TERMS OF REFERENCE (CONSULTING SERVICES – INDIVIDUAL SELECTION)

Country: Cayman Islands

Project: Central America and Caribbean Catastrophe Risk Insurance Program Project (P175616)

Assignment Title: A Peer Review of the Tropical Cyclone (TC) model of CCRIF (SPHERA) for Central America and the Caribbean.

Reference No: KY-CCRIF SPC-285321-CS-INDV

The Project is financed through the Central America and Caribbean Catastrophe Risk Insurance Program (Program) Multi-Donor Trust Fund (MDTF), which is administered by the World Bank.

The consulting services ("the Services") include a technical review of the following:

- (a) Simulation of TC events based on a new catalogue, including:
 - Evaluation of suitability of the new TC event catalogue purchased by CCRIF for updating the TC model,
 - Calculation of TC-induced wind field and surge depth,
 - Generation of TC losses,
 - Validation of generated losses, including potential adjustments to vulnerability functions, and
 - Production of TC ELT.
- (b) Design of an additional trigger based on the damage rates in the most impacted areas, including:
 - Evaluation of options for activating the additional trigger in terms of the scientific soundness of employed mechanisms for each option,

The Required Qualifications and Relevant Experience to perform the Services are:

- A PhD degree in Meteorology with a speciality in TC hazard and risk modeling, or an equivalent and suitable set of qualifications;
- Experience in developing and Peer Reviewing TC risk estimation models or other similar experience;
- At least 10 years of proven experience as a reviewer of TC risk estimation models;
- Excellent analytical skills, and ability to prepare professional narrative reports summarizing observations and conclusions and
- Good oral and written communication abilities in English.
- Experience and knowledge of the Central America and the Caribbean context.

The assignment is expected to commence in February 2023 upon execution of the contract and the expected level of effort (LOE) is no more than 15 days over a five-month period.