### The Future Goal of Our Sustainability Management

**Solving Social Issues Through Business** 

Anritsu Group Put into place a safe and secure infrastructure which leads to **Company Philosophy** the building of a sustainable

**Company Vision** 

**Company Policy** 



**Q** NOUSTRY, NNOVATI

society and encourages

innovation

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disasters

#### **Promoting Global Environmental** Protection

Contributing to the creation of a sustainable society with sustainable consumption and corporate production practices

- Increasing the share of private renewable energy generation of total energy consumption
- Reduction in CO<sub>2</sub> emissions volume (energy consumption volume) and water usage volume
- Developing and manufacturing high-quality and environmentally friendly products
- Supply chain management that lowers environmental impact





**Test and Measurement Business** 

Put in place a robust network

**Communications Business** 

Put in place a robust network

Preventing and mitigating natural

infrastructure

Information and

infrastructure

#### Maintaining Harmony with the Global Socio-Economy

Together with our diverse human resources, we seek to contribute to the creation of workplaces where each individual can achieve personal growth and experience job satisfaction.

Respect for human rights and diversity

Supply chain management that gives

Providing information to and communicating

Human resources development

Occupational health and safety

due regard to human rights

with stakeholders

and resolute decision making Corporate governance Establishing compliance as a part of our

Governance

**POA Business** 

Reducing food loss

Ensuring product quality

**Sensing & Devices Business** 

Put in place a robust network

infrastructure

Ensuring healthy lives

mind-set Promoting risk management

**Expanding and Strengthening** 

Ensuring ethical corporate activities through

risk management and transparent, fair, quick,

The Creation of Shared Value through the Promotion of Communication

Contributing to the creation of shared value with collaboration among all stakeholders

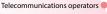


#### Test and Measurement Business

#### Communications semiconductor manufacturers

Communication module manufacturers

- Smartphone manufacturers
- Wireless base station manufacturers



#### Automobile makers IoT terminal manufacturers

Home electronics manufacturers Aerospace industry

PQA Business

Customers

Financial services providers

Educational institutions

Local governments

Others

Others

Telecommunications operators

Sensing & Devices Business

Medical equipment manufacturers

Telecommunications operators

Telecommunications parts manufacturers 🛑

Information and Communications Business

Processed food producers Pharmaceutical manufacturers

Others

Others

The Future Goal of Our **Sustainability Management** 

### **Developing a Safe, Secure,** and Prosperous Global Society

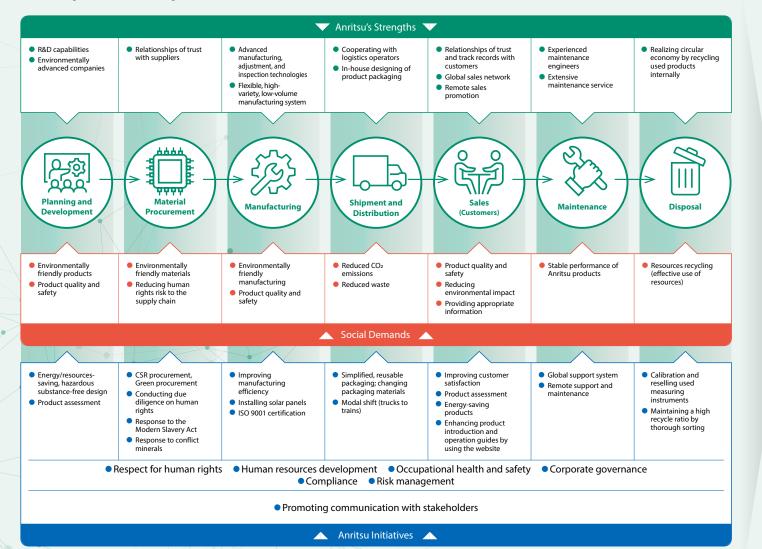
Anritsu will contribute along with its customers to the resolution of social issues through its business operations. The Company takes on challenges to meet the needs of society and places great value on communication with stakeholders while working to advance the sustainability of a global society.



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### Anritsu's Value Chain and Its Strengths for Supporting Business

Anritsu contributes to the creation of a safe, secure, and prosperous society by addressing social expectations such as environmental protection and respect for human rights throughout our entire business operations, from planning to development and the ultimate disposal of products. To that end, the Company is establishing a value chain through co-creation with stakeholders.



