



Korea Radio Promotion Association (RAPA)

Korea Radio Promotion Association Collaborates with Anritsu to Lead 5G-Advanced/6G, the Next-Generation Communication Technologies

* The following presents an interview with RAPA and Anritsu, conducted by e4ds News and partially edited by Anritsu.

Introduction Purpose

Accelerating 6G telecommunication technologies, sparking industry-wide innovation through revolutionary advancement.



Name: Korea Radio Promotion Association (RAPA)

RAPA was established in 1990 to support Korean radio wave and broadcasting companies as radio wave technology spread throughout the industry. They support cooperation between government and industry in areas where the efficient use of radio wave resources, globalization of the radio wave broadcasting industry, and standardization of radio wave technologies are needed.

Recently, RAPA has been providing test environments and technical support to assist companies and revitalize industries in the 5G-Advanced/6G field.

In particular, RAPA is working with antenna and module manufacturers in the 5G-Advanced/6G field to perform various verification tasks, including Proof of Concept (PoC).

Office: Seoul and Incheon, Republic of Korea

URL: <https://www.rapa.or.kr/en/main.do>

Background and Challenges

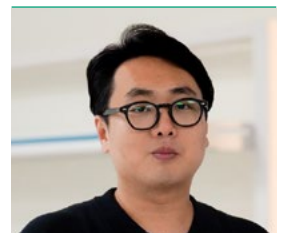
Urgent need to provide a verification environment for 5G-Advanced/6G technologies to utilize new radio frequency bands.

Reasons for Selecting Anritsu

Reliability and accuracy of testers, prompt and professional technical support, and a clear vision and roadmap for the development of 5G-Advanced/6G technologies.

Introduction Results

Built the Anritsu 5G-Advanced & 6G Test Lab for the efficient development and verification of 5G-Advanced/6G technologies for companies and research institutions.



Director of the RAPA IoT Technical Support Center
Mr. Park Se-ho

Background and Challenges

Urgent need to provide a verification environment for 5G-Advanced/6G technologies to utilize new radio frequency bands.

Providing a test environment for 5G-Advanced/6G communication fields Reasons for choosing Anritsu as a partner: Accuracy and reliability

With the beginning of the next-generation communications era, there is a need to build a test-bed capable of testing and verifying 5G-Advanced (5G-A)/6G technologies. In response, the Korea Radio Promotion Association (RAPA) and Anritsu have collaborated to establish a verification environment for next-generation communications technologies.

Anritsu and RAPA have signed a Memorandum of Understanding (MOU) to jointly verify technologies for 5G-A/6G, the next-generation communications standards.

To learn about the cooperative achievements of RAPA and Anritsu in promoting next-generation communication technologies and industrial development, we met with Mr. Park Se-ho, Director of

RAPA's IoT Technical Support Center, to talk about the collaboration with Anritsu.

— What is the background behind the collaboration and the challenges faced?

The era of 5G-A/6G heralds a revolutionary advancement in communication technologies. Various innovations are anticipated, including enhanced mobile broadband, ultra-reliable, ultra-low latency, massive machine-type communications, connectivity with communications satellites, including Non-Terrestrial Network (NTN), and cyber-physical convergence.

To realize these key requirements, securing new frequency bands is essential.

For this reason, the Frequency Range (FR3) and Sub-THz bands utilization has been proposed. FR3 combines the advantages of existing 5G FR1 and FR2 to provide a wider bandwidth than FR1, while offering superior propagation characteristics compared to FR2, enabling broader coverage.

To support technological innovation, there was an urgent need to establish an environment capable of verifying 5G-A/6G technologies. As a key institution leading the development of the radio wave industry, RAPA needs to take the initiative in establishing an environment where 5G-A/6G technologies can be efficiently verified in Korea.

Therefore, RAPA needs partners with the expertise and resources to carry out the important task of verifying next-generation communications technologies. This goes beyond simply building a test bed. This is necessary to establish a comprehensive and cooperative relationship for the development of future communications technology.

Reasons for Selecting Anritsu

Reliability and accuracy of testers, prompt and professional technical support, and a clear vision and roadmap for the development of 5G-Advanced/6G technologies.



5G-Advanced & 6G Test Lab opening ceremony

— Why has RAPA selected Anritsu as a partner?

