

MEMORANDUM OF UNDERSTANDING
BETWEEN THE
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AND THE
U.S. GEOLOGICAL SURVEY
CONCERNING
COLLABORATIVE PROGRAMS

1. PURPOSE. This Memorandum of Understanding (MOU) establishes the organizational structures and mechanisms for cooperation between the National Aeronautics and Space Administration (NASA), Washington, D.C. and the U.S. Geological Survey (USGS), Reston, Virginia for the purpose of facilitating the conduct of scientific research and long range technology development. This MOU supercedes the MOU between NASA and the USGS to Establish the Organizational Structures and Mechanisms for Cooperation between NASA HQ and USGS for the Purpose of Facilitating Scientific Research and Long Range Technology Development Planning, dated May 28, 1996.

2. BACKGROUND. NASA and the USGS share common interests in science and technology research and development (R&D). Both organizations have mission responsibility for conducting scientific research and technology development. Increased benefit will accrue from the expenditure of funds appropriated for such R&D if NASA and USGS cooperatively engage in long range science and technology plans and development efforts.

3. SCOPE. This MOU sets forth the general terms and conditions under which NASA and the USGS will coordinate and cooperate in implementing cooperative research and technology development activities. The cooperative activities covered by this MOU will include specific activities agreed to be of mutual interest within, but not limited to, the following areas:

Science themes:

- Land Characterization and change
- Long and short term climate and associated biological change
- Hydrologic science
- Coastal Zone studies
- Natural resources and hazards assessment and monitoring
- Geologic research

- Ecological research

Technology themes:

- Remote sensing and monitoring technology
- Data and information system development and information delivery
- Commercialization (private sector satellite operations and sources of data)

4. NASA/USGS ROUNDTABLE FOR SCIENCE AND TECHNOLOGY COORDINATION.

NASA and the USGS will establish a joint NASA/USGS Roundtable for Science and Technology Coordination to provide leadership and program oversight of the cooperative activities conducted under this MOU.

The Roundtable will be chaired jointly by the NASA Associate Administrator for Earth Science, and the Director, USGS. Membership and staff support will be determined by the co-chairs.

The Roundtable will meet at least twice per year.

The Roundtable will establish, as it deems necessary, working groups to undertake studies of interagency issues, and make recommendations within its areas of responsibility. These activities include the areas of broad common interest to both agencies covered by the scope of this MOU.

5. COLLABORATIVE ENDEAVORS.

A separate Implementing Agreement shall be concluded for each joint project agreed to by the Roundtable. An Implementing Agreement may include parties other than NASA and the USGS. Each Implementing Agreement shall be endorsed by the Associate Administrator for Earth Science, NASA, and the Director, USGS or their designated representatives. Such Implementing Agreements shall define the specific interagency relationships and responsibilities with regard to the cooperative activities covered under the scope of this MOU, and shall include, at a minimum, the following:

- (1) Description of product(s) or service(s) to be supplied;
- (2) Assignment of responsibilities to each Agency;
- (3) Description of financial arrangements;
- (4) Production and/or delivery schedules;
- (5) Duration of the plan/project; and

(6) Programmatic and/or technical points of contact.

Further, each Implementing Agreement shall stipulate a formal annual exchange of programmatic requirements, funding arrangements and budgetary estimates, performance status, and other related information that ensures proper interagency coordination.

These Implementing Agreements shall be listed in Annex I to this MOU.

6. FINANCIAL ARRANGEMENTS.

a. NASA and the USGS will, through direct appropriations, cost/work share, or full reimbursement, carry out the activities covered by this MOU. Performance of either party under the terms of this MOU is subject to the availability of appropriated funds and personnel resources through their respective funding procedures.

b. Both agencies agree that reimbursement payment will be on a service provided basis, calculated by mutual agreement **and relevant Agency reimbursable policies.**

7. EFFECTIVE DATE, PERIODIC REVIEW, MODIFICATION, AND TERMINATION.

This MOU shall take effect upon the date of the last signature. NASA and the USGS will conduct a formal review of this MOU at least every 5 years. Supporting annexes will be reviewed on a yearly basis, or sooner, as circumstances warrant. This MOU may be modified at any time upon joint approval. This MOU may be terminated at any time by mutual written agreement of the agencies, or by either agency upon 180 days written notice to the other agency.

DR. GHASSEM ASRAR
Associate Administrator for Earth Science
National Aeronautics and Space Administration

DR. CHARLES P. GROAT
Director
U.S. Geological Survey

Jan 4, 2000

Dec 8, 1999

Date

Date

ANNEX I List of Implementing Agreements for Collaborative Programs