

Support to the Advancement of Comprehensive Disaster Management (CDM) in the CDEMA Participating States Project

TERMS OF REFERENCE

Reviewing, Updating and Delivering Training in the Code of Practice for Construction of Houses: An Instruction Manual for Foremen and Experienced Artisans

1. BACKGROUND

The Caribbean Disaster Emergency Management Agency (CDEMA) has received financing from the Government of Norway to implement the project, ***Support to the Advancement of Comprehensive Disaster Management (CDM) in the CDEMA Participating States*** over the period December 2019 to November 2022. The goal of this thirty-five-month long project is *CDM implementation advanced at the national [level] and community level in the CDEMA Participating States for enhanced resilience building*. The blueprint towards achieving CDM in the region is the Regional CDM Strategy and Results Framework 2014- 2024. The project is supporting the achievement of core elements of the Framework related to- safer schools, more resilient communities, regional capacity building through the Regional Training Centre (RTC) and, safer building. Four outcomes are planned:

Outcome 1: The model safe school programme is advanced across all CDEMA Participating States;

Outcome 2: Community-based disaster risk management advanced in select communities in the CDEMA Participating States;

Outcome 3: The CDEMA Regional Training Center is enhanced and provides standardized, accredited and sustained training that supports improved rollout of national and regional CDM programmes; and

Outcome 4: The CDEMA Safer Building training programme is advanced in the CDEMA Participating States.

CDEMA has partnered with the CARICOM Regional Organisation for Standards and Quality (CROSQ) to execute Outcome 4, '*The Safer Building training programme is advanced in CDEMA Participating States (PS)*'. This programme targets experienced foremen and contractors in the informal building sector to enhance their knowledge of safer

building and encourage them to utilise these approaches. It consists of delivery of training using a Curriculum, Trainer's Manual and Student's Manual.

Since 1950 the Caribbean region has been impacted by 324 disasters that have killed 250,000 people and affected more than 24 million through injury and loss of homes and livelihoods (Ötker and Srinivasan, 2018)¹. The economic cost of these disasters has been substantial, exceeding US\$26 billion in damages. Post damage and loss assessments reveal that in the Caribbean, a significant portion of the damages from these events has been in the housing sector. Much of the damages to houses could be avoided as repeatedly, the application of building codes was found to be inconsistent and there was weak to no legislation for safe building. Poor building practice was evident and an absence of sensitization to safe building practices. There are indications that a substantial portion of the housing stock in the Caribbean has been built through the informal construction sector which does not necessarily adhere to formal building codes and standards. Moreover, many practitioners within the informal sector, in most instances, have never received formal skills training or certification. Training for individuals in all parts of the construction industry in appropriate building techniques is an important counterpart to codes and regulations and can significantly enhance the quality and resilience of the region's housing stock. Under the Norway project, the safer building training programme will be revised, updated and utilised to train artisans in the informal sector in six (6) CDEMA PS.

The Safer Building training programme was originally developed by the Caribbean Disaster Emergency Response Agency (CDERA) (CDEMA's predecessor) with the assistance of the Organisation of American States (OAS) and with the funding support of the Canadian International Development Agency (CIDA) under the Caribbean Hazard Mitigation Capacity Building Programme (CHAMP). From 2005/2006 CROSQ assisted with the review of the Programme and established it as a best practice. Now named the *Code of Practice (COP) for the Construction of Houses: An Instruction Manual for Foremen and Experienced Artisans*, this two-part document comprises of a [Curriculum and Trainer's Manual](#) (Part 1) and a [Student's Manual](#) (Part 2).

Since the piloting of the programme under CHAMP in four (4) post-secondary institutions in Belize, Grenada, Saint Lucia and the Virgin Islands, CDEMA supported the delivery of the COP between 2011 and 2014 in six other PS with financing under the CDM-HIP project¹. Namely, Dominica, Antigua and Barbuda, Bahamas, Haiti, Barbados and St. Kitts and Nevis. In this second phase, CDEMA trained a cadre of trainers, and training

¹CDM HIP Phase 1 was a 5-year programme implemented by CDEMA through the support of CIDA and DFID.

institutions worked closely with National Disaster Organisations to deliver the programme. Institutions were provided with (i) a compilation of lessons learned from the four CHAMP pilots (ii) guidance notes inclusive of an implementation strategy based on these lessons learnt and (iii) a grant to support the delivery. To date, the COP has been used to train more than 280 artisans in safer building techniques and is available in English, French and French Creole. It has also been utilised as a pre-requisite for the issuance of contractor trade licenses in the BVI.

