

#### **DRC**

# **Terms of Reference (TOR)**

for

# RFP: BEY-2023-06 Civil engineer Consultant

# Building structure assessment for the resilience of seismic activities

# 1. Who is the Danish Refugee Council?

Founded in 1956, the Danish Refugee Council (DRC) is a leading international NGO and one of the few with a specific expertise in forced displacement. Active in 40 countries with 9,000 employees and supported by 7,500 volunteers, DRC protects, advocates, and builds sustainable futures for refugees and other displacement affected people and communities. DRC works during displacement at all stages: In the acute crisis, in displacement, when settling and integrating in a new place, or upon return. DRC provides protection and life-saving humanitarian assistance; supports displaced persons in becoming self-reliant and included into hosting societies; and works with civil society and responsible authorities to promote protection of rights and peaceful coexistence.

Operating since 2004 in Lebanon, DRC has addressed the needs and rights of vulnerable populations, working initially with Palestinian refugees (since 2004), Iraqi refugees (2007-2010), Lebanese IDPs (during the 2006 conflict), migrant domestic workers (since 2009), responding to the Syrian refugee crisis (since 2011) and to Lebanese crisis (since 2019). DRC Lebanon is currently delivering programming in protection, livelihoods, and community development interventions. This myriad programming seeks to address the immediate needs of displaced populations and concurrently support vulnerable host populations. DRC has four offices spread throughout Lebanon in, Beirut, the Bekaa and North (Tripoli and Akkar).

For further information about DRC, please refer to our website: <a href="https://drc.ngo/">https://drc.ngo/</a>

CT Consultancy 01 – Terms of Reference Date: 22-03-2023 Valid: 22-03-2023

## 2. Purpose of the consultancy

Subsequent to the 6th February 2023 earthquake in Turkey and Syria, the effects of which were also felt in Lebanon, it was decided to check all buildings being occupied by DRC for any imminent signs of risk of collapse, in case a strong earthquake takes place in or around Lebanon. As part of earthquake risk mitigation of buildings occupied or proposed to be occupied by DRC, it was decided to conduct a visual structural assessment of CD Residence building, to confirm if there are any major cracks in the building (after the recent earthquake) and if it has any other apparent structural vulnerability that might lead to its collapse during a strong earthquake.

## 3. Objective of the consultancy

The purpose of this consultancy is to:

- 1-Conduct a visual inspection assessment to several buildings at different locations (to be assigned in a later stage)
- 2-The inspection will focus on the structural foundations and bases of these buildings mainly but specified to the following:(columns, beams, walls, ceilings and main foundations if applicable) in addition to recordings of seen or apparent shear cracks due to earthquake or settlements
- 3-In case available, DRC will provide drawings and building documents in order for the consultant/engineer may assess accordingly (further analysis may be required using analysis systems, Robot modelling for example)
- 4-A full official report with pictures and site seeing should be done for every site where this report should state the case of the building and reasons for damage in case any in addition to recommendations in case needed repairs or mitigation measures/ in addition to safety recommendation of the structure

5-I case needed or required as essential the consultant shall inform DRC of the need to conduct complex analysis (coring, shear tests, load tests done at a certified Laboratories)

#### 4. Deliverables

The Consultant will submit the following deliverables as mentioned below:

1-Detailed report including:

- Site inspection with details and pictures
- Causes of any damage, cracks or abnormalities
- Recommendations for every inspected entity (precautions, mitigation measures, safety recommendations)
- In case asked for a modelling for the building as further analysis of loads and structure

- In case DRC was able to provided maps and documents for the entity, the consultant is required to review and assess these document and results in recommendations based on Lebanon codes and measures for seismic activities tolerance
- Signed document for the end result and recommendations by the consultant

#### 5. Duration, timeline, and payment

The total expected duration to complete the assignment will be no more than 20 working days

The consultant shall be prepared to complete the assignment **no later than 15-04-2023** 

Delivery Timeline	Expected final deliverables	Indicative description tasks	Maximum expected time frame
25-04-2023 27-04-2023	Inspection Area 1 Beirut	Inspection for the site in beirut ashrafeyeh areas	3 days
28-04-2023	Inspection Area 2 BEKAA	Inspection for the site in bekaa zahle area	1 day
02-05-2023	Inspection Area 3 North	Inspection for the site in North Tripoli and Akkar areas	1 day
03-05-2023 16-05-2023	1st draft report	Time limit for the 1st draft reports to be submitted to DRC for reveiw, it can be done on a rolling basis or as all reports are done	10 days
17-05-2023 19-05-2023	Review and question By DRC	Final discussion between parties to better understand the reports and modify or inquire about the conclusion and allow time for change or adjust	3 days
22-05-2023	Discussion and final report	Final report to be submitted to DRC	2 days

## 6. Qualification, and experience required

#### **Essential:**

- Experience with structural analysis and civil construction for at least 7 years
- Certified and acknowledgment from the order of engineers as a Civil and structural consultant
- Excellent communication and presentation skills are necessary to effectively present proposals, site assessments, and performance reports to clients and stakeholders.
- Knowledge of the latest technologies used for testing of both concrete and steel, in addition to codes and design measure related to Lebanon context and the order of engineers
- ➤ The ability to identify and resolve complex technical and operational issues in a timely and efficient manner is essential

- Language requirements:
  - Written and spoken fluency in English and Arabic

# 7. Technical supervision

The selected consultant will work under the supervision of:

- Shelter Coordinator
- Safety Coordinator

#### 8. Location and support

The consultant will be executing his/her tasks at DRC offices and buildings covering the Following areas: 5 buildings in Beirut, Achrafieh area, 2 in Tripoli, 1 in Akkar and 1 in Beqaa/Zahle.

#### 9. Travel

DRC will be responsable for Managing the transportation for the consultant.

#### 10. Evaluation of bids

Evaluation will take place within a Selection Committee to compare the bids, along the principles of quality of the bid, as well as cost-effectiveness. Full details on the evaluation process and criteria can be found in *the RFP BEY\_23\_06 Invitation Letter*.

## 11. Submission process

Refer to the RFP BEY\_23\_06 Invitation Letter.