#### Solving Social Issues Through Business

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#### Anritsu Group

Put into place a safe and secure infrastructure which leads to the building of a sustainable society and encourages innovation

### 9 NOUSTRY, INNOVATION AND INFRASTRUCTURE

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#### **Test and Measuring Business**

 Put in place a robust network infrastructure

Measuring solutions for the telecommunications market

#### **POA Business**

- Reducing food loss
- Reducing rood loss
  Ensuring product quality

Quality assurance solutions for the production lines of processed foods and pharmaceuticals

#### Information and Communications Business

 Put in place a robust network infrastructure  Preventing and mitigating natural disasters

Bandwidth control devices, video surveillance system

#### **Sensing & Devices Business**

 Put in place a robust network infrastructure
 Ensuring healthy lives

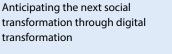


Optical devices, Ultrafast electron devices

### **Test and Measurement Business**

With a mission of being the first to deliver optimal testing and measurement solutions with its advanced measurement technologies, Anritsu contributes to the creation of industry and advances in innovation that assist with the development of a sustainable society by helping customers maintain safe and secure communication infrastructure.

#### Social Issues and **Customer Needs**



#### Social Issues

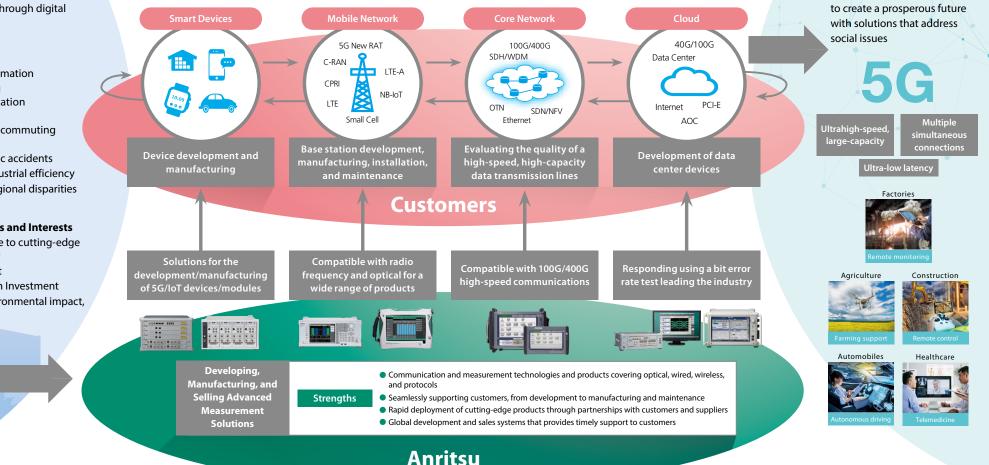
Digital transformation

- Strengthening telecommunication infrastructure
- Improving telecommuting environment
- Reducing traffic accidents Improving industrial efficiency
- Eliminating regional disparities

#### **Customer Needs and Interests**

- Quick response to cutting-edge 5G technology
- Global support
- High Return on Investment
- Reducing environmental impact, etc.

### Evaluating and Inspecting the Development, Manufacturing, Construction, and Maintenance of 5G Infrastructure Using Anritsu's Measuring Instruments



Anritsu Sustainability Report 2020

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**Future Society** 

Leveraging 5G advantages

### Anritsu's Test and Measurement Business Support Customers Develop 5G Smartphones

martphones are now essential tools for daily communication. S Cutting-edge 5G smartphones are expected to transfer a larger volume of data faster than 4G in real time and new services and applications will be created that leverage these advantages.

5G smartphones, as with conventional smartphones, are required to meet international wireless communication standards and clear stringent inspections under these standards before they are launched into the market. Anritsu was the first in the industry to develop, manufacture, and market a testing system for these inspections. The Company helps customers such as smartphone makers and communications operators launch 5G smartphones at an early stage using the system.

The diagram on the right is an example of a 5G-compliant automated testing system that enables users to guickly review hundreds of test patterns.

The smartphone under development is required to have its performance verified with a GCF 1-certified testing instrument and to clear inspection specified by wireless communication standards. The test is conducted by placing a smartphone inside the anechoic chamber (OTA chamber 2). The millimeter wave 3 test requires sophisticated measurement technology.

Millimeter wave-compliant 5G smartphone under development

## of smartphones at an early stage by verifying their performance with Anritsu 5G Conformance Testing System, which acquired the world's first GCF certification (as of **5G** April 2020) for a millimeter spurious 4 emissions test! Customer -----

### **Anritsu 5G Testing System**

ME7873NR, a New Radio RF Conformance Testing System

Glossary

#### 1 GCF (Global Certification Forum)

An organization that formulates network operations and testing standards for the certification of mobile terminals to ensure the global interoperability of mobile terminals

#### 2 OTA chamber

A chamber that blocks external radio waves and prevents the internal reflection of radio waves to transmit and receive radio waves over the air and measure the performance of a smartphone

