



**FACULTY OF CIVIL ENGINEERING (CONSTRUCTION) AND
INFRASTRUCTURE**

**REPORT FOR THE POST-EARTHQUAKE ASSESSMENT IN
ALBANIA FROM THE STAFF**

Pristina, 2023



FACULTY OF CIVIL ENGINEERING (CONSTRUCTION AND INFRASTRUCTURE)

REPORT ON THE POST - EARTHQUAKE BUILDING ASSESSMENT BY THE STAFF OF THE FACULTY OF CIVIL ENGINEERING AND INFRASTRUCTURE OF UBT IN ALBANIA AFTER THE 26 TH NOVEMBER EARTHQUAKE

REFERENCË:	
PËR/ZA/TO:	Mr. Argjend Zejnaj, Chief of Cabinet of MIT
C.C	Prof. Dr. Sc, Edmond Hajrizi - Rector of UBT Prof. Dr. Muhamet Ahmeti - Director of Academic Affairs UBT Mr. Pal Lekaj, Minister of MI Mr. Ambassador of Albania Qemal Mingjozi Mr. Rexhep Kadriu, Deputy. minister Mr. Artan Tahiri, Secretary of UBT Mr. Betim Reqica, Secretary General of MIT Mrs. Tringa Shkodra Mrs. Lirigzona Morina
PËRMES/PREKO/THROUGH:	
NGA/OD/FROM:	Dr. Sc. Visar Krelani, Team Leader / Vice Dean Faculty of Civil Engineering - UBT
TEMA/SUBJEKAT/SUBJECT:	Report - Post-earthquake assessment of buildings in Durrës

On December 2, 2019, UBT and the Faculty of Civil Engineering and Infrastructure were invited by the Ambassador of Albania and by the Ministry of Infrastructure of Kosovo to visit Durrës. The official request was to provide any kind of professional assistance to support Albania in this difficult time. At the request of Rector Edmond Hajrizi and of the director for academic affairs Prof. Muhamet Ahmeti asked our faculty to show readiness with all staff in order to support this initiative.



Part of the CEI-UBT group in a meeting with the Minister of Infrastructure Pal Lekaj

The Minister of Infrastructure Pal Lekaj, organized a meeting on the morning of December 2, 2019, where he met with the staff of CEI and confirmed the commitment of the state of Kosovo to support this organization and agreed that a joint visit of UBT to Albania will take place, represented by the vice dean of CEI Dr. Sc. Visar Krelani and Dr. Sc. Eglja Luca while on behalf of the Ministry of Infrastructure, itself Deputy. Minister Rexhep Kadrija and the Minister

Chairman of the Cabinet Mr. Argjend Zejnaj, to organize the stay, security and areas in which the team will operate knowing that at the moment in Durrës and Tirana are at an emergency state.

Upon arrival in Albania, in Durrës, at the Municipality, we were received by the highest levels such as the new Mayor Zhylien Varfaj and the emergency team represented by Deputy Minister of Interior Affairs Ms. Rovena Vodo together with the Ambassador of Albania in Kosovo Mr. Minxhozi and the Ambassador of Kosovo in Albania Mr. Nait Hasani. In this meeting was confirmed the state of emergency in this city and we were thanked for the commitment of Kosovo and UBT with professional staff. The Deputy Minister of Infrastructure Mr. Kadriu stressed the importance that before the arrival of the group and the heavy machinery, we should define technical aspects such as zoning maps, accommodation, personal and health insurance, etc. Knowing the value of the group visiting Albania. Mayor Varfaj and Mrs. Voda offered all their support so that the staff coming from Kosovo can do a job as smooth as possible in the evaluation of facilities starting from December 3, 2019.



Takimi në Bashkinë e Durrësit me Kryetarin e Durrësit Z. Zhylien Varfaj

After this meeting, the team was invited to go out on the field to one of the most sensitive facilities of Durrës, that of the Port of Durrës. They were received by the leaders of the port and also representatives of the Ministry of Infrastructure responsible for the Port of Durres. The meeting was very hospitable and they were thankful for the commitment of Kosovo and UBT and were

invited to visit the part affected the most by the earthquake where a complete ruined object was seen up close which is expected to be cleaned but also the port part can not be called safe. for this demolition work. They were also invited for the arrival of heavy vehicles from Kosovo to be stationed in this port, dividing a part of the port for stationing during the emergency. On their part, the representatives of Kosovo confirmed that they can also contribute to the port, which was appreciated, but since it is a sensitive process, we were left to return later to establish the way of working in the port. A quick visit to the damaged parts of the city took place, a part of the city was completely abandoned.



Meeting in the directorate of the port of Durres with representatives of the Albanian government



Visit to the scene where is seen a demolished object by the earthquake in the Port of Durres

From these meetings, the Kosovo delegation confirmed the interest of Albania for professional assistance, therefore it was agreed to wait for the meeting of the Albanian emergency team in the evening, at the municipality of Durrës, to decide on further and concrete steps to be taken.

