

Test and Measurement Business

Contributing to the Advancement and Enhancement of Communications Networks through Leading-Edge 5G Technology

Making the Business High Value Added in the New Society that 5G Will Conduce

The rapid development of the Internet and spread of smartphone have transformed our society and lifestyles. As the practical use of 5G increases, communications services are becoming even more advanced and widespread. Further, the COVID-19 pandemic worldwide is changing the way we live, making information and communications more important than ever before.

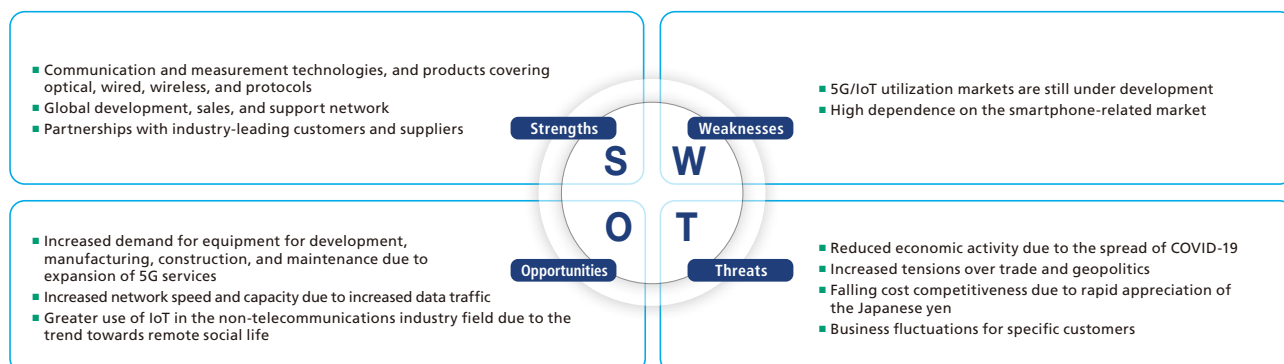
Anritsu's Test and Measurement Business provides the global market with test and measurement systems that are crucial for establishing and expanding the use of communications technology. As a partner to our customers, we will contribute to the development of information and communications technologies, such as 5G, and create test solutions to solve problems in new applications and uses for communications technology.

Takeshi Shima

Director, Senior Vice President,
Test and Measurement
Company President



SWOT Analysis



Business Areas

This year marks the 125th year since Anritsu was founded and over our long history, we have contributed to the evolution of communications technology through innovation that have paved the way for the future of information and communications and by providing society with original and high-level products. The Test and Measurement Business delivers measuring instruments and test systems that are essential for the quality assurance of communications equipment and facilities to customers worldwide.

- Providing test solutions for all phases in the mobile communications market, as represented by smartphones, including chipset development, device development, conformance testing, and manufacturing inspection.
- Providing wide range of wired and wireless measuring instruments for the manufacturing and construction/

maintenance of various communications equipment and devices, including the base stations that make up mobile networks.

- Providing measuring instruments for performance evaluations and manufacturing inspections of network devices that deliver high-definition video and images from the cloud networks at high speeds through the Internet.
- Providing measuring instruments and systems required for evaluating and assuring the quality of connectivity of communications modules in IoT devices installed in vehicles, home appliances, and industrial equipment, for use in development and manufacturing.
- 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.

Market Environment and Business Opportunities

The Acceleration of Remote Social Activities

In 2019, 5G services were first launched in the U.S. and South Korea, and then in China, and now, many countries around the world are preparing for the full-fledged introduction of the services.

While human beings are experiencing hardships (COVID-19) on a global scale, it is notable that communications are being used to develop new lifestyle patterns. Sales and service activities historically in form of face to face, are now moving online in many cases, and this trend expands to the education and healthcare fields. As social activities continue to become remote (a non-face-to face economy) going forward, it is predicted that demand for communication methods that deliver high-definition video and image information will grow.

