

# Nippon Techno Lab Inc.

**3849**

Sapporo Securities Exchange Ambitious

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## ■ Summary

### **A computer systems development company with a small number of highly skilled employees and a large number of products developed in-house that have market dominance**

Nippon Techno Lab, Inc. <3849> (hereafter, also “the Company”) is a computer systems development company with a small number of highly skilled employees who conduct four businesses: the Imaging and printer controller business, the Storage solution business, the Security business, and the Business solutions business. Its strengths include its products it developed in-house in each business segment with market dominance.

#### **1. 1H FY3/20 results**

In the 1H FY3/20 results, net sales decreased 10.8% year-on-year (YoY) to ¥193mn, the operating loss was ¥33mn (a loss of ¥59mn in the same period in the previous fiscal year), the ordinary loss was ¥32mn (a loss of ¥108mn), and the loss was ¥36mn (a loss of ¥73mn). Alongside the decreases in product sales and maintenance sales, net sales declined for the segments as a whole, but the profit-loss for the segments as a whole improved due to a major decrease in product cost prices. Not only was the orders balance maintained at a high level, there were also some large-scale orders, and at the end of 1H FY3/20, it was ¥558mn. By segment, the Security business performed well. Also, in the Imaging and printer controller business, projects became larger in scale, so the FY3/20 orders balance for scheduled sales increased 192.7% YoY to ¥373mn.

#### **2. Outlook for FY3/20**

For the FY3/20 full year results outlook, the Company has left unchanged the initial forecasts, of a double-digit increase in sales and major increases in profits, with net sales to increase 18.9% YoY to ¥900mn, operating profit to rise 48.7% to ¥150mn, ordinary profit to grow 175.7% to ¥150mn, and profit to increase 105.7% to ¥80mn. Looking by segment, the Imaging and printer controller business has an orders backlog, alongside the orders for large-scale projects, while in addition, the mass production of head controllers with added new functions for high-speed, large-scale inkjet printers and RIP software were started from October 2019, and the Company is awaiting their effects. In the Security business, it is aiming for business expansion through horizontal development from the decision to introduce information security into central government ministries and agencies, and in addition, in video security, needs are increasing for multiple bases and multiple camera integrated management. It is currently progressing overseas business development, centered on initiatives such as a framework in a collaboration with the facial recognition technology of NEC <6701>. In the Storage solution business, it is leveraging its superiority on the points of energy saving and the long-term storage of data, and it is steadily expanding the business, centered on medical facilities- and media-related, including newspapers.

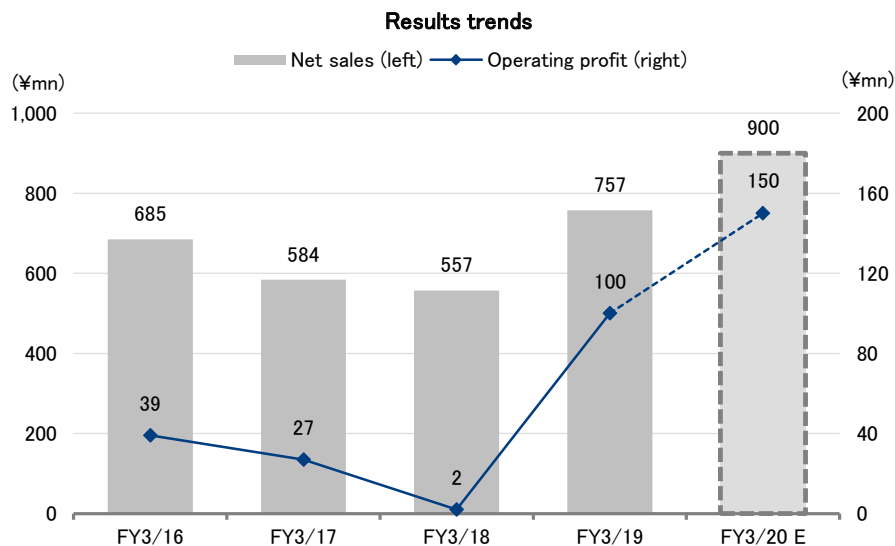
Summary

3. Medium-term management plan

The Company announced its medium-term management plan, Next Stage 2022, in May 2019. In this medium-term management plan, it has set three management policies, of “Proactive management that utilizes the follow-up external environment,” “The development of high value-added software and systems through advanced development capabilities and technical capabilities,” and “Having a small number of highly skilled employees.” The plan’s targets for FY3/22 are net sales of ¥1,300mn and operating profit of ¥450mn. In terms of topics by segment, in the Imaging and printer controller business, continuous orders are expected, including the adoption of the next-period global strategy model of Think Laboratory Co., Ltd, a business-use, advanced-functions printer major company. In the Storage solution business, demand is growing for methods to securely store Big Data from customer needs of wanting to store huge volumes of data accumulated in the past for “long periods,” “securely,” and at “low cost (electric-power saving), centered on medical facilities-related and news media-related. In the Security business (information), awareness of the need for information management for print-outs is rising, and products are being introduced mainly by major financial institutions and local governments, and orders are expected to increase in the future. In the Security business (video), there is an abundance of demand from infrastructure facilities using comparatively large-scale, multiple video equipment systems, such as airports, expressways, dams, and power plants.

Key Points

- A computer systems development company with products developed in-house that have market dominance in each segment, including “Mistral,” “SPSE PRINT SCOPE,” and “FIREDIPPER”
- Even as sales declined in 1H FY3/20, orders were strong, with orders balance in the Imaging and print controller business increasing nearly 3 times YoY
- The forecasts for FY3/20 are for a double-digit increase in sales and major increases in profits, while the targets for FY3/22 are net sales of ¥1,300mn and operating profit of ¥450mn



Source: Prepared by FISCO from the Company's financial results

## ■ Company overview

### Since its foundation, has developed in-house and market launched package software

#### 1. Company overview

The Company was founded in 1989 by its founder, President Eisei Matsumura. President Matsumura majored in informatic engineering science at university, and then worked in an overseas computer manufacturer for 45 years, where he was deeply involved in computer communication and software development. During this period, he handled and experienced many overseas-manufactured computers, OS, and application software.

At that time, 99% of computers were manufactured in the US, and moreover, the OS and software tools installed in them, and even the package software used in Japan, was also almost entirely manufactured in the United States. In 1971, Intel <INTC> developed the microprocessor, and in 1985, Microsoft <MSFT> released OS “Windows,” and IBM <IBM> PC-AT (PC) became the global standard, after which installing and operating software on these platforms became the mainstream. Incidentally, in the worlds of control-use embedded computers (Arm, Motorola, and, Intel) and proprietary architecture, such as game consoles, Japan-manufactured OS and application software have acquired only small market shares and have only a small presence.

