



Terms of Reference

Assignment Title: Consulting Services for an Individual Consultant to be assigned the role of Disaster Risk Model Development Specialist

1. Background

In 2007, the Caribbean Catastrophe Risk Insurance Facility was formed as the first multi-country risk pool in the world, and was the first insurance instrument to successfully develop parametric policies backed by both traditional and capital markets. It was initially designed as a regional catastrophe fund for Caribbean governments to limit the financial impact of devastating hurricanes and earthquakes by quickly providing financial liquidity when a policy is triggered. CCRIF was developed under the technical leadership of the World Bank and with a grant from the Government of Japan. It was capitalized through contributions to a multi-donor trust fund (MDTF) by the Government of Canada, the European Union, the World Bank, the governments of the United Kingdom and France, the Caribbean Development Bank and the governments of Ireland and Bermuda, as well as through membership fees paid by participating governments.

In 2014, the facility was restructured into a segregated portfolio company (SPC) to facilitate offering new products and expansion into new geographic areas and is now named CCRIF SPC. The new structure, in which products are offered through a number of segregated portfolios (SPs), allows for total segregation of risk. In April 2015, CCRIF SPC signed an MOU with COSEFIN - the Council of Ministers of Finance of Central America, Panama and the Dominican Republic - to enable Central American countries to formally join the facility. The expansion into Central America and new products for the Caribbean is supported through a new World Bank administered multi-donor trust fund established for that purpose. The MDTF channels resources from various donors, including: Canada, through the Department of Foreign Affairs, Trade and Development; the United States, through the Department of the Treasury; the European Union, through the European Commission; and Germany through the Federal Ministry for Economic Cooperation and Development. The expansion into Central America has the potential to diversify CCRIF's risk portfolio and improve access by Central American governments to reinsurance markets thus reducing the cost of risk transfer, allowing these benefits to be passed on to all CCRIF members.

CCRIF SPC is registered in the Cayman Islands with a board of directors which is responsible for governance and the strategic direction of the company and a chief executive officer with responsibility for managing the company on a day-to-day basis. It operates primarily as a virtual organization, supported by a network of service providers covering the areas of risk management, risk modelling, captive management, reinsurance, reinsurance brokerage, asset management, technical assistance, and corporate communications and information technology. CCRIF offers earthquake, tropical cyclone and

excess rainfall policies to Caribbean and Central American governments. The facility helps to mitigate the short-term cash flow problems small developing economies suffer after major natural disasters. The parametric nature of the insurance that CCRIF's provides, allows the Facility to make rapid payouts after a policy is triggered, helping member governments finance their initial disaster response and maintain basic government functions after a catastrophic event.

Nineteen Caribbean governments are currently members of the Facility: Anguilla, Antigua & Barbuda, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Haiti, Jamaica, Montserrat, Saint Lucia, St. Kitts & Nevis, St. Maarten, St. Vincent & the Grenadines, The Bahamas, Trinidad & Tobago and Turks & Caicos Islands. Nicaragua, Panama and Guatemala are CA SP members.

CCRIF's sustainability relies on certain key factors:

- Continuing operations with the capacity to fund payouts, within the agreed timeframe of within 14 days after an event, while maintaining adequate capital and reserves and satisfying regulatory requirements
- Ability to attract new members by offering relevant products with competitive pricing while always reinforcing the objectives and limitations of parametric insurance coverage
- Supporting its members in areas such as disaster risk management which is offered through the provision of technical assistance and ensuring a close working relationship with members that value the need for parametric insurance coverage considering the impacts of a changing climate which is resulting in more frequent and severe natural hazards. The technical assistance program includes an internship programme, small grants program and a scholarship program as well as a range of MOUs with regional organizations that are operationalized through funded work plans and through which a range of DRM and climate change adaptation projects are implemented
- Development of new products which are based on the demand of member governments and which are aimed at addressing either economic sectors, additional hazards or economic sectors for which indemnity insurance may not be readily available (e.g. in the energy sector and particularly as it related to transmission and distribution) aimed at

2. Objectives

The Disaster Risk Model Development Specialist (MDS) is a full-time senior technical position within CCRIF SPC¹. The role involves supporting CCRIF Management in designing, evaluating and onboarding new tools as well as maintaining of existing tools for CCRIF's members for the better understanding of risk and additional application of CCRIF catastrophe model. The MDS will further support the CCRIF management in the quantification of risk, portfolio optimization, accumulation control and calculation of the sustainability of the portfolio, for example with DFA analysis.

¹ CCRIF Segregated Portfolio Company (CCRIF SPC or CCRIF), formerly established as the Caribbean Catastrophe Risk Insurance Facility.

3. Scope of the Assignment

The MDS (herein referred to as ‘the Consultant’), working under the supervision of the Chief Risk Management Officer (CRMO), shall be responsible for the following tasks:

- Coordinating all (external and internal) disaster model development and improvement activities;
- Participating in setting objectives and scope for research and development in the short and medium term;
- Participating in the development of new tools for clients, understanding and visualizing risk;
- Supporting the CCRIF and CCRIF clients in interpretation of modeled results such as disaster risk profiles and in stress-testing of models;
- Working with the CRMO and modeling team on customization and modification of catastrophe models for bespoke applications;
- Supporting the CRMO in risk management quantifications, special DFA analysis, portfolio optimization, and accumulation control;
- Supporting the CRMO in the review of model performance in specific events;
- In cooperation with management and other service providers, the Consultant will prepare technical studies, reports, papers and presentations that will enhance knowledge of disaster risk management; insurance mechanisms and adaptation financing, the economics of climate change adaptation and the role of risk transfer in helping to address disaster risk reduction;
- Providing support in provision of educational and outreach activities and represent CCRIF at meetings, forums, workshops etc. Where necessary, providing input to CCRIF publications;
- Supporting the CRMO in preparation of annual renewals; and
- Performing other duties requested by the CRMO.

4. Time Schedule

The is a short-term contract ending on December 31, 2021, with possibility of extension of up to eighteen months. The assignment is expected to commence in June 2021 upon execution of the contract. The assignment will start upon execution of the contract and will require daily dedicated support to December 31, 2021.