#### 3 Millimeter wave

Conventionally refers to waves with a frequency of 30-300 GHz. The term includes waves with a frequency of 27.0-29.5 GHz for 5G in the telecommunications industry in Japan

#### 4 Spurious emissions

Unwanted frequency components other than the design intent of signals

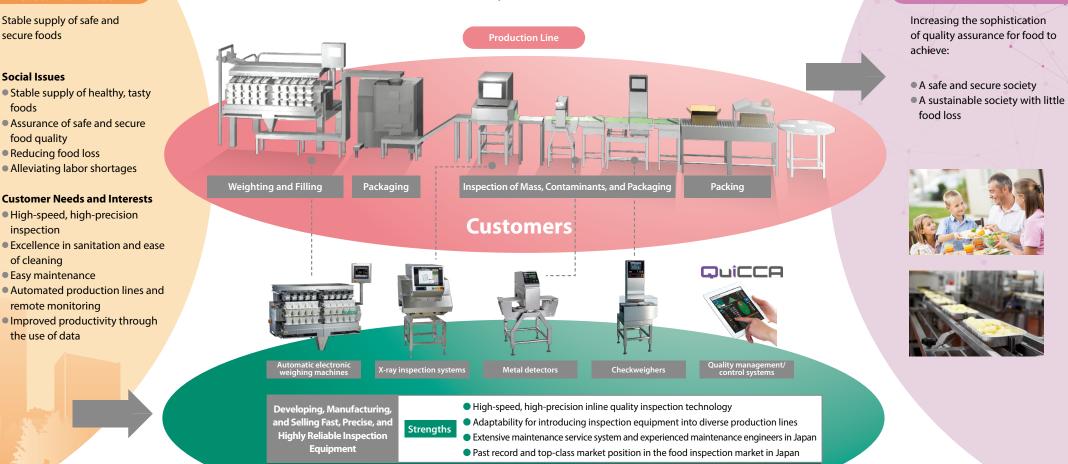
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Let's launch new models

### **PQA Business**

The PQA Business provides solutions for automating the quality inspection process on production lines of the food and pharmaceutical industries. Representative Anritsu initiatives (presented below) address social issues faced by the food industry and account for over 80% of our PQA business.

#### Social Issues and Customer Needs



Anritsu

**Realizing the Automation of Quality Inspection Process with** 

**Anritsu's Quality Assurance Solutions** 

### n lines of the food and pharmaceutical industries. stry and account for over 80% of our PQA business.

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**Future Society** 

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# Anritsu's PQA Business Contributes to Reducing Food Loss by Increasing the Sophistication of Quality Assurance

A mid a dramatic rise in food demand due to a growing population and economic development, the problem of food loss, or food that is discarded rather than consumed, has become a major social concern and is the target of an SDG. In this context, many food manufacturers cite reducing food loss as a key issue along with improving food taste and ensuring safety and security. Various food processors and distributors have been raising awareness of the issue and cooperating to reduce food loss.

Advances in sterilization, storage, and packaging technologies can significantly extend the expiration dates of processed foods, leading to reduced food loss. However, foods that are fit for consumption longer can remain for extended periods on the market or shelves at home, while recalling or discarding these products can lead to substantial losses. For food manufacturers, extending expiration dates reduces the risk of food loss, but the increased risk of losses when the products are recalled highlights the need for the strictest standards in quality assurance.

Anritsu's quality assurance solutions have been used to prevent the intrusion of defective products at the manufacturing process and minimize the risk of product recalls. Our state-of-theart X-ray inspection equipment with dual energy sensors and Al can effectively inspect and pull from the line certain products, including overlapping items that are difficult for conventional equipment to inspect. We are contributing to reducing food loss further by increasing manufacturing yield with improved accuracy in determining product acceptance.



Achieving a stable high-sensitivity inspection with

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### **Information and Communications Business**

Anritsu contributes to realizing a safe, secure, and comfortable society with its customers by providing highly reliable solutions to improve communications quality and video surveillance solutions while leveraging its advanced technology.

#### Social Issues and Customer Needs

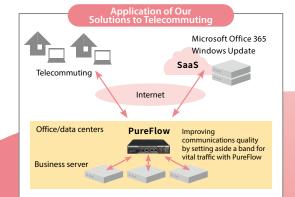
Anticipating the next social transformation through digital innovation.

#### Social Issues

- Dramatic rise in traffic due to increased telecommuting and online education
- Increase in natural disasters such as torrential rains and earthquakes

#### Customer Needs and Interests

- Easily dealing with communication failures in a company (late transmission, disconnection)
- Accurately grasping the state of a monitoring site with visual images in real time



Eliminating unstable access to an operating server due to an increase in the number of telecommuting employees by introducing PureFlowWS1 to implement priority control of the communications band.

