

AUTONOMOUS CONTROL SYSTEMS LABORATORY



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FY21/03 Q3 Highlights

- Under **ACSL Accelerate**, announced in August 2020, **ACSL is aiming to achieve 100 billion JPY sales after 10 years and over 5 billion JPY sales in FY22**, and proceeding business to achieve these goals
- Due to the prolongation of COVID-19 and emergency declaration, ACSL decided to **postpon projects, suspend demonstrations and shift to the next fiscal year, with prioritization of customer safety**. Sales are expected to shift by about half a year and expected to be **600 million JPY sales in this fiscal year**, while the forecast was 1.4~1.7 bn JPY sales. **Already pipelines for next fiscal year of 259 million JPY** including shift projects **are acquired**.
- The environment for the industrial drone market is being developed, and demand is steadily growing
 - The Japanese government **announced to establish a licensing system and drone safety certification system** in order to regulate Level 4 flight
 - U.S. Government **imposed embargo on DJI, Chinese drone manufacturer**
- The business strategies in the mid-term management direction are being implemented as planned, and the results of activities are being achieved
 - Developing **small aerial drone, smokestack inspection and enclosed environment inspection drones to launch in FY2021**. Successful on-site demonstration with a 5 kg payload drone for delivery
 - Expected to establish a **track record for trials of a wide range sales models such as subscription by the end of the current fiscal year**
 - Preparing to **expand into India, Singapore**, and other countries for ASEAN expansion
 - **Established CVC in December 2020 for technology collaboration** and is actively engaging in sourcing activities
- **Sales was 125 MM JPY in Q3 YTD. ACSL Accelerated R&D activities as an upfront investment**, resulting in a **net loss of 812 MM JPY**. It revised this fiscal year forecast to 600 MM JPY sales and operating loss of 1.2 bn JPY.

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What ACSL will accomplish

MISSION

Liberate Humanity Through Technology

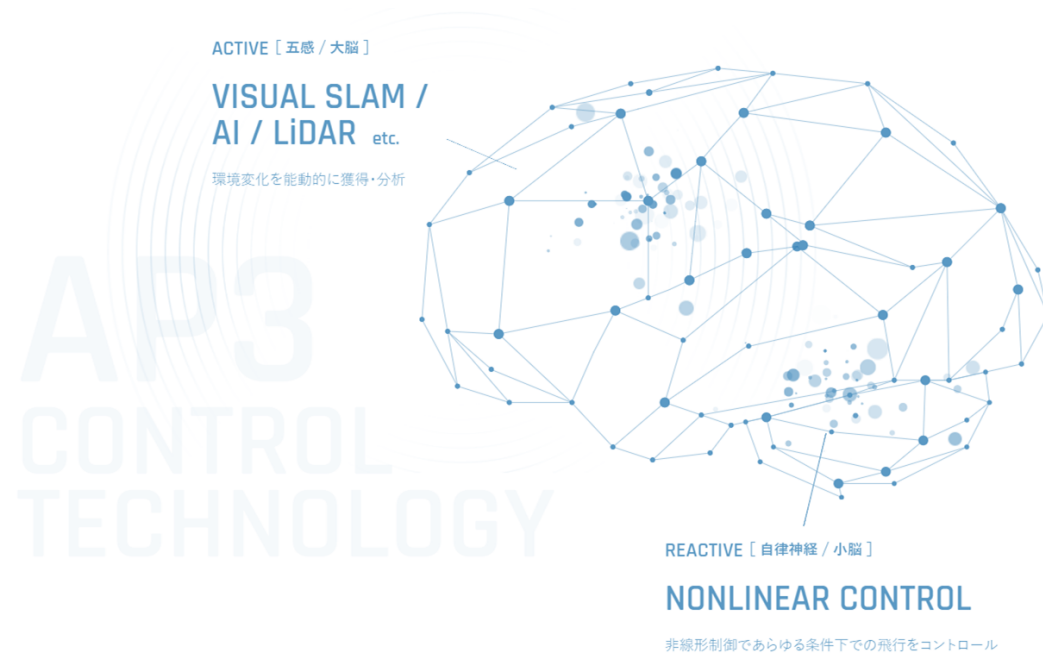
VISION

**Revolutionizing social infrastructure
by pursuing cutting-edge robotics
technology**

ACSL is an industrial drone manufacturer pioneering drone market

ACSL is a manufacturer of industrial drones that develops application-specific drones through discussion and demonstration with customers, using proprietary autonomous control as its core technology.