The experiences of recent tropical storm and hurricane events, and the observed impacts in affected States of significant damage to housing and other infrastructure, has re-ignited the need for urgent attention to be given to expanding the support to the CDEMA PS for training of artisans in Safer Building as a means of contributing to the resilience, particularly of the housing sector, to these types of events as well as to potential seismic events. Cost-efficient and affordable construction has also been identified as a priority. In the third phase of delivery under the Norway project, CDEMA aims to revise the COP to incorporate the rich lessons learnt and recommendations that were generated from the previous two phases. The COP will be made more comprehensive and will be aligned with the most up-to-date building legislation and standards. Delivery approaches will also be enhanced to cater to all competencies, to provide more practical, and blended learning options where viable.

CDEMA is desirous of engaging a consultant to review and revise the COP and achieve regional acceptance for this review through the CROSQ recognised standards development mechanism. The Consultant will also support six CDEMA PS in delivering training utilising the updated COP.

2. OBJECTIVES

- 2.1.** To review and revise the *Code of Practice for Construction of Houses: An Instruction Manual for Foremen and Experienced Artisans*, and achieve regional acceptance for this review through the CROSQ recognised standards development mechanism. (See Annex for CROSQ Work Development and Review Process).
- 2.2.** To review and revise the COP to facilitate institutionalisation and sustainability through CVQ and related certification pathways.

2.3. To support six CDEMA PS in delivering training utilising the updated COP.

3. SCOPE OF WORK

To achieve the above objectives, the Consultant is expected to conduct the following activities:

3.1. Prepare an Inception Report.

- 3.1.1. **Participate** in an online inception meeting with CDEMA, and CROSQ to discuss the vision for the COP, the CROSQ process, expectations for the Consultancy including key milestones for delivery.
- 3.1.2. **Undertake** a preliminary review of the COP and other background documents including the compilation of lessons learnt from phase 1, and final reports from institutions that delivered the COP in phase 2.
- 3.1.3. **Prepare** and submit for CDEMA's approval, an Inception Report detailing:
 - 3.1.3.1. The approach to be used in the execution of the consultancy including modalities which give cognizance of COVID-19 realities.
 - 3.1.3.2. The recommended approach to be used for reviewing and revising the COP.
 - 3.1.3.3. The work program and timeline for the revision of the COP.
- 3.1.4. **Finalize** the Inception Report incorporating comments from CDEMA and CROSQ where appropriate.

3.2. Conduct a comprehensive technical review of the COP and relevant documents and prepare a Guidance Document on directions and priorities for consideration in revising the COP.

- 3.2.1. **Undertake** a comprehensive review of the COP, review all recommendations and reports from phase 1 and phase 2 as well as all relevant and up-to-date legislation, standards, documents on safe building for the revision of the COP-curriculum and manuals.
- 3.2.2. **Prepare** a draft Guidance Document based on the reviews at 3.2.1 that identifies the specifications, directions, and priorities for revising the COP. It should include the following:
 - Adjustments and considerations for improved technical soundness, based on findings on safe building including from recent disaster impacts, the latest technological developments

and the most up-to-date building legislation, standards, codes, and practices.

- Key areas and proposals for more effective delivery and assessment including through more practical and blended learning options.
- Considerations to address lessons learnt from delivery of the COP in phase 1 (2005), and phase 2 (2011-2014) across post-secondary institutions in ten Caribbean countries.
- An outline of the specifications of the proposed revised Curriculum.
- Considerations for institutionalisation and sustainability of the COP including through CVQ and certification pathways.

3.2.3. Present the draft Guidance Document to the Regional Group of Experts (Regional Project Team (RPT))² and Project Advisory Committee (PAC) through CDEMA for feedback and agreement on specifications, directions and priorities for consideration in the revised COP.

3.2.4. Finalise the Guidance Document based on feedback and agreements at 3.2.3 and submit to CDEMA for acceptance.

3.3. Revise the COP based on agreed directions and priorities.

3.3.1. Based on the Guidance document and agreements at 3.2.4 revise the COP-curriculum and manuals.

3.3.2. Present the revised COP documents at 3.3.1 through CDEMA to the Regional Group of Experts (Regional Project Team, RPT) and PAC for their review and acceptance.

3.3.3. Amend documents- Curriculum and Manuals in accordance with accepted comments emanating from the public comments exercise coordinated by CROSQ.

3.3.4. Submit the revised COP at 3.3.3 through CDEMA for acceptance.

3.4. Facilitate a virtual 4-day Train-the-Trainers (TOT) workshop sponsored by CDEMA and one-on-one consultations to support the delivery of training in six identified CDEMA PS.

3.4.1. Prepare an annotated draft Agenda, and any additional guidance documents for the training-of-the-trainers virtual workshop and one-on-one consultations

² The RPT is established by CROSQ.

(virtual) with identified training institutions in each of the six CDEMA PS and present to CDEMA for comments.

3.4.2. Revise items at 3.4.1 and finalise.

3.4.3. Utilise the finalised COP to undertake the virtual training-of-the-trainers workshop.

3.4.4. Prepare a Report of the TOT Workshop and submit to CDEMA for acceptance. It should include:

- A summary of the workshop, recommendations for the improvement of the COP and an assessment of the achievement of workshop objectives;
- Workshop participants list including full contact information; and
- Feedback from participants including workshop training evaluations.