When founding the Company in 1989, President Matsumura set the goals of developing in-house package software for all uses and market launching these products. Therefore, in the seven years from the Company’s foundation (1989 to 1995), it became involved in outsourced development (consignment) and systems development. As a side of this, it made a list of the software packages distributed around the world considered necessary. Among them, it developed its own similar products in-house that do not seem to require a significant of man-hours for development.

The main products that the Company developed in-house are as follows.

From 1996, it started the development of a printer image processing package (MISTRAL PostScript) and control software and developed “Mistral” in the same year.

From 1997, it started developing large-scale storage devices as auxiliary storage devices for optical disk and DVDs, and in 2004, started shipments of the “MNEMOS” series.

Subsequently, it started shipments in 2007 of “SPSE PRINT SCOPE,” a copier printer information leakage prevention system; in 2003 of “PC GUARD,” a file encryption tool; and in 2004 of “COPYGUARD.”

Also, in 2008, it developed and started sales of “FIREDIPPER,” a surveillance camera network system.

It is currently developing a “blockchain security system”.

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Company overview

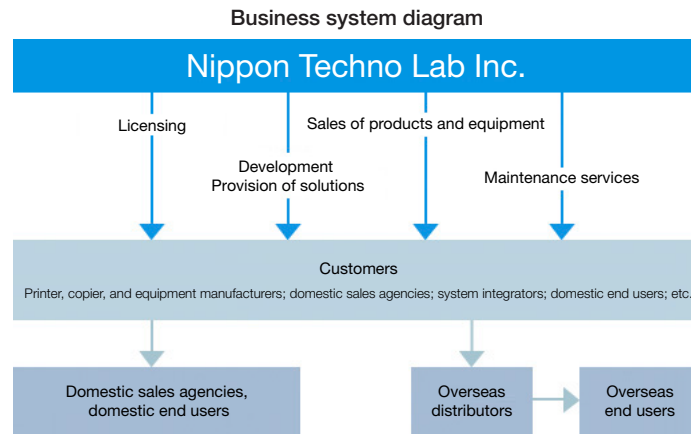
**History**

Date	Main events
January 1989	Established Nippon Techno Lab, Inc., in Shinbashi, Minato Ward, Tokyo
April 1989	Relocated the head office to Higashi Gotanda, Shinagawa Ward, Tokyo. Started providing technical support for massively parallel computers for a major construction company
July 1990	Alongside the business expansion, relocated the head office to Ningyo-cho Nihonbashi, Chuo Ward, Tokyo
June 1991	Developed an UNIX-compliant device drive for an OA equipment manufacturer
July 1991	Launched sales of the "NPS series," a UNIX-compliant driver for color MFP and an image input/output system
June 1994	Alongside the business expansion, moved the head office to Tenma-cho, Nihonbashi, Chuo Ward, Tokyo
November 1995	Developed a Windows-compliant device driver
September 1996	Entered-into a capital and business tie-up with Yazaki Corporation and conducted outsourced development of gas alarms system and vehicle-installed OS
October 1996	Developed the "Mistral" print server
March 1997	Concluded an agreement on Adobe Photoshop and technical support with Adobe Systems of the US
May 1997	Established a new development center in Nihonbashi Horidomechou, Chuo Ward, Tokyo
July 1998	Concluded a MISTRAL sales contract with the former Canon Sales Co., Inc.
January 1999	Concluded an exclusive sales agreement with Kinokuniya Company Ltd. for the digital library system "NTL DLS" and started sales
August 1999	Started sales of the PICTROGRAPHY-use Adobe PS printer controller for the former Fuji Photo Film Co., Ltd.
October 1999	Concluded a development agreement for the "Mistral" plotter controller manufactured by MIMAKI ENGINEERING CO., LTD.
February 2000	Started shipments of a controller for the "DocuColor" "A Color" project of Kyushu Electric Power Company for Fuji Xerox Co., Ltd.
August 2000	Concluded an OEM sales agreement for the "Mistral" A1 plotter controller for the former KYOCERTA MITA Corporation
September 2000	Started shipments through "Mistral" OEM of a wide plotter controller manufactured by KATSURAGAWA ELECTRIC CO., LTD
January 2001	Started shipments of the "Mistral" multi-function printer controller manufactured by former Minolta Co., Ltd.
February 2001	Built various service sites to grow sales of the mobile phone (Toyota PiPi) of the former Gazoo Media Service Corporation.
March 2001	Started shipments of the light printer PostScript controller manufactured by Duplo Corporation
May 2002	For business expansion and to integrate the head office and the development center, relocated the head office to Hirakawacho, Chiyoda Ward, Tokyo
September 2002	Started shipments of Adobe PS-installed printer controller for high-speed inkjet printers for RISO KAGAKU CORPORATION
December 2002	Started the Information security business and commenced developments
March 2004	Initiated PKI authentication technology in the University of Tokyo Hospital
April 2004	Started shipments of controllers for high-speed variable printers for Nagano Japan Radio Co., Ltd.
June 2004	Entered into a licensing agreement for "JAWS RIP" with Global Graphics of the UK
October 2005	Concluded a development and licensing agreement for filter software for large plotters for Ricoh Company, Ltd. Started developing PS controllers for large plotters for the former Showa Information Systems Co., Ltd.
September 2006	Started the video security business
May 2007	Listed on Sapporo Securities Exchange Ambitious
September 2007	Entered-into a business tie-up with an inkjet head manufacturer. Developed large-scale, high-speed inkjet printer control equipment.
October 2007	Conducted joint development of a high-speed digital printer with JADASON Enterprises
February 2008	Started sales of "FIREDIPPER," a surveillance camera network remote management system
September 2008	Launched sales of "SPSE," a secure printing system Entered-into a tie-up with the former KYOCERTA MITA JAPAN Corporation
October 2008	Started sales of "WisePatrol," a client PC surveillance system
February 2009	Launched sales of a CO <sub>2</sub> offset navigator and a toner and ink saver
April 2010	Started sales of "iDupli," a data backup & label printing system
June 2010	Started developing a controller for high-speed POD printers for Duplo Corporation
July 2010	Developed "DICOM PAPER PRINT," a medical-use image printing system
March 2011	Started a capital and business tie-up with NALTEC, Inc.
July 2011	Concluded a licensing agreement for "Harlequin RIP" with Global Graphics of the UK
April 2012	Started fully fledged shipment of the line-head IJ printer controller
December 2012	Acquired the ISO27001 certification
January 2015	Started sales of a secure camera system package for food production sites
October 2015	Succeeded in developing digital printing for tablets (generics)
April 2016	Succeeded in developing a printer for aluminum foil
March 2017	Started the cyber security business Entered into a business tie-up with NSFOCUS Japan Co., Ltd., a network security vendor

Source: Prepared by FISCO from the Company's materials

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Company overview



Source: The Company's website

**2. Management philosophy and management policy**

The Company cites as its management philosophy the words of Shingen Takeda, that “The people are your castle, the people are your stone walls” (meaning that even if you have a castle, it is useless unless you also have the power of the people). Based on the idea that “people” who you can rely on are equivalent to a strong castle, the foundation of the Company is its people, and the managers of the Company are its people, or in other words, its human resources. Therefore, it spends time to acquire, train, and invest in human resources. As the Company develops advanced products (package products), it first requires human resources who are excellent academically (mainly in mathematics and information theory). Moreover, it greatly requires human resources with a knowledge of programming, color science, chemistry and physics, and with the ability to comprehend academic papers. Since it is difficult to acquire externally people with the knowledge to contribute in the work field immediately, it is considered that its human resources must be trained for a minimum of 10 years within the Company.

