NASA OPEN INNOVATION SERVICES 2 STATEMENT OF WORK

1.0 <u>CONTRACT OVERVIEW</u>

1.1 INTRODUCTION

The Federal Government continues to seek new and improved ways of solving problems and driving innovation through the use of existing and/or emerging open innovation tools. The National Aeronautics and Space Administration (NASA) has used open innovation, specifically in the form of public challenges since the launch of the Centennial Challenges Program in 2005. Since 2011, NASA's Center of Excellence for Collaborative Innovation (CoECI) has been working to mature its experience primarily focused on the use of procurement-based public challenges. Across the agency, however, interest continues to grow in the broader use of crowdsourcing as a tool to help NASA meet its mission. As a result, CoECI is seeking to expand the capabilities and expertise it provides to NASA, as well as other federal agencies, in the successful use of crowdsourcing.

As a follow on to the NASA Open Innovation Services (NOIS) contract awarded in June of 2015 the NOIS2 contract is to enable the broader use of crowdsourcing-based innovations and solutions. This Statement of Work (SOW) describes the requirements for providing services and/or delivering products to multiple NASA centers and other government agencies.

1.2 SCOPE OF WORK

The scope of the NOIS2 contract includes the ability to solicit crowd-based solutions via contracts with multiple awardees using their commercial approaches to satisfy the SOW. The Contractor shall provide all the necessary management, personnel, facilities, equipment, materials and supplies to deliver the products and services defined in this SOW and more specifically described in each task order (TO). Other NASA centers or federal Government agencies may utilize this contract through a mutual agreement with NASA.

Multiple crowdsourcing methodologies exist today. At a minimum the following are the types of methodologies NASA may require over the course of the contract:

Challenges and prize competitions: Challenges and prize competitions are competition-based activities that use a focused problem-statement approach and crowdsourcing, rather than specifically identified individuals or groups, to obtain solutions and/or stimulate innovation.

Citizen science: Citizen science invites the public to participate voluntarily in the scientific process and addresses real-world problems in ways that may include formulating research questions, conducting scientific experiments, interpreting results, making new discoveries, collecting and analyzing data, developing technologies and applications, and solving complex problems.

Micro-task and/or Freelance: Microtasking is the process of splitting a large job into small tasks that can be distributed, over the internet, to many people. It usually involves the work of freelancers who offer their expertise on an hourly, daily, or by-the-job rate to deliver expertise to meet the requirements of the particular task.

Open Innovation Expertise: This expertise, while not a methodology in and of itself, includes, but is not limited to, specialized skill in translating a requirement, need, or gap into a problem statement; designing a detailed approach to the use of a particular crowdsourcing methodology; and/or, understanding how to structure incentives to maximize outcomes.

2.0 DATA REQUIREMENTS

Contractors shall provide reporting and metrics to satisfy the White House Office of Science and Technically Policy (OSTP) reporting requirements in addition to reporting to be specified in each TO. Typical TO reporting includes program reviews, periodic status reports, and challenge closeout reports.

3.0 DELIVERABLES

Through the use of one or more of the methodologies described in section 1.2, the contractor shall provide an indefinite delivery and indefinite quantity of the end-products and services listed below.

      3.1 Technical solutions – These include, but are not limited to, technical ideas, concepts, conceptual designs, detailed designs, technologies, prototypes, or hardware that address or solve all or part of a specified requirement.

      3.2 Multimedia - These include, but are not limited to, multimedia such as graphic art, logos, animations, videos, storyboards, voiceovers, music, or writing/copy.

      3.3 Data science - These include, but are not limited to, data-science-related elements such as machine learning algorithms, mathematical algorithms/models, data sets (gathered, validated, or cleaned/improved)

      3.4 Software and apps - These include software development related elements including conceptual designs, architectures, requirements/specifications, operations concepts/use cases, user interface designs/wireframes, software/application code, testing/bug hunt/validation reports, simulators/emulators, and users guides/documentation.

      3.5 CAD/mechanical designs - These products or deliverables include, but are not limited to, computer aided design (CAD) digital files that provide design models and details for physical/technical systems including mechanical or electrical design elements.

      3.6 Crowd program formulation - These products or deliverables include, but are not limited to, recommended approaches or plans for the formulation and execution of

organizational programs that leverage crowdsourcing as a tool for accessing expertise, skills, or products.

    3.7 Engagement campaign - This includes, but is not limited to, executed campaigns, programs, or events that engage the public (including students) in various technical aspects of NASA's programs to promote STEM education and/or public interest/support.

4.0 <u>CONTRACT MANAGEMENT AND ADMINISTRATION</u>

The Contractors shall perform all management functions, including technical and business management, necessary to plan, implement, track, report and deliver the required products and services described in the SOW. Contractors may be requested to support CoECI-sponsored workshops with presentations showcasing their capabilities and highlighting their approach to crowd sourced challenges.

The work on this contract is performed primarily offsite unless specified otherwise in the TO. If any government property is required in the performance of these requirements it will be specified in each applicable TO.

5.0 <u>WORK AUTHORIZATIONS</u>

The Contracting Officer (CO) will issue task orders specific to each effort requested by the government. TOs will be issued in accordance with the contract task ordering procedures. Each TO will contain specific details concerning the services and deliverables as outlined within the SOW. The Contractor shall respond to TOs with their proposal. After proposal evaluation a selection will be made and the CO authorizes work via an executed TO that specifies the Government's requirements.