# **Group CEO Message**

# "Beyond testing, beyond limits for a sustainable future Aiming to be a ¥200.0 billion company by FY2030

Anritsu depends on its Test and Measurement Business for 70% of its sales and is greatly affected by the volatility of this market. For example, the transition of smartphone technology from 3G to 4G, and again from 4G to 5G, has fluctuated our business performance. As a result, Anritsu has remained in a growth dilemma for the past decades, with sales repeatedly rising and falling, and a headline figure in the vicinity of 100 billion yen. This situation is not favorable to Anritsu's customers, employees, or other stakeholders. It has been a long-held desire of Anritsu to surpass its previous limitations and become a company that generates stable earnings. In order to achieve new growth, we have set a goal to become a ¥200 billion company in fiscal year 2030. This effort embodies our Company vision, "Beyond testing, beyond limits for a sustainable future together," which was renewed in April 2021. GLP2023 is the first three-year plan toward that vision.

In the final year of GLP2023, we are targeting sales of ¥140 billion. Thus, in order to become a ¥200 billion company in 2030, we must increase sales by ¥60 billion over the remaining seven years. In the Test and Measurement Business, we expect to see demand for 6G, the next communication system after 5G, in 2030. In the PQA business, we expect demand to grow in the medical and pharmaceutical fields. However, we believe it will be difficult to become a ¥200 billion company only through in-house growth. This is the reason for our new Company vision. We are determined to establish new growth drivers that are not bound by conventional concepts but leverage Anritsu Group's competency in "testing", and we will strive to become a ¥200 billion company in fiscal year 2030.

**GLP** 2023

3 years of growing towards 5G business peak

> 3 years of nurturing new business

**Sustainable** growth with profit 10 years of establishing financial strength

2020

VISION



together."

FY2030

The enterprise with stable revenue and profit through growth of 4 internal companies and

Revenue: ¥200 billion

**Advanced Research Labs** 

Operating margin: 20%

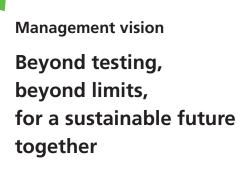
# Delivering Safety and Security in an Era of Chaos and Uncertainty, through Testing

We are now in a chaotic era of unpredictable events such as outbreaks of COVID-19, the Russia-Ukraine crisis, heightened geopolitical risks, and the global shortage of semiconductors.

Under such unsettled circumstances, Anritsu's competency for "testing" will become increasingly vital. In the era of uncertainty, it is communications technology that delivers "safety and security." For example, in remote work, advanced technologies such as 5G make connections between remote employees stronger and faster. They make connections between the elderly and their families living long-distances away stronger and more reliable. Advances in communications technology make the bond between people in distance stronger, and create communication experiences as if they were meeting face-to-face. Anritsu's "testing" technology is making significant contributions to these advances.

# Hirokazu Hamada

Representative Director, President of Anritsu Group CEO





## **Group CEO Message**



In the event of a disaster or a pandemic, a stable supply of food and medical supplies becomes crucial. Anritsu's "testing" technology detects whether or not foreign substances are mixed in food, preventing large amounts of food loss. Also, by "testing" whether the amount of medicine in a capsule is the prescribed amount, Anritsu's "testing" technology delivers safety and reliability of medicines to people.

In these chaotic and uncertain times, Anritsu's role is becoming even more important.

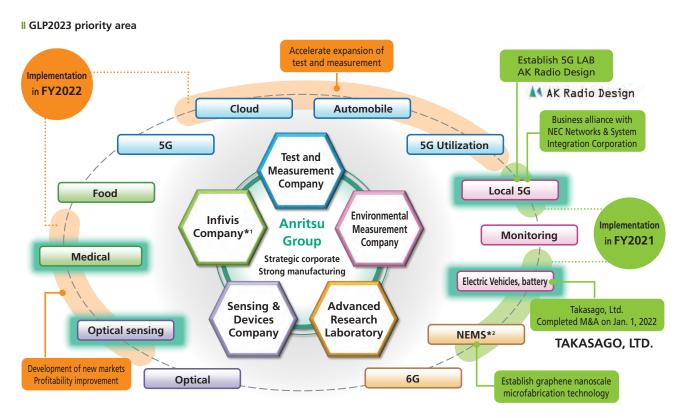
We will continue to deliver safety and security through "testing", and move toward a sustainable future together.

## Overcoming an Unprecedented Crisis

Anritsu has a social role to play in supporting communications infrastructure and the safe supply of food and pharmaceuticals. We must be able to sustainably supply products and services in the face of earthquakes, floods, infectious diseases, and even a global shortage of semiconductors. To ensure this role, we will continue to overcome unprecedented crises by ensuring stable business continuity through the construction of new disaster-resistant factories, an IT environment that allows 80% of our employees to work remotely, and the mobility that enabled replacement of 300 parts for 20 models with alternative parts in response to the recent difficulty of parts procurement.

