



*Ministero degli Affari Esteri*

**SCIENTIFIC COOPERATION AGREEMENT**

**BETWEEN**

**THE ITALIAN MINISTRY OF FOREIGN AFFAIRS DEPARTMENT OF  
COOPERATION FOR DEVELOPMENT**

**AND**

**THE CARIBBEAN COMMUNITY (CARICOM)**

**ON**

**COOPERATION IN HYDRO-METEOROLOGICAL MONITORING,  
NATURAL DISASTER PREVENTION AND EARLY WARNING**

The Italian Ministry of Foreign Affairs, Department for Development Co-operation, hereinafter referred to as the **Italian Party**;

**And**

The Caribbean Community, hereinafter referred to as **CARICOM**

**CONSIDERING** that CARICOM is an international organisation, established by Treaty, whose Member States are Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts-Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago;

**CONSIDERING** the excellent relations existing between Italy and CARICOM, which led to the conclusion on 21 July 2005 of a Memorandum of Understanding between the Caribbean Community and the Government of Italy, whereby the Parties undertook to develop, by mutual agreement, scientific and technical programmes, projects and activities to promote, inter alia, economic and social development as well as human resource capacities in CARICOM Member States;

**RECALLING** the commitment made by both parties in Article II of the aforementioned MOU 'to carry out joint programmes and projects that may contribute to improving the quality of life of their peoples';

**RECALLING ALSO** the special mention made in Article IV of the aforementioned MOU to cooperate *inter alia* in the fields of Climate Change, Scientific and Technological Research and the Environment;

**CONSIDERING** the commitment of the Italian Authorities to rendering this Memorandum effective through the implementation of mutually fruitful co-operation projects, capable of responding to the most urgent needs of the Caribbean Community, and at the same time bolstering the opportunities for the Italian industrial sector to more effectively penetrate the CARICOM market;

**CONSIDERING ALSO** the substantial material damage and loss of human life repeatedly suffered by the CARICOM Member States as a result of natural disasters and the consequent urgency of developing a regional project aimed at fully modernizing and expanding the hydro-meteorological monitoring network and related services to facilitate institutional strengthening, with

a view to improving linkages between hydro-meteorological authorities, and national disaster coordinating mechanisms;

**REFERRING** to the Italian Law N°49/87, which authorizes the Italian Party to finance activities in Third States, with the aim of substantially contributing to their development;

**WILLING** to implement co-operation activities and exchange scientific and technical experiences in the above mentioned fields, and to enhance regional capabilities to effectively respond to the negative effects of extreme meteorological events;

Have entered into the following Scientific Co-operation Agreement, hereinafter referred as the **AGREEMENT**:

#### **Article 1: Objective**

- 1.1 The Italian Party and CARICOM agree to jointly undertake a feasibility study, preparatory to the development of a project proposal for donor financing toward the establishment of a modern hydro-meteorological monitoring system with real time transmission of data, capable of giving CARICOM and its Member States and Associate Member States the necessary information and alerts for a timely pre-disaster intervention, thus facilitating a substantial reduction in human and material loss caused by disruptive meteorological occurrences.
- 1.2 It is intended that, for the implementation of this study, consideration shall be given to major Italian and Caribbean scientific public and private institutions, including Universities and research centres, which have capacity and experience in the field of meteorology, hydrology, environmental monitoring and weather forecasting. The participation of independent experts is also envisaged, under the surveillance and co-ordination of the Italian Party and CARICOM.
- 1.3 It is also intended that, after the completion of the above study the resulting project proposal will be used to seek donor funding for installation and operation of the hydro-meteorological monitoring and early warning system, giving preference, as far as possible to the application of environmentally sound Italian technologies.
- 1.4 The co-operation referred to in the previous paragraphs, will be carried out on the basis of equality, reciprocity and mutual benefit, bearing in mind the different levels of economic

development between Italy and the CARICOM Member States, and the need of CARICOM Member States for access to low cost or free technology, wherever possible.

## **Article 2: Executing Agencies**

The following Executing Agencies will be responsible for the implementation of the present AGREEMENT:

- 2.1 On behalf of the Italian Party: the Institute of Atmospheric Sciences and Climate (ISAC) of the Italian National Research Council (CNR). The ISAC is a national institute of advanced studies, research and training in the field of remote sensing, atmospheric processes, weather and climate change. It is headquartered in Bologna, Italy and boasts a permanent staff of over 200 specialists.
- 2.2 On behalf of CARICOM: the Caribbean Institute for Meteorology and Hydrology (CIMH). The CIMH is a training and research organisation formed by the amalgamation of the Caribbean Meteorological Institute (CMI) and Caribbean Operational Hydrological Institute (COHI). The role and mission of the CIMH are to improve meteorological and hydrological services and to assist in promoting the awareness of the benefits of these services for the economic well-being of the CARICOM Member States.

