

MEMORANDUM OF UNDERSTANDING

Between

Earth System Science Organization-Ministry of Earth Sciences
of
The Republic of India

And

The University Corporation for Atmospheric Research (UCAR)

For

COOPERATION IN THE FIELD OF EARTH SYSTEM SCIENCES

The **University Corporation for Atmospheric Research (UCAR)**, USA, and the **Earth System Science Organization-Ministry of Earth Sciences (ESSO-MoES)** of the Republic of India (hereinafter referred to as the "Parties"),

Whereas the UCAR, is a consortium of more than 100 member colleges and universities focused on research and training in the Earth system sciences as well as various research laboratories that carry out cutting-edge research in the Earth System sciences which contributes substantially to solving the grand challenges of science, society and industry.

Whereas ESSO-MoES conducts scientific and technical research in activities related to Earth System Science and translates the same into societal benefit.

Concurring on the importance of scientific and technical cooperation in Earth System Sciences including capacity building through training,

Given the excellent scientific and technological research opportunities existing in the two countries in the field of Earth System Science Research,

Recognizing that such cooperation is of benefit to both countries, and

Understanding the importance of promoting a closer working relationship to address Earth System Science issues of common concern,

Now, Therefore, ESSO-MoES and UCAR have reached the following understanding:

Article I

Purpose of Memorandum

The purpose of this Memorandum of Understanding (hereinafter referred to as "MOU") is to facilitate arrangements and understandings that lead to cooperation and coordination of various activities and programs in Earth System Sciences.

The broad objective of the cooperation is to allow the exchange of scientific resources as well as personnel and technical knowledge to support the improvement or development of programs in Earth System Sciences for both Parties.

Article II

Scope of Cooperative Activities

Cooperative activities are specific activities in scientific areas of mutual interest undertaken by the Parties and their subsidiary entities. Activities may include, but are not limited to areas such as:

1. Wind Profiler System Development
2. Radar Meteorology
3. Airborne platforms and Aircraft facilities
4. Nowcasting of severe weather events
5. Hydrometeorology
6. Satellite /Remote Sensing data related research and development
7. Oceanographic and climate research
8. Capacity Building through scientific lectures and distance learning etc.
9. Urban Flooding

Activities that facilitate the collaborative and mutual exchange of scientific and technical experts for the furtherance of mutual project objectives;

Activities that support one or more objectives as identified in an international/regional forum in which the Parties participate; and

Additional activities of scientific and technical cooperation as may be mutually agreed.

Article III

Responsibilities of the Parties

The Parties shall be responsible for coordinating and engaging with other organizational entities in their own countries, as appropriate and necessary, for the completion of the tasks designated pursuant to this Memorandum of Understanding. Other responsibilities include:

1. Management and coordination of activities undertaken under the auspices of this Memorandum of Understanding;

2. Designation of appropriate officials to manage and coordinate joint activities; and
3. Provision of all necessary arrangements to help facilitate entry to and exit from its country of personnel, engaged in projects contemplated under this Memorandum of Understanding subject to the laws and regulations of the respective country.

There shall be no exchange of funds between the Parties to this Memorandum of Understanding unless otherwise agreed. Each Party shall provide staff, facilities, and other support necessary for implementation of projects as mutually determined by the Parties. Such support will be subject to the availability of appropriated funds and personnel and will be in accordance with the laws and regulations of respective country.

To the extent permitted by its laws and regulations, each Party shall work toward obtaining, on behalf of the other Party, relief from taxes, fees, customs duties, and other charges (excluding fees for specific services rendered) levied with respect to items received at custom points of entry for the fulfillment of the Party's responsibilities for scientific cooperation under this Memorandum of Understanding.

Article IV Implementing Agreements

Specific projects to implement the cooperative activities identified in Article II, will be concluded by the Parties and any other cooperating entities, when appropriate, and will be embodied as stand-alone Implementing Agreements under this Memorandum of Understanding. Each Implementing Agreement shall be negotiated in good faith and shall reduce to a mutually agreeable writing the tasks, responsibilities, milestones, deliverables, resources, Principal Investigators and the terms and conditions under which activities will be conducted. Projects established under this Memorandum of Understanding will be coordinated through the heads of the two Parties or their designees. Coordinators and working groups may be appointed by mutual consent of the Parties, as required, to consider and act on matters related to the implementation of this Memorandum of Understanding.

Coordinators and working groups may be appointed by mutual consent of the Parties, as required, to consider and act on matters related to the implementation of this Memorandum of Understanding.

Periodic reports, on the progress towards achieving the purpose of the Memorandum of Understanding as stated in Article I, shall be submitted to the heads of the Parties or their designees. Such reports should outline future activity areas, represent proceedings of working groups, seminars or meetings. Joint review meetings will be held on mutually agreed occasions to measure the deliverables against the objectives stated in Article I. Status reports on each particular project or program shall be defined in the Implementing Agreement(s).

Article V
Scientific and Technical information

Each party shall ensure legal means for the protection of intellectual property rights of all materials obtained in the framework of this Memorandum of Understanding, in accordance with the laws and regulations in force in its country.

Article VI
Settlement of Disputes

Each Party shall consult with the other as soon as possible on any matter that may affect the proper implementation of the Memorandum of Understanding. Any dispute regarding interpretation and implementation or application of this Memorandum of Understanding or its associated Implementing Agreements will be resolved through mutual discussion between the Parties.

Article VII
Entry into Force and Term

The Memorandum of Understanding shall enter into force on the date of its signing by both the parties. The Memorandum of Understanding shall remain in force for a period of five years and may be renewed for a further period of 5 years upon written agreement between the parties. This Memorandum of Understanding may be terminated at any time by either Party upon ninety days written notice to the other Party.

Unless otherwise agreed, termination or expiration of the Memorandum of Understanding shall not affect the validity or duration of projects programs or Implementing Agreements under this Memorandum of Understanding that have been initiated prior to such termination.

Article VIII
Amendment and Extension of the Memorandum

This Memorandum of Understanding may be amended by mutual written agreement of the Parties.

Article IX
Notices

All written notices between UCAR and ESSO-MoES with reference to this MOU shall be sent to the respective address of the party, or to such other individuals as the parties may designate in writing from time to time, as follows:

UCAR

Technical contact

Lana Kimayeva
UCP Director of Business and Operations
3090 Center Green Drive
Boulder, CO 80301
(303) 497-2614
lanak@ucar.edu

ESSO-MoES

Technical contact

Dr Swati Basu
Scientist G/Advisor
Room No: 118, Prithvi Bhavan
Lodi Road, New Delhi 110003
+91-11-24669514
swati.basu@nic.in

UCAR

Administrative Contact

Virginia Taberski
Contracts Director
3090 Center Green Drive
Boulder, CO 80301
(303) 497-2132
taberski@ucar.edu

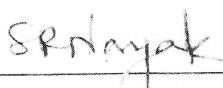
ESSO-MoES

Administrative Contact

Anand S. Khati
Joint Secretary
Room No: 102, Prithvi Bhavan
Lodi Road, New Delhi 110003
91-11-24669511
js@moes.gov.in

In witness whereof, the undersigned being duly authorized thereto, have signed this Memorandum of Understanding.


Done at **New Delhi** on **24th September 2014** in two originals each in English and Hindi languages. In case of any divergence in interpretation the English text shall prevail.



For Earth System Science Organization-
Ministry of Earth Sciences of the
Republic of India

Dr. Shailesh Nayak

Secretary, Government of India



For — University Corporation for
Atmospheric Research, USA

Dr. Thomas J. Bogdan

UCAR President