In the first year of GLP2023, consolidated revenue of ¥105.4 billion and consolidated operating profit of ¥16.5 billion fell far short of their ¥114.0 billion and ¥20.5 billion targets, respectively, due to the global semiconductor shortage and the COVID-19 lockdown in Shanghai.

Nevertheless, the situation in overseas markets remains favorable for both the Test and Measurement and the POA businesses, with consolidated orders received totaling ¥110.7 billion which is 3% higher than last year. Going forward, 5G will shift from the phase of initial introduction to the phase of functional expansion. In our Test and Measurement Business, next growth drivers in addition to the



<sup>\*1</sup> Infivis Company Promotes POA business

<sup>\*2</sup> NEMS: Nano Electro Mechanical Systems

demand for 5G smartphones have become apparent. Those drivers are such as expansion of 5G utilization in non-communications fields like Automotives and IoT, the utilization of next-generation millimeter waves, base stations introducing O-RAN architectures, the acceleration of optical networks in the cloud.

Furthermore, in the medium- to long-term, we expect to see increased investment in next-generation communications including 6G, as we expect emergence of new catalysts for the communications field.

Those are such as local 5G and private 5G, metaverse, and satellite communications for wireless network field, and increasing the speed of IOWN and cloud computing for wired network field.

GLP2023 also includes initiatives in new growth fields. We have identified new growth fields where we expect the markets to grow. Those are electric vehicle and battery measurement market for the Environmental Measurement Business, the medical and pharmaceutical inspection market for the PQA Business, and the optical sensing device market for the Sensing & Devices Business. Therefore, we are implementing growth strategies in these four priority growth fields in GLP2023.

While capturing these new markets, we will make steady progress toward the targets of GLP2023 and our vision of becoming a ¥200 billion company in fiscal year 2030.

# **Regarding SDG Initiatives**

Anritsu believes that responding to the requirements of a global society through business activities conducted in good faith and contributing to the resolution of social

issues is the best way to enhance the corporate value. In turn, in our GLP2023 plan, we have established initiatives and targets regarding sustainability issues.

In the environmental field, reduction of greenhouse gas emissions is progressing as planned. In addition, we are making progress with PGRE 30, a unique initiative for in-house renewable energy generation, including the installation of solar power generation equipment. As for the promotion of diversity management, the percentage of women in management positions globally is 10.9%, and we are still in the process of achieving our goal. We will continue to promote the promotion of female managers by increasing new graduate and mid-career hires, with a focus on women in engineering, and by enhancing our flexible work system.

With regard to the promotion of active roles for elderly employees, we are implementing a personnel system reform from fiscal year 2022, with the main objective of making all employees feel fulfilled and able to continue working into their later years. In addition, we have established Hapi Sma Co., Ltd. as a special subsidiary, thereby achieving our goal to meet the legally mandated employment ratio of Promote employment of physically challenged people.

Anritsu will contribute to the achievement of these globally-shared goals by promoting activities which encourage the recognition of the SDGs as issues of our own. In the spirit of Sincerity, Harmony, and Enthusiasm, the Anritsu Group is aiming to increase corporate value through contribution to the SDGs and to the sustainability of global society. We look forward to the continued support of our shareholders.

\*PGRE30: Private Generation of Renewable Energy. The "30" stands for the target year of around 2030 and for the in-house power generation ratio target of around 30%

#### **II Progress of Sustainable Development Goals (SDGs) in GLP2023**

	KPI	GLP2023 Goal	FY2021 results	Progress
<b>E</b> Environment	Greenhouse gases (Scope1+2)	23% reduction compared to FY2015	17.7% reduction	0
	Greenhouse gases (Scope3)	13% reduction compared to FY2018	14.7% reduction	0
	In house power generation ratio (PGRE 30)	13% or more (compared to FY2018 power consumption)	16.8%	0
<b>S</b> Society	Advancement of women	A proportion of women in manager positions of 15% or more	10.9% (As of March 31, 2022, Global)	0
	Promote employment of physically challenged people	Achieve the legally mandated employment rate of 2.3% through job development	Established a special subsidiary, Hapi Sma Co., Ltd. Achieved 2.54% (As of March 31, 2022)	0
	Strengthening of supply chain due diligence	A cumulative total of 10 or more companies, over 3 years	Conducted due diligence on 6 companies	0
<b>G</b> Governance	Promoting the diversity of the Board of Directors	Percentage of outside directors 50% or more	utside directors 50% outside director percentage achieved (5 out of 10 directors)	

# **Mid-Term Business Plan**

#### Mediumto Long-Term Vision

#### 2020VISION

#### To be a global market leader

- Creating the value that only Anritsu can deliver
- · Building a world-class, robust income structure

