



BUILDING FOR RESILIENCE, INNOVATION,
COOPERATION AND SUSTAINABILITY

BRICS Disaster Risk Reduction Group Ministerial Meeting

24th July 2026

BRICS Guidelines for Disaster Management Early Warning Data Integration



BRICS Guidelines for Disaster Management

Early Warning Data Integration

Preamble

- 1.** Aligning with the Sendai Framework for Disaster Risk Reduction 2015-2030 and recognising the importance of strengthening multi-hazard early warning systems and disaster risk information for reducing disaster risks and building resilience;
- 2.** Noting the United Nations Secretary-General's Early Warnings for All Initiative and the significant contribution of timely, reliable and actionable multi-hazard impact-based early warning information to protecting lives, livelihoods and sustainable development;
- 3.** Recognising that BRICS countries face a wide range of natural and man-made hazards, many of which are increasing in frequency, intensity and complexity and, in some cases, may have transboundary and cascading impacts;
- 4.** Recognising that disaster impacts arise from the interaction between hazards, exposure, vulnerability and capacities, disproportionately affecting populations and territories experiencing socioeconomic, geographic or institutional vulnerabilities.
- 5.** Recognizing that climate variability, climate change, urbanization and environmental degradation are contributing to increasing disaster risks and growing demand for integrated Early Warning information;
- 6.** Recognizing the vital role of national disaster management authorities, global and national meteorological and hydrological services, scientific and technical institutions, and communication systems in strengthening multi-hazard early warning systems;
- 7.** Acknowledging that disaster preparedness, anticipatory action and strengthened local capacities are among the most cost-effective ways to reduce disaster losses through improved climate information, and effective last-mile communication;

8. Recalling the continued cooperation among BRICS countries in disaster management and disaster risk reduction, and recognising the value of voluntary cooperation, mutual respect, consensus, national ownership and the exchange of knowledge, experience and good practices;
9. Recognising that cooperation on early warning data integration should be undertaken in accordance with international best practices, national laws, regulations, priorities and capacities, while respecting national ownership of data, security considerations and mutually agreed arrangements;
10. The BRICS countries present these Guidelines as a reference framework to facilitate practical cooperation on integrated risk information, data integration, early warning and anticipatory action, relating to meteorological, hydrological, geological, oceanic, biological, technological and other hazards.

Institutional Governance and Coordination

11. Encourage BRICS Member Countries, as appropriate and in accordance with their national circumstances, priorities, laws and institutional arrangements, to establish and/or strengthen governance and coordination arrangements for the development and implementation of multi-hazard early warning systems across the early warning value chain.
12. Such arrangements may promote coordination among disaster management authorities, meteorological and hydrological services and any other early warning institutions. They may also clarify institutional mandates, roles and responsibilities; facilitate the coordinated generation, exchange and use of risk information, forecasts, warnings and other relevant data; strengthen national early warning capacities; and support timely, coordinated and risk-informed decision-making and action by competent authorities.
13. Any access to or exchange of data and information would be subject to applicable national laws, regulations and policies, institutional mandates, and relevant data-protection, cybersecurity and national-security requirements.

Voluntary Cooperation and National Ownership

- 14.** Strengthen voluntary cooperation on early warning data integration, consistent with national laws, regulations, priorities, capacities, security considerations and mutually agreed arrangements, while recognising that national authorities retain the primary responsibility for disaster risk management and early warning systems

People-Centred Impact-Based Multi-Hazard Early Warning

- 15.** Advance inclusive, accessible and people-centred multi-hazard early warning systems covering risk knowledge, monitoring, forecasting, warning dissemination, preparedness and early action.
- 16.** Encourage the integration of hazard, exposure, vulnerability and coping capacity information to support impact-based warning and risk-informed decisions. Give particular attention to effective last communication and to people and communities at greater risk, including persons with disabilities, older persons, women, children and other vulnerable groups that may be difficult to reach.
- 17.** Use interoperable public warning systems, community-based mechanisms and multiple communication channels as appropriate to support anticipatory action and timely preparedness.

Data Quality, Interoperability and Information Exchange

- 18.** Encourage BRICS Member Countries to improve the quality, interoperability, accessibility and usability of disaster risk and early warning information through internationally recognized technical standards and good practices, as appropriate.
- 19.** Support improved data availability, coordinated data management, and secure and timely information exchange, together with the institutional, digital and technical capacities required for effective data use. Such efforts should be consistent with national laws, policies and governance arrangements relating to data management, protection and sharing.

Science, Technology and Innovation

- 20.** Strengthen cooperation among relevant scientific and technical institutions and authorities to advance research and the appropriate application of science, technology and innovation in multi-hazard early warning systems.
- 21.** Encourage the use of earth observation, remote sensing, impact-based forecasting, artificial intelligence and other relevant technologies, as appropriate, to support timely warnings, risk-informed decisions and anticipatory action.
- 22.** Promote scientific and technical capacity-building, knowledge exchange, and accessible and, where appropriate, multilingual warning systems using digital and non-digital channels suited to local contexts. The development and use of emerging technologies, including artificial intelligence, should be consistent with national laws, regulations and governance frameworks.

Cooperation on Hazards of Common Concern

- 23.** Promote cooperation on hazards of common concern through technical dialogue, knowledge exchange and capacity-building.
- 24.** As appropriate, such cooperation may include hazard monitoring and assessment, joint analysis, training, simulation exercises, and the timely exchange of relevant early warning information, expertise and lessons learned.
- 25.** These efforts are expected to strengthen early warning capacities and operational preparedness in accordance with national laws, policies and institutional arrangements.

Capacity Development and Knowledge Exchange

- 26.** Promote voluntary capacity development and knowledge exchange among BRICS Member Countries and, where appropriate and mutually agreed, with other developing countries.
- 27.** This may include training, expert exchanges, peer learning, simulation exercises, and the sharing of technical knowledge, operational experience, lessons learned and good practices to strengthen preparedness and operational readiness.

Partnerships and Continuous Improvement

- 28.** Encourage collaboration with relevant international and regional organisations, academic institutions, development partners and the private sector to support innovation, strengthen institutional capacities and promote continuous learning from experience.