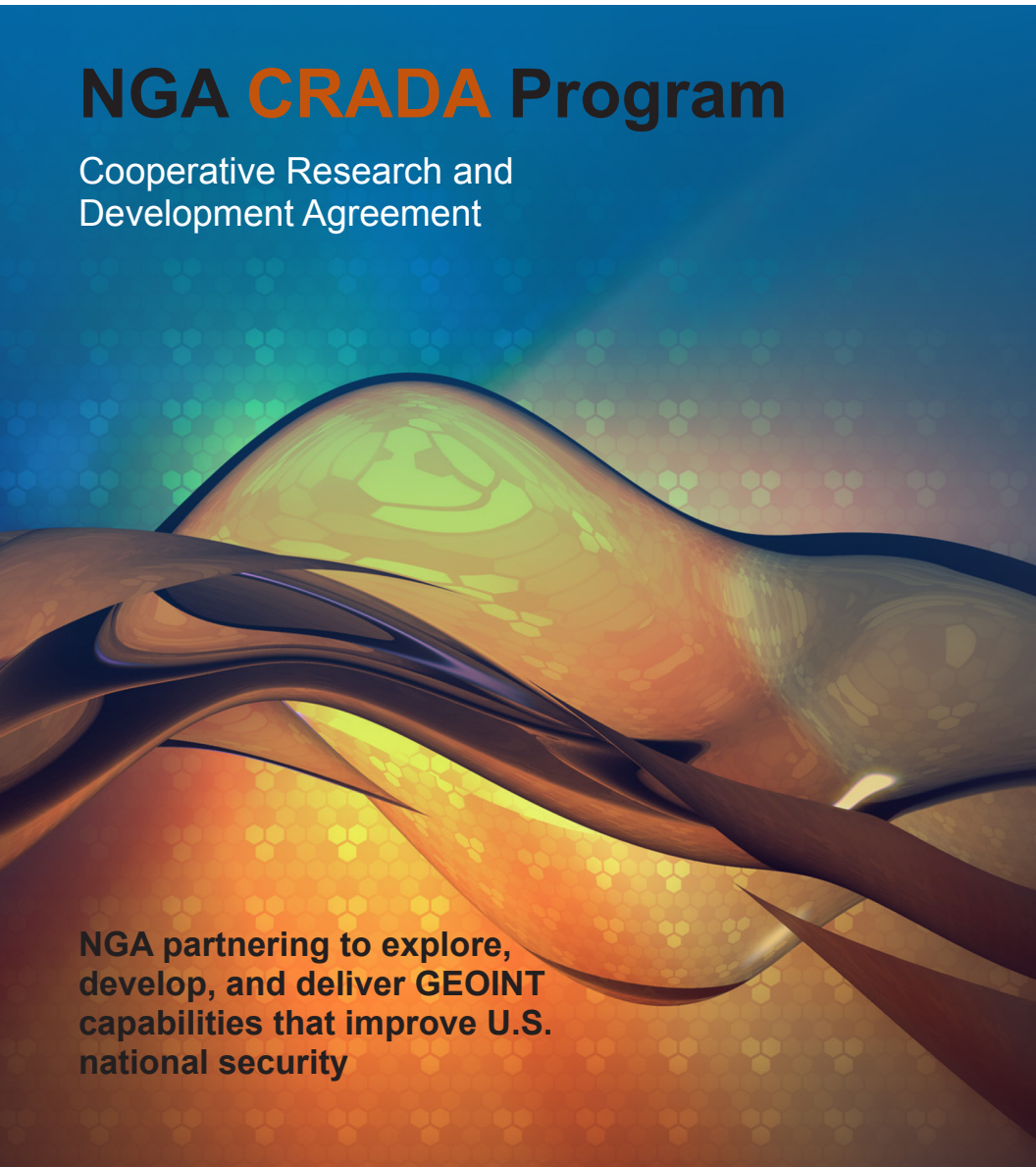
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

Know the Earth... Show the Way... Understand the World

NGA CRADA Program

Cooperative Research and Development Agreement



NGA partnering to explore, develop, and deliver GEOINT capabilities that improve U.S. national security

NGA Mission

NGA provides timely, relevant, and accurate geospatial intelligence in support of national security.

GEOINT

- Geospatial intelligence (GEOINT) is the exploitation and analysis of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the Earth.
- GEOINT answers the questions “When?” and “Where?” GEOINT builds the bridge from information to intelligence—from decision to action.

NGA Vision

Know the Earth… Show the Way… Understand the World

- Provide GEOINT in all its forms and from whatever source-imagery, imagery intelligence, and geospatial data and information ensure the knowledge foundation for planning, decision, and action.
- Provide easy access to GEOINT databases for all stakeholders.
- Create tailored, customer-specific GEOINT, analytic services, and solutions.

What resources are allocated?

NGA may contribute personnel, equipment, services, and property, but may not provide funds to the private sector partner.

Is proprietary information protected?

In cases where the industry partner may need to disclose proprietary information to NGA in order to have an effective cooperative research program, NGA must, under the CRADA, protect disclosed proprietary information.

What patent rights arise under a CRADA?

Normally, the research partner takes title to its inventions. NGA takes title to NGA inventions and the parties take joint title to joint inventions.

Could a CRADA with NGA lead to an NGA-funded acquisition?