Therefore, the Company develops all its products in-house, and not only does it not outsource to external companies, it does not procure licenses externally (purchasing), and it conducts development through full-time employees. In addition to developing its human resources, it also focuses on enabling its employees to work stress free, including through preferential treatment (no overtime required), paying high salaries, a full annual salary system (12 equal monthly payments), a focus on the work environment (the site is only around a 3 minute walk from Hanzomon Station, and it is expansive, at 992 square meters over 1 floor, even though there are only a small number of employees) and providing a free drinks vending machine.

The Company’s six management policies are described below.

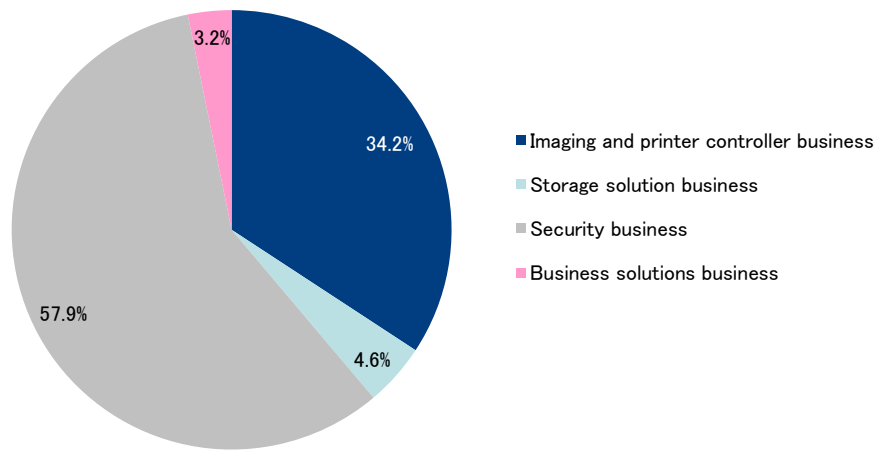
- (1) Value originality.
- (2) Be the first in Japan to develop unique and superior software.
- (3) Develop software made in Japan that can be used overseas.
- (4) Bravely take-on the challenge of difficult themes.
- (5) Even if the software is not prominent in the Japanese economy, such as game software and accounting software, specialize in developing industrial-use and science- and technology-use software.
- (6) Enhance employee satisfaction through work, and as a result, realize high earnings.

## ■ Business description

### Develops its business in four segments. The Security business provides nearly 60% of net sales

The Company is developing four businesses; “the Imaging and printer controller business,” “the Storage solution business,” “the Security business,” and “the Business solutions business.” In the percentages of total net sales in FY3/19, the Security business provided nearly 60% of the total, at 57.9%.

Percentage of total net sales (FY3/19)



Source: Prepared by FISCO from the Company's results briefing materials

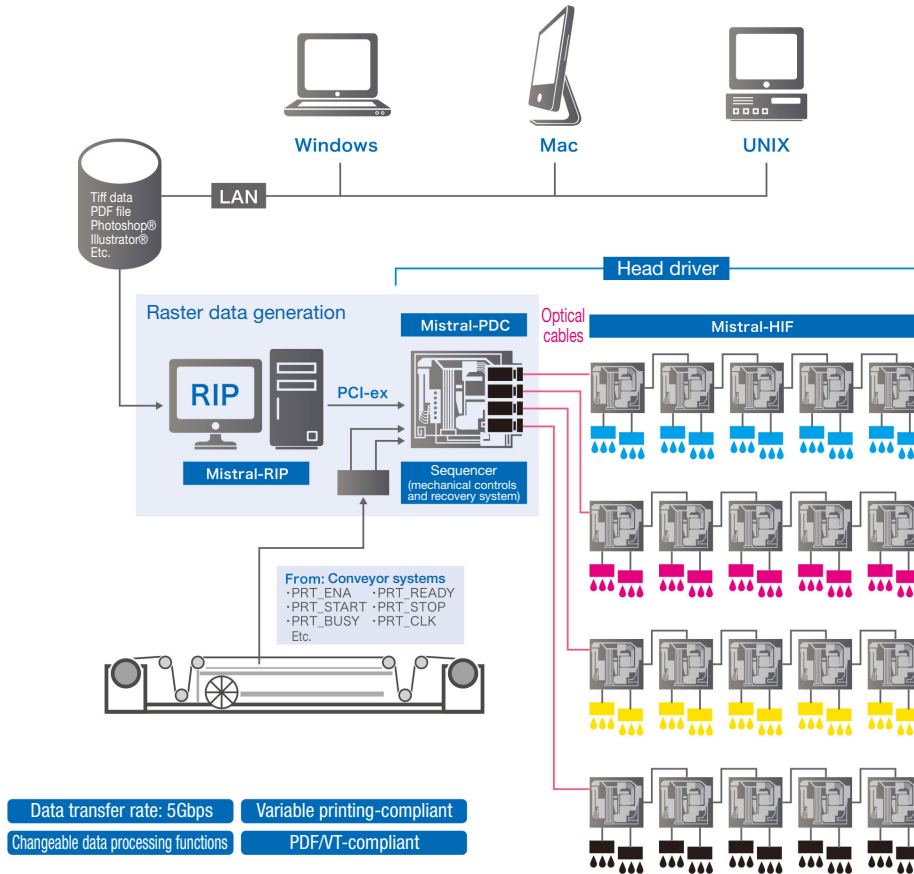
#### 1. Imaging and printer controller business

In contrast to printer manufacturers that provide printers for special and industrial uses, the Company develops and sells Mistral, which is control-systems software for the same printers, while it also sells printer control equipment (hardware) into which Mistral has been embedded. The features of this business include the Company's specialization in the development and sales of this special, business-use and industrial-use printer control systems software that can be used with printer multifunction machines, at CAD design sites, and for certain purposes. The printers it targets must be highly accurate and have high image quality as they are used for special applications, and in order to realize in a short-period printer output that meets customers' diverse and sophisticated needs, it provides to customers all of the component technologies relating to the various control systems software.