#### To create new business through emerging business

• Driving innovation in new business areas

## GLP2014 (FY2012-2014)

Becoming a cutting-edge, trusted global market leader -Capture growth drivers without fail, and realize "continuous profitable growth"-

## GLP2017 (FY2015-2017)

- On-going "Growth & Global" improvement and strengthening of Group management capabilities
- -Capture growth drivers without fail, and realize "continuous profitable growth"—

## GLP2020 (FY2018-2020)

- Prosecute the policy "Continuous profitable growth"
- Do our best to accomplish the 2020VISION
- -Capture growth drivers without fail, and realize "continuous profitable growth" —

# Vision

**Outline of** 

the Mid-

Term

**Business** 

Plan

### FY2014

Consolidated revenue of ¥110.0 billion and operating profit of ¥19.0 billion

#### Test and Measurement Business

 Strive to boost competitiveness, focusing on the mobile broadband service market and the Asian market, while achieving a 7% or higher sales growth rate

#### **POA Business**

• In the food and pharmaceuticals quality assurance field, focus on Asia and North Americagrow into large markets—and achieve a 7% or higher sales growth rate

#### FY2017

Consolidated revenue of ¥120.0 billion and operating profit of ¥17.0 billion

#### Test and Measurement Business

- Capture global business opportunities through solutions with high added value and solidify our position as a global market leader
- Customer-focus and business development through the strengthening of global management capabilities
- Leverage Anritsu's strengths in technologies and customer base in integrated wireless, opticals, and systems solutions

#### POA Business

- Expand overseas businesses
- Develop markets in North America and Asia with X-ray inspection systems as a key solution

#### FY2020

Consolidated revenue of ¥105.0 billion and operating profit of ¥14.5 billion

#### Test and Measurement Business

- Become the No. 1 Test and Measurement vendor ahead of competitors in 5G
- Develop new profit bases in the IoT/automotive field, where growth is expected through the utilization of 5G
- Create test solutions that support the expansion of cloud

#### POA Business

- Develop the advanced market in Europe and North
- America with X-ray inspection systems as a key solution Accurately respond to market needs through localization
- and global business reform Strengthen profitability through value-added solutions and expansion of global business

# Looking Back

#### Test and Measurement Business

- As smartphones rapidly proliferate, they simultaneously rise in functions and spread as everyday devices; increasingly intense competition among smartphone players amid mergers and acquisitions, reorganization, and participant withdrawal. Japanese market contracts as other Asian players make gains.
- Continuous evolution of mobile broadband. Anritsu seizes development demand by providing superior, cutting-edge

#### **PQA Business**

 PQA Business reaches a 40% overseas sales ratio by strengthening local manufacturing and sales support

#### Test and Measurement Business

- Mobile test and measurement market sees a 40% slump (over the 2012 peak) amid structural changes in the smartphone market
- Progress in standardization of 5G and concrete moves toward 5G commercialization with the release of new 5G products in February 2018
- Establishment of the Philippines Development Center and finalization of preparations for delivering high-cost-per formance 5G support services

Aggressive expansion in the PQA Business (launch of new X-ray inspection systems, strengthening of local manufacturing framework and sales support framework) leads to 1.4x revenue gain and 4.0x operating profit increase

#### Test and Measurement Business

- In 2018, immediately after 3GPP established 5G standards, there was a sharp rise in demand for 5G
- chipset and smartphone development
  In 2019, Intel's discontinuation of its 5G modems saw a slowing of the European market. However, development demand picked up in Asia when Chinese smartphone vendors overall shifted to developing smartphones in-house for the global market.
- In 2020, the 5G development market lost steam once again due to the effects of COVID-19. The expansion of millimeter wave services in the U.S. was pushed back because of technical issues

 There has been a global trend towards investing in safety and security as well as improving productivity and reducing food waste, which are social issues (SDGs). However, such investing slowed in 2020 as certain customers grew more cautious about capital investment due to the effects of COVID-19

FY2012: revenue of ¥94.5 billion, operating profit of ¥15.5 billion, operating profit margin of 16% FY2014: revenue of ¥110.0 billion, operating profit of ¥19.0 billion, operating profit margin of 17%

FY2012: revenue of ¥94.7 billion, operating profit of ¥15.7 billion, operating profit margin of 17% FY2014: revenue of ¥98.8 billion, operating profit of¥10.9 billion, operating profit margin of 11%

- On-going "Growth & Global" improvements for the Anritsu Group
- Optimal utilization of overseas business resources within the Group

## Test and Measurement Business

- Further improve our leading position in the mobile market
   Setting Japan and North America Test and Measurement
- Business back on a growth trajectory Developing new markets in China and India

- Enhancement of management resources for achieving North American PQA market strategies
- Profit improvement scenarios for the PQA Business

