

Test and Measurement Business

Contributing to the advancement and enhancement of social infrastructure with high-speed communications networks leveraging cutting-edge 5G technology

Accelerating Initiatives for the New Society that 5G Will Support

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SWOT Analysis

<ul style="list-style-type: none"> ▪ Test & Measurement technology covering wired and wireless communications and a wide variety of solutions ▪ Global development, sales, and support network ▪ Extensive partnerships with industry-leading customers and suppliers <p>Strengths S</p>	<ul style="list-style-type: none"> ▪ 5G/IoT utilization markets are still under development ▪ High dependence on the telecommunications market <p>Weaknesses W</p>
<ul style="list-style-type: none"> ▪ Increased demand for equipment for development, manufacturing, construction, and maintenance due to expansion of 5G services ▪ Increasing network speed and capacity through DX for meetings, entertainment, purchasing, and various control functions ▪ Promotion of 5G utilization (local 5G/IoT) in non-telecom industry fields by taking advantage of higher speed and lower latency (local 5G, IoT) <p>Opportunities O</p>	<ul style="list-style-type: none"> ▪ Reduced economic activity due to the spread of COVID-19 variants and delay in deployment of 5G services ▪ Increased tensions over trade and geopolitics, and restrictions on business activities, due to conflicts between major powers ▪ Business fluctuations for specific customers <p>Threats T</p>

Business Areas

Since Anritsu was founded, and over our long history, we have contributed to the evolution of communications technology through innovations that have paved the way for the future of information and communications and by providing society with original and sophisticated products. The Test and Measurement Business delivers measuring instruments and test systems to customers worldwide. These instruments and systems are essential for the quality assurance of communications equipment and facilities that are the core elements of communication network infrastructure.

- Providing test solutions for all phases in the mobile communications market, as represented by smartphones, including chipset development, device development, conformance testing and manufacturing inspections.
- Providing measuring instruments and systems required for evaluating and assuring the quality of connectivity quality

of communications modules in IoT devices installed in vehicles, home appliances, and industrial equipment, for use in development and in manufacturing inspections.

- Providing measuring instruments for performance evaluations and manufacturing inspections of network devices that deliver high-definition video and images from data center cloud networks at high speeds over the Internet.
- Providing a wide range of wired and wireless measuring instruments for the manufacturing and construction/maintenance of various types of communication equipment and devices, including the base stations that make up mobile networks.
- Providing monitoring solutions that contribute to the improvement of network operations, including network failure analysis and capacity expansion, by visualizing the network operational status of telecommunications carriers.

The importance of the internet has been reaffirmed in the COVID-19 pandemic and there is demand for its further development as infrastructure supporting new ways of living. With the launch of 5G, we are at a point where anyone can receive high-level services regardless where one lives as high-speed and high-capacity wireless communication is now available.

Anritsu's Test and Measurement Business provides the global market with test and measurement systems that are crucial for establishing and expanding the use of sophisticated communications technology. As a partner to our customers, we will contribute to the development of information and communications technologies, such as 5G, and create test solutions to solve problems in new applications and use cases for communications technology. As we do so, we will accelerate initiatives for addressing the needs of a communication-oriented society.

Market Environment and Business Opportunities

In 2019, 5G services were first launched in the U.S. and South Korea, then in China, and now include 143 commercial 5G networks (of varying sizes) in 68 countries around the world. The number of subscribers has also increased to 220-230 million worldwide, led by China (as of the end of

December 2020, according to "5G America" and the "Ericsson Mobility Report").

The importance of communications services has risen further as the human race has been confronted with the global turmoil of COVID-19. Face-to-face interaction had been the norm for many types of sales and service activities that have now switched to online formats and there is demand for further development of 5G as the infrastructure supporting this new way of living. The range of fields utilizing 5G is showing breadth and is expected to go beyond current online services to include the remote operation of robots and vehicles, as well as education and healthcare. As these types of social activities continue to be carried out remotely (i.e., a non-face-to-face economy) going forward, it is predicted that there will be test and measurement needs for using AI and VR to deliver high-definition, low-latency video and image information, and to build product assurance frameworks that guarantee quality.

