General Programmatic Terms and Conditions (PTCs) for the CISE Research Infrastructure: Mid-Scale Infrastructure – NSFCloud (CRI: NSFCloud) (NSF 13-602) Cooperative Agreement(s)

NSF 13-602: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf13602

1. <u>**Key Personnel:**</u>
   Except for the Principal Investigator(s) (PIs) or Co-PIs identified in this award, requests to make any changes to personnel, organizations, and/or partnerships specifically named in the proposal approved as part of this award shall be submitted in writing to the cognizant NSF Program Official for approval prior to any changes taking effect. Requests for prior approval of changes to the PI(s) must be submitted through FastLane for review by the cognizant NSF Program Official and approval by an NSF Grants Officer.

2. <u>**Program/Project Description:**</u>
   This CISE Research Infrastructure (CRI): Mid-scale Infrastructure (NSFCloud) project is a track within the CRI program specifically supporting research infrastructure that enables the academic research community to develop and experiment with novel cloud architectures addressing emerging challenges, including real-time and high-confidence systems.

3. <u>**Project Governance and Governing Responsibilities:**</u>
   The Awardee will ensure that an efficient and effective project governing structure is in place throughout the award period to support all critical or significant project activities. In support of this objective, key responsibilities for the Project Manager, who is also the PI of the award, are defined as follows:

   a.   Managing, overseeing, and directing the overall NSFCloud project;

   b.   Contributing to infrastructure development, community development, and broader impact outcomes;

   c.   Serving as the point of contact with NSF Program Officials;

   d.   Producing, together with co-PIs and other project personnel, annual and final reports that provide an integrated view of the overall project;

   e.   Creating, maintaining, and contributing to an updated website for the NSFCloud project; and

f.   Leading the project team in planning, coordinating, and holding semi-yearly NSFCloud meetings.

4.   **Reporting Requirements:**
The Awardee will provide reports as requested by the cognizant NSF Program Director who will determine the contents, formats, and submission timelines. The Awardee will submit all required reports via the mechanisms specified by NSF. Below we specify the types of required reports, along with the frequency and content/purpose of each.

a.   Teleconferences between NSF (PD, DD, and/or DDD) and Project Manager and relevant co-PIs/collaborators.

   i.   Frequency:
        1.   At least once every other week with the times to be jointly decided by NSF and the Project Manager.
        2.   Along with the teleconference, a written bi-weekly status report is to be provided prior to each teleconference.
   ii.   Content and purpose:
        1.   Give updates to NSF on current and planned activities, including on the NSFCloud architecture, phase 1 deployment, risks and risk assessments, and other technical topics;
        2.   Coordinate community events and outreach;
        3.   Coordinate with NSF as necessary to ensure appropriate support for NSF research initiatives; and
        4.   Other items, as suggested as part of the written status report. The actual agenda may be modified in concert with NSF.

b.   Site Visits and/or Reverse Site Visits.

   i.   Frequency:
        1.   At least one at the project's halfway point.
   ii.   Content and purpose:
        1.   Contribute toward, and attend, an evaluation by an external committee assessing the progress of the project relative to the goals of the NSFCloud program as specified in the original solicitation, as well as specific metrics outlined in the original proposal.
   iii.   Other site visits and/or reverse site visits may be requested by NSF, as appropriate and with reasonable accommodations for scope and timing.

c.   Annual Reports.

   i.   Frequency:
        1.   Annual (via FastLane).
   ii.   Content and Purpose
        1.   Submits to NSF an integrated project report incorporating results from work performed by all PIs in the project. The Report is reviewed and approved by the NSF cognizant Program Official.

d. Special Reports:

    i.   A monthly financial report for the overall project, detailing expenditures for the lead project as well as any collaborative projects or subcontracts, is to be submitted by the Project Manager to the NSF Program Official.

    ii.   Others reports may be requested by NSF, as appropriate and with reasonable accommodations for scope and timeline.

e. NSFCloud Website:

    i.   Frequency:
        1. Ongoing activity to establish and maintain an up-to-date website about the NSFCloud project.

    ii.   Content and purpose:
        1. Contains reports on progress, lists publications and outreach activities, and describes outcomes and impacts from the research for the overall project.
        2. Provides the NSFCloud user community with tutorial material on how to use the NSFCloud infrastructure.
        3. Describes and links to all services, such as authentication, resource descriptions, operations support, network status, etc., needed to use the NSFCloud infrastructure.
        4. Provides the NSFCloud user community with pointers to a version-controlled code repository with all code, header files, and interfaces needed use the NSFCloud facility.
        5. Contains all content needed to support, grow and maintain a NSFCloud community.

5. **NSF Ongoing Project Oversight:**
The Awardee will ensure full commitment and cooperation among the governing structure components, and all project staff during all ongoing NSF project management and oversight activities. The Awardee will ensure availability of all key institutional partners during any review as well as timely access to all project documentation.

6. **Program-Specific Terms and Conditions, if Applicable:**
NSFCloud Intellectual Property Management:

a. The PI will develop and execute a process that leads to minimum encumberment of software, hardware and information technologies developed under the NSFCloud program.

b. The PI will maintain a record of the licensing terms of all software and other intellectual property developed by the program or essential to the operation of program facilities.