There is no guarantee, direct or implied, that a CRADA with NGA will lead to a NGA-funded contract or acquisition.

How is a CRADA initiated with NGA?

Retrieve the NGA CRADA Handbook and associated instruction from the NGA website http://www.nga.mil/crada. The handbook contains standard policy provisions and an NGA model agreement. Its salient parts are as follows:

- **The NGA CRADA Inquiry Form** provides a brief synopsis of a potential partner's CRADA idea. Fill this out and e-mail to crada@nga.mil to start the process.
- **The Research Plan** describes the research, development, and commercialization efforts to be performed by each party.
- **The Basic Agreement** addresses the business and legal issues.

Selected Current CRADA Projects

- Mapping Tool Development
- Transforming Operations and Production to Services
- GEOINT Fusion Database Development
- Object-Oriented Technologies
- Geospatial Training and Tools
- Image Exploitation
- Geospatial Tool Technologies for a New Millennium
- Advanced Sensor Research, Development, and Testing
- R&D Enhancements to Electronic Navigation Technology

NGA Research and Technology Priorities

The NGA CRADA team uses CRADAs to support the National System for Geospatial Intelligence (NSG) Research and Development (R&D) program. NGA identifies the R&D needed to achieve the NSG vision presented in the NGA InnoVision Strategic Plan and provides senior management a tool to strategically manage the content and direction of the NGA R&D program. The InnoVision Strategic Plan describes six specific Research Portfolio areas to concentrate research and development areas.

1) **Exploration of new phenomenology** to exploit the full potential of new national, commercial, airborne, and ground technologies and transition their applications to the NSG to address enduring hard problems for the intelligence community and the military.

2) **Geospatial-Intelligence analytics** will enable analysts to quickly process voluminous and heterogeneous data inputs to determine their significance, extract relevant information, and discover subtle patterns that may be critical to solving pressing intelligence problems.

3) **Multi-source and multi-INT fusion** from multiple sensors, sources, and intelligence disciplines can dramatically improve the ability to detect, locate, and track objects and provide fusion-based solutions to hard problems in a netcentric environment.

4) **Integrated problem-driven collection** aims to perform the necessary research, modeling, and simulation to answer tough collection questions.

5) **Automated image and geospatial data understanding** helps develop new approaches to automated or assisted understanding of imagery and geospatial data that can provide orders-of-magnitude improvements in collection and data management parameters.

6) **GEOINT enablers** are the critical foundation for the first five research and technology priorities. It includes IT monitoring and leveraging user laboratories and infrastructure, verification and validation activities, tech insertion and transition activities, and web services development. Although our six priorities represent the major focus of NGA research and work, NGA will research other relevant areas to improve and advance GEOINT.

What are the benefits of CRADA partnerships with NGA?

The specific benefits depend upon the circumstances of the collaborating partners. Potential benefits include:

For NGA and a partner:

- Opportunity to apply additional resources against a technical problem
- Opportunity to develop and transfer mutually beneficial technologies
- Expanded technology base
- Established operational transition paths
- Protected sensitive information

For the partner:

- Direct insight into NGA data, data standards, and processes
- Opportunity to work with technical experts using advanced tools and technologies in a production environment
- Opportunity to expand geospatial capabilities
- Protection of trade secrets

For NGA:

- Access to industry expertise
- Reduced NGA R&D investments due to leveraging commercial R&D
- Hands-on access to leading edge commercial off-the-shelf (COTS) tools and technologies
- Opportunity to incorporate requirements into COTS' products and services
- Improved understanding of market trends

Who may enter into a CRADA with NGA?

Commercial or academic organizations may enter into a technology transfer partnership. According to public law, "units of State or local government; industrial organizations (including corporations, partnerships, and limited partnerships, and industrial development organizations); public and private foundations; nonprofit organizations (including universities); or persons (including licensees of inventions owned by the Federal agency)" may enter into CRADAs with NGA.

NGA Technology Transfer & Partnerships

As the world leader in the analysis, storage, maintenance, dissemination, and training related to Geospatial Intelligence (GEOINT), NGA invests significant resources in research and development to accomplish the agency's mission of providing timely, relevant, and accurate GEOINT (imagery, imagery intelligence, and geospatial information) to national, military, and civilian customers in support of national security objectives.

The proliferation of commercial imagery analysis, geographic information systems technologies, and standardized data formats creates opportunities for collaborative research and development (R&D) between the private sector and NGA laboratories. Particular emphasis is placed on initiatives that are consistent with NGA's Research and Technology Priorities.

To encourage the transfer of technology between the government and private sector, and enhance U.S. competitiveness, Congress passed legislation under the Federal Technology Transfer Act of 1986 (P.L. 99-502) that promotes technology transfer by introducing the Cooperative Research and Development Agreement (CRADA) as a mechanism to increase federal laboratories' interaction with industry.

It is the Department of Defense (DOD) policy to use technology transfer activities to strengthen the industrial base and make the best use of national scientific and technical capabilities to enhance the effectiveness of DOD forces and systems. NGA uses CRADAs for its technology partnerships and actively seeks commercial and academic research collaborators. Please note that a CRADA is not a procurement or grant, but a means to pursue joint research goals while protecting and creating intellectual property and granting certain rights for licensing to the commercial partner.

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