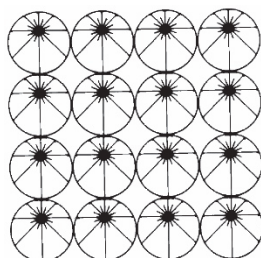


Foreword



A Technology Compass for the Next 100 Years

Director, CTO
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Anritsu Technical Review (in Japanese*) was first published in October 1957. It was an era when Japan was heading toward a period of full-fledged economic growth with the momentum of post-war recovery in the background. President and Representative Director Masakazu Taomoto at that time contributed the Foreword to the inaugural issue writing passionately, "Electronics is the darling of all industrial technology fields. In our industry, technology is paramount, and again, technology is key. Technology is not built overnight, but is built by layering new techniques on the foundations established by our predecessors." In the inaugural issue, cutting-edge technology at that time was shared widely through various technical papers.

The shape of society and industry has changed dramatically in the more than half a century since then, and communications technology has expanded continuously from analog to digital, to wireless and optical communications, and further to our data society brought about by IoT and AI. And now, Anritsu has transitioned to a communication measurement business, leveraging the rich experience and technology cultivated in the wireless communication equipment business when the journal was first published, providing innovative and high-quality services to the market with cutting-edge measurement technology. Furthermore, Anritsu measurement technologies support society in various other ways, covering a wide range of fields, including food and pharmaceutical inspection, devices supporting communications and communication measurement, and environmental measurement.

*: The English version has been published since 1982.



Business Visions: Beyond testing, beyond limits, for a sustainable future together

Anritsu is operating under these business visions. While mastering current measurement technologies cultivated over many years, we are creating added value beyond the traditional "measurement" and "inspection" frameworks by fusion with other different ideas and technologies. Anritsu is adopting a new approach to enhance people's quality of life by combining high-precision measurement technologies from the communications field with sensing and image/information processing technologies for evaluating food and pharmaceutical safety, as well as integration with various other fields, such as energy management. Acquiring accurate and reliable data, in other words — precise measurement, is especially essential now, as AI applications and big data analysis advance. Anritsu's strengths in accurate measurement help further social developments. Furthermore, combining communications and AI technologies with food and pharmaceutical inspection will help solve social challenges, such as predicting the causes of

defects, reducing food waste, and responding to the declining working population through automation and labor-saving.

In the communications world, rollout of 6G services is coming into view with efforts to develop communication infrastructure that integrates wired and wireless technologies. This fusion of wired and wireless communications aims to build infrastructure that truly meets societal demands, such as low latency, high capacity, and low power consumption. Additionally, AI-based autonomous networks offer opportunities to provide new solutions that we are confident will lead to innovations transcending the limits of current business operations. Furthermore, Anritsu is committed to its mission of assuring a sustainable and attractive future for the next generations of employees, customers, and all stakeholders. While social challenges, such as climate change and energy issues, still remain unsolved, we believe our technologies can help find answers. In a world where advanced technologies such as AI and AGI (Artificial General Intelligence) have the potential to significantly transform society, Anritsu is meeting the challenge of assuring a sustainable society where people and technology are in harmonious collaboration achieved through activities that accurately measure and convert measurement results into valuable information for society. One example is our collaboration with Takasago Manufacturing, which recently joined our group.



Takasago Manufacturing's mission is to contribute to sustainable social prosperity and growth for all by providing energy control solutions. Specifically, the company's strengths are high-capacity energy control to evaluate the performance of key components for next-generation vehicles

(including EVs and PHEVs), such as batteries, inverters, and motors. By combining Takasago Manufacturing's technologies with Anritsu's strengths in communications measurement and inspection technologies, we have dramatically expanded our approaches and capabilities in achieving a future sustainable decarbonized society, as well as contributing to communications as social infrastructure and to food and pharmaceutical safety. By integrating our expertise with partners, we are beginning to develop a more comprehensive solution-oriented business going beyond our traditional "measurement" domain.

Additionally, in order to expand our measurement abilities, our Advanced Technology Research Laboratory has acquired atomic-scale precision processing technology for graphene — an interesting new material. While focusing on its physical properties, we are exploring applications for next-generation devices. Meanwhile, our research on 6G is advancing development of fundamental technologies for handling high frequencies such as the millimeter-wave and sub-terahertz bands. We expect that results in these cutting-edge research fields will serve as an important foundation for innovation in next-generation communications and electronics devices.

Towards Next 100 Years

Since its inception, Anritsu Technical Review has served as a knowledge platform for sharing insights with engineers both inside and outside the company. In the first issue published in 1957, the pages were packed with cutting-edge information of that time, such as HF (high frequency) receivers for coastal stations and direction finders. Looking back, the research achievements of that era became the foundation of our current communication and measurement technologies, establishing a solid first step toward further evolution. The various themes featured in the first issue were all innovations that pioneered that era, and also represented challenges to technologies anticipating the future of society.

This issue marks a significant milestone — the 100th edition of Anritsu Technical Review (in Japanese). At the same time, this is also a milestone year marking Anritsu's 130th anniversary. 6G and IOWN are revolutionizing communications, AGI will bring structural social changes,

while achieving decarbonization and sustainable economies remain serious global challenges. Facing these trends requires greater cooperation not only between engineers but between all stakeholders. Anritsu Technical Review aims to continue being a "compass" that both deepens these cooperative relationships and guides a path to the future.

Even technologies and ideas that seem at first glance to belong to different fields actually have great potential to connect through the common foundation of "measurement." By bringing together communications and inspection, we might dramatically improve food safety. By combining industrial equipment control technology with communications infrastructure, we might build resilient networks that can withstand disasters. We aim to break through barriers and pioneer the next 100 years with an approach that transcends conventional wisdom and frameworks, going beyond all boundaries.

By moving ahead one step at a time without stopping we shall expand our "measurement" technology into even more fields, bringing new value to society and industry. My hope is that this journal will continue sharing the results of meeting these challenges with all of you to serve as a technology and wisdom guide as we head toward the next 100 years.

We look forward to your continuing support and expectations for both Anritsu Technical Review and our Anritsu Group.