Anritsu is recognized as a leading provider of test solutions in the wireless

and wired communications sectors. Anritsu's reliability and accuracy were key factors in selecting Anritsu as RAPA's collaboration partner. RAPA has been

using Anritsu's test solutions to verify wireless communication performance, and highly values their accuracy and the reliability of the verification results.

RAPA has also been satisfied with Anritsu's prompt and professional technical support. This is a crucially important factor in setting up and operating a test environment for new technology verification.

It is important to note that Anritsu has a clear vision and roadmap for the development of 5G-A/6G technology. Its international standing and diverse project experience are expected to provide clear insights into the development of 5G-A/6G technology in Korea, which led to the decision to pursue this cooperation.

Introduction Results

Built the Anritsu 5G-Advanced & 6G Test Lab for the efficient development and verification of 5G-Advanced/6G technologies for companies and research institutions.

— Can you describe the collaboration between RAPA and Anritsu?

RAPA has opened the 'Anritsu 5G-Advanced & 6G Test Lab' in Songdo, Incheon, to verify technologies in the 5G-A/6G field. This facility is equipped with the latest RF and wireless communication solutions for 5G-A/6G, enabling the efficient development and verification of technologies by domestic companies and research institutions. There are plans to gradually expand this facility in line with technological advancements and industry demands.

The Anritsu 5G-Advanced & 6G Test Lab is expected to become a crucial infrastructure for the innovation of next-generation communications technologies. In this test lab, companies can utilize Anritsu's latest test solutions to precisely verify and improve the wireless perfor-

mance of their 5G-A/6G devices. This will lead to enhanced product quality and reliability.

The lab aims to provide a comprehensive verification environment for 5G-A/6G and FR3 candidate frequency band technologies, facilitating rapid market entry for participating companies. The focus will be on providing an all-encompassing verification environment and revitalizing the industry as a whole.

— What are the prospects and visions for the collaboration?

RAPA expects this technological collaboration to strengthen the leadership of RAPA and Anritsu in the 5G-A/6G field. Given RAPA's verification infrastructure, it is anticipated that Korea will lead the development of mobile communication technology and revitalize the 6G industry

through the provision of verification environments and development validation in the 5G-A/6G field.

Furthermore, RAPA hopes that this technological cooperation with Anritsu will serve as a model case for the world. Anritsu has been developing wireless communication test solutions since the 3G/4G era and has been advancing technology with partners in the fields of research and development, manufacturing, installation, and maintenance.

Anritsu also mentions to us that, through cooperation with RAPA, an industry leader, Anritsu aims to become a highly reliable test solution provider in the next-generation communication field, one of Korea's national strategic technologies, and expects to contribute to the revitalization of the industry.

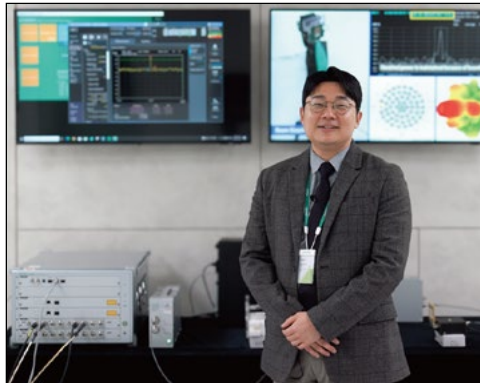
Solutions Introduced Test platform featuring 5G base station simulation capabilities

— Test platform featuring 5G base station simulation capabilities

Lim Hyun-Mook, Assistant Manager of the Technical Support Department of Anritsu Corporation Limited, introduces the Radio Communication Test Station MT8000A, the latest verification equipment used in the 5G-Advanced/6G Test Lab established at the RAPA IoT Technical Support Center. The MT8000A is useful for various kinds of 5G testing and will evolve as a next-generation base station test simulation that will support 5G-A/6G.

— Radio Communication Test Station MT8000A

The MT8000A is a 5G call simulator that supports the network environments of NSA/SA and EN-DC/NR-DC. The Radio Communication Test Station MT8000A is extensively used in communication product development, verification, and certification tests throughout the industry because it supports reliable testing across RF, Protocol, and certification. It is cooperating with multiple companies, including communication chipset vendors, to support and develop solutions.



Lim Hyun-Mook, Assistant Manager, Technical Support Department of Anritsu Corporation



Radio Communication Test Station MT8000A