

**Proposed Amendment to the CREWS  
Investment Plan 2016-2020  
Caribbean**

The objective of the CREWS initiative is to significantly increase the capacity to generate and communicate effective impact-based, multi-hazard, gender-informed, early warnings and risk information to protect lives, livelihoods, and assets in Least Developed Countries (LDCs) and small island developing States (SIDS).

### CREWS Members



Australia



France (Chair)



Germany



Luxembourg



Netherlands

### CREWS Observers



Canada



Japan



New Zealand



Switzerland



ACP

### Implementing Partners



## Caribbean

Level of disaster risk <sup>1</sup>	On average very high.	Average Annual Loss to disasters <sup>2</sup> (USD million)	776	Access to information and communications (ICT index) <sup>3</sup>	Average rank 96 out of 175 countries
Capacity of NMHS	Varied, with a number of low capacity countries	Status of hydromet and EW services	Varied, with a number of low capacity countries	Disaster loss and risk data to inform early warnings	Requires strengthening
Capacity of regional organizations	Good capacity are available in the Caribbean Institute for Meteorology and Hydrology (CIMH) and Caribbean Disaster Emergency Management Agency (CDEMA) to support regional programmes.				
Demand/priority	High	Leveraging Potential	Varied		

<sup>1</sup> Descending ranking of risk based on the INFORM Index. <sup>2</sup> Average Annual Loss (AAL) projected cost of disasters for the country's economy per year <sup>3</sup> Ascending ranking countries' access to information and communications based on ICT Development Index 2015.

**Timeline** 3 years (2018-2020)

**Budget (US \$ million)** 5.5 (including a regional programme and three country projects)

### Context

States/territories in the Caribbean and regional institutions have experience and expertise in relation to many aspects of multi-hazard early warning systems with cooperation ongoing between countries and technical organisations in the region. The needs, however, to ensure critical minimal capabilities to provide hydrological, weather and climate services exceed the resources currently available in the region, in light of socio-economic patterns in Caribbean states/territories and changing climate projections,.

In particular, National Meteorological and Hydrological Services' capacity in the region, remains varied with regard to both weather and climate services, with a small number of countries requiring long term engagement and support.

The capacity to communicate and disseminate early warning and risk information, with regard to the channels (established authoritative and official voices) and the methods (standard alerting protocols that allow to reach the general public through media, mobile platforms and social networks) equally remains varied from one state/territory to another.

There is a need for a comprehensive, structured regional approach to strengthen early warning systems. Such an approach must contribute to donor harmonisation, and address all four components of effective, integrated, risk-based, people-centred, multi-hazard early warning systems:

(1) disaster risk knowledge; (2) detection, monitoring, analysis and forecasting of the hazards and possible consequences; (3) dissemination and communication and (4) preparedness at all levels to respond to the warnings. It also needs to contribute programmatically to the disaster risk reduction pillar of the Global Framework for Climate Services (GFCS) through support to the Regional Climate Center.

Opportunities exist to develop country programmes to upscale the capacities to monitor, predict climate and disaster events and provide more effective forecasts and alerts. It is suggested to pipeline three Caribbean states/territories for CREWS country programmes, namely Curaçao & Sint Maarten, Haiti and St. Lucia. For all three, initial assessments of needs have been carried out.

### Key Deliverables

#### Regional Caribbean Programme:

- Improvement of basic systems: data bases containing climate data, indices of climate extremes and impacts; development/validation of forecasting capabilities; preparation of monitoring products based on satellite and in-situ observations, and existing international datasets; georeferenced risk analysis information covering relevant hazards with identified at risk populations, critical infrastructure and user needs analysis for climate services
- Institutional strengthening: improve forecasting and delivery of warning services for severe weather in Island States and Territories in Eastern Caribbean including in Members of Caribbean Met. Organization (CMO); and, collaboration with regional outlook fora, regional observational data providers, NMHSs, and (regional) EWS product users.

#### Country Projects:

- Projects will build on existing assessments for Curaçao & Sint Maarten, Haiti and St. Lucia to provide investments required to achieve critical minimal capabilities to provide hydrological, weather and climate services. Specific deliverables will be adapted to each national context.

### Partners

World Meteorological Organization (WMO), World Bank and the Global Facility for Disaster Reduction and recovery (GFDRR), Caribbean Institute for Meteorology and Hydrology (CIMH), Caribbean Disaster Emergency Management Agency (CDEMA)

Other potential partners include the Association of Caribbean States (ACS), Caribbean Community Climate Change Centre (CCCC), KNMI, MétéoFrance, International Federation of Red Cross and Red Crescent Societies (IFRC), International Telecommunication Union (ITU), United Nations Office for Disaster Risk Reduction (UNISDR).