Expression of Interest of the Iran National Committee to become a Member of the Integrated Research on Disaster Risk (IRDR)

The International Institute of Earthquake Engineering and Seismology as the delegate of a group of Iranian research institutes and scientific associations comprised of:

- 1. International Institute of Earthquake Engineering and Seismology (IIEES)
- 2. Iranian Earthquake Engineering Association (IEEA)
- 3. Disaster Management Research Institute of Shakhes Pajouh (DMRISP)
- 4. Iranian Sociological Association (ISA)
- 5. Water Research Institute (WRI)
- 6. Iranian Water Resource Association (IR-WRA)
- 7. Disaster and Emergency Health Department at Tehran University of Medical Science
- 8. Tehran Disaster Management and Mitigation Organization (TDMMO)

which are mainly or partly active in the field of disaster management and risk reduction, hereby, expresses the group's interest in being recognised as the IRDR National Committee (NC) for Iran.

INTRODUCTION TO THE NATIONAL COMMITTEE MEMBER

The following pages outline the history, missions, structure, technical capabilities and goals of IIEES and other member entities, and alternatively demonstrate that the objectives of the members of this committee are in-line with IRDR's.

International Institute of Earthquake Engineering and Seismology (IIEES)

The International Institute of Earthquake Engineering and Seismology (IIEES) is a comprehensive international research institute in the field of earthquake established in Iran based on the 24th UNESCO General Conference Resolution DR/250 and the Iranian government approval in 1989; as an independent institute under the Iran's Ministry of Science, Research and Technology. The main goal of IIEES is seismic risk reduction and mitigation both in Iran and in the region by promoting research and education in science and technology related to seismotectonic, seismology and earthquake engineering as well as risk reduction. IIEES activity in research covers all aspects and components of earthquake risk assessment and management; public education and Ph.D. programmes in seismology and earthquake engineering. IIEES consists of 5 Research Centres: Seismology, Geotechnical Earthquake Engineering, Structural Earthquake Engineering, Risk Management; National Centre for Earthquake prediction and Graduate School; Public Education; and Information Division.

IIEES disaster risk research topics include: (1) Seismotectonic and seismological studies on the earth crust, active faults, seismicity and earthquake hazard; mapping active faults, hazard zonation; and earthquake catalogues; (2) Vulnerability and risk assessment of cities, developing integrated, feasible and effective risk management and reduction programmes, proposing effective risk reduction measures to the authorities, and cooperate towards its approval and implementation with the consideration of socio-economic and cultural aspects of the country; (3) Promoting the earthquake safety, prevention and preparedness culture in all levels of society (general public, specialist and decision makers) through comprehensive

earthquake awareness programmes; and (4) Providing technical and research consultancy to the government and industries for their seismically safe development and construction.

Over the past 26 years, IIEES had major contributions to the development and implementation of the earthquake risk reduction programme in Iran as well as in decision making process and promoting the safety culture and public awareness.

Iranian Earthquake Engineering Association (IEEA)

Iranian Earthquake Engineering Association (IEEA) is a non-profit association with the mission of encouraging and supporting the effective research and development actions to reduce the earthquake damage and loss, was founded in 1993 by a group of Iranian earthquake researchers, faculties and engineers. The main goal of the association is to improve the quality of the earthquake engineering and seismology as an important field of study in Iran and to provide the students and engineers with required scientific supports. The main office of IEEA located in Tehran organises a close relationship among interested clients from all around the country. Furthermore, the mutual international cooperation with specialists and worldwide organisations enables the members to exchange the newest scientific achievements at the shortest time possible. IEEA has been registered since 1993 by the Iran Scientific Associations Commission (ISAC). IEEA is also registered with the Council of Iranian Scientific Associations (CISA). IEEA is an official member of International Association of Earthquake Engineering (IAEE) which is a member of ICSU. IEEA operates by the Board of Directors that are elected every 3 years by the IEEA members during the annual IEEA general assembly. As of January 2015, IEEA members exceed 1350.

Disaster Management Research Institute of Shakhes Pajouh (DMRISP)

Disaster Management Research Institute of Shakhes Pajouh (DMRISP) is a private research centre on disaster risk management certified by the Ministry of Science, Research and Technology (MSRT) aims to engineering of natural disasters. DMRISP research activities are in three different research sectors of: Management, geography and civil engineering. DMRISP is also licensed for admission of students by the Ministry of Health and Medical Education (MHME), the Health Research Centre. Currently more than 50 faculty members and 200 researchers are working with the institute. DMRISP also offers research-oriented MS and PhD programmes in the fields of Civil Engineering (Earthquake and Crisis Management), Human Resources, Entrepreneurship, Geography (urban planning), Climate Risks and Future Studies, Health Safety Environment (HSE), Health Management in Disaster and Health in Disasters and Emergencies. These programmes are accredited by MSRT and MHME.