The proprietary control technology consists of the “cerebrum”, which actively grasps the surrounding environment, and the “cerebellum”, which controls flight in any environment.



Develop specific drones by understanding the technical and economic requirement for specific applications through discussions with customers and demonstrations in actual environments.



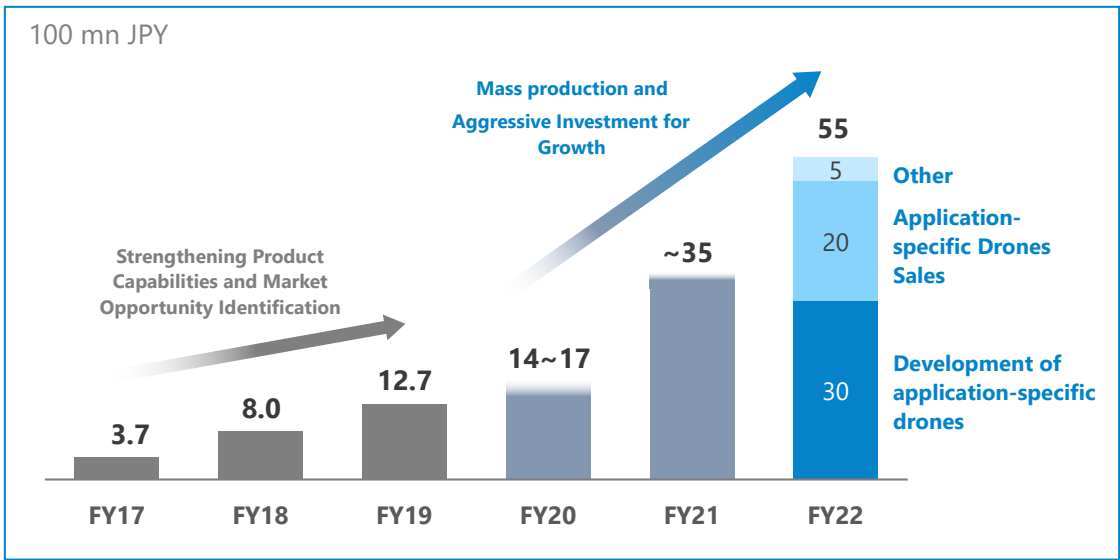
Announced "ACSL Accelerate" in August 2020 to achieve market dev

In the "ACSL Accelerate" announced in August 2020, a masterplan that defines what ACSL should be aiming for after 10 years and a mid-term management direction (FY20-22) to realize it and promoting projects to achieve

A masterplan defining what ACSL aim for after 10 years

- 1 Global pioneer in solving social infrastructure issues
- 2 More than 100 bn JPY sales, 10 bn JPY sales profit
- 3 Mass production manufacturer that produces 30,000 units/year
- 4 Supporting the country with de facto standards
- 5 Developing cutting-edge technologies for autonomous control (cerebellar and cerebral)
- 6 Nurturing the industry's most advanced and talented human resources
- 7 Constantly working to improve its corporate value and financial KPIs

Sales in mid-term management direction (FY20-22)

