Southeast Asia Disaster Risk Insurance Facility (SEADRIF)

Terms of Reference for SEADRIF Catastrophe Risk Modeling Consultant

Background
Natural disasters affecting the livelihoods of populations and the economy are a major challenge in Southeast Asia and often leave governments with a critical need for short-term liquidity to finance response and recovery. To strengthen financial resilience against climate and disaster shocks, the governments of ASEAN+3 countries, with the support of Japan and Singapore, have jointly established the Southeast Asia Disaster Risk Insurance Facility (SEADRIF). It provides participating ASEAN countries with insurance and risk management solutions against climate shocks and natural disasters.

About SEADRIF
SEADRIF is composed of:

- SEADRIF Trust: The governing mechanism for SEADRIF open to all ASEAN+3 countries. The SEADRIF Trust is governed by the Council of Members (CoM), composed of representatives from each of the member countries;
- SEADRIF Sub-Trust: an arrangement for sub-groups of the SEADRIF member countries and donor partners within and beyond ASEAN+3 to develop and govern specific initiatives. Sub-Trust A has been established to develop the first SEADRIF financial product, a catastrophe risk pool for Lao PDR and potential beneficiary countries. Sub-Trust A is governed by the Committee of Sub-Trust A, composed of the beneficiary countries and donor partners. The CoM delegates its authorities and powers of governing Sub-Trust A and its assets (including the SEADRIF Insurance Company) to the Committee; and
- SEADRIF Insurance Company (the Company): a general insurance company incorporated and regulated in Singapore and owned by SEADRIF Sub-Trust A to provide insurance and financial services.

Intertrust, a licensed trust company in Singapore, is the Trustee and legal owner of the Trust assets, which includes all of the Company’s shares. The Company outsources most of its functions to third party service providers.

SEADRIF is supported by the World Bank as the Lead Technical Partner and the ASEAN Secretariat as the Secretariat.
About the SEADRIF Insurance Company

The SEADRIF Insurance Company was incorporated in Singapore in April 2019 as a licensed insurance company under the Singapore Insurance Act. The Company is fully owned by SEADRIF member countries through Intertrust acting as Trustee of the SEADRIF Trust and regulated by the Monetary Authority of Singapore. It is governed by a Board of Directors comprising three professionals with decades of experience in the insurance industry. During its start-up phase, the Company was established with a lean structure with most of its functions outsourced to service providers.

As its first product, the Company launched a regional catastrophe risk pool that provides cover against flood risks in Lao PDR as the first beneficiary country. Following the first few years in operation, the Company looks to further develop its capacity to meet the demand from SEADRIF member countries including development of new products and strengthening operational capacity.

If interested, please submit your application to contact@seadrifinsurance.com by Friday 13 January 2023 6pm SGT.

More information about the SEADRIF Insurance Company can be found here: https://seadrif.org/the-seadrif-insurance-company/.
Proposed Assignment
The Catastrophe Risk Modelling Consultant will support the Company’s board of directors and management team in providing catastrophe risk modelling and re/insurance expertise to support the:

i. renewal of Lao PDR’s flood insurance policy
ii. expansion of SIC’s flood insurance policy to other member countries
iii. development of new products (e.g. public asset insurance or agriculture insurance) in support of the strategic development of SIC business
iv. SEARIF initiative’s risk assessment and technical solutions work (e.g. collaboration with The ASEAN Disaster Risk Financing and Insurance ADRFI)

Specific responsibilities will include, but are not limited to:

1. Prepare an assessment of the existing flood risk model and insurance policy for the Company’s board, incorporating proposed options and recommendations for renewal of the policy in 2024
   a. In coordination with external service providers and in support of the flood risk model assessment prepare a review of the flood risk model's performance over the duration of the policy period.

2. As directed by the SEADRIF Company board assess options and provide recommendations for product development, including the assessment of risk models, for perils in additional member countries

3. Closely coordinate with re/insurance underwriters, reinsurance brokers, pricing actuaries, external service providers, the World Bank and others on catastrophe risk models and insurance products

4. Develop proposals for the improvement of SEADRIF Insurance Companies’ visualization tool

5. Prepare background notes or catastrophe risk profiles for each member country that highlights the client’s disaster risk funding gaps, key risks, existing insurance solutions.

6. Prepare for the SEADRIF Company board background notes or briefings on each client country that highlights the Company’s opportunities and challenges to provide insurance products for each country.

7. Support member countries with understanding the impact from natural catastrophes soon after events have occurred.

8. Gather country/local market intelligence as necessary through desk research and meetings with government counterparts, the World Bank and development partners.
9. Meet with member countries as requested by the SEADRIF Company board
10. Research and answer technical inquiries (e.g., on risk assessments, risk modeling, etc.) from the SEADRIF Company’s board and management team
11. Perform other tasks related to risk modelling and product development as may be required by the SEADRIF Company’s board

All activities will be performed with the guidance from the Company’s board and support from the World Bank as the Lead Technical Partner and other stakeholders as appropriate.

**Deliverables**

The following outputs and deliverables are expected from the Consultant:

1. A report assessing the suitability of the existing SEADRIF Flood Risk Model and insurance policy to all stakeholders, outlining options and recommendations for revisions to either the model or policy.
2. Proposals (PowerPoint or Written) outlining options and recommendations for enhancing SEADRIF’s visualization tool
3. Background notes and catastrophe risk profiles for each member country for both internal and external audiences
4. As required, reports assessing the possibility of developing insurance policies for additional member countries – to include assessment of existing models, extending the existing flood model or developing a new model.
5. Participate in dialogue with member country governments
6. PowerPoint presentations summarizing the flood risk model, parametric or indemnity insurance policies, the visualization tool, and other areas as required
7. Input and participation in meetings as required

**Qualifications**

- Have a Master’s degree in natural sciences, a STEM subject or a quantitative field
- At least 10 years of relevant professional experience developing and using catastrophe risk models in support of the re/insurance industry
- Experience working in the insurance sector, with strong technical knowledge of insurance and an established network within the insurance industry
- Demonstrable experience working in disaster risk finance
- Demonstrated ability to apply consultative mind-set, problem-solving and critical thinking
- Excellent collaboration skills and ability to work closely and effectively with Government counterparts in support of their objectives
- Direct experience with ASEAN required
- Able to manage deadlines with solid project management skills.
- Excellent English oral and written communication skills with experience presenting to Company Board and management
- Able to travel as required.

This will be a consulting role to be invoiced against actual days worked, with the total number of days, not to exceed 20 days per month, and remuneration to be agreed with the SEADRIF Insurance Company Board of Directors. This contract is for twelve (12) months with an option for renewal subject to mutual agreement.