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**Bandwidth Controller PureFlowWS1** 

Office SightVisor Disaster prevention office SightVisor SightVi

Video Surveillance

cameras transmitted via an IP network connecting the monitors

High-resolution images, from surveillance cameras across a wide area to monitor rivers and roads, are displayed on monitors in the disaster prevention office. They capture multifaceted information from multiple locations to prevent and mitigate the impact of disasters.



Video Information System SightVisor2 Broadcasting high-vision images on a nine-window screen

#### Developing, Manufacturing,

and Selling Highly Reliable Communications Network Equipment Strengths
 Proprietary technologies and solution proposal capability
 Strong installation base

### Anritsu

Customers



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### **Future Society**

Creating a communications environment that ensures stress-free, comfortable connectivity anywhere, anytime



Realizing a society in which measures to prevent and mitigate natural disasters have advanced and everyone can live securely



### **Sensing and Devices Business**

Anritsu contributes to realizing a safe, secure, and comfortable society by improving convenience in our lives together with customers through the provision of optical devices that constitute core components of industrial products and Ultrafast electron devices across the world.

#### Social Issues and **Customer Needs**

Anticipating the next social transformation through digital transformation

#### Social Issues

- Building a robust communications infrastructure that handles increased data traffic
- Increased number of patients with eye diseases due to the aging population

#### **Customer Needs and Interests**

Secured quality of optical signals transmitted through optical fiber that constitutes part of the communications infrastructure Development of a highresolution retinal examination device



Optical transceiver

Anritsu's SOA, a low-noise optical signal amplifier, between data centers for long-distance optical communications, realizes a reliable communications environment.



Optical coherence tomography (OCT) for ophthalmology

Incorporating Anritsu's SLD light sources into ophthalmic OCT systems allows for high-resolution retinal examination, leading to the early detection of age-related macular degeneration and glaucoma.



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### **Future Society**

Helping to resolve social-issues through digital transformation and high-speed, high-capacity communications



Realizing a society in which people of all generations can enjoy healthy lives due to medical advances



**Semiconductor Optical Amplifier (SOA)** 

SLD Light Sources for Optical Sensing for Medicine High resolution imaging for ophthalmic OCT systems

#### Developing,

Manufacturing, and Selling High-performance, Highly **Reliable Devices** 

• Advanced device technologies, many with compound semiconductors Strengths • Realizing flexible responses and high product quality through integrated processes

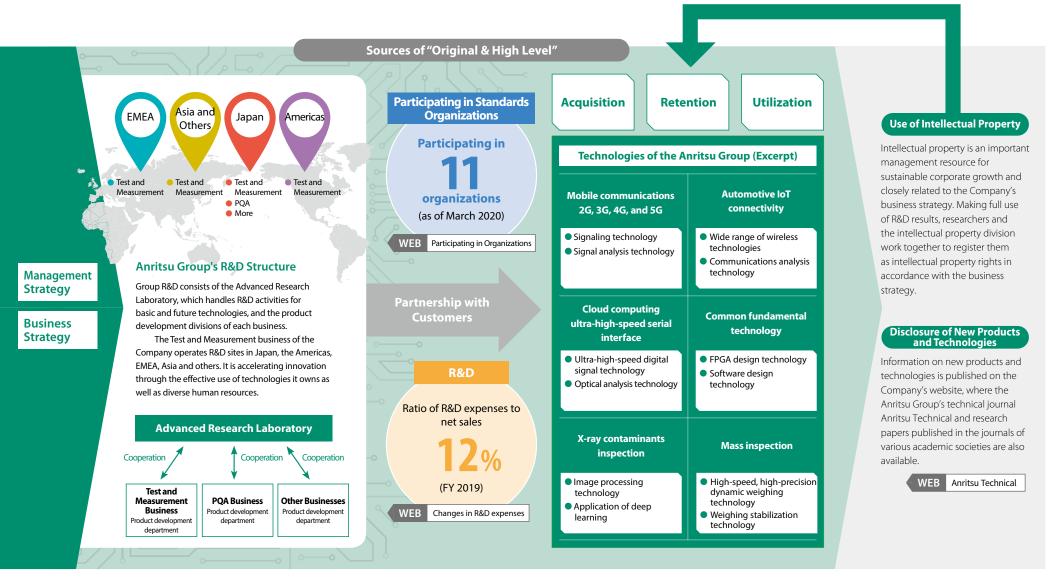


**Customers** 

### Anritsu Sustainability Report 2020

The Anritsu Group contributes to realizing a sustainable society with its customers by developing "Original & High Level" products and solutions and delivering them globally through the acquisition, retention, and utilization of advanced technologies.

Strategic Intellectual Property Management



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