<u>Iranian Sociological Association (ISA)</u>

Founded in 1991, Iranian Sociological Association (ISA) is the professional organisation of sociologists and social science researchers. Because of its activities, the Association was chosen by the Ministry of Science, Research and Technology as an "Outstanding Association" in years 2009, 2011, 2013, 2015. The association is also a full member of International Sociological Association (ISA) and the focal point of Asian Social Science Research Councils (ASSREC) and has launched yearly International conferences focusing on Middle East and North Africa with collaboration of ISA and some regional supporters in Turkey and Arab world since 2010. ISA publishes two quarterly journals that are, *Iranian Journal of Sociology* and *Journal of Social Studies of Iran* and one newsletter. The association has 40 specialised

committees and 20 provincial offices and the number of its full members has reached to 1200 in 2015.

The Specialised Committees of Urban Sociology and Regional Studies, and Sociology of Natural Disasters have performed several workshops, research activities, public discussions and conferences on environmental issues and natural disasters over the past ten years. The research topics include but are not limited to post-earthquake social issues; risks of earthquake and city resistance; management of disasters and reconstruction; social ethics and natural disasters, society, culture and water crisis; sociological and climate analysis of dust; etc.

Water Research Institute (WRI)

WRI has founded in 1967 as a research centre for operating physical hydraulic models. Water Research Institute (WRI) serves as the main centre for research and development of country's water sector for now. Actually, WRI is affiliated to Ministry of Energy which is involved in the field of applied water researches and has the duty to support decision makers to successfully pass the water related challenges of the day. The institute consists of two research departments and 4 individual research centres as following:

- Hydraulic and Hydro-Environment Engineering Department- Tehran main campus
- Water Resource Management Department- Tehran main campus
- Water and Wastewater Research Centre- Tehran main campus
- Karst and Hard Rock Research Centre- Shiraz
- Cloud seeding Research Centre- Yazd
- Caspian Sea Research Centre- Sari

Current activities in different sections of WRI is very broad, including water resources management, climate change and its impact on water bodies, Generating flood alarm network in country's rivers, River engineering, Hydraulic model development, Research on Coastal engineering and marine science, Development of applied cloud seeding methods, Research on karst water resources of the country, Laboratory affairs as sediment, water quality, Chemical, Physical and Microbiology parameters and much more.

Iranian Water Resources Association (IR-WRA)

IR-WRA has been constituted as a national non-profit association aiming at enhancing cooperation and exchanges in research and application in the field of water resources. The main goals of IR-WRA comprise, but are not limited to:

- 1. Promoting research and application of scientific knowledge on water resources to practical engineering activities,
- 2. Contributing to the dissemination of results of scientific and technical advances by Iranian specialists in the field, and
- 3. Contributing to the extensive programme of conferences and workshops, discussions and IR-WRA publications

IR-WRA consists of four main committees, including Hydrology, Environmental issues, Water Resources Management and Executive committees.

<u>Disaster and Emergency Health Department at Tehran University of Medical Science</u>

DEH Academy is a leading scientific center in the Middle East and North Africa (MENA) region. It is a well-known institution for operational research programmes and professional training courses. It is basically affiliated to Iran's National Institute of Health Research and TUMS

School of Public Health, and is a close partner of Iran's Ministry of Health and Medical Education (MoHME), National Disaster Management Organization (NDMO), and Iranian Red Crescent Society (IRCS). The academy is also a Non-UN Member of the United Nations Disaster Management Team in I.R. Iran, and an active member of Global Network for Disaster Reduction (GNDR) for Civil Societies.

DEH Academy has a country-wide network of faculty and staff with diverse backgrounds that includes epidemiology, emergency medicine, environmental health, nutrition, reproductive health, mental health, communicable and non-communicable diseases, engineering, geophysical and hydro-meteorological sciences, sociology and health services.

