024 or 2025]_[Engine name].xls" of any cybersecurity incidents covering any of the items below, and corresponding actions take to alert and coordinate with the respective governing entity. The lack of incidents should also be noted.
 - i) Those that may cause financial harm or loss of intellectual property created or supported in performance of the award, including malware and ransomware attacks.
 - ii) Operations of Engine or the security of, or access to, scientific data, including disruption of both physical operations and business operations for a duration greater than one (1) hour 3 interagency or partners, or have national security implications.
 - iii) Incidents that affect personally identifiable information or other unauthorized release of data related to the Engine
 - iv) Any significant or persistent attempt to gain unauthorized access to a system or its data related to the Engine.
 - v) Incident where federal law enforcement is notified; and
 - vi) Abuse or misuse of a system or data in violation of the terms of the agreement and any limited personal use policy established by the awardee for individuals with access to its systems.

The size of the table should be scaled to the number of incidents.>>

- K. Infrastructure Construction and Associated Operations and Maintenance (O&M), and Sustainability Plan. Includes all costs and activities where NSF funds are used for building construction, design and engineering services, and on-site costs, e.g. prep costs including cleanup, legal services, etc. This also covers the use of NSF funds for development of shared research facilities (i.e., any facility that will not be used exclusively for Engine activities) and space outfitting items for existing or new spaces, such as furniture.
 - << DELETE this reference text in the final version of report. Note that efforts described in this section can be considered an Ecosystem Building Project, refer to the Engines Activities document in section C of this quarterly report template.

The content and subsections noted below should be included as part of the third quarterly report, and changes reported routinely in subsequent quarterly reports. If construction is initiated earlier, teams should discuss with their cognizant Program Director earlier submission of this content.

<u>i)</u> <u>Construction Costs</u>: Costs will be captured in the NSF Budget and Resources template noted in section c of this quarterly report template. The initial quarterly report

- addressing construction should summarize the costs. Subsequent quarterly reports should summarize construction costs over the reporting period.
- ii) Construction Activities: The status of the construction activities should be reported in the provided format of the file titled "Construction Activities _[Q1, Q2, Q3, Q4]_[2024 or 2025]_[Engine name].xls". The initial quarterly report should summarize the activities. Subsequent quarterly reports should include a brief narrative to summarize the following, if applicable: i) cost and schedule variances by activity, positive and negative, ii) impacts to the Engine and where applicable iii) actions planned to address them.
- iii) Operations and Maintenance (O&M) Plan: Engines should submit the plan as a separate file titled "Operations and Management plan _[Q3]_[2024]_[Engine name].pdf". The O&M Plan should include the overall plan for operating the infrastructure, and at a minimum should include: a management and governance plan, strategy for access to and utilization of the infrastructure by the target communities, and planned metrics for the evaluation of the success and impact of Engines investment in the infrastructure. The O&M Plan must also identify the anticipated support to sustain the infrastructure using funds other than from the NSF Engine. After the initial plan has been submitted, future quarterly reports should include a summary of the progress against the O&M Plan.

Suggested length: up to two paragraphs per subsection noted above.>