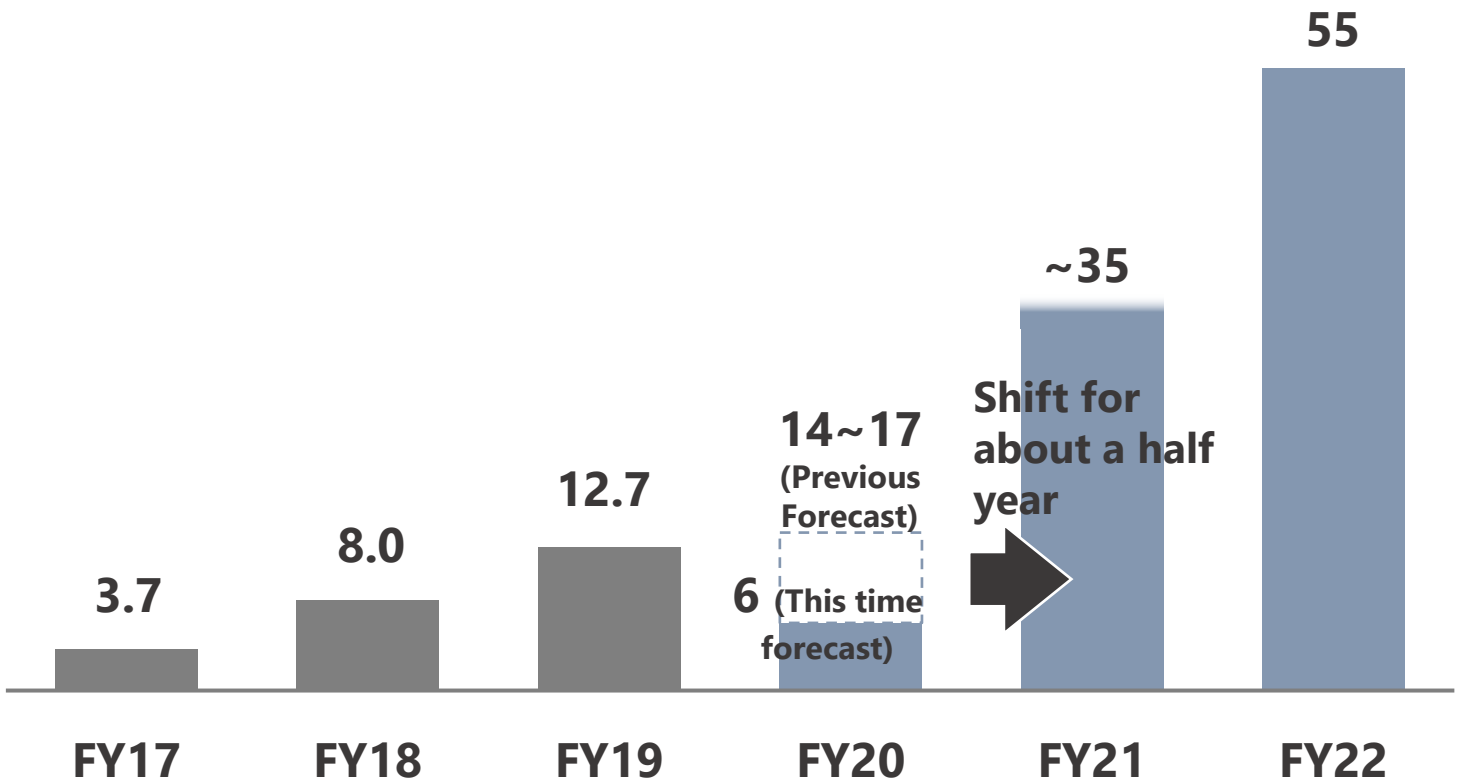


ACSL results for this fiscal year will be affected by COVID-19

Due to the prolongation of COVID-19 effect and state of emergency declaration, ACSL postponed projects, suspended demonstrations and decided to shifted to the next fiscal year. As a result, sales shifted about six months

Sales (base scenario)

