

## Special Session SS-5-7

- Title

Harnessing Digital Infrastructures and Green Solutions to Strengthening Climate Resilience

- Organiser

Organisation: Asian Infrastructure Investment Bank

Representative: Asma Bachikh

E-mail: asma.bachikh@aiib.org

- Co-organiser

None

- Potential Presenter

1. Presenter: Guoping Zhang

Affiliation: Senior Investment Operations Specialist – Water, AIIB

Organisation: Asian Infrastructure Investment Bank

2. Presenter: Sani Ye Zhou

Affiliation: Strategy and Policy Officer – Climate Change

Organisation: Asian Infrastructure Investment Bank

3. Presenter: Ronald Muaña

Affiliation: Investment Operations Officer – Water

Organisation: Asian Infrastructure Investment Bank

- Alignment with Congress

5. 5. Establishing Sustainable Water Infrastructures

- Session description

Background: Floods are Asia's most common natural disasters, bringing the most economic damage. In the past three decades, floods have led to at least USD150 billion in economic damages and 300,000 deaths across the region. Exposure to flooding is increasing with urbanization, with a projected 410 million Asian urban population at risk of coastal flooding and 350 million at risk of inland flooding by 2025. Most of the world's largest cities classified as having extreme risks of climate vulnerability are located in Asia. Asia's cities, predominantly located in deltaic settings, have been identified as a global hotspot for coastal flooding. These cities are increasingly vulnerable to climate change-related hazards, including accelerated sea level rise, intensification of tropical cyclones, extreme waves, and storm surges. Unless suitable and sustainable mitigation measures are put in place, economic losses caused by these hazards will propagate and sustain along regional supply chains and trade networks of Asia and beyond. To cope with

the increasing risks, the existing stormwater systems and flood control infrastructure will need to be upgraded and expanded across Asia. The rising costs associated with increased frequency and severity of flooding drive demand for effective and comprehensive flood control systems. Nevertheless, investments have been mostly concentrated on conventional engineering solutions, emphasizing the strengthening of physical infrastructure performance. The potential of digital and green infrastructures has often been left untapped or utilized on a pilot scale. Asian countries face challenges related to the low coverage of hydrometeorological monitoring, which limits their ability to optimally design mitigating measures and disaster response. Asian countries need to improve their climate monitoring and flood forecasting ability, as well as develop early warning systems for communities. Against this backdrop and guided by its Water Sector Strategy, AIIB has been harnessing digital technologies and green solutions to build climate resilience across its member countries. Guided by the AIIB Water Strategy's principles (which includes 'Adopting Innovative Technology') and the vision of the Bank's Corporate Strategy (development towards a green institution, AIIB has been building its capacity and financings in digital technologies and green solutions to optimize the infrastructure performance, socio-economic benefits, and climate outcomes. Since its first financing in flood protection in 2018, the Bank has invested over USD 1.8 billion towards this endeavor across Asia. The proposed session, therefore, aims to share lessons learned from the Bank's works highlighting the relevant challenges and opportunities. Format: 90 minutes of presentations and panel discussions Presentation (indicative): Investing in Integrated Flood Emergency Response and Smart River Management Systems, study case: Henan Flood Emergency Rehabilitation and Recovery Project, by a representative of the Government of Henan Province and Mr. Guoping Zhang, Senior Investment Operations Specialist – Water, AIIB Strengthening Urban Flood Resilience through Infrastructure Modernization, study case: Metro Manila Flood Management Project, by Mr. Ronald Muaña, Investment Operations Officer – Water, AIIB Optimizing and Harnessing Flood-Regulating Ecosystem Services through Nature-based Solutions, by Ms. Sani Ye Zhou, Strategy and Policy Officer – Climate Change, AIIB Opening and closing by Mr. Toshiaki Keicho, Sector Head for Urban & Water, Region 1, AIIB Moderated by Mr. David Ginting, Investment Operations Specialist – Water, AIIB / Ms. Asma Bachikh, Investment Associate, AIIB