

The Environmental Science Committee,

Deeply conscious of the increasing frequency and intensity of natural disasters worldwide as a direct consequence of anthropogenic climate change, which has resulted in severe social, economic and environmental impacts on vulnerable populations,

Recognising that the integration of emerging technologies, such as Artificial Intelligence (AI), Machine Learning, Remote Sensing, the Internet of Things (IoT), Unmanned Aerial Vehicles (UAVs), Blockchain, and Big Data Analytics, offers unprecedented potential to improve the detection, prediction and response to natural disasters through enhanced accuracy, speed and communication,

Acknowledging the ongoing efforts of international organisations, for example the United Nations Environment Programme (UNEP), the World Meteorological Organisation (WMO), the United Nations Office for Disaster Risk Reduction (UNDRR) and national governments in using scientific innovation to alleviate the devastating effects of climate related hazards,

Alarmed by the growing technological disparity between HICs and LICs countries, wherein unequal access to emerging technologies, limited technical expertise and insufficient infrastructure hinder the capacity of developing nations to prepare for and respond to natural disasters effectively,

Concerned about ethical and security implications arising from using AI and Big Data in disaster management, including issues of data ownership, privacy, bias and accountability, which may lead to unequal dissemination of warnings or resources and undermine public trust in technological systems,

Further noting that while technological innovation remains a vital tool in achieving sustainability and resilience, over-dependency on high-cost, resource intensive technologies may inadvertently divert attention and funding from community-based disaster preparedness, education and ecosystem restoration,

Emphasising the importance of ensuring that all technological solutions for disaster detection are environmentally sustainable, socially equitable and transparent in their development and deployment, thereby aligning with the principles of the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction,

Reaffirming the commitment of the international community to foster cooperation, acknowledge sharing and capacity-building among Member States, research institutions and private enterprises to ensure the fair, ethical use of emerging technologies in mitigating the impacts of natural disasters.