100 MM JPY



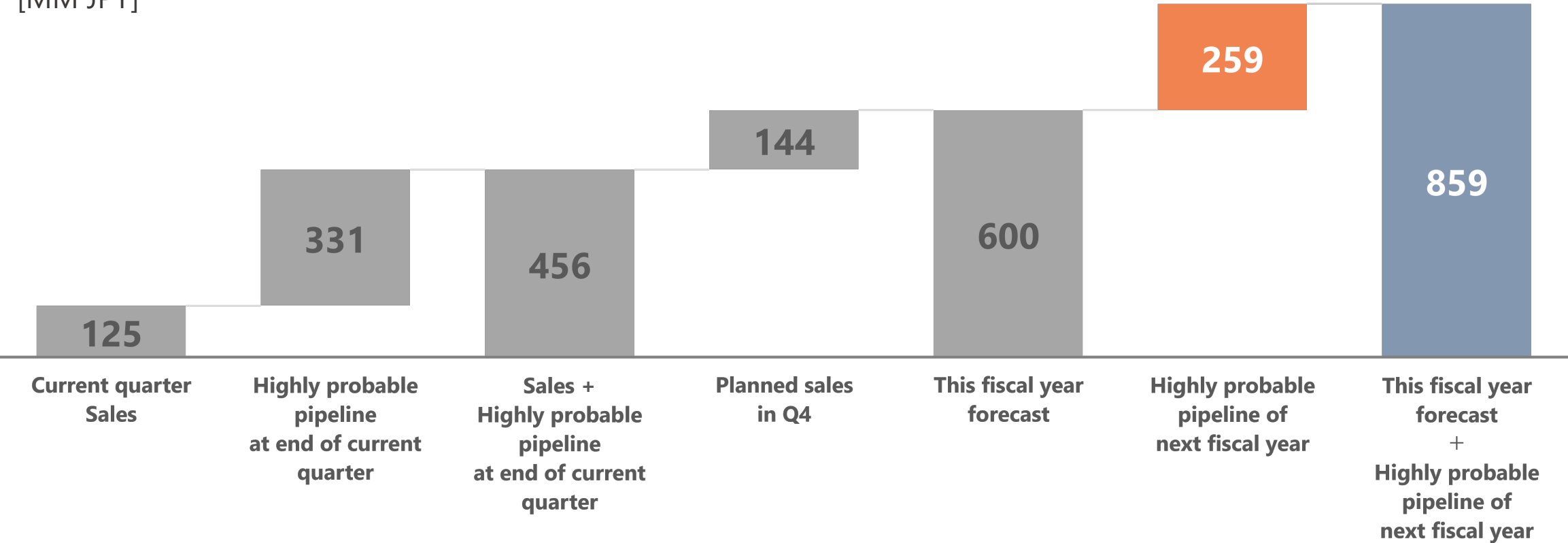
Infection of COVID-19

- Keep an eye on the impact of the prolongation of COVID-19 and emergency declaration from the beginning of the year
- **Postponed** the current fiscal year projects **to the next fiscal year due to restrictions on activity**
- **Suspended demonstrations** scheduled for this fiscal year and **shift to the next fiscal year**, prioritizing customer safety
- Continuously invest in R&D in line with the mid-term management direction

Already acting in acquiring projects after the next fiscal year

Already acting for the next fiscal year, the current acquisition after the next fiscal year is 259 million JPY, including delays
Acquiring more projects than in the same period last year

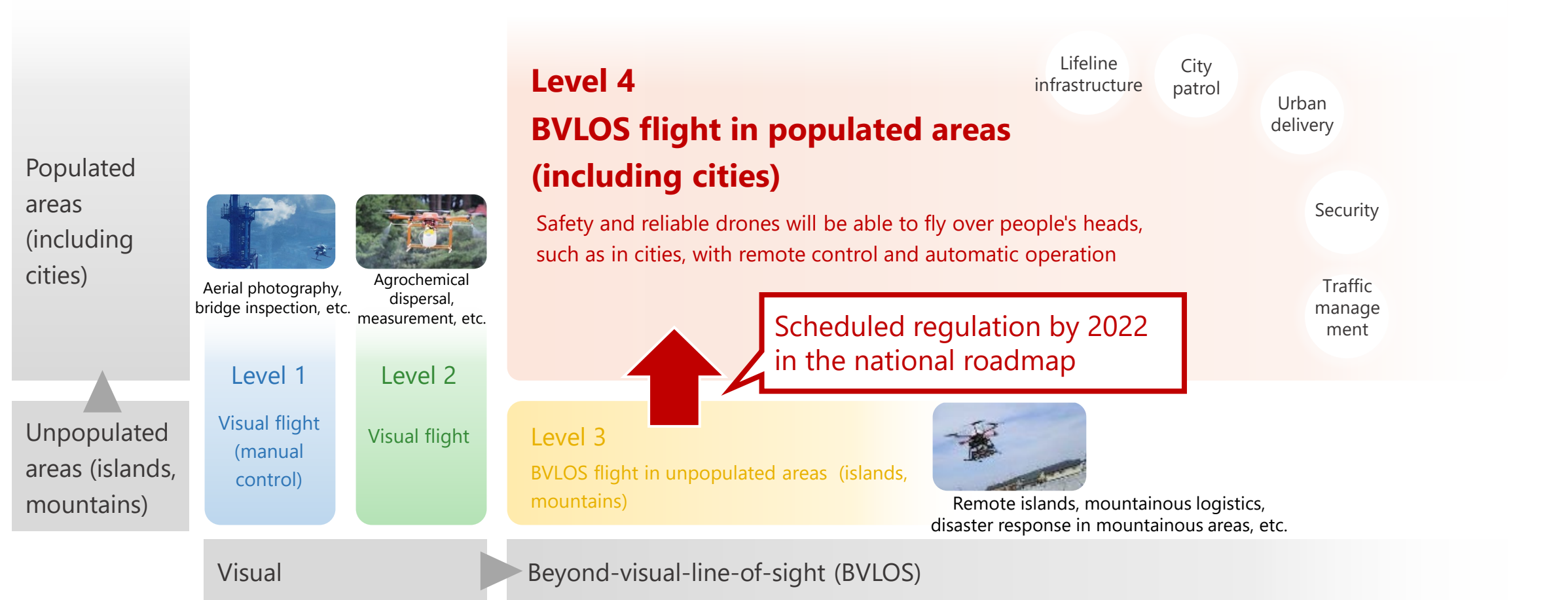
Sales and Pipelines as of end of FY21/03 Q3¹
[MM JPY]