FY2015: revenue of ¥103.0 billion, operating profit of ¥11.0 billion, operating profit margin of 11% FY2017: revenue of ¥120.0 billion, operating profit of ¥17.0 billion, operating profit margin of 14%

FY2015: revenue of ¥95.5 billion, operating profit of ¥5.9 billion, operating profit margin of 6% FY2017: revenue of ¥86.0 billion, operating profit of ¥4.9 billion, operating profit margin of 6%

#### Test and Measurement Business

- $\color{red} \bullet$  Thorough implementation of the management restructuring program
- Investment in 5G business
- Establishment of a division focusing on the IoT business
- Introduction of new optical and digital products in TTM

- Active investments in cutting-edge technologies to overcome quality assurance issues
- Development of new products that contribute to quality
- Strengthening relationships with global companies

FY2018: revenue of ¥92.0 billion, operating profit of ¥6.6 billion, operating profit margin of 7% FY2020: revenue of ¥105.0 billion, operating profit of ¥14.5 billion, operating profit margin of 14%

FY2018: revenue of ¥99.7 billion, operating profit of ¥11.2 billion, operating profit margin of 11% FY2020: revenue of ¥105.9 billion, operating profit of ¥19.7 billion, operating profit margin of 19%

#### <Challenges> Test and Measurement Business

- Business expansion in the 5G utilization field and in
- network infrastructure
- Concentration on 5G and withdrawal from the wholesale/ retail business
- Expansion of investment in growth areas

#### **PQA Business**

- Identification of changes in customer needs and provision of best solutions
- Expansion of investment to acquire advanced technologies
- Transformation into a global company
- Entry into the pharmaceuticals market as a new business

Results

Challenges

#### **Management vision**

#### Beyond testing, beyond limits, for a sustainable future together

- Through further growth of four internal companies and Advanced Research Laboratory, we aim to become a ¥200 billion company achieving consistent profits by FY2030 -

## GLP2023 (FY2021-2023)

- "3 years of growing towards 5G business peak" and "3 years of nurturing new business"
- Make consistent earnings in the 5G measurement market
   Increase growth investment and shareholder return as financial strategies
- Focus on four priority areas: "EVs and battery measurement," "local 5G," "optical sensing," and "medical and pharmaceuticals"

FY2023 Consolidated revenue of ¥140 billion, operating profit of ¥27 billion

#### Test and Measurement Business

Become a leading company supporting the telecommunications society built

- Increase the ratio of revenue from 5G utilization and network infrastructure
- Shift from simply providing products to providing solutions that give value
- Increase investment in growth areas (5G Advanced, self-driving vehicles, ORAN/IOWN)

#### **PQA Business**

Become our customers' most trusted, "First-to-Call" company for quality assurance with a view to achieve a sustainable future

- Create solutions that eliminate our customers' key issues
- Accurately and promptly address local needs worldwide through localization
- Enhance X-ray inspection systems and expand investment for product development in the pharmaceuticals market

#### Test and Measurement Business

In 2021, 5G moved from the initial implementation phase to the functional expansion phase. Investment in 5G services in Asia was moderate but steady. In the U.S., deployment of C-band (Sub-6 GHz) services, which are expected to propel 5G penetration, was delayed due to radio interference problems

#### **POA Business**

• In 2021, capital investment for labor saving and automating quality assurance processes remained steady overseas. In Japan, some customers remain cautious about capital investment due to the impact of COVID-19

#### <Plan>

FY2021: revenue of ¥114.0 billion, operating profit of ¥20.5 billion, operating profit margin of 18%

#### <Result>

FY2021: revenue of ¥105.4 billion, operating profit of ¥16.5 billion, operating profit margin of 16%

#### <Challenges>

#### Test and Measurement Business

- Capturing 5G demand in Europe and North America
- Customer development in the 5G IoT/automotive market in Asia and North
- Securing a foothold in next generation businesses, such as O-RAN and 6G

#### **PQA Business**

Capturing new demand and improving profits through IT

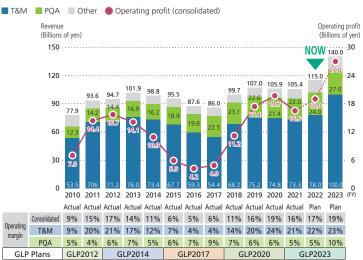
- Address automation/labor-saving needs
- Market expansion by strengthening sales capabilities in Europe and the US and enhancing local SE response capabilities
- Developing new products for the pharmaceutical market to improve profit margins