In the meeting at the municipality of Durrës, the team was received from the main person in charge for the assessment of facilities after the earthquake, Deputy Minister Mr. Artan Shkreli who thanked the Kosovo team for their commitment. He confirmed that they will ensure all that is required and the engineers and the professionals can perform the activity as smoothly as possible. He also promised an office (work space) inside the municipality building where where the team can work and at the same time be close for everything.

As agreed, on December 3 2019, the teams from the Ministry and UBT will arrive in Durrës where they will first be trained on how to fill in the forms and about the way the assessment will be performed, and then go to the sites. The area will be allocated the Kosovo team and the professionals will be supported also from local staff.



Upon the arrival of the UBT team together with the engineers from the Ministry of Infrastructure, it was decided that the Kosovo team will be part of the emergency group under the leadership of the European Union together with the US Embassy and USAID and UNDP. Also in this meeting were decided the leaders of the group namely Deputy. Minister of Infrastructure Mr. Rexhep Kadriu and Vice Dean of CEI Prof. Visar Krelani who also took responsibility for contacting the emergency team and group management.

The teams from the Ministry and UBT took over the tasks from the headquarters and it was decided that the Kosovo team should be divided into five locations in which three of them were taken over by the UBT groups and two by the Ministry. The areas to be assessed by the Ministry team were Ishëm and Rashmbull while under the responsibility of UBT groups were Katundi i Ri, Sukth and Manëz. In the following days UBT groups were concentrated inside the city of Durrës in Region 2, 3 and 4.

The representatives of the Faculty of Civil Engineering and Infrastructure at UBT were:

1. Feti Selmani
2. Hysen Ahmeti
3. Hazir Çadraku
4. Visar Krelani
5. Besian Sinani
6. Arber Mucaj
7. Arsim Rapuca
8. Eglu Luca
9. Naim Munishi
10. Mustafa Buzhala
11. Fatos Sadiku
12. Agron Sylu
13. Lulzim Kukaj
14. Ilir Koraqi

I. First group

1. Feti Selmani
2. Hazir Cadraku
3. Mustafa Buzhala
4. Agron Sylu

This group was in charge of **Manëz Zone** and **Region 3** in the **City of Durrës**.

During the inspections carried out in the areas affected by the earthquake in Albania, respectively in the area of the city of Durrës, we have made the following damage assessment:

- Total - 20 residential buildings.

- 17 individual houses in the area of Manëz and
- 3 mixed used (residential and commercial) complexes in the city of Durrës, Administrative Unit 3,

The following decision were made:

- 11 Liveable buildings
- 9 Uninhabitable Objects.

Note: All suggestions and assessments are substantiated in the Damage Assessment Act which was drafted by the Ministry of Infrastructure and Energy, Institute of Construction, On field verification of entities damaged by the earthquake dated 26.11.2019.

The whole process of assessment and ascertainment of damages has been carried out only based on professional experience and visually (without any measuring instrument).

Attached you can find an example from the Statement Act (for objects) which we have made is accompanied by photos which argue the estimates given.

Durrës, më / 2019

AKTI KONSTATIM

Mbi verifikimin në terren të subjekteve të dëmtuara nga Tërmeti i datës 26.11.2019.

Koordinata: 41 32 28/19 45 08
Subjekti: Strukturat 2002. Adunua's bates Agim Kallmet RF 3041856
Qyteti: Durrës Njësia Administrative nr. 3 Rruga "Rugë Ulqinche" L.16
Ndërtesa: Strukturat 2002.

Numri total i kateve: 9 Sipërfaqja totale e objektit _____ m³

Sistemi Konstruktiv i Objektit (përshkrim): Beton Muraturë tjetër
Përshkrim: Më duhet të japë sistemin dyqel. Muret e hollit përshkrimi është përshkrimi
Suava dhe muret e hollit përshkrimi është përshkrimi.

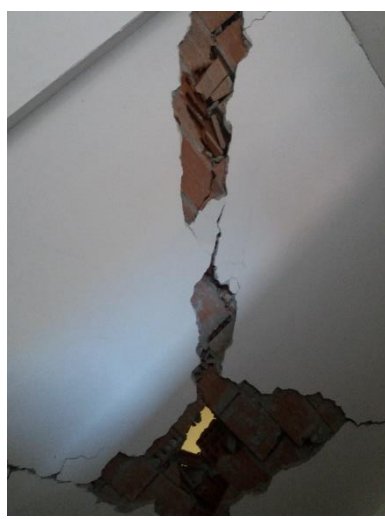
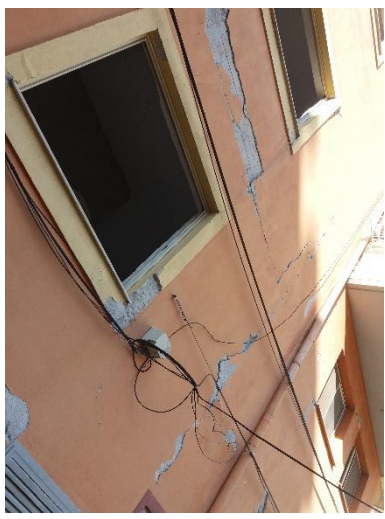
Dëmet e konstatuara në objekt: I ulët I mesëm I lartë
Përshkrim: _____

