

## IORA Workshop on Biomedical-engineering and other Innovative Technologies with Relevance for Post-Disaster Situations, 18 – 21 November 2019 RWTH Aachen University, Germany



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IORA Workshop on Biomedical-engineering and other  
Innovative Technologies with relevance to Post-Disaster Situations  
18-21 November 2019 - Aachen Germany



The Indian Ocean Rim Association (IORA) Member States, located within and around the Indian Ocean rim, are prone to natural disasters such as earthquakes, tsunamis, typhoons, floods, droughts, and volcanic eruptions. As a result of climate change, extreme weather phenomena with the accompanying natural hazards are on the rise, alongside man-made hazards such as oil spills, and water, sea and air pollution. These effects are rising in frequency, with increasingly devastating results for our natural environment and alarming prospects of future generations. While early warning and precautionary measures are vital to reduce the risks for damages and losses of life associated with these hazards, relief operations and rescue services are also important to help contain the damages to public infrastructure, private properties, and human lives. It is with a view to these aspects, the RWTH Aachen University, IORA Regional Centre for Science and Technology Transfer (IORA-RCSTT), with the support of Germany as a Dialogue Partner, through GIZ (Deutsche Gesellschaft für Internationale

Zusammenarbeit) and the IORA Secretariat, held the IORA Workshop on Biomedical-engineering and other Innovative Technologies with relevance to Post-Disaster Situations in Aachen from 18 – 21 November 2019 in Germany. The Workshop welcomed Disaster Risk Management (DRM) participants from 11 IORA Member States including Bangladesh, Iran, Madagascar, Malaysia, Maldives, Mauritius, Seychelles, Somalia, South Africa, Sri Lanka and Tanzania. This Workshop provided participants an opportunity to gain experience and knowledge to advance technologies and strategies within the Indian Ocean region which may be used to effectively reduce fatalities and to aid victims affected by disasters. enhancing and building capacity to manage post-disaster situations through medical and technology transfer, participants and RWTH Aachen University Academics, developed an outcome document for submission and consideration to IORA.

Recommendations by participants and experts present at the Workshop suggested to:

- \* Integrate next generation of Disaster Risk Management (DRM), including technologies, expertise to be shared and exchanged;
- \* Recognise the importance of ICT to assist Member States in post-disaster situations;
- \* Promote the adjustment of national guidelines for procedures in Disaster Risk Reduction (DRR) among IORA Member States on the basis of the Sendai Framework;
- \* Collate an IORA disaster risk map and needs assessment;
- \* Establish an inventory of procedures (human resources, equipment, medicine, infrastructure etc.) and techniques/strategies as a basis for a regional analysis of best practises and gaps by IORA-RCSTT in consultation with the IORA Core Group for Disaster Risk Management (CGDRM).
- \* Collate a DRM overview analysis on Member State and regional organisation DRM plans/strategies;
- \* Organise the sharing of disaster mitigation and response techniques by IORA-RCSTT in collaboration with the IORA CGDRM;
- \* Develop suggestions and recommendations to enhance national and regional strategies for DRM;
- \* Promote the delivery of training, exchange and capacity building programmes by Member States and Dialogue Partners in the area of DRM;
- \* Enhance early warning systems through new technologies and improved communication channels for early warning systems;

- \* Enhance DRM awareness, especially in post-disaster situations, through education, media usage and simulation exercises;
- \* Establish an IORA 'Rapid Assistance Response Mechanism' (including but not limited to: committees, team members, intergovernmental assistance structures etc.) through the IORA CGDRM to assist Member States during disaster situations;
- \* Further enhance knowledge among Member States and Dialogue Partners on specific relevant technologies for post-disaster situations, including but not limited to;

- Water treatment/recycling and water quality assurance;
- Salt-water desalination and water purification technology;
- Safe sanitation solutions; apted automated hospital technologies;
- Educational training for patient safety;
- Telehealth and telemedicine;
- Hydraulic engineering technologies for disaster prevention.

- \* Promote the hosting of DRM medical and technological exhibitions for the effective transfer of knowledge on a regular basis;
- \* Enhance cooperation with civil society organisations, including regional and national non-governmental NGOs.