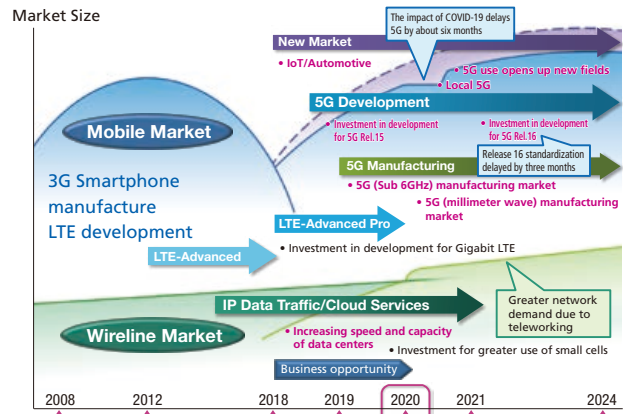
The Diversification of Information and Communications Usage

Due to the recent trend that various social activities are done remotely, data traffic is rapidly increasing through those such as social media posting, video sharing, online meetings, and the like. As the practical use of services such as 4K/8K video, event broadcasting with VR, and various IoT services, as represented by autonomous driving, are progressed there will be demand for higher-speed networks. The issues apparent even in current networks, such as distorted screen images or delays, are expected to become even larger issues and therefore measurement technologies will become more sophisticated and more complicated in order to support telecommunications carriers, and communications device and equipment manufacturers resolving those issues from quality aspect.

Aiming for a More Comfortable, High-Quality Information Society

While more convenient and more comfortable environment is demanded for information and communication, 5G wireless, 400Gbps wired ethernet, and various types of low-power wireless technologies are expected to be the

Trends in T&M Market and Business Opportunity



means for achieving this. Anritsu has cultivated the measurement and monitoring technologies for 4G, 5G, ethernet, wireless LAN, and Bluetooth that provide seamless support for the quality of these large-capacity and high-speed communication networks. Going forward, we will continue to propose test solutions that cater to a wider and more diverse range of customer use cases including “local 5G,” and work on acquiring and accumulating technologies geared toward the realization of 6G in the near future.

Growth Strategy

GLP2020 Basic Policy

Under our Mid-Term Business Plan GLP2020, we have identified the three areas as the drivers for realizing continuous growth with sustainable superior profit. Those are (1) 5G, LTE-Advanced, (2) IoT/Automotive, Connectivity, and (3) IP Data Traffic, Cloud Services. Among these, the 5G business plays a central role, and we need to broaden the test solutions we provide in this business to cater for a wider range of customer use cases. In the Test and Measurement Business, we will be maintaining 14% R&D investment to sales ratio and will be actively investing in the 5G as well as in the development of advanced ethernet, connectivity, and other areas corresponding to global broadband needs. We will also enhance areas other than product develop-

Business Areas of the Test and Measurement Business



Mobile communication
2G, 3G, 4G & 5G



Automotive IoT
connectivity



High-speed buses for
cloud computing



Network Construction/
Maintenance



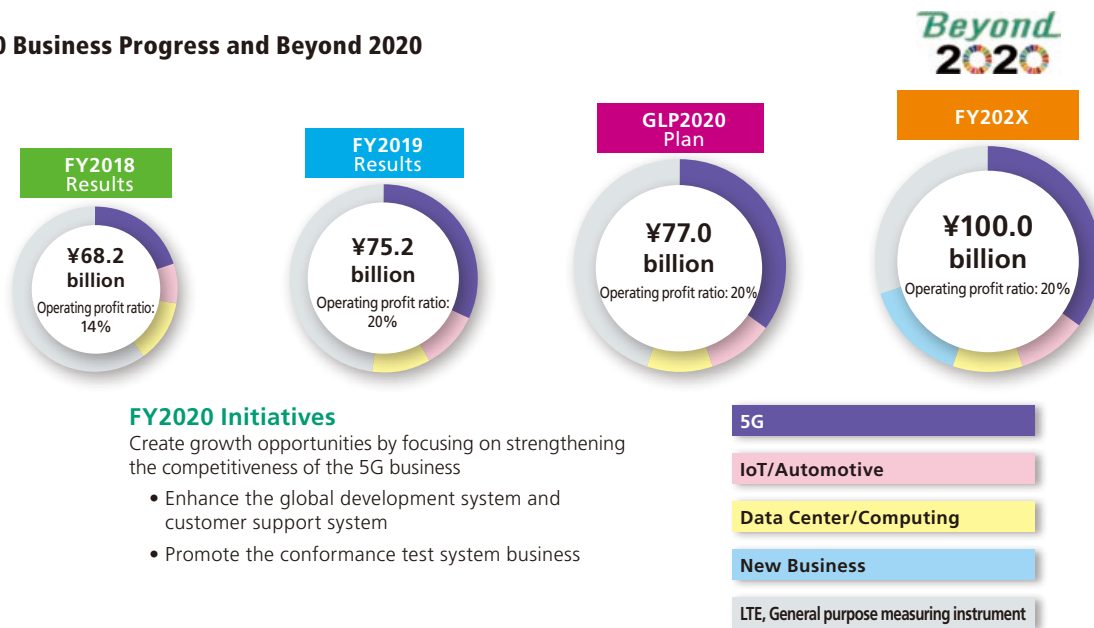
RF & micro/mmWave
devices/components



Telecom network
monitoring

Test and Measurement Business

GLP2020 Business Progress and Beyond 2020



ment, such as support and sales structures, so we can further enhance our partnerships with customers.

