Recommendations of the European Seismological Commission (ESC) for the Post Hyogo Framework of Action (HFA2)$^1$

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Abstract – ESC community held a PostHyogo consultation by using a questionnaire prepared by ESC Executive Committee (ExeCom) in 2014. Six questions were posed to the ESC community, asking for additional comments not specifically included within the questions. The questions were:

1. What is the role of ESC at regional and international level for improving the understanding of disaster (especially earthquake) risk reduction and building resilience?
2. How effectively has the Hyogo Framework of Action been implemented by countries and scientific community (especially ESC Members)?
3. Can you give some examples of how earthquake community has benefited from HFA between 2005-today (one or two outcomes)?
4. What do you think should be three main components that needs to be further addressed in a post-2015 framework for disaster risk reduction (considering primarily the earthquake risk mitigation)?
5. How do we improve the science and policy dialogue to ensure that decisions are informed by science? Examples?
6. What could be the top three seismology related issues important to building earthquake resiliency that can be addressed in a post-2015 international risk reduction strategy?

Following the answers received, the ESC ExeCom prepared a set of final proposals to be submitted to UNISDR as ESC contribution for PostHyogo Consultation.

Keywords – Earthquakes, European Seismological Commission, Hyogo Framework of Action, Seismology

1. The European Seismological Commission (ESC)

The European Seismological Commission (ESC) is a scientific organisation created in 1951 by the International Association of Seismology and Physics of the Earth’s Interior (IASPEI) and is a regional commission of IASPEI. The ESC mission is to promote the science of Seismology within the scientific community of the European and Mediterranean countries (encompassing the area from the Mid-Atlantic Ridge to the Ural Mountains and from the Arctic Ocean to northern Africa), by promoting research studies, to extend and enhance scientific co-operation and to train young scientists (more info at http://www.esc-web.org/).

The ruling body of the ESC is the Council, consisting of the Titular Members (representatives of the European and Mediterranean countries regular members of the IUGG), and the Executive Committee, which is the administrative body. Working Groups are formed within the ESC to address particular scientific problems.

2. Methodology Driven by ESC Constulation

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b) How effectively has the Hyogo Framework of Action been implemented by countries and scientific community (especially ESC Members)?

c) Can you give some examples of how earthquake community has benefited from HFA between 2005-today (one or two outcomes)?

d) What do you think should be three main components that needs to be further addressed in a post-2015 framework for disaster risk reduction (considering primarily the earthquake risk mitigation)?

e) How do we improve the science and policy dialogue to ensure that decisions are informed by science? Examples?

f) What could be the top three seismology related issues important to building earthquake resiliency that can be addressed in a post-2015 international risk reduction strategy?

Following the answers received, the ESC ExeCom prepared a set of final proposals to be submitted to UNISDR as ESC contribution for Post-Hyogo Consultation. Those proposals are summarized in the next section.

3. ESC Proposals on the Post 2015 Framework on Disaster Risk Reduction

Following a consultancy among the ESC community, the ESC would like to contribute to the post-2015 framework on Disaster Risk Reduction (the HFA2 initiative) with the following proposals:

3.1. Proposals on the structure of the new policy

- New strategy must be easy to comprehend (understand), adoptable by all countries and stakeholders and must be implemented at all levels.
- Accountability must be the key component of the new strategy. In order to achieve this, a robust implementation system must be proposed by UNISDR for all stakeholders of new strategy on DRR.
- Challenges of the existing HFA must be well analyzed and strongly re-articulated within the new strategy.

3.2. Proposals on fostering scientific investigations on hazards, especially earthquakes

- Improving seismic hazard evaluation by new advanced methods of assessment and mapping, including systematic detailed microzonation analysis, to significantly reduce or overcome main uncertainties still affecting hazard studies in some regions. In addition, strong support should be given to more reliable vulnerability and risk assessments specially in developing regions.
- Detailed studies of potential for large earthquakes, and possible associated tsunamis, in subduction zones of the European-Mediterranean region.
- Development of guiding documents, exchange of best practices, as well as training, education and outreach activities should be considered important tools in order to achieve effective DRR.
- Updating building codes, and land use plans, emphasizing retrofitting of existing strategic buildings, like e.g. schools and hospitals, critical infrastructures and cultural heritage should be coordinated with new strategy on DRR.
- A continuation of the evaluation of physical assets at risk especially redesigning related priorities of existing HFA. Earthquake risk assessment for critical infrastructures must be paid attention in the new strategy document.
- ESC welcomes the existence of a Scientific and Technical Advisory Group of UNISDR. This committee should play more active role during the forthcoming post-2015 DRR Era by facilitating the necessary coordination among scientific community working especially on DRR.
- Science can contribute enhancing resilience through advanced methodologies developing hazard and risk monitoring, early warning and rapid response and early damage assessment systems. New strategy document must emphasize the importance of those systems and promote countries during the implementation of the new strategy.

3.3. Integration of Science with Policy Making

- Results of scientific studies must be implemented by practical applications by policy makers and government authorities. There is more need to strengthen the relations and existing dialogues between scientific community and policy makers.
- Consultancy showed that there is further need in order to raise awareness of Hyogo Framework of Action and International DRR strategies over scientific communities.
- There is a need for the better communication methodologies to communities when informing them about disasters. A common framework or standards could be defined in order to guide scientific and governmental authorities when communicating the media and communities.
- Funding allocated for DRR and scientific investigations must be increased. With increasing support from governments to scientific research aiming DRR, resilience of societies will be systematically increased.
3.4. Regional and International Collaboration and Cooperation

New strategy has to foster regional and international collaboration and cooperation on the shared use of hazard information and exchange of knowledge and experiences. More attention should be paid on the importance of disaster archives and databases, and the added value of close collaboration and cooperation in observational seismology worldwide.

Citation