The followings are the highlights of collaboration of DEH Academy with national and international partners:

- Establishment of Disaster Risk Management Office at MoHME
- Integration of disaster risk management (DRM) to primary health care system of Iran
- Development and institutionalization of metrics system for DRM at MoHME
- Integration of hospital disaster safety assessment to health system of Iran, as a criteria for annual accreditation of Iranian hospitals
- Founding and hosting the national committee of community disaster resilience
- Establishment of national committee for disability and disasters
- Development of the national disaster rehabilitation plan in collaboration with NDMO
- Organising the first training course on Health Emergency in Large Population in collaboration with International Committee of Red Cross and IRCS
- Organising an annual training course on Health Disaster Risk Management in collaboration with MoHME and WHO/Iran
- Organising a training course on Refugees Health Care in collaboration with UNHCR

Tehran Disaster Management and Mitigation Organization (TDMMO)

Tehran Disaster Management Master Plan (TDMMP) was established by the Tehran Municipality with the approval of the Government in December 1999 in coordination with National Committee for Reduction of Natural Disasters' Impacts and Natural Disaster Task Force of MOI and many other related ministries and organisations. According to the provisions of the approved Master Plan and in-line with the goal for the coordination of disaster Management issues (Mitigation, Preparedness, Response and Reconstruction), Tehran Mayor was assigned as the commander and Tehran Municipality became responsible for the Tehran Disaster Management task. Based on this, all related organisations were asked to cooperate with Tehran Municipality. The main objectives of TDMMO can be categorised as follow:

- 1. To improve the level of security and safety and to reduce risks in Tehran through conducting related coordination, reviews, researches, training programmes and executive measures prior to the occurrence of disasters to provide mitigation and preparedness for emergency response.
- 2. To perform measures and necessary coordination for increasing efficiency of disaster management system in Tehran and in related organisations at the time of occurrence of disasters for the implementation of rescue and relief operations and also reduction of damages and human/property losses.

3. To monitor and direct reconstruction efforts and recovery activities following the occurrence of disasters within the framework of national rules and regulations and also governmental and non-governmental (community- based) aids.

SCOPE of COLLABORATION and COOPERATION:

Proposed area of collaboration in line with the IRDR strategy and programs are as follows:

Forensic Investigations of Disasters (FORIN) Project

- Defining forensic objectives and designing the necessary framework and systems.
- Revisiting past disaster reports and documentation in order to extract the required information.
- Forming the forensic teams to investigate impacts of future disasters namely earthquakes, flood, drought and coastal disasters from physical, health, environmental and social point of view.
- Collaborating with the other IRDR NCs and RCs to share the experiences and increasing the synergy.

Risk Interpretation and Action (RIA) Project: Enhancing Risk-Literacy

- Fostering trans-disciplinary research on risk management and resilience focusing on urban areas.
- Conducting integrated research with special emphasis on socio-economic and policy aspects of risk and resilience.
- Forming the special taskforces to conduct high quality research on different aspects of disaster risk management.
- Holding joint workshops and educational programs with other NCs of the IRDR in order to enhance the research quality and maintain the momentum.
- Monitoring near shores, river banks and catchments in terms of water quality and quantity, Environmental issues and impacts
- Encouraging the governmental organizations and private sector at national and local level to more implement DRR measures and also engaging them in the committee's activities.

Measuring Losses from Disasters: Human and Economic Impact Indicators

- Defining a common indicator-base model at the national scale to assess and monitor the economic and human risk.
- Designing and developing necessary frameworks and systems to collect and manage the loss data in a coordinated manner within the country.
- Exchanging scientific findings and techniques with other IRDR members through joint meetings and research collaborations.
- Engaging government and private sector in risk monitoring process benefiting from data resources and also encouraging risk-informed decision making in the national and local scale.

COORDINATION:

The members have agreed to appoint Prof. Mohsen Ghafory-Ashtiany as the coordinator of the Iran National Committee in IRDR, whose contact information can be found hereafter.

Contacts:

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IRDR-Iran National Committee Coordinator

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Signed in Tehran on the Occasion of the 7th International Conference on Seismology and Earthquake Engineering (SEE7) during the IRDR special session on Tuesday May 19, 2015 by:

Prof. Mohammad-Kazem Jafari:

President of International Institute of Earthquake Engineering and Sei

Prof. Mohsen Ghafory-Ashtiany:

President of Iranian Earthquake Engineering Association (IEEA)

Dr. Amir Mahmoodzadeh:

Chancellor of Disaster Management Research Institute of Shakhes Pajouh (DMRIS

Prof. M. Amin Ghaneirad:

President of Iranian Sociological Association (ISA)

Dr. Morteza Eftekhari:

President of Iranian Water Resource Association (IR-WRA)

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