NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
7500 GEOINT Drive, Springfield, Virginia 22150

Office of Research and Technology Applications (ORTA) Interest Form

Introduction

ORTA is responsible for launching and providing guidance on NGA technology transfer (T2) activities, through formal agreements that permit research and development (R&D) collaboration with non-federal entities such as corporations, academic institutions, and non-profits. T2 activities include Cooperative Research and Development Agreements (CRADAs), Education Partnership Agreements (EPAs), Partnership Intermediary Agreements (PIAs), and Patents & Licensing. See Appendix A for additional information and agency criteria for each activity. *(Note: every T2 activity requires an NGA government employee to serve as the lead for the effort).* NGA offers no promises of future funding, activities or contracts.

Potential Work

1. Describe the intent for the proposed effort.
2. Explain the benefits of the proposed effort to both NGA and the partner. Why would NGA want to engage in it?

Potential Tech Transfer (Knowledge, Equipment, or Capability)

Note: Fill out only as applicable.

1. What is the specific technology (or what knowledge, equipment, or capability) to be transferred?
2. How will the technology be shared?
3. What capability is proposed for transfer, to support the agency's mission?

Purpose

Choose the top three rationales justifying the proposed relationship from the following list, by placing a numeral 1, 2, or 3 next to the corresponding bullets below (with 1 being the highest priority).

- Assisting in the development of science, math, business, law, or engineering-related courses and materials for an educational institution
- Encouraging study in STEAM-related courses
- Providing sabbatical opportunities for faculty of an academic institution
- Offering NGA personnel to serve as adjunct professors or guest lecturers at an academic institution
- Providing academic, career, or internship advice and opportunities to students
- Enabling a long-term partnership between NGA and a state or local government or affiliated non-profit for purposes of T2 or community
- Facilitating technology transition (spin-in) to NGA from non-federal entities
- Facilitating technology transfer (spin-out) from NGA to non-federal entities
- Conducting cooperative or joint activity with small business firms and educational institutions to apply technology-related assistance from NGA
- Facilitating commercialization of technology developed or funded by NGA
- Exchanging technical expertise with non-federal partners
- Sharing resources and expertise not otherwise available to the partner, to advance development of ideas or technology supporting NGA mission needs
- Other: (Describe the justification)

Proposed Partner/Collaborator POC Information

Company or Institution Name:
Preferred Company or Institution Email:

NGA POC Information

Component/Office:
Office Email:

Appendix A: ORTA Activity Fact Sheet

Cooperative Research and Development Agreement (CRADA)

A CRADA is a formal written agreement between one or more federal agencies or laboratories and one or more non-federal parties under which the government provides personnel, services, facilities, equipment, subject matter expertise, or other resources. In return, the non-federal parties provide insight into cutting-edge industry technologies and share resources, subject matter expertise, and intellectual property. The following outlines the Agency's criteria:

- CRADAs are for research and development only.
- CRADA work can be classified or unclassified.
- The NGA "owning" organization provides an NGA Principal Investigator (PI).
- CRADA activities cannot overlap with NGA-funded work or otherwise provide NGA funds to a non-federal party for CRADA purposes.
- The CRADA Research Plan describes R&D tasks that align with NGA's Strategic Objectives.
- Collaborator personnel must be cleared to the same level of classification as the work performed under the CRADA.

Education Partnership Agreement (EPA)

EPAs enable the government to partner with universities and certain other non-federal entities to encourage and enhance study in scientific disciplines at all levels of education. Under an EPA, NGA does not provide direct funding to a partner. The following outlines the Agency's criteria:

- EPAs are for projects to support and enhance STEAM education objectives.
- EPAs are for unclassified work only.
- An EPA must have a Principal Liaison (PL) at the partner institution.
- NGA may make its personnel available for the following purposes:
    - Teaching engineering and science courses.
    - Assisting in the development of engineering and science courses and related educational materials.
- NGA may offer visits, tours, and demonstrations at its facilities for institution faculty and students.
- NGA may provide academic and career advice to institution students.