Business description

Mistral's core technologies

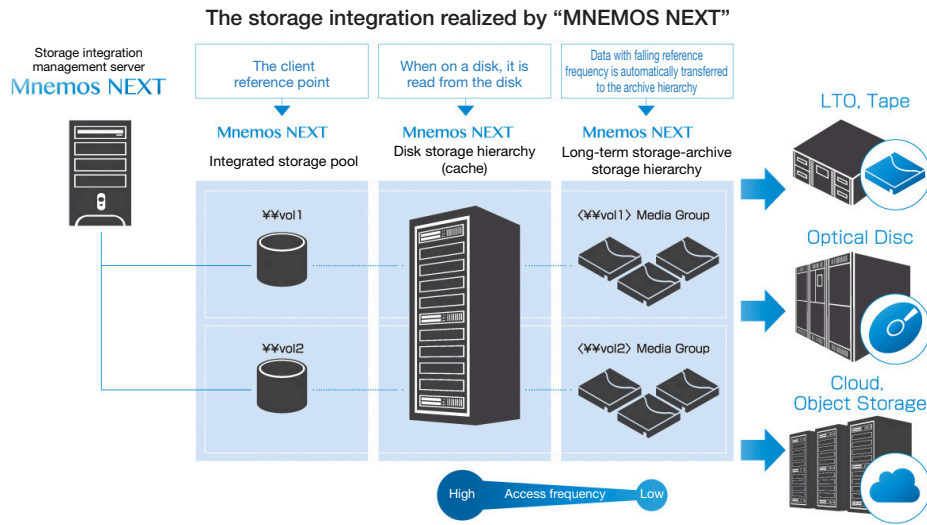


Source: The Company materials

2. Storage solution business

This business mainly conducts the development, sales, and maintenance of portable storage media systems (storage media such as CD and memory cards that require dedicated reading and writing devices to read and write the information), while it also conducts R&D for product development in the future. One of the Company's products is "MNEMOS NEXT", a files system for large-capacity, long-term storage archives, and it is software in which the aim is to offer long-term storage comprised of disks, a tape library, or an optical disk library that is provided as one integrated hierarchical file system. In today's era of the explosive generation of information, large-scale archive-use storage (tapes and optical disks) are the optimal storage in order to realize large volume, long-term data storage at low cost.

Business description



Source: The Company's website

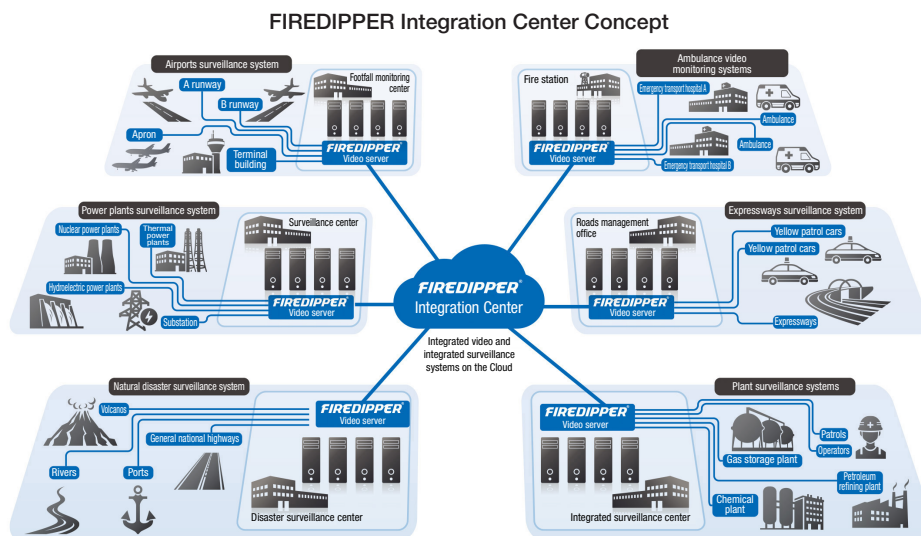
**3. Security business**

This business mainly develops, sells, and maintains security printing systems and integrated surveillance video systems, while it also conducts R&D for product development in the future. “SPSE PRINT SCOPE,” which is the Company’s total printing management foundation, is a printing environment integrated foundation that can totally manage all aspects, not only authentication printing, but also for printing content, ensuring auditable and inspectable printing security, and ascertaining the printing volume for each piece of equipment, the optimized operations of printers, and the management of printing costs. In terms of the average value of the projects introduced, it can manage from 50,000 to 500,000 jobs per day per server and has a track record of stable operations 24 hours a day 365 days a year, and of large-scale introductions on the scale of many thousands of people, to financial institutions, including to over half of the mega-banks and major securities companies, and major companies in the communication and manufacturing industries.

In the video security field, it handles the “FIRE DIPPER” video integrated surveillance software. It is a video surveillance solution the Company developed entirely in-house that specializes in infrastructure-related video surveillance. The video server realizes non-stop operations for video and the accumulation of records for various purposes, while also making possible a redundant configuration. It can cooperate with fire alarms, emergency doors and various types of sensor groups. “FIRE REC,” an appliance surveillance server for SMEs, can transmit live video images and accumulate recordings from approximately 100 cameras with a single installation, and it is used in fields such as food quality control (food defense), commercial facilities surveillance, and plant surveillance. In other products, “FIRE REC” is a small, all-in-one NVR used for crime prevention, including at chain stores, tenants, buildings, condominiums, and warehouses.

Business description

Moreover, in the FIREDIPPER's main market of mission-critical environments, mainly for government and municipal offices, in many cases the cameras of different manufacturers are used mixed together, so it is essential to have multi-vendor compliant cameras and related aspects. The video integrated management system "FIREDIPPER" solves the problems arising from the requests by various systems and provides a robust video integration system. It has been delivered to many customers, including to the main domestic airports under the jurisdiction of the Ministry of Land, Infrastructure and Transport, Narita International Airport, expressways, national volcanoes (volcano surveillance), the Ground Self-Defense Force (surveillance of exercises), the Maritime Self-Defense Force (surveillance of movements), the police (surveillance of traffic intersections), local governments (surveillance of rivers and roads), ports (surveillance of marine vessels), and nuclear power plants (surveillance of surrounding areas and sensor cooperation).



Source: The Company materials

4. Business solutions business

The Company conducts outsourced development, sales and maintenance of special software that meets customers' needs. As its systems-development track record, it has developed various types of embedded-use  $\mu$  CPU software and OS device drivers, and it is meeting demand in a wide range of industries, including for reservation systems in hotels and Japanese inns, mobile phone sales' support sites, non-bank loan application sites, a set of communication satellite TRANSPONDER systems, local government public relations video distribution sites, membership system information provision site systems (credit card wireless payment systems), hydraulic experiments and analysis systems, ECG monitoring data recording and analysis system, and image-contents large-scale distribution systems. In microprocessor firmware development, the Company has completed developments in areas including automotive instrumental panel forms; gas leak sensors; cheque, bill, and CD recording devices; and automotive optical LAN controllers.