#### | Planned Sales and Operating Profit

			GLP2023			
Indicator		FY2020 (Results)	FY2021 (Results)	Plan for FY2022*2	Plan for FY2023*1	
Revenue		¥105.9billion	¥105.4billion	¥115.0billion	¥140.0billion	
Operating profit		¥19.7billion	¥16.5billion	¥19.0billion	¥27.0billion	
Operating margin		19%	16%	17%	19%	
Profit		¥16.1billion	¥12.8billion	¥14.0billion	¥20.0billion	
ROE		16%	11%	12%	15%	
	Revenue	¥74.8billion	¥73.3billion	¥78.0billion	¥100.0billion	
T&M Business	Operating profit	¥17.7billion	¥15.2billion	¥17.5billion	¥23.0billion	
Dusiness	Operating margin	24%	21%	22%	23%	
	Revenue	¥21.4billion	¥22.0billion	¥24.0billion	¥27.0billion	
PQA Business	Operating profit	¥1.3billion	¥1.2billion	¥1.3billion	¥2.7billion	
Dusilless	Operating margin	6%	5%	5%	10%	

- 1 Expected exchange rates for GLP2023: 1 USD=105 JPY, 1 EUR=125 JPY
- \*2 Exchange rates at the time of establishment of the FY2022 plan: 1 USD = 120 JPY, 1 EUR = 135 JPY

#### | Changes in Sales and Operating Profit



<sup>\*</sup>GLP20XX: The names of our Mid-term Business Plans

#### | Goals and Initiatives

WDI C. I. C. DOOD A. I. II. C. DOOD B.					
	KPI	Goals for GLP2023	Actual results for FY2021	Progress	
E Environment	Greenhouse gases (Scope 1+2)	23% reduction compared to FY2015	17.7% reduction	0	
	Greenhouse gases (Scope 3)	13% reduction compared to FY2018	14.7% reduction	0	
	In-house power generation ratio (PGRE 30*)	13% or more (compared to FY2018 power consumption)	16.8%	0	
	Advancement of women	15% or more women in mana- gerial positions	10.9% (globally, as of March 31, 2022)	0	
<b>S</b> Social	Advancement of the elderly	Employment until the age of 70 and the establishment of a new compensation package	Employment until the age of 70 and the establishment of a new treatment system	0	
	Promote employ- ment of physically challenged people	Achieve the legally mandated employment rate of 2.3% through job development	Achieved 2.54% due to the launch of special subsidiary Hapisuma Co., Ltd. (by March 31, 2022)	0	
	Strengthening of supply chain due diligence	A cumulative total of 10 or more companies, over 3 years	Implemented by 6 companies	0	
		ss on CSR procurement to suppli- year, and provide training at least	Developed awareness 3 times, and provided training 1 time	0	
Governance	Promoting the diversity of the Board of Directors, outside	director ratio 50% or more	Achieved outside director ratio of 50% (5 out of 10 directors)	0	
	Establishment of an internal control system at overseas subsidiaries	All overseas subsidiaries meet the criteria of Control Self Assessment (CSA)	CSA criteria and required stan- dards for each company are being defined for evaluation in FY2023 (to be completed in 2022)	0	

<sup>\*</sup>PGRE stands for Private Generation of Renewable Energy, and "30" refers to the 2030 PGRE target of approximately 30%

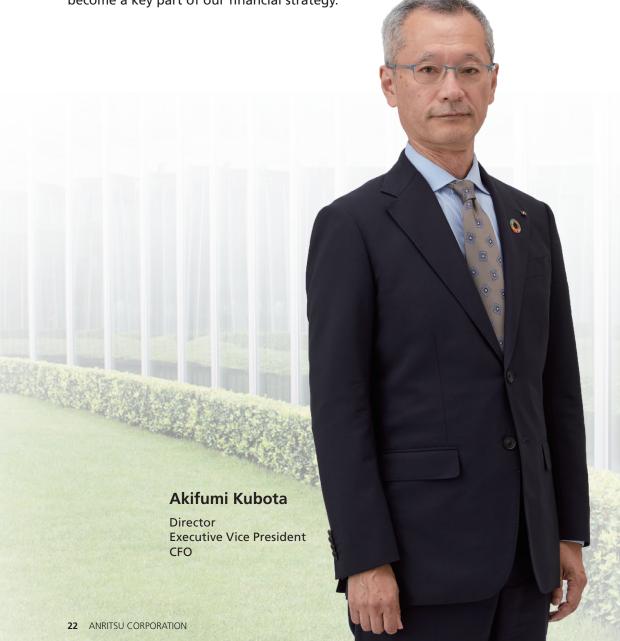
# **CFO Message**

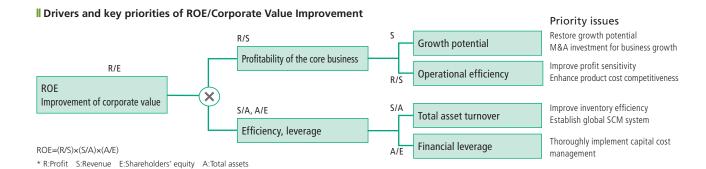
# Promoting a transition of financial strategy looking towards 2030 Invest in growth and enhance shareholder returns

The principal objective of the financial strategies laid out in the new Mid-Term Business Plan, GLP2023, is accelerating growth-oriented investment with a view to achieving revenue of ¥200 billion by 2030. Leveraging the robust financial standing we have built up over the years, we will be aggressively investing for growth in order to build a business portfolio independent of the business cycles of mobile telecommunications systems. Evolving from the previous "cost management to safeguard profit" to "investment management in order to realize growth" will become a key part of our financial strategy.