3.4.5. Undertake one-on-one consultations with each of the six identified institutions to provide guidance for their delivery of COP training in their respective countries. CDEMA will establish agreements with identified institutions for in-country delivery of training³ using the COP with the support of a grant. It is therefore planned that persons who participate in the TOT workshop (at 3.4.3) and consultations are those institutions that have agreed to deliver the COP training in their respective countries.

3.5. Revise the COP to incorporate feedback from the six pilot countries that have delivered training in the COP.

3.5.1. Collate feedback from each of the six training institutions on the delivery of the training in their respective countries and areas for improvement of the COP; and submit through CDEMA to the PAC and the RPT for consideration.

3.5.2. Finalise the COP based on agreements at 3.5.1 and submit through CDEMA for acceptance.

3.6. Undertake final edits to the COP to facilitate publishing.

3.6.1. Participate in meetings of the CROSQ Editorial Committee and **undertake** all final edits to the COP to facilitate publishing.

3.6.2. Submit the final COP through CDEMA to the PAC and CROSQ for acceptance.

³ Training is expected to be delivered via a blended approach were appropriate.

3.7. Prepare and submit to CDEMA a Final Report which should describe the process utilised for conducting the Consultancy, the report should include:

- 3.7.1. A critical review of the COP review process and delivery of the training in the six PS.
- 3.7.2. Lessons learnt and recommendations for improvement of the overall process.
- 3.7.3. Submit the Final Report as outlined at 3.7.1 to CDEMA for comments and revise, as necessary.

4. DELIVERABLES AND REPORTING REQUIREMENTS

The Consultant is expected to submit all deliverables to CDEMA for acceptance. The Consultant is expected to work closely with the CROSQ Technical Officer for Standards and the Regional Project Team (RPT) in the delivery of:

- An Inception Report detailing the proposed methodology and work plan to execute the review and revision of the documents at 3.1.3 within 10 days of contract signature.
- The Guidance Document at 3.2.4
- Disposition of all comments received on the documents, alongside the RPT, and the subsequent revision of the documents accordingly 3.3.3
- The Revised Curriculum at 3.3.4, 3.5.2, and 3.6.2
- The Revised Student and Trainer Manuals based on the revised curriculum at 3.3.4, 3.5.2, and 3.6.2
- Train-the-trainers workshop and consultation documents at 3.4.1
- TOT Workshop Report at 3.4.4
- A Final Report at 3.7.3 on completion of the TOT training and acceptance of the Final Revised Curriculum, Students and Trainers Manuals by the RPT.

5. DURATION

The level of effort is expected to be 80 days over a sixteen (16) month period (12 months for review and revision of the COP and 4 months for delivery of training and consultations) as follows:

- 5.1.** Inception meeting and resultant report – 3 days
- 5.2.** Review of documents- 5 days
- 5.3.** Prepare Guidance document for revising the COP- 5 days
- 5.4.** Draft Revised Curriculum, Student's and Trainers' Manuals – 30 days

- 5.5.** Disposition of comments received on documents and revision of same accordingly – 7 days
- 5.6.** Production of Final Curriculum, Student's and Trainers' Manuals– 9 days
- 5.7.** Delivery of training-of trainers workshop, report and consultations in six countries- 19 days
- 5.8.** Production of Final Report – 2 days

6. QUALIFICATIONS AND EXPERIENCE

The Consultancy shall possess the following **minimum qualifications** and shall present for consideration the minimum of two (2) experts for the undertaking of the work as outlined at Section 3.0 above.

6.1. Qualifications and Experience of Experts:

A. Building Specialist/ Team Leader

- i. A postgraduate degree in Civil or Construction Engineering or related field.
- ii. Five (5) years of experience in administrative and managerial positions for the leading of consultancy teams.
- iii. Five (5) years of experience in the facilitation of multi-stakeholder workshops (Of these, two (2) years of experience in multi-stakeholder workshops within the Caribbean at the national and regional level would be an asset)
- iv. Two (2) years demonstrated experience in Standards development/ writing and / or any standards related activities.
- v. Familiarity with the regional standards development process would be an asset.
- vi. Five (5) years of experience working in the construction sector in the Caribbean.
- vii. Excellent technical and report-writing skills.
- viii. Demonstrated knowledge of the CARICOM construction industry challenges.

B. Curriculum Design and Training Specialist

- i. Five (5) years of experience and working knowledge in curriculum design and module formulation for technical vocational training and building construction.
- ii. Qualification in curriculum design.
- iii. Qualification in teaching and facilitation.
- iv. At least five years of experience in teaching in construction.

- v. Experience in training and course delivery.
- vi. Experience in the design and delivery of blended learning (virtual and face-to-face at a minimum).

All experts must: have a good command of the English language; communicate clearly; meet deadlines; pay attention to details; and be computer literate.