## **Article 3: Activities**

- 3.1 The activities to be developed pursuant to the present Agreement, to achieve the objective outlined in Article I will include but not be limited to the following:
  - a. Review of preliminary studies, research and cooperative projects executed or under execution by CIMH and other relevant institutions;
  - b. Field review of existing hydro-meteorological stations, monitoring activities being conducted, environmental parameters being monitored, data processed and results obtained;
  - c. Design of the new hydro-meteorological monitoring network, based on Automatic Weather Stations, including but not limited to:
    - data transmission systems (radio should be considered as the first option);

- engineering of control centres and software installation;
  - determination of system operation and infrastructure needs.
- d. Establishment of key parameters for selecting the most appropriate technologies, including the definition of criteria for installation (of system and control centres), training sessions, maintenance facilities and identification of needs for efficient pre and after sale services;
  - e. Advising on hydro-metrological forecasting and now-casting models to be applied, considering the need to merge information retrieved from satellites and meteorological radars;
  - f. Advising on distribution of data to different users, links to be established with CDERA and other major concerned institutions, alarm system, etc.;
  - g. Providing guidelines for anticipated Technical Assistance needs with special focus on institutional strengthening and data exchange at the regional and international levels;
  - h. Developing, as a part of the feasibility study, the Terms of Reference for the Project implementation, to be submitted for donor financing and to the region during preliminary negotiations.
  - i. Preparing a detailed project implementation schedule and a confidential preliminary cost estimate;

3.2 Detailed Terms of Reference for the execution of the present Study are given in the attached document "*Request to the Italian Government - Feasibility Study: Establishment of a modern Hydro-meteorological monitoring system in the Caribbean*" which forms an integral part of this AGREEMENT

#### **Article 4: Implementation schedule**

The Feasibility Study including the Project Proposal, is estimated to be completed in sixty (60) calendar days, starting 15 (fifteen) calendar days after the signature of the present AGREEMENT.

### **Article 5: Cost evaluation**

- 5.1 The total cost for the execution of the present agreement has been evaluated at € 100.000,00 (one hundred thousand euros), to be provided by the Italian Party. This amount will cover professional fees for the personnel assigned by the Italian Party, plus travel and per diem of either Italian or CARICOM assigned personnel;

### **Article 6: Program Co-ordination**

- 6.1. A Joint Committee is established for the implementation of the present AGREEMENT, comprising two representatives each of the Italian Party and CARICOM;
- 6.2. The Italian Party will be represented by the Director General of the Institute of Atmospheric Sciences and Climate (ISAC) of the Italian National Research Council (CNR), and one expert;
- 6.3. CARICOM will be represented by the Director General of the Caribbean Institute for Meteorology and Hydrology (CIMH), and a representative of the Secretary General of CARICOM;
- 6.4. The Joint Committee shall meet at least twice, once before the commencement of activities and again upon delivery of the final report(s);
- 6.5. It is intended that the report(s) will be accepted only after the official signature of the members of the Joint Committee.

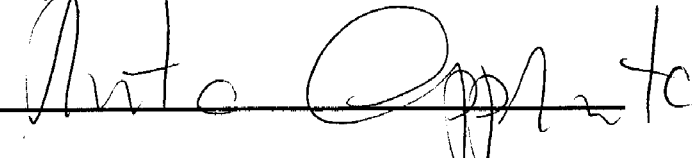
### **Article 7: Final Provisions**

- 7.1 The present AGREEMENT will come into effect on the date of signature by the Parties and will remain in effect until acceptance of the report as stipulated in Article 6.5 hereof;
- 7.2 Amendments may be made with the consent of the Italian party and CARICOM through the exchange of written communication specifying the date and entry into force thereof;
- 7.3 Any disagreement in the interpretation, management or execution of this AGREEMENT will be resolved through diplomatic channels and by mutual agreement;

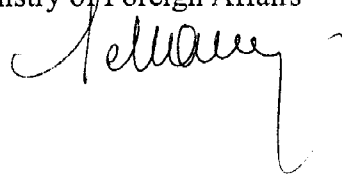
7.4 Termination of the present AGREEMENT shall have no effect on ongoing co-operation projects and/or on initiatives already agreed upon between the Italian Party and CARICOM .

Signed in, GEORGE TOWN on the 4<sup>th</sup> day of April of 2006 in two original texts in English.

---



For the Italian Party  
Ministry of Foreign Affairs



For CARICOM / CIMH  
Secretary General  
Caribbean Community