## First Year of GLP2023 Review

One year has passed since the start of the Mid-Term Business Plan GLP2023, which focuses on strengthening investment for growth and further enhancing shareholder returns. The first year's accomplishments include (1) M&A as a strategic investment, specifically the acquisition of Takasago, Ltd. and (2) a ¥5 billion share buyback (acquired from September to October 2021 and retired in June 2022).





The acquisition of Takasago, Ltd. in (1) is the execution of a strategy aimed at market development in the "electric vehicles, battery" field, one of the four new domains set forth in the GLP 2023, and is a major first step toward achieving ¥200 billion in revenue in fiscal year 2030.

In addition, the total return ratio for fiscal year 2021 increased to 81.3% due to the share buyback mentioned in (2). We were able to clearly state to the market that we consider share buybacks, in addition to dividends, as an important form of shareholder return. Moreover, the Company repurchased another ¥5 billion of its own shares in June-July 2022. We are thoroughly implementing a financial strategy that emphasizes shareholder returns.

Meanwhile, ROE, the most important KPI for GLP2023, finished at 11.5% in fiscal year 2021, falling short of the 15% target.

# **Efforts to Enhance Corporate Value**

The basic policy for financial strategy in GLP2023, which aims at accelerating growth, consists of the following.

#### (1) Enhancing Corporate Value

We will make committed efforts to improve upon our management system in order to enhance corporate value. This means establishing a corporate value improvement indicator as a KPI for ROE and consistently practicing management by objectives.

#### Payout ratio and total return ratio



Anritsu considers achieving 15% ROE to be a priority management issue. To realize medium- to long-term growth in the global market, it is essential that we steadily generate profits, the source of investment. An ROE of 15% is the global standard and is considered to be the engine for profitable growth. The drivers and key priorities for improving and increasing ROE are shown in the chart above.

## (2) Aiming for an ROE of 15%

ROE is analyzed using three factors: profitability, efficiency, and leverage.

#### ROE Target Factor Breakdown



#### **II** ROE Trends



#### **I** Trends of ROE Factors

	Profitability	Efficiency	Leverage	ROE
FY2019	12.5%	0.79	1.50	14.9%
FY2020	15.2%	0.75	1.39	15.8%
FY2021	12.2%	0.69	1.34	11.5%
Model case of GLP2023	13.0% or more	0.80 or more	1.50	15.0% or more

## **CFO Message**

Compared to the GLP2023 model case, fiscal year 2021 was a year in which challenges remained in terms of profitability, efficiency, and leverage. In particular, the main challenges for achieving GLP2023 are improving the profitability of the PQA Business in terms of profitability, expanding the scale of sales in the Test and Measurement Business in terms of efficiency, and raising funds by taking advantage of the A rating of our corporate bonds rating in terms of leverage.

## (3)-1 Initiatives to Establish Investment Level Standards and Improve Cost Structure: Improving Profitability

For our core business, the Test and Measurement Business, we will focus on strengthening our competitiveness in 5G, while for the PQA Business we will focus on investment aimed at global business development.

We have adopted development ROI (gross profit divided by development investment) as the KPI for investment levels and are working to improve investment efficiency with the goal of achieving a development ROI of 4.0 or higher. We are also actively working to strengthen our cost structure to enhance profitability. One of the approaches, for example, is to appropriately manage and promote improvement of cost per order (CPO) in each sales region in order to enhance each business segment's cost structure. Including such effort we are actively working on achieving greater efficiency in our sales activities and improve business processes in our corporate back office functions.

# (3)-2 Thorough Cash Flow Management: Improving Efficiency

Strengthening our ability to generate net cash provided by operating activities is essential for realizing sustainable investment for growth. Our constant goal is to maintain an

operating cash flow margin at or above 13% (achievable by realizing an operating profit margin of at or above 18% and avoiding increases in working capital), and to raise our CCC\*, which is a cash flow improvement index, to 121 days (the result of fiscal year 2011, the best recent result) by the end of fiscal year 2023. To achieve these targets, we will improve profitability through cost reductions and more efficient spending, as well as by improving capital efficiency through such measures as reducing inventory and promoting the collection of accounts receivable.