FY2019 Results

In FY2019, the second year of GLP2020, we achieved sales of ¥75.2 billion and an operating profit margin of 20%, significantly exceeding our initial forecasts of ¥69.0 billion for sales and an operating profit margin of 12%. The main factor behind this was our success in capturing demand for development related to the commercialization of 5G. In particular, our performance responding to the demand for the development of communications equipment supporting with 5G services launched specifically in Asia made a big contribution.

Initiatives for the Final Year of GLP2020

Based on the assumption that the COVID-19 pandemic which started at the end of FY2019 will have an impact on the first half of FY2020 and these effects will disappear in the second half of the year, we will work toward targets that will achieve GLP2020 and guide us into GLP2023.

These targets are sales of ¥77.0 billion and an operating profit margin of 20%. This fiscal year, we expect demand for conformance test related to 5G commercial services in addition to the 5G commercial development demand we engaged in FY2019. Also, as we expect demand to increase as the number of businesses launching these services grow, we will work on expanding our customer base. As 5G becomes more widespread, competition will most likely become fiercer, so we will focus on strengthening the competitiveness of related products. In addition to 5G, we will also actively invest in test solutions in areas including even higher-speed 400Gbps ethernet, cloud computing, and wireless LAN, while advancing product development that

supports large capacity and high speeds across entire communications networks.

Toward "Beyond 2020"

The features of 5G, namely ultra-low latency and multiple simultaneous connections, will make the use of information and communications technology possible in areas in which it was previously difficult to achieve, including in the automotive, healthcare, manufacturing, and construction industries. Many experiments and demonstrations are being conducted and we expect to see a variety of use cases being created. Anritsu is conducting initial verification activities with some leading service providers and manufacturing-related customers, and we have started widening the scope of the areas in which we carry out activities in addition to currently focused smartphone-related fields. We will leverage the connecting and measuring technologies that are the core competencies of the Test and Measurement Company, with the aim of expanding our business in fields where 5G is used, through collaborations and M&A with customers that have a strong presence in other industries.

In regard to revenues, we will strengthen frameworks that support growth. Specifically, we will work on building initiatives such as improving the effectiveness of development costs by strengthening resource allocation to overseas development sites, expanding our customer base by adding more sales channels (increasing revenue from new markets), building a flexible production structure that is not confined to areas where we have manufacturing sites (location-free production), and coordinating with suppliers to source key components from multiple

countries (avoiding procurement risk). In this way we will advance the optimization and streamlining of our overall operations.

In "Beyond 2020," we aim to realize sales of ¥100.0 billion and an operating profit margin of 20% through this series of initiatives.

Solving Social Issues Through Business



Description of Social Issues

Communication over Internet services such as social networks, photo sharing, and video distribution, have become indispensable tools for "connecting" people with society. The communication network that realizes such "connections" has evolved day by day, and now entering the 5G era that enables high-speed, large-capacity, ultra-low latency, and multiple simultaneous connections. 5G is expected to become a communications infrastructure that solves various social issues such as information disparity, traffic accident prevention, and labor shortages and realizes the sustainable soci-

ety by being employed in industrial fields such as medical care, agriculture, automobiles, and disaster prevention in addition to further sophisticate smartphones and tablet devices.

Anritsu Initiatives

The Test and Measurement Business provides added value by manufacturing original products at a high level, which corresponds to Goal 9 of the SDGs (Industry, innovation and infrastructure). We will also grow our contribution to Goal 11 (Sustainable cities and communities) by expanding our business in 5G including utilization by IoT. Furthermore, we will play our part in the Anritsu Group's efforts to "resolve social issues as represented by the SDGs", by realizing partnerships with customers, developing environmentally friendly products, and strengthening overseas operations.

Societies with highly advanced information and communications have potentials to solve a wide range of social issues including, for example, saving energy. Our measurement technologies will fulfill a role in making life more convenient and ensuring comfort by raising the quality of communications networks. We will contribute to the creation of sustainable society by making the maximum utilization of 5G and other technologies we own.

