unesco
Category 2 Center under the auspices of UNESCO

RCECWA
Regional Education and Research Center on Earthquake Risk Management and Resilience for West and Central Asia

International Institute of Earthquake Engineering and Seismology (IIEES)

Webinar on:

"Natural Disaster Loss Assessment and Early Warning System"

Date: Thursday, November 12, 2026; 13:30-17:30 (Beijing Time)

College of Architecture and Civil Engineering, Beijing University of Technology, Beijing, China

Post-disaster rapid loss assessment is a structured process for estimating damage and economic losses within hours to days of a hazard event. It draws on sensor-triggered hazard maps with established loss models, field reconnaissance, remote sensing and damage mapping, and pre-established damage functions to generate preliminary estimates of destroyed buildings, disrupted infrastructure, and affected populations. Its value lies not in precision but in speed and usability—giving decision-makers enough information to prioritize search-and-rescue, allocate emergency resources, and declare states of emergency.

To promote international academic exchange on disaster risk reduction, the Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences (IGSNRR-CAS), the International Institute of Earthquake Engineering and Seismology (IIEES), and Beijing University of Technology (BJUT) initiate this workshop to strengthen mutual understanding among the three institutions regarding research on disaster losses and early warnings.

9:00 – 9:20 (Tehran time) **13:30 – 13:50** (Beijing time)	**Opening Statement Workshop Objective and Plan by:** ***Prof. Peng Cui:*** *Prof. of IGSNRR, CAS* ***Prof. Mohsen Ghafory-Ashtiany****: Prof. of IIEES (Iran) and Guest Professor of BJUT (China)* ***Prof. Chengshun Xu****: Dean and Prof. of BJUT.* *Introduction to the College of Architecture and Civil Engineering, Beijing University of Technology*
9:20 – 12:40 (Tehran time) **13:50– 17:10** (Beijing time)	**Presentations** 1. ***Prof. Juanle Wang:*** *From Disaster Data to Actionable Information: Supporting Timely, Evidence-Based Loss Assessment and Emergency Decision Making* 2. ***Prof. Babak Mansouri:*** *Remote Sensing for Quick Post-Disaster Loss Assessment* 3. ***Prof. Zeren Zhima:*** *Current Status and Progress of China Seismo-Electromagnetic Satellite (CDES) Mission. (National Institute of Natural Hazard, MEMC)* 4. ***Prof. Tao Wang:*** *Seismic Monitoring and Rapid Safety Assessment for Key Infrastructures* 5. ***Dr. Chaodong Zhou:*** *Detection and Analysis of Ground Deformation in the Beijing Plain Based on Improved Time-Series InSAR* 6. ***Dr. Jian Guo:*** *Data- and Physics-Driven Mountain Hazard Risk Assessment* 7. ***Dr. Chunhao Wu:*** *Novel Mechanism Driven Indicators for Rockslide and Coseismic Landslide Susceptibility Assessment* 8. ***Mr. Zili Wang:*** *Data-Physics Coupled Intelligence: The Next-Generation Debris Flow Early Warning System* 9. ***Dr. Yaqiao Wu****: Road Network Disruption: A Systemic Risk Perspective* 10. ***Prof. Anooshiravan Ansari:*** *Overview of the Greater Tehran Earthquake Early Warning Sysem (online)* *Note: Each Lecture is 15 minutes and follows by 5 minutes Q/A*
12:40 – 13:00 (Tehran time) **17:10 – 17:30** (Beijing time)	**Discussion: Moving Forward** ***Moderated by Prof. Peng Cui, Prof. Mohsen Ashtiany and Prof. Chengshun Xu***