In fiscal year 2021, inventories, mainly parts and work in process, increased as a result of prioritizing meeting delivery deadlines to customers, due to the factors such as global shortage of semiconductors. As a result, CCC also deteriorated by 8 days compared to fiscal year 2020. Current efforts include building strong relationships with suppliers, creating a system to promptly grasp information, and minimizing risk by switching to alternatives for high-risk parts. In addition to properly grasping product demand trends, including the 5G market, we are working to optimize inventories in response to changes in the parts procurement environment, which should lead to sales expansion and shorter CCCs.

\*CCC: Cash Conversion Cycle

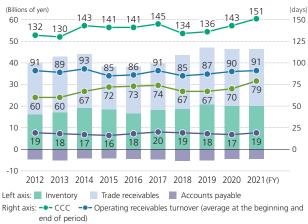
#### (4) Allocating Cash to Strategic Investment for Growth

Along with allocating cash generated from improving profitability and efficiency to strategic investment for growth, we will also be taking dynamic financial measures. Although establishing financial strength was the key issue up until GLP2020, the major management issue addressed by GLP2023 is how we can effectively utilize the achievements we have so far made, and our basic policy going forward involves concentrating investment in growth areas.

#### **I** Trends in Cash Flow



## **I** Trends in CCC



- --- Inventory turnover (average at the beginning and end of period)
- --- Operating payables turnover (average at the beginning and end of period)

Shifting our strategies from a protective (defensive) approach to an active (offensive) approach, we will be carrying out financial activities that establish growth as a priority goal.

More specifically, greater than 50% of operating cash flow (a total of ¥47.4 billion over three years) was used in strengthening our financial standing (paying back liabilities and increasing cash) over the past three years (GLP2020). Over the next three years (GLP2023), however, we plan to put more than 50% of operating cash flow toward strategic investment aimed at business growth.

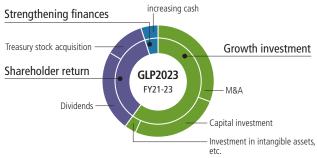
We also plan to stick with our aggressive plan for shareholder returns, as outlined in the next section.

#### Net Cash Provided by Operating Activities Allocation

FY2018-2020 Net Cash Provided by Operating Activities Allocation (Actual)



FY2021-2023 Net Cash Provided by Operating Activities Allocation (Plan)





## **Shareholder Returns**

Our basic policy on distributing profits to shareholders is paying dividends with a consolidated payout ratio of 30% or higher primarily by raising the dividend on equity (DOE) in response to increases in consolidated net income. We also flexibly implement other measures regarding shareholder return that take the total return ratio into account.

Total shareholder return (TSR) over the past 10 years is shown below. Anritsu's TSR fell below that of TOPIX due to our consolidated financial performance not meeting the first year goal set in the GLP2023. We will continue to implement growth strategies, sound finance, and capital policies that will enable us to realize a TSR that exceeds capital cost (7%). Specifically, we will further enhance corporate value and meet our shareholders' expectations by strengthening our competitiveness in the 5G market, expanding business into industrial fields that employ the IoT, developing business in the cloud service and other markets, and cultivating new growth fields, while making strategic investments and carrying out accurate financial strategies that include acquiring next-generation technologies such as 6G.

#### **II** TSR

	One year	three years		five years		ten years	
		Cumulative	Annual rate	Cumulative	Annual rate	Cumulative	Annual rate
Anritsu	-34.1%	-18.8%	-6.7%	104.9%	15.4%	64.7%	5.1%
TOPIX	2.0%	31.2%	9.5%	44.3%	7.6%	183.3%	11.0%



- \* Total Shareholder's Return (TSR): the total return on investment including capital gains and dividends.
- \* TSR is calculated based on cumulative dividends and stock price fluctuation for Anritsu, and based on the stock price index including dividends for TOPIX (prepared by the Company using Bloomberg data, etc.).
- The values in the graph are the market value indexed by TSR with the closing price data as of the end of March 2012 as 100 (the holding period is until the end of March 2022)

# **CTO Message**

# Going beyond "testing" with graphene

For Anritsu to exist in 2030 as a company that contributes to society through "testing", we are working to acquire new technologies while expanding the business domain and developing new businesses. One of the new technologies we are focusing on is graphene. Graphene is a form of carbon that is familiar to us all, but it was only in the 21st century that a method for its production was established, and it is expected to be used in a wide range of fields in the future. However, there are still many parts of the mechanism of graphene that remain unexplained, and it is essential to elucidate them in order to expand the range of its utilization. Anritsu has been engaged in graphene research and development since April 2020, with the aim of utilizing graphene in the future.

