**Official Statement by the**

**Scientific and Technological Community (STC) Major Group**

**Global Platform for Disaster Risk Reduction 2019, Geneva, Switzerland**

Excellencies, distinguished delegates and colleagues,

This statement is given on behalf of the Scientific and Technological Community (STC) Major Group. The Group actively promotes an enhanced science base for effective disaster risk reduction and risk-informed development at global, national and local levels.

The convergence of the Sendai Framework for DRR, the 2030 Agenda for Sustainable Development and the Paris Climate Agreement has produced an unprecedented opportunity to maximise the contribution of science and technology to sustainable and inclusive societies. - As a major part of this contribution the UNDRR Global Science Technology Advisory Group (G-STAG) undertook revision of the ‘[Science and Technology Roadmap to Support the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030](https://www.preventionweb.net/files/45270_unisdrscienceandtechnologyroadmap.pdf)’ in collaboration with other S&T partners The purpose was to enhance the relevance of the Roadmap by developing better coherence with the global agreements and Agenda. The implementation of the Roadmap would need synergistic and partnership efforts from S&T partners as well as other relevant stakeholders. The monitoring of Roadmap progress is being done through the online [Sendai Framework Voluntary Commitments](https://sendaicommitments.unisdr.org/), and through conferences of the STC.

The scope of the Sendai Framework encompasses a wide range of natural, technological, biological and environmental hazards. There is a need to provide a set of scientifically based hazard definitions to enable countries and their partners to implement disaster risk management and to report against the Sendai Framework targets. A common set of definitions would also support a range of global and regional initiatives, including the UNDRR’s *Global Risk Assessment Framework* (GRAF). While the current [Integrated Research on Disaster Risk](http://www.irdrinternational.org/)’s publication [*Peril Classification and Hazard Glossary* (IRDR, 2014)](http://www.irdrinternational.org/2014/03/28/irdr-data-project-publishes-peril-classification-and-hazard-glossary/) covers many hazards, an updated document to address the broadened scope of the Sendai Framework is needed and is under preparation.

Better data is needed for risk-informed development and science-based decision-making at all levels. A UNDRR G-STAG Data Working Group (DWG) is examining how data is contributing to this aim which is common to other initiatives such as the GRAF. It also responds to a call from the [International Science Council](https://council.science/) for science as a global public good which is more inclusive and engaged. Detailed disaggregated data can help ensure that no one is left behind when implementing Sendai and the Sustainable Development Goals. Though numeric, narrative and visual data is already contributing, progress remains well short of what is needed for comprehensive transitions to resilience, health and security. One result of this inadequate progress is that much data is of poor quality and misused. Challenges include having adequate data, with minimum standards and capacity for data sharing, across public and private data cultures, and under-represented groups.

It is imperative that technological risk is fully integrated within policy relating to the Sendai Framework, and also within disaster risk assessment and preparedness strategies. Technology can prevent or mitigate disaster risk and impacts, such as artificial intelligence, and GIS. At the same time, the rapid pace of innovation, for example, in relation to drones, autonomous transportation, and cyber dependency, is such that technology can also be a source of disaster hazards, risks and vulnerabilities, with potentially catastrophic and transnational implications. Both the positive and negative forms of technological innovation need to be fully integrated within disaster and resilience planning which should extend beyond traditional cross-sectoral partnerships and existing conceptual and institutional constraints.

Disaster risk reduction is especially important because of its strong links with development, and the SDGs. Risk creation is the result of complex interactions between social and economic processes, and the natural environment. The conceptualisation, identification and understanding of risk therefore demands an interdisciplinary integrated approach from science, collaboration between science and policy, and a cross-sectoral approach from government. Data exchange is a cornerstone activity for this, and has to be freed up through innovative platforms to support analysis and synthesis of risk occurrences and possible entry points for breaking risk-producing processes. By understanding and reducing risk through enhanced data, science and technology supports aligning policy for implementation of the targets of the Sendai Framework, and major global agreements as part of sustainable development.

Prepared by: ISC, IRDR,