1: Highly probable pipeline is the total amount of sales for projects with a purchase order and related documents at the end of December. Next year's pipeline can be change subject to the application of accounting revenue recognition standards

Steady growing demand for industrial drones

Regulations for BVLOS¹ flight in populated areas is scheduled and it is going to allow drones to fly in many environments where they have not been able to fly, and is going to unlock the large potential space and market



1: Beyond-visual-line-of-sight
SOURCE: Roadmap for Small UAV Utilization and Technological Development (April 28, 2016, Public-Private Sector Council for the Improvement of the Environment for Small UAVs)
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Government announced direction of system to achieve Level 4

The Japanese government announced to establish a licensing system and drone safety certification system in order to deregulate Level 4 (BVLOS flight in populated areas) in December 2020.

Regulation to promote drone security

Government passed legislation to promote adoption of drones and 5G, while ensuring cyber security of them¹

Government policy of procuring "secure" drones

Government has announced that it will procure only "secure drones" and it will "promptly replace existing drones that are already in place"³

February 2020

June 2020

September 2020

December 2020

"Secure" drone development for government procurement

NEDO has allocated 1.61 billion JPY for development of a high-security, low-cost standard drone and a standard flight controller aiming for government procurement²

New institutional directions for achieving Level 4

In order to ensure safety flight in a more stringent manner to achieve Level 4 flight, government announced the direction of setting the certification for drone safety⁴

*1: "Outline of the Draft Law on Promotion of Development, Supply and Introduction of Specified Advanced Information and Communications Technology Systems" February 19, 2020 Ministry of Economy, Trade and Industry

*2: "Development of Basic Safety Drone Technology" June 25, 2020 New Energy and Industrial Technology Development Organization (NEDO)

*3: "Policy on the Procurement of Unmanned Aircraft by Government Agencies, etc." September 14, 2020 Liaison Conference of Relevant Government Agencies on Small Unmanned Aircraft

*4: "Toward the realization of beyond-visual-line-of-sight flight in populated areas (including cities) (Level 4) in manned areas" December 10, 2020 Liaison Conference of Relevant Ministries and Agencies on Small Drone

Revealed of global demand for security

In addition to the Japanese government announced policy for procuring “secure” drones in September, U.S. Government imposed embargo on DJI, Chinese drone manufacturer

The Nikkei

U.S. Embargoes China's DJI, Largest Drone Company, for Involvement in Human Rights Violations

On December 18, the U.S. Department of Commerce imposed embargo on China's DJI, the world's largest drone manufacturer. It was **determined that the company was involved in human rights violations using high-tech surveillance technology**. Drones made by DJI are also used by Japanese companies and may be affected by the sanctions.

The company was added to the Entity List(“EL”), a list of companies with security problems. Exporting U.S. products to the company requires a license from the Department of Commerce, and license applications are generally rejected.

(ellipsis)

DJI's drones are used in many countries around the world, including Japan and the United States, and are said to hold 70% of the global market share. **DJI's drones incorporate U.S. semiconductors** and other components, which **will become more difficult to procure. This is likely to have an impact on Japanese companies that use the DJI's products to inspect infrastructure and factories.**

The Trump administration has been pushing for a ban on DJI because of fears that its drones, which can take aerial photos, could be used by the Chinese government for espionage. U.S. President-elect **Joe Biden is determined to take a hard line on China's human rights violations, and it is highly likely that sanctions will continue.**

(ellipsis)

Promoted business strategies as planned

Implemented the four new business strategies announced in the mid-term management direction. While some restrictions on the movement of people, ACSL has been able to achieve the results as planned.

New business strategy

Development of application-specific drones

Commercialization of small aerial drones (for government procurement and the private sector), medium logistics drones (Level 4 compliant), smokestack inspection drones, and enclosed environment inspection drones

Introduction of subscription model

Subscription-based fixed income/recurring sales model to be introduced to meet various customer needs, in addition to one-off drone sales

Full scale entry into ASEAN region

Establish an office in Singapore, the core city in the ASEAN region, and hire local talents to conduct development and sales activities, and begin full-scale overseas expansion

Technology procurement through CVC

Establish CVC (or equivalent function) and actively procure technologies with potential for technology synergies, such as AI, blockchain, security, image processing and sensors

Progress

Developing **small aerial drone, smokestack inspection and enclosed environment inspection drones for launch in FY2021**. Successful on-site demonstration with a 5 kg payload drone

Expected to **establish a track record for trials** of a wide range sales promotion models **by the end of the current fiscal year**, including subscription, rental, and leasing

While restrictions on the movement of people, **preparations are being made to expand into India, Singapore**, and other countries for ASEAN expansion.