Partnership Intermediary Agreement (PIA)

A PIA is a partnership between a federal Government laboratory and a state or local government or non-profit entity (the "intermediary") that facilitates the federal laboratory's technology transfer activities with companies or educational institutions. The intermediary acts as a technology broker for the federal lab and provides services to advance the lab's cooperative or joint activities with small businesses or educational institutions.

T2 services under a PIA include:

- Consulting, strategic planning, and technology assessments.
- Facilitating transfer of technologies from the laboratory to industry.
- Evaluating patents and patent applications to identify the most viable candidate technologies for licensing to industry.
- Marketing NGA technologies to potential licensees.
- Providing support and assistance for media interactions as they relate to technology transfers.
- Working with industry and regional economies interested in commercializing federal technology.
- Arranging technical conferences, workshops, Accelerators, Hackathons, and seminars as they relate to T2 activities.
- Identifying companies with innovative technologies that match NGA operational needs.
- Establishing and fostering STEAM-related partnerships.

The following outlines the Agency's criteria:

- PIAs enable a long-term partnership between a federal Government laboratory and a state or local government or an affiliated non-profit.
- PIAs facilitate joint projects and accelerate technology transfers between the lab and private companies.
- NGA and the intermediary must provide a Contracting Officer, Contracting Officer's Representative, Program Manager, funding, and/or any other resources necessary to successfully execute a Collaborative Project Order.

Patents and Licensing

In general, patents give the patent owner a time-limited monopoly in the United States on the use, performance, manufacture, sale, or import of new and novel methods, machines, and compositions of matter. The patent owner can grant licenses to third parties (private sector, academic, and government organizations) to use, perform, manufacture, sell, or import the patented technology. Patent licenses can be exclusive (with only one licensee) or non-exclusive (with multiple licensees) and can be royalty-free or require that the licensees pay royalties to the licensor. In the case of patents owned by the U.S. Government, the organization holding the patent can use royalty payments only for limited purposes and must pay a portion of the royalty payments to the inventors of the patented technology even after they leave Government service.

Obtaining a U.S. patent can take several years. It requires disclosing the technology in sufficient detail to enable a "person having ordinary skill in the [relevant] art" to re-create the technology.

Unclassified patents are published 18 months after their filing date on the website of the U.S. Patent and Trademark Office (USPTO) and are discoverable using standard internet browsers. Any request for non-publication must be made concurrently with the initial filing of the patent application; they cannot be filed separately, even on the same day. Details can be found in the Manual of Patent Examining Procedure (MPEP) Sec. 1122. However, the request can be rescinded later at any time during prosecution to pursue foreign patent rights (MPEP Sec. 1123).

NGA can obtain patents in other countries, but additional steps are required, and additional limitations may apply.

Technology invented by a contractor employee working under an NGA contract generally belongs to the contractor firm unless it assigns ownership to the U.S. Government.

Classified patent applications may be filed with the USPTO, but additional limitations apply.

Patent Requirements

To qualify for patent protection, the technology or invention must be new—not disclosed anywhere in the world—and must be more than an obvious modification of existing technology (This is a very nuanced area of the law; NGA's ORTA team can provide additional clarification).

- All inventions made by U.S. Government employees must be disclosed to ORTA, regardless of whether the technology was invented using Government time or resources (the ORTA team can provide additional clarification).
- Inventors must fill out an Invention Disclosure Form, available from ORTA.
- If ORTA files a patent application for the technology, inventors must work with ORTA on the application, which may require several hours of the inventor's time over the course of weeks.
- With limited exceptions, disclosing a technology to the general public before filing for patent protection makes that technology unpatentable.
- NGA also applies for non-technology patents such as design patents to protect the design of the technology (e.g., the graphical user interface, the user experience, etc.).

Patent Licensing

- ORTA will identify potential licensees and negotiate terms of the license(s).
- Inventors are encouraged to coordinate with ORTA about potential licensees and typical license terms used in the field of the invention.

Appendix B

Learn More About Technology Transfer
Technology Transfer from Defense Acquisition University
Techlink, DoD partner intermediary
Federal Lab Consortium Learning Center