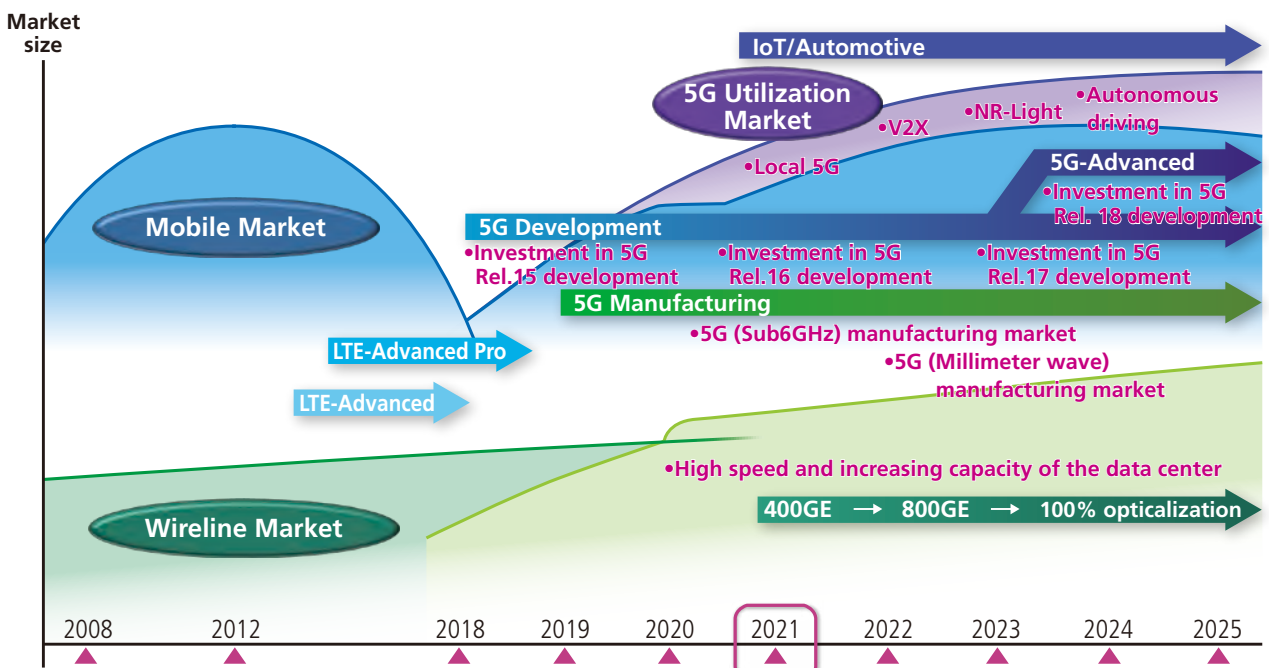
Roadmap of 5G

*Created by Anritsu referring to publicly available information



As of end of September 2020 (The figure is a selection of major countries)

Test & Measurement Business: Mobile market trends and Business opportunity



Test and Measurement Business

In terms of technological progress, research has already gotten underway on 5G-Advanced, 6G, 800 Gbps that expect to become the succeeding technologies for already commercialized 5G for wireless, 400Gbps ethernet for wired and various types of low-power wireless technologies.

Over and above further honing our development of these technologies, we will aggressively develop and propose solutions, while also continuing to work on accumulating expertise for fulfilling requirements that arise accompanying a wider and more diverse range of customer use cases, including local 5G and various remote services such as autonomous driving and healthcare.

Growth Strategy

FY2020 Results

With revenue of 74.8 billion yen and an operating profit margin of 23.6%, we were able to meet our initial targets for FY2020, the final year of GLP2020; however, we did not reach 77.0 billion yen in revenue—the target we set at the beginning of FY2020—due to market impacts from COVID-19. Even under such environment, being able to continue and extend collaboration with global customers pursuing development of cutting-edge technologies was a major success for us to accelerate efforts in FY2021 and beyond. We completed setting up a development environment for engineers to be able to progress development even when they are at home in the early part of FY2020 so that our development plans were progressed almost equivalent to the schedule as when employees were working in office. As a result, we released new products that included fading functions for our 5G base station simulator (MT8000), C-V 2X solutions, a 400 Gbps field tester (MT1040A), and the world's only new-standard Wi-Fi 6E-compliant single-box Wireless Connectivity Test Set (MT8862 A).

Basic Policy for GLP2023

With the completion of GLP2020, we embarked in April 2021 on our new Mid-Term Business Plan, GLP2023. The plan targets considerable growth, with revenue of 100 billion yen and an operating profit margin of 23%. The vision set