## Strengths

**Its strengths include the products it has developed in each segment, such as “Mistral,” “SPSE PRINT SCOPE,” and “FIREDIPPER,”**

### **1. An inkjet printer control system software optimized for industrial uses, such as in the high-definition printing field: “Mistral”**

In its foundation period, the Company worked on printer controllers for offices, and it handled products for the MFP and copiers of major printer manufacturers, for the plotters of large printer manufacturers (computer output equipment to print vector images), and for CAD output devices. However, around 2008, it conducted a market research visit to “drupa2008,” which is the world’s premier industry trade fair that showcases the latest printing technologies centered on printing, functional printing, 3D printing, future technologies, and industrial-use printing, and it began a survey of large-scale printers in Japan and overseas and approached users, from office-use to industrial-use. Currently, it is focusing on the inkjet digital printing market, and it is developing and selling the “Mistral” printer control system software and conducting sales of printer control devices into which Mistral is embedded (hardware).

The printers’ targeted by the Company’s software must be highly accurate and have high image quality as they are used for special applications. In order to achieve a printer output that meets customers’ diverse and sophisticated needs, it provides to customers all of the component technologies related to the various control systems software, including computer connection control devices, image-development software, network connection software, image processing software, color synthesis software, scanner input devices’ control software, color adjustment software, data format automated recognition conversion software, and inkjet discharge control software. These products have extremely good reputations in the inkjet line-head controllers market, and these technologies are the Company’s strengths.

Also, these systems are not only for paper, as the targets for printing also include plastics, boards, containers, and film, and their uses include for painting and marking systems. Previously, processes such as the painting process or the printing process relied on screen printing and silk printing. But due to the overlapping benefits from the Company’s products, of simplification of the line, rationalization, low pollution, optimized inventories, and putting product information online, it has become possible through using these systems to build high performance printer (painting) lines, even including product tracking.

The reasons for the superiority of “Mistral” is that it can be customized due to its original head driver architecture, and its head and printing widths (from 1 head to multiple arranged heads) can be freely selected. To give an example, in the industrial large-scale printer of Hewlett-Packard of the US, it is possible to have a 2,800mm printing device by arranging 26 4-inch heads. Due to this superiority, it can be used with the world’s best heads, including of FUJIFILM Dimatix Inc., and Kyocera <6971>. Also, through the state-of-the-art technologies of Mistral Technology and FUJIFILM Dimatix, it can be combined with “Samba,” a high-performance, highly durable industrial-use inkjet head, to give the optimal inkjet printer for industrial uses, such as in the high-definition printing field.

#### Strengths

### 2. Only solution to realize authentication printing and to ascertain the content of printing: “SPSE PRINT SCOPE,”

The Company’s authentication printing solution “SPSE PRINT SCOPE” makes it possible to extract the content of printed items, such as text and images, while being used for printer manufacturers’ genuine printer drivers and Microsoft Windows OS genuine Standard TCP/IP Port Monitor. In terms of the introductions of “SPSE PRINT SCOPE,” it has a track record of large-scale introductions on the scale of many thousands of people, to financial institutions, including to over half of the mega-banks and major securities companies, and to major companies in the communication and manufacturing industries.

A feature of “SPSE PRINT SCOPE” is that it makes visible the actual printing conditions, and it is a foundation on which the entire printing environment can be managed. Not only for authentication printing, but also for printing content, while ensuring auditable and inspectable printing security, it enables the printing volume for each sector and piece of equipment to be ascertained, the operations of printers to be optimized, and printing costs to be managed. In addition, it makes possible systems construction in every type of environment and can be introduced not only into virtual PC environments, but also into Thinclient and ThinPrint (printing systems) environments. It also integrates the printing environments of network separated (mission critical and information systems) and Web separated environments, and it enables authentication printing even in a mixture of printing environments, of Windows, Linux, and Mac OS environments. It further makes it possible to build systems even when there is a shared print server. Moreover, for genuine printer drivers, it enables an environment in which printing quality is ensured and the output destination is not selected. Many companies are implementing measures for information security, and leaving out, forgetting, and mixing-up print-outs are sources of information leakage, and eradicating the leaving-out of print-outs is a way to prevent the leakage of information before it occurs.

A lot of information leakages that have been reported on in the media involved an electronic medium, but even today amid the progress of digitization, paper medium is still the source of many information leakages. Security measures for MFP, which use a lot of paper, are important, but measures to keep down costs also cannot be ignored. By improving the printing environment as a whole, the Company is realizing both strengthened security and cost reductions.

### 3. A video surveillance solution developed completely in-house: “FIRE DIPPER,”

The video integrated surveillance software “FIRE DIPPER” is a video surveillance solution that the Company developed completely in-house that specializes in infrastructure-related video surveillance in places where the use of video is essential and where problems, such as failures and malfunctions, cannot be allowed to occur. It realizes non-stop operations for camera video and the accumulation of records for various purposes, and it also makes possible a redundant configuration video server. Further, it is said that it has extendibility, in that it can coordinate with fire alarms, emergency doors, and various sensor groups. The Company has a track record of providing multiple video surveillance solutions even on a nationwide scale and it can be used from small-scale to large-scale, while there is also an enterprise version that utilizes the “FIRE DIPPER Integration Center” that can be used on the Cloud. Through this, it makes possible the total management of video servers located throughout the country, subordinate camera groups, and subordinate surveillance terminals. In integrated management systems for mission critical, the Company has made deliveries to various customers, including to the main domestic airports under the jurisdiction of the Ministry of Land, Infrastructure and Transport, Narita International Airport, expressways, national volcanoes (volcano surveillance), the Ground Self-Defense Force (surveillance of exercises), the Maritime Self-Defense Force (surveillance of movements), the police (surveillance of traffic intersections), local governments (surveillance of rivers and roads), ports (surveillance of marine vessels), and nuclear power plants (surveillance of surrounding areas and sensor cooperation).

## Results trends

### In the Imaging and printer controller business, the orders balance increased 192.7% YoY to ¥373mn

#### 1. 1H FY3/20 results

In the 1H FY3/20 results, net sales decreased 10.8% YoY to ¥193mn, the operating loss was ¥33mn (a loss of ¥59mn in the same period in the previous fiscal year), the ordinary loss was ¥32mn (a loss of ¥108mn), and the loss was ¥36mn (a loss of ¥73mn). Alongside the decreases in product sales and maintenance sales, net sales declined for the segments as a whole, but the profit-loss for the segments as a whole improved due to the major decrease in product cost prices. Not only was the orders balance maintained at a high level, there were also some large-scale orders, and at the end of 1H FY3/20, it had become ¥558mn. By segment, the Security business performed well. Also, in the Imaging and printer controller business, projects became larger in scale, so the FY3/20 orders balance of scheduled sales increased 192.7% YoY to ¥373mn.