## **About Graphene**

Graphene is a single atom-thick sheet of carbon atoms bound together in a hexagonal honeycomb lattice. The tubular form is called a "carbon nanotube" and is used in fuel cells. The pencil lead we have used since childhood is made of layers of graphene called "graphite". Soot, which is produced when a substance is burned, is another form of graphite. In fact, graphene bonded three-dimensionally turns into a diamond. It is a so-called "miracle material" very close to us with a wide range of uses.

Graphene has long been the focus of academic attention, but progress on studying it has stalled due to difficulties in its procurement. Since its successful production in 2004, research on its application has progressed. The graphene production method discovered at that time is called the "Scotch tape method," in which a piece of cellophane tape is used to repeatedly peel graphene flakes off of a lead pencil. This method is still used today. In 2010, Andre Geim and Konstantin Novoselov were awarded the Nobel Prize in Physics for their groundbreaking experiments regarding the two-dimensional material graphene.

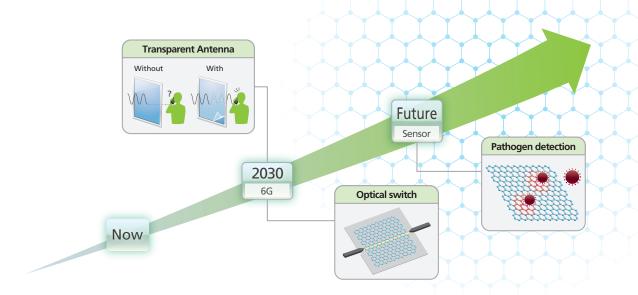
# **Characteristics of Graphene**

Graphene has a variety of excellent properties. Graphene is strong and flexible, conducts electricity more easily than metals, has high thermal conductivity, and is highly transparent due to its thinness. Let us focus on strength. Graphene has a honeycomb structure, which makes it elastic and shock-dispersive. Imagine a soccer goal. The net of a soccer goal has a honeycomb structure to disperse impact and prevent tearing. Graphene is 0.3nm thick. The thickness of a piece of copy paper is 0.1mm and the thickness of a hair is 0.05mm, so the thickness of graphene is approximately 1/100,000th of the thickness of a hair. Despite its near-zero thickness, graphene is said to be 200 times stronger than iron. If we could make a hammock with a single layer of graphene, a 4-kg housecat could be placed on it without tearing it.

# Hanako Noda

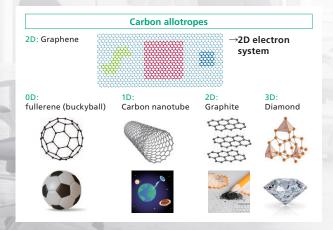
Executive Officer, CTO General Manager of Advanced Research Laboratory





# **Expectations for Graphene Applications**

Research and development is underway around the world for applications of graphene, which has a variety of excellent properties. One example of graphene application is transparent conductive film. Graphene's extremely thin, highly transparent, and conductive properties are expected to be applied to touch panels, solar cells, liquid crystal displays, and more. In addition, the film is also expected to be used in battery applications, taking advantage of its easy conductivity, high resistance to chemicals and other agents, and large surface area of carbon. Furthermore, they are expected to be used in transistors which amplify signals and act as on/off switches in smartphones and other electronic devices. The use of graphene is expected to enable the creation of smaller sized transistors, which means even faster speeds and lower power consumption. It has also been reported that transistors compatible with terahertz waves, which are expected to be used in 6G, are now being developed as a result of this research.



# **Anritsu Envisions the Future** with Graphene

Because of its toughness and lightness, graphene is intended to contribute to the advancement of micro-electro-mechanical systems (MEMS), which are indispensable for devices such as mobile phones. In addition, since graphene has no covering, it can adsorb molecules by direct contact and change their properties significantly. For this reason, its application as a gas sensor is also being considered, and recently research is being conducted to apply graphene in the development of a COVID-19 test which outperforms PCR testing. Furthermore, by using its ability to absorb a wide range of light wavelengths from ultraviolet to terahertz, it can also be applied in optical sensors for terahertz waves, infrared light, and other electromagnetic waves. It is also expected to contribute to the advancement of components essential for communication, such as photodetectors and optical modulators. Also, being made into a transparent antenna sheet, as graphene can be an antenna for electromagnetic waves, it is also expected to help build our digital society of the future. Thus, graphene is a technology that is expected to be used in 6G, as well as contribute to the advancement of the sensing and the creation of a decarbonized society. In 2020, Anritsu began fundamental research on graphene NEMS (Nano-Electro Mechanical Systems), and in fiscal year 2021 we achieved a major breakthrough in establishing graphene microfabrication technology by processing graphene with atom-by-atom precision. This achievement was presented at the 9th International Symposium on Surface Science. We will continue to investigate the properties of graphene itself in collaboration with external parties. And we will continue our research and development on graphene to be used as the sensors and 6G devices in order for Anritsu to go "beyond testing".