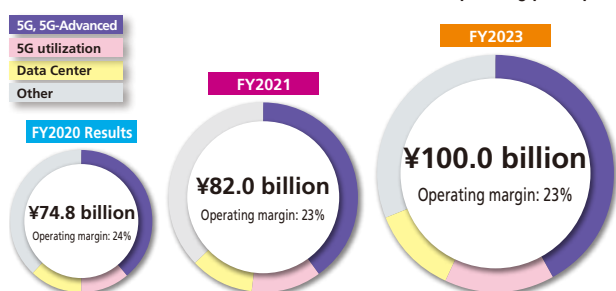
forth in GLP2023 is to become a “leading company supporting a communications society built on 5G.” As we head toward the peak of 5G smartphone-related business in 2023-24, we aim to accelerate efforts and expand our business in fields further developing 5G or derived from 5G. We have three policies for achieving the plan: 1. Increase the ratio of 5G utilization and solutions for the network infrastructure market within our business portfolio; 2. Transform our business solutions from simple provision of “measurement” tools to provision of value by “resolving through measurement”; and 3. Increase investment in growth areas (5G-Advanced, self-driving vehicles, O-RAN/IOWN). Under these policies, we will continue to create solutions that contribute to a broad range of customers pursuing business leveraging communications technology. We are placing priority on “co-creation” initiatives for collaborating and growing together with customers in each industry as we pursue this three-year activity plan.

Of the three basic policies, we are particularly emphasizing the transformation of our business solutions to provide value by “resolving through measurement,” which we recognize as a formidable challenge. As the scope of 5G utilization broadens, there has been an increase in customers who are not skilled in communications technologies unlike traditional chipset or smartphone manufacturers. The challenge for those customers is to identify what kind of business to develop using communication technologies, but not the communications technology itself. We must think of how results gained from our measurement solutions can be used to serve the businesses of these customers, and then convert them into new values. Through collaboration and co-creation, we are working with customers in the new fields such as IoT, automotive, and local 5G operators in order to generate these values. We are adding the findings and the new knowledge gained from this process to Anritsu's advantages, advanced and accurate measurement and testing technologies, to contribute to building a more sophisticated social infrastructure.

Human Resource Hiring and Training

With an untiring commitment to Anritsu's concept of “Original & High Level,” we are striving to broadly and globally hire and train talented personnel who align with this commitment and come from a broad, global pool that spans solutions development, manufacturing, and sales. We are expanding our development bases in the U.S. and the U.K., as well as in the Asia region, including the Philippines and other countries. With regard to engineers involved with leading-edge R&D, we are conducting thorough training in Japan (the home base for our development), and then distributing them to the development sites in other countries so that under a consistent mindset based on company policies they pursue development effort taking into account the particular cultures and environments of each country. With regard to manufacturing and sales as well, we are striving to strengthen the

Test & Measurement Business: GLP2023 revenue and operating profit plan



framework above while simultaneously engaging in personnel development through trainings, meetings, and human resource exchange programs. The number of female employees working in development and marketing has increased and, going forward, we will further build out programs for advancing the careers of all employees.

Accumulating Intellectual Capital and Participating in External Organizations

In addition to acquiring patent rights for technology emerging from our development, we are also dedicating effort to attaining new technology by joining various external organizations. Currently, we are members of the Third Generation Partnership Project (3GPP) for determining mobile communication standards, and some of our other affiliations include the following groups (for details on activities, please see the section of our website listing affiliations).

1. The Next Generation Mobile Networks Alliance (NGMN Alliance) for deliberating on the status of next-generation mobile communications
2. The Wi-Fi & Ethernet Standards Group, organized under the Institute of Electrical and Electronics Engineers (IEEE)
3. The Open Radio Access Network Alliance (O-RAN Alliance) for intelligent 5G communication networks and for devising open interface specifications
4. The Innovative Optical and Wireless Network (IOWN). A global forum for reviewing new communications platforms comprised of fully optical networks, and edge and wireless distributed computing

SDGs Undertaken by a Test and Measurement Company

By manufacturing and delivering value-added original products at a high level, Anritsu is in agreement with Goal 9 of the SDGs (Build infrastructure, promote industrialization, and foster innovation). We will also grow our contribution to Goal 11 (Sustainable cities and communities) by expanding our business in 5G, including utilization via the IoT. In recent years, natural disasters, epidemics, aging populations, and other social issues that require solutions have been increasing. SNS, photo sharing, video streaming, and other forms of communication over the Internet have received recognition as tools for solving these issues. The communication networks that support human safety and daily living by “connecting” now enable high-speed, large-capacity, ultra-low latency, and multiple simultaneous connections over 5G. 5G will be utilized in industries such as healthcare, agriculture, automotive, and disaster prevention and expected to become a communications infrastructure that solves various social issues such as information disparity, traffic accident prevention, and labor shortages.

Anritsu’s test and measurement technology supports the advancement and quality improvement of communications, thereby contributing to creating a more comfortable and convenient society.

We will continue to take part in Anritsu Group’s effort of contributing to the “realization of social sustainability” by maximally utilizing not only 5G but also other technologies we own.