#### 1H FY3/20 results

	(¥mn)					
	1H FY3/19		1H FY3/20		YoY	
	Results	% of sales	Results	% of sales	Change	% change
Net sales	216		193		-23	-10.8%
Imaging and printer controller business	85	39.5%	24	12.8%	-60	-71.0%
Storage solution business	10	5.0%	12	6.7%	2	18.9%
Security business	107	49.7%	145	75.6%	38	35.7%
Business solutions business	12	5.8%	9	4.9%	-3	-24.4%
Operating profit	-59	-	-33	-	-23	-
Imaging and printer controller business	15	7.1%	2	1.3%	-12	-83.3%
Storage solution business	-16	-	-17	-	-0	4.4%
Security business	-1	-	44	22.9%	45	-
Business solutions business	1	0.9%	2	1.1%	0	15.6%
Ordinary profit	-108	-	-32	-	76	-
Net profit	-73	-	-36	-	36	-

Source: Prepared by FISCO from the Company's financial results and financial results briefing materials

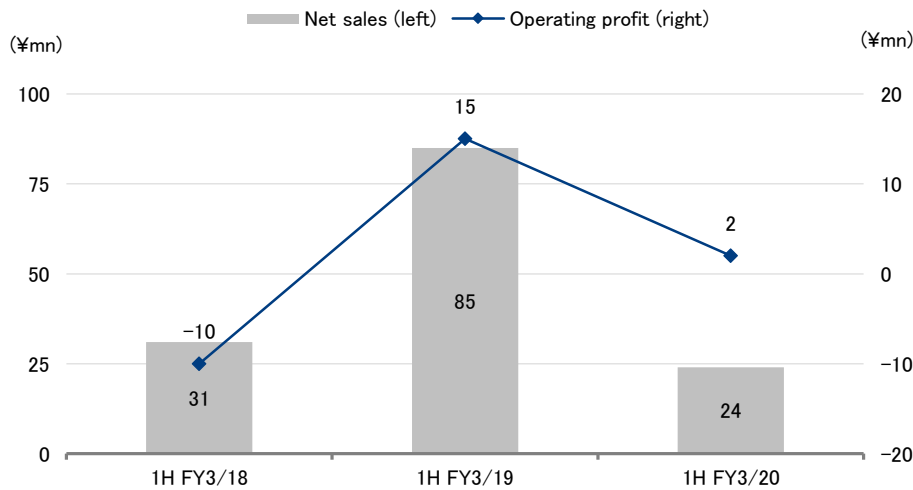
#### 2. Results by business field

##### (1) Imaging and printer controller business

Net sales decreased 71.0% YoY to ¥24mn, and segment profit declined 83.3% to ¥2mn. Alongside the decrease in product sales, segment net sales and segment profit decreased. But the orders balance of sales scheduled for FY3/20 increased 192.7% to ¥373mn.

Results trends

Trends in the Imaging and printer controller business

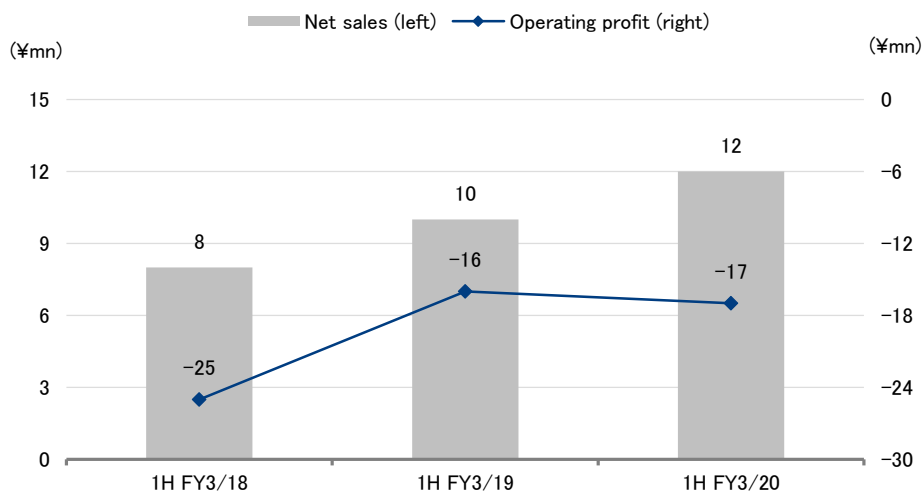


Source: Prepared by FISCO from the Company's financial results

(2) Storage solution business

Net sales increased 18.9% YoY to ¥12mn and the segment loss was ¥17mn (a loss of ¥16mn in the same period in the previous fiscal year). Alongside the rises in product sales and maintenance sales, segment net sales increased, but the segment loss still rose slightly due to the higher maintenance cost prices and SG&A expenses.

Trends in the Storage solution business

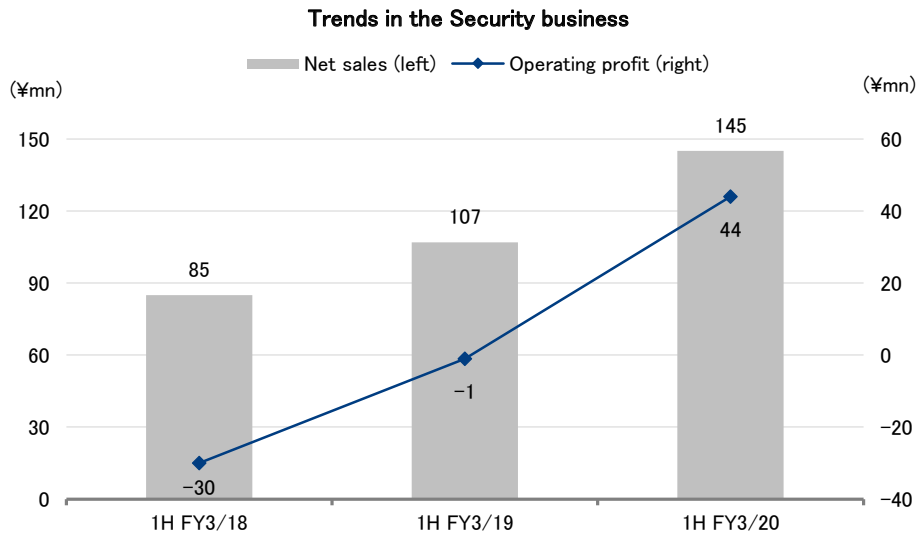


Source: Prepared by FISCO from the Company's financial results

(3) Security business

Net sales increased 35.7% YoY to ¥145mn and segment profit was ¥44mn (a loss of ¥1mn in the same period in the previous fiscal year). Alongside the major rise in product sales, segment net sales increased significantly. Also, cost prices and SG&A expenses decreased, so the previous segment loss became segment profit.

