QINGDAO INITIATIVE ON SURVEYING AND MAPPING SUPPORTING SUSTAINABLE DEVELOPMENT 2026

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Qingdao, China

Preface

We, surveying, mapping, and geospatial information scientists, practitioners, and administrators from across China, gather in Qingdao on Global Surveyors' Day 2026 under the theme "*Smart Mapping Connects the World, Building a Better Future Together*." We jointly discuss the responsibilities and actions of surveying and geospatial information in supporting global sustainable socio-economic development and addressing common challenges faced by humanity.

Surveying and geospatial information, as strategic global information resources, form the essential spatiotemporal foundation for achieving the United Nations 2030 Agenda for Sustainable Development (SDGs). Accurate geospatial data are indispensable to all 17 SDGs and have been widely applied in areas such as sustainable economic and social development, disaster prediction and mitigation, biodiversity conservation, cultural heritage protection, monitoring of global environmental and climate change, energy exploration and management, land use and land cover inventory, food security, sustainable water resource utilization, as well as human settlements, environment, and health.

We, professionals in surveying and geospatial information, are committed to realizing the ambitious vision of this field by encouraging and promoting research and development, advancing knowledge through scientific networks, strengthening international cooperation, promoting interdisciplinary integration, fostering education and training, exploring new applications, and enhancing public awareness of surveying and spatial information science. To this end, the Chinese Society for Geodesy Photogrammetry and Cartography, together with industry partners, puts forward the following initiatives to the global geospatial community:

Ⅰ Build a Global Digital Foundation to Support Sustainable Development Decision-Making

Promote global advances in 3D technologies and integrate multi-scale, multi-resolution three-dimensional models to provide a unified spatiotemporal data foundation for territorial spatial planning, natural resource surveys and monitoring, and refined urban governance.

Strengthen global satellite navigation and positioning service capabilities and develop collaborative service systems to provide high-precision positioning services for forest and grassland monitoring, geological disaster early warning, and precision agriculture.

Enhance emergency surveying and mapping support capacity, improve coordination mechanisms, ensure rapid response to emergencies, and obtain high-resolution imagery and provide emergency mapping products within hours after disasters to safeguard lives and property.

Ⅱ Promote Scientific and Technological Innovation and Accelerate Intelligent Surveying Transformation

Accelerate the application of new satellite technologies such as laser surveying and hyperspectral remote sensing, and build an integrated "*air-space-ground-sea-network*" three-dimensional observation system to provide continuous and precise data for global sustainable development.

Promote the deep integration of artificial intelligence with surveying technologies and develop spatiotemporal intelligent computing engines driven by "*large computing power + big data + large models*," enabling the upgrade of the entire chain from data acquisition to intelligent interpretation and decision support.

Strengthen open cooperation and technology sharing, promote the widespread application of global spatiotemporal intelligence platforms, and build a secure, reliable, and interoperable surveying technology system so that all countries—especially developing countries—can equally access and utilize geospatial technologies.

Ⅲ Expand Global Cooperation Networks and Contribute Collective Wisdom

Actively participate in global geospatial governance, support the operation of the *United Nations Global Geospatial Knowledge and Innovation Centre*, develop global public geospatial data products, narrow the digital divide, and contribute to SDG 10 (Reduced Inequalities).

Deepen cooperation with international organizations such as FIG, IAG, ISPRS, and ICA; recommend experts from various countries to participate in international standard development; promote mutual recognition of global surveying standards; and facilitate the two-way flow of geospatial products, services, and talents.

Ⅳ Practice Green Development and Protect the Earth Community of Life

Strengthen spatiotemporal monitoring of global change and use remote sensing technologies to continuously track climate change, land degradation, and sea level rise, providing scientific evidence for carbon peak and carbon neutrality and supporting SDG 13 (Climate Action).

Improve marine spatial governance, support planning and monitoring of marine ranching, offshore wind power, and port shipping, and protect marine ecological environments.

Promote systematic observation and modeling of global ecosystems (forests, wetlands, grasslands, deserts, etc.) to achieve full-factor, full-process, and full-life-cycle management of natural resources.

Ⅴ Enhance Professional Recognition and Cultivate World-Class Talent

Call for the establishment of a "*Chinese Surveyors' Day*" to enhance professional identity and social recognition and make surveying and geospatial information a globally recognized fundamental industry.

Strengthen the training of young scientific and technological talents, support international exchange and participation in global projects, and build a surveying workforce with global vision.

Promote industry-education integration and university-enterprise collaboration to cultivate interdisciplinary, innovative, and internationally oriented surveying professionals.

We call upon the global surveying and geospatial community to take Global Surveyors' Day as an opportunity to build consensus, deepen cooperation, and jointly address challenges. Let us measure the Earth with precise coordinates and connect the future with intelligent spatiotemporal technologies, contributing the power of surveying to the realization of the *UN 2030 Agenda for Sustainable Development* and the building of a clean and beautiful world.