Gjendja e ndërtimit: I banueshëm I pa banueshëm
Përshkrim: Më duhet hyrja e banorëve pa hollit, Fenixi mos hynë brenda

Rekomandim/qufizime:
Nëse në hollit e 3 dëmetet grina p të shprehës hollit plososihet dërgon
Më duhet deri në hollit e 3 dëmetet stabilitim - komplet

- Grupi i inspektorëve:
- Milo Kodhoshi
 - FETI SELMANI
 - HAZIR GADIRAKA

Ing. Agron HYRENLLIU
DREJTOR I PËRGJITHESH



II. Second Group

1. Visar Krelani
2. Besian Sinani
3. Arbër Muçaj
4. Hysen Ahmeti

This group was in charge of **Katundi i Ri** Zone and **Region 2** in the **City of Durrës**.

During the inspections carried out in the areas affected by the earthquake in Albania, respectively in the area of the city of Durrës, we have made the following damage assessment:

- Total – 44 Residential buildings.
- 33 individual houses in the area Katundi i Ri
- 11 Mixed use buildings, 5 to 8 floors in Durrësit, Administrative region 2,

The following decision were made:

- 34 Liveable buildings
- 10 Uninhabitable Objects.



Third Group

1. Arsim Rapuca
2. Naim Munishi
3. Fatos Sadiku
4. Lulzim Kukaj


This group was in charge of **Sukth** Zone and **Region 4** in the **City of Durrës**.

During the inspections carried out in the areas affected by the earthquake in Albania, respectively in the area of the city of Durrës, we have made the following damage assessment:

- Total – 43 Residential buildnigs.
- 23 individual houses in the area Sukth
- 20 individual houses in the area Durrësit, Administrative region 2,

The following decision were made:

- 18 Liveable buildings
- 25 Uninhabitable Objects.


 REPUBLIKA E SHQIPËRIË
 MINISTRIA E INFRASTRUKTURËS DHE ENERGJISË
 INSTITUTI I NDËRTIMIT

Durrës, më 05.12.2019

AKT KONSTATIM

Mbi verifikimin në terren të subjekteve të dëmtuara nga Tërmeti i datës 26.11.2019.

Koordinatat:

Subjekti: OBJEKT BANIMI
 Qyteti: DURRËS Njësia Administrative nr. 4 Rruga ALEXANDER SOGA
 Ndërtesa: PALLATI Nr. 775 (PESKATESHI SPITALI) VIT (VËRTIMIT) 1975

Numri total i kateve: BTP+4 Sipërfaqja totale e objektit N 2000 m²

Sistemi Konstruktiv i Objektivit (përshkrim): Beton Muraturë tjetër

Përshkrim: 1 SHITANGET ME MURË NGA TULLAT

Dëmet e konstatuara në objekt: I ulët I mesëm I lartë

Përshkrim: DËMETIM (GARJE) TE MENJAJTE MURËVE MBADITËSE NDARJE TE LINDJES NË (SOSHË) GARJE DIAGONALE TE MURËVE MBADITËSE

Gjeandja e ndërtimit: I banueshëm pa banueshëm

Përshkrim: OBJEKT I VËJETËR ME TULLA ME GARJE TE MENJAJTE NË GARJE NË HUMBËNJE E STABILITETIT TE STRUKTURËS

Rekomandimet/ kufizimet:
DEMOLIM I OBJEKTIT DHE RINDËRTIM

Grupi i inspektimit:
ARSIM PAPUÇA
LULZIM FUKAJ
NALIM MUNISHI
FATOS SADIKU

Ing. Agron BYSENLLIU
 DREJTOR I PËRGJITHËSH

Rr. Myslym Keta, Brar, Tiranë Shqipëri



Liveable Residential structures have mainly minor damage to the plaster as well as some partition walls which are easily repairable and do not pose a risk to the supporting structure of buildings.

Of the structures that are considered uninhabitable, they are severely damaged or moderate damage that is not economical to repair taking into account the old structure built with inadequate materials for seismic areas, so they must be demolished and rebuilt new houses .

Attached you can find one of the Finding Act where the building has been declared uninhabitable due to identified structural problems.

OVERVIEW

The following objects have been evaluated in total by the UBT staff:

- Total - 107 residential buildings with floors from 1 to 8 floors.
- 44 uninhabitable objects and
- 63 habitable objects.

Note: All suggestions and assessments are substantiated in the Damage Assessment Act which was drafted by the Ministry of Infrastructure and Energy together with the Emergency Headquarters led by the European Union, the United Nations and USAID with the Construction Institute, on the field verification of the subjects damaged by the Earthquake of 26.11.2019.

- The whole process of assessment and ascertainment of damages has been realized based only in professional experience.

- Attached you can find some examples from the filled Statement Act (for objects) which is accompanied by photos that support the decision.

- For each case there are acts of ascertainment and photographs of identified cases.

This report will be followed by a detailed report for each case where a documentation will be collected on the findings and challenges that may arise in cases of earthquake.