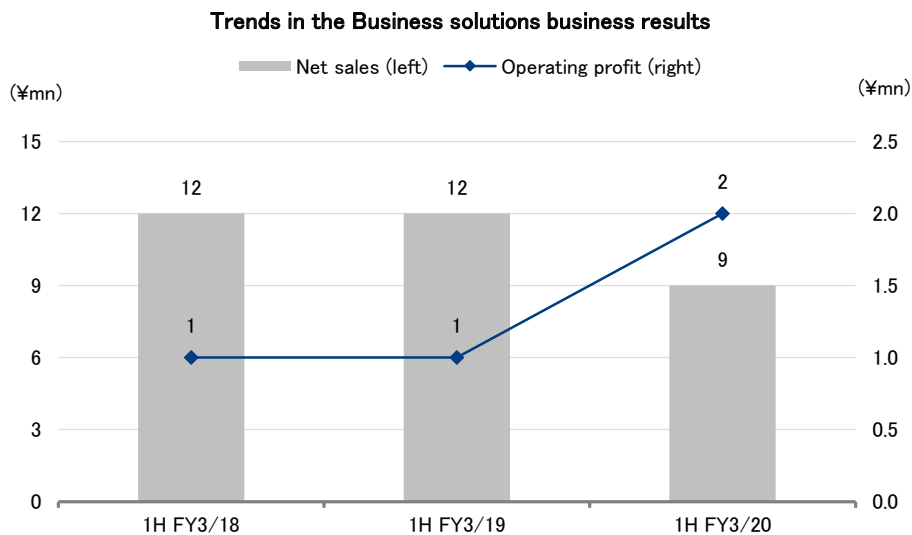
Results trends



Source: Prepared by FISCO from the Company's financial results

**(4) Business solutions business**

Net sales decreased 24.4% YoY to ¥9mn and segment profit increased 15.6% to ¥2mn. Alongside the declines in product sales and maintenance sales, segment net sales decreased. However, segment profit increased, due to the decreases in cost prices and SG&A expenses.



Source: Prepared by FISCO from the Company's financial results



## ■ Outlook

**For FY3/20, is forecasting a double-digit increase in sales and a major increase in profits, and for FY3/22, the final fiscal year of the medium-term management plan, is targeting net sales of ¥1,300mn and operating profit of ¥450mn**

### 1. FY3/20 outlook

For the FY3/20 full year results outlook, the Company has left unchanged the initial forecasts of a double-digit increase in sales and major increases in profits, with net sales to increase 18.9% YoY to ¥900mn, operating profit to rise 48.7% to ¥150mn, ordinary profit to grow 175.7% to ¥150mn, and profit to increase 105.7% to ¥80mn.

**FY3/20 outlook**

	FY3/19		FY3/20		Change
	Results	YoY	Forecast	YoY	
Net sales	757	35.7%	900	18.9%	142
Operating profit	100	3812.6%	150	48.7%	49
Ordinary profit	54	443.5%	150	175.7%	95
Profit	38	534.7%	80	105.7%	41
Earnings per share (¥)	24.37		49.07		

Source: Prepared by FISCO from the Company's financial results

#### (1) Imaging and printer controller business

Alongside the orders for large-scale projects, there is an orders backlog, while in addition, the mass production of head controllers with added new functions for high-speed large-scale inkjet printers and RIP software were started from October 2019, and the Company is waiting for their effects.

#### (2) Storage solution business

The Company is leveraging its superiority on the points of energy saving and the long-term storage of data and steadily expanding this business, centered on medical facilities- and media-related, including newspapers.

#### (3) Security business

For information security, it is aiming for business expansion through horizontal development from the decision to introduce information security into central government ministries and agencies. For video security, needs are increasing for multiple bases and multiple camera integrated management. It is currently progressing overseas business development, centered on surveillance in the areas around plants and the surveillance of important public facilities.

## Outlook

**(4) Other topics**

On December 5, 2019, the Cabinet of the Japanese government resolved on new economic measures with a project scale of around ¥26.0tn, including private-sector spending, and government spending of approximately ¥13.2tn. The effects of these measures in terms of pushing-up the Gross Domestic Product (GDP) are estimated to be around 1.4%. The three pillars of the economic measures are “Ensure recovery and reconstruction for disasters, and security and peace of mind,” “Provide priority support for people so as to overcome the risk of an economic slump,” and “Maintain and improve economic vitality for investment in the future and with a view to the period after the Tokyo Olympics and Paralympics.” In particular, in 2019 the damage caused by natural disasters was widespread, and based on this, the government is taking an abundance of measures to fortify national land, with a focus on flood measures. Therefore, in the video security segment, demand for surveillance cameras and other products would seem likely to increase in the future.

## “Mistral” is at the planning and execution stage of overseas business development, and “FIRE DIPPER” is also expected to realize overseas business development

### 2. Medium- to long-term growth strategy

The Company announced its medium-term management plan, “Next Stage 2022,” in May 2019. In this medium-term management plan, it sets out three management policies and the targets for FY3/22, of net sales of ¥1,300mn and operating profit of ¥450mn.

**(1) Management policies****a) Proactive management that utilizes the follow-up external environment**

In the 5G society, it would seem investment is becoming active not only for hard aspects, but also for software and systems that control various type of equipment, which is expected to increase opportunities for earnings. Therefore, alongside actively conducting R&D, the Company is aiming to increase earnings through strengthening the salesforce.

**b) The development of high value-added software and systems through advanced development capabilities and technical capabilities**

In the printer controller, video security, information security, and storage solutions fields, which are the Company's main businesses, in the future the technical standards required by customers are expected to become increasingly higher. Therefore, the Company intends to grow earnings by aiming to solve customers' problems and improve value through utilizing the many unique technologies and rare technologies it has accumulated up to the present day, and by developing advanced software and systems with high added-value.

**c) Having a small number of highly skilled employees**

The Company's total number of employees is small, at around only 30. The majority are engineers and their technical level is top-class within Japan. By having a small number of highly skilled employees, the Company is able to provide low-cost, high quality services through speedy initiatives.

