Ministry of Science and ICT

Korea's Policy and Regulatory Updates

APEC TEL67
5 Aug. 2023

Digital innovation with private 5G: E-um project

What is the E-um Project?
Government initiative to advance private 5G ecosystem, allowing non-telecom operators to build and operate 5G networks using 4.7GHz and 28GHz — which are dedicated frequency bands for private 5G networks in Korea

- Launched the pilot '5G Mobile Communications Convergence Project' (Jun.2022)

- Released the Guidance for establishing and operating Private 5G (Oct.2021)

- Announced the Plan for Frequency Allocation of Private 5G (Jun.2021)

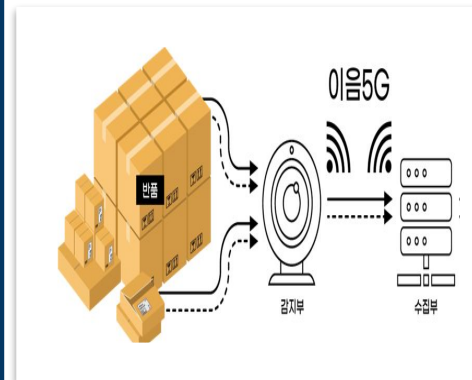- Announced the Action Plan for 5G+ Strategy (Jan.2021)

5G E-um Project:
Newly Assigned Enterprises in July of 2023

LG Electronics
- Frequency bands: 4.7GHz
- Sector: R&D
- Testbed for robot, cloud, etc

Megazone Cloud
- Frequency bands: 4.7GHz
- Sector: Logistics
- Logistics services utilizing AI, Cloud, etc

The K-Network 2030 Strategy

The Ministry of Science and ICT announced 'the K-Network 2030 Strategy' to carry out policy tasks to achieve three goals: ① Facilitate development of 6G technology ② Foster Innovation of software-based networks ③ Strengthen network supply chains (Feb. 2023)

<Strategies of the K-Network 2030>

Ramp up innovation for the next generation network	Build more robust and safe network infrastructure	Create a robust and competitive ecosystem for the industry
• Advancing 6G R&D • Global cooperation for 6G standardization • Developing 6G Convergence Services • Establishing pilot networks for low orbit satellite communication services(2027)	• Network infrastructure enhancement for private networks, backbone networks, and submarine cables • Reducing energy consumption of network equipment and contributing to carbon neutrality • Improving safety and trust of networks	• Strengthening the network software capacities of the companies • Creating an enabling ecosystem for Open-Ran networks • Fostering professionals of the next generation networks

Competitiveness Enhancement Strategy for Hyper-scale AI

The Ministry of Science and ICT announced '**Competitiveness Enhancement Strategy for hyperscale AI**' to accelerate digital transformation utilizing AI in April 2023

Strategy	Expand technical and industrial infrastructure for hyper-scale AI	Create an ecosystem for hyper-scale AI innovation	Establish institutional and cultural foundations for AI innovation
Policy measures	• **(Data)** Augment high-quality text data for the development of hyper-scale AIs • **(Technology)** Develop deep-learning technologies and undertake R&D • **(Infrastructure)** Develop HW-SW to enable hyper-scale AI to utilize high-performance and low-power K-cloud and expand support of computing resources for hyper-scale AI to SMEs and universities	• **(Super AI Flagship Project)** Develop application services that innovate productivity, such as expert assistance and support, by applying hyper-scale AI to the top five professional fields in the private sector • **(Public and administrative innovation)** Implement hyper-scale AI-related public initiatives such as streamlining internal work and complaint responses • **(Capacity Building)** Nurture hyper-scale AI professional talent and Improve hyper-scale AI training and AI training program for citizens	• **(Social Issues)** Improve regulations related to hyper-scale AI, discuss social issues such as education and security • **(Regulations)** Prepare ethical principles for AI in education and guidelines for the use of hyper-scale AI in the public sector • **(Assessment for reliability)** Evaluate risk factors and performance of hyper-scale AI services

Thank You