UN GEONOW 2024
首届联合国地信周

The Panel consists three parts:

Part A: **ONE** insightful **opening remark** and **SIX** inspiring **keynotes**;

Part B: **TWO** significant **achievements** from the recent China-Australia cooperation project led by **CASM**, **QSMI** and **UoM**;

Part C: **FIVE+ONE** geospatial **experts** shared their experiences and thoughts in a round table discussion on **THREE topics** related **digital twin and smart city**, **low-altitude economy** and **UN-GGKIC Think Tank initiative**.

The experts in the Panel emphasised the needs for:

- **Global collaboration**
- **Innovative geospatial data management**
- **Human-centered design**

to make cities more **inclusive**, **sustainable**, and **adaptable**.

To shape our future cities, they highlighted interrelated roles of:

- **Digital Twin technologies**
- **Data-driven solutions**
- **Resilient infrastructure**

The central theme of the Panel revolves around the **growing use of digital twin technologies for transforming urban environments**. Speakers highlighted the need for **cities to adopt integrated digital systems that enhance Liveability, Resilience, and Sustainability**.

- Importance of high-resolution geospatial data (e.g. 3D Real Scene datasets) **to support digital twin systems, enable smarter urban planning, and boost low-altitude economy initiatives**.

- Cities of tomorrow should prioritize human-centric designs while **leveraging digital twin technology to improve planning and infrastructure management**.

- From 3D models to large-scale urban informatics systems, **geospatial intelligence** supports the dynamic needs of cities and their populations.

Building resilience infrastructure is essential to future-proofing cities.

Digital technologies, including **AI，IoT and Digital Twin**, can contribute to the development of resilient and sustainable infrastructure through：

- **Integrating sensing technologies**.

- **Real-time data system**.

- Through the integration technologies, smart cities can create infrastructure that not only meets current demands but also adapts to future challenges, ensuring long-term sustainability.

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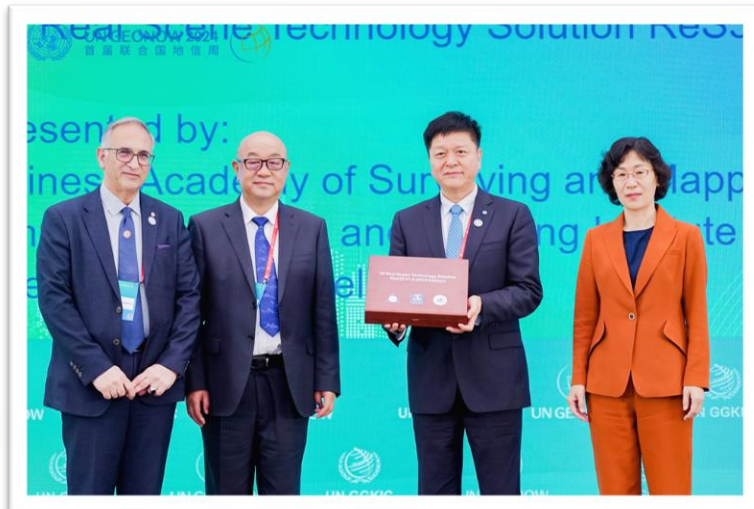**3D Real Scene Technology Solution**

ReS3D V1.0

实景三维技术解决方案

ReS3D V1.0 Best Practice in Cities

White Paper

On Promoting Qingdao's High-Quality Development

实景三维赋能青岛高质量发展白皮书

Part C - Round Table Discussion Highlights

Topic 1:The current status of digital geospatial infrastructure in cities across countries

- **Rapid uptake** in developed nations vs. **slower adoption** in developing regions；

- Impact of **governmental policies** on geospatial technology implementation

- Shared challenges in **collecting, maintaining and updating** large scale high-resolution geospatial data.

Topic 2: How Digital Twin technology can facilitate the development of low-altitude economy

- Low-altitude economy is an emerging market；

- Access to high-resolution, 3D geospatial datasets, Digital Twin can **enable detailed planning** and testing of infrastructure required for operation；

- Through integrating data from various urban systems such as traffic, weather, and public safety, Digital Twin can enhance the operational efficiency.

Topic 3: Suggestions for Research by the UN-GGKIC Think Tank

- Develop and apply a **Research Methodology** to compile a **Systematic Inventory** of current Digital Geospatial Infrastructure capacity and market analysis (status) of UN Member States.

- Develop a **Maturity Matrix** in partnership with **Research Partners** with Targets to improve Digital Geospatial Infrastructure performance.

- **Develop and Implement a RoadMap** outlining **Actions** for Public and Private Sectors to apply Geospatial Data to improve the Quality of Life and promote UN-SDGs and UN-IGIF.