Outlook

**(2) The business environments by segment**

**a) Imaging and printer controller business**

Continuous orders are expected, including the adoption of the next-period global strategy model of Think Laboratory Co., Ltd.\*, a business-use advanced-functions printer major company. Other than this, the Company is steadily progressing development work for the medical and pharmaceutical markets, and it has established a repeat orders system. Moreover, there have been inquiries for the cardboard printing system that utilizes the Company's proprietary technology, and for controller development for high quality 4K and 8K TV panels. Also, through a collaboration with a major head manufacturer and ink manufacturer, it has entered the stages of planning and execution for overseas business development.

\* The Company conducted a capital increase from a third-party allocation of shares to Think Laboratory, which is one of the Company's main business partners. In terms of the use of the funds, they will be used to supplement materials costs for hardware development and R&D costs relating to both hardware and software development. The aim is to launch products that cannot be matched by the products of other companies both in terms of function and quality.

**b) Storage solution business**

Demand is expanding for methods to securely store Big Data from customer needs of wanting to store huge volumes of data accumulated in the past for "long periods" "securely," and at "low cost (electric power saving), centered on medical facilities-related and news media-related. Therefore, the Company is developing sales activities to recommend the introduction of a library system in the future. Also, based on Single-drive Standalone system, which is standalone drive-compliant software for a portable storage media system, the Company is recommending introductions of its software to users while proposing to them a low-cost system.

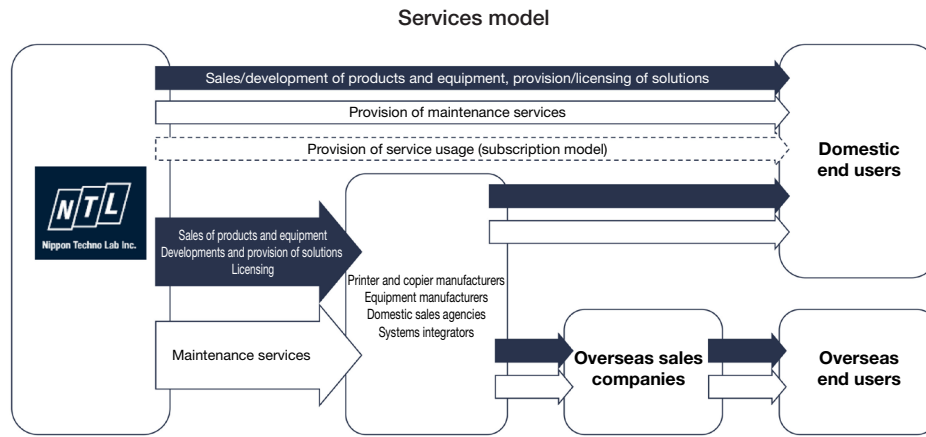
**c) Security business (information security)**

The awareness of the need for information management for print-outs is rising, and products are being introduced mainly by major financial institutions and local governments, and orders are expected to increase in the future. The high quality and reliability of "SPSE," a security printing systems product, have been confirmed.

**d) Security business (video security)**

There is an abundance of demand from infrastructure facilities using comparatively large-scale, multiple video equipment systems, such as airports, expressways, dams, and power plants. Demand from news media-related is also expanding with an awareness of real time, in preparation for the fully fledged 5G era. For commercial-facilities projects also, in order to increase the likelihood of orders, the Company has embedded new functions into its products to differentiate them from the products of its industry peers. On the other hand, in plant surveillance, it has currently obtained a number of orders, and moreover it has in sight specific, scheduled orders in the next few years. The target market has expanded from the previous focus on public sector-related to include private sector-related as well. Needs for surveillance cameras, such as for crime prevention, disaster prevention, and anti-terrorism measures, are trending upward, and it seems that needs for "FIREDIPPER," integrated surveillance software that has been introduced for many public transport-related projects, will also increase in the future. Moreover, there are inquiries from companies that are active overseas, and the Company is more actively conducting sales activities, including through site visits. Incidentally, in the next few months, it is expected to realize overseas business development.

Outlook



Source: The Company's medium-term management plan

(3) Results targets

Targeting net sales of ¥1,300mn and operating profit of ¥450mn in FY3/22, the final fiscal year of the medium-term management plan.

The medium-term management plan's numerical targets

	FY3/19 Results	FY3/20 Plan	FY3/21 Plan	FY3/22 Plan
Net sales	757	900	1,050	1,300
Operating profit	100	150	300	450
Ordinary profit	54	150	300	450
Net profit	38	80	200	300
Operating profit margin	13.3%	16.7%	28.6%	34.6%
ROE	4.1%	7.2%	16.0%	20.0%

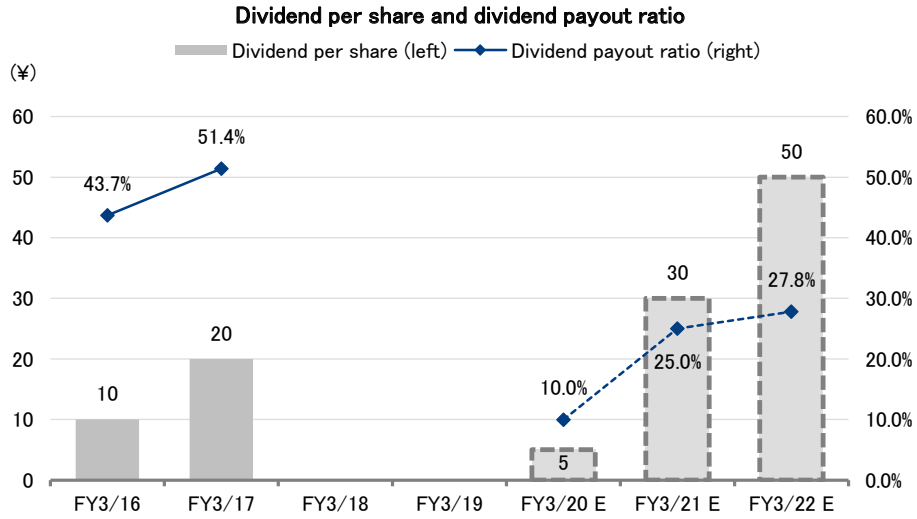
Source: Prepared by FISCO from the Company's medium-term management plan

## Shareholder return policy

**Policy is to actively pay dividends, while also prioritizing R&D, aiming for a dividend payout ratio of 30% in the future**

As an R&D-type company, the Company's basic policy is to return profits to shareholders while also retaining the internal funds necessary for business expansion in the future and to strengthen its corporate structure. Based on this policy, in FY3/20 it plans to recommence dividend payments and pay a dividend per share of ¥5.0. Its targets for the dividend per share are ¥30 in FY3/21 (dividend payout ratio of 25.0%), and ¥50 in FY3/22 (dividend payout ratio of 27.8%), and in the future, it is aiming for a dividend payout ratio of 30%.

Shareholder return policy



Note: Conducted a 2-for-1 stock split on April 1, 2019  
 Source: Prepared by FISCO from the Company's financial results and results briefing materials



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