Established CVC in December 2020 for technology collaboration and is actively engaged in sourcing activities

Steps towards the launch of an ACSL application-specific drones

After identifying and prioritizing use case, ACSL is developing application specific drones with major customers and developing Go-to-Market strategy



Three application-specific drones are expected to launch in FY21

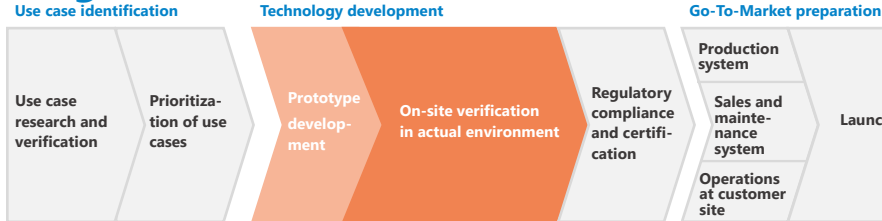
ACSL is proceeding each steps toward the launch of the four application-specific drones announced in “ACSL Accelerate FY20” in next fiscal year and progress is on track

Applications

Progress

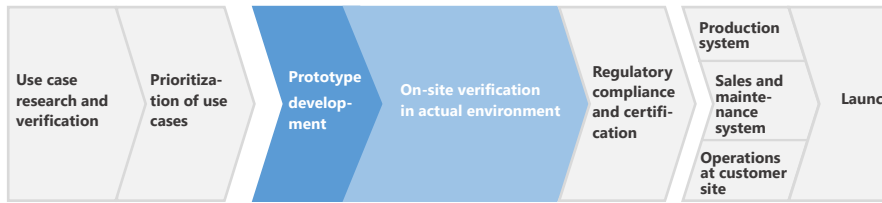
Status

Small aerial drones



- Completed development of a new drone prototype and initial evaluation is underway
- Building sales and production systems in parallel, aiming for the launch in FY2021 Q3

Delivery (Level 4)



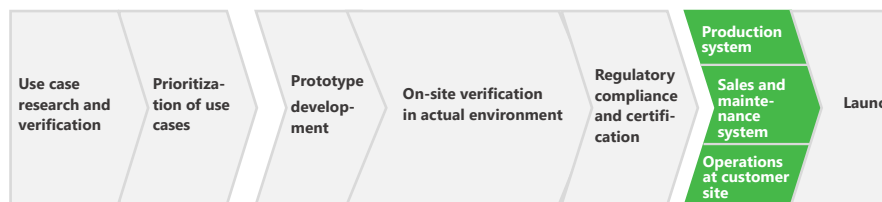
- Verified 5kg payload prototype usage in demonstrations with ANAHD, AIN HOLDINGS , SEVEN-ELEVEN JAPAN and NTT DOCOMO to verify its effectiveness
- Conducted requirement definition for new drone based on feedback

Smokestack inspection



- Conducted on-site demonstrations in actual environments and got satisfactory results
- Building evaluation and production system for initial shipments in FY2021 Q2

Enclosed environment inspection



- Final stage of mass production prototype development
- Building sales and mass production, aiming for the launch in FY2021 Q2

Delivery : Successful site demonstration with a 5 kg payload drone

Conducted on-site demonstration of a 5 kg payload delivery drone as actual environment with ANAHD

Successful flight a total of 65 times, more than 160 km in four days

Project background

- **ACSL has conducted Level 3 demonstrations in the delivery area with a number of clients**
- Payload of current ACSL drone is about 3kg
- **For social implementation**, capability of 20 km flight distance **with 5 kg payload** is essential
- **Developed prototype of 5 kg payload delivery drone** based on the on-site verification results
- Will continue to conduct further on-site demonstration with prototype delivery drone , aiming for social implementation

Project overview

- **Conducted on-site demonstration of a 5 kg payload delivery drone prototype in actual environment with ANAHD**
- Demonstrated an immediate delivery service of daily necessities and prescription drugs
- **Succeeded 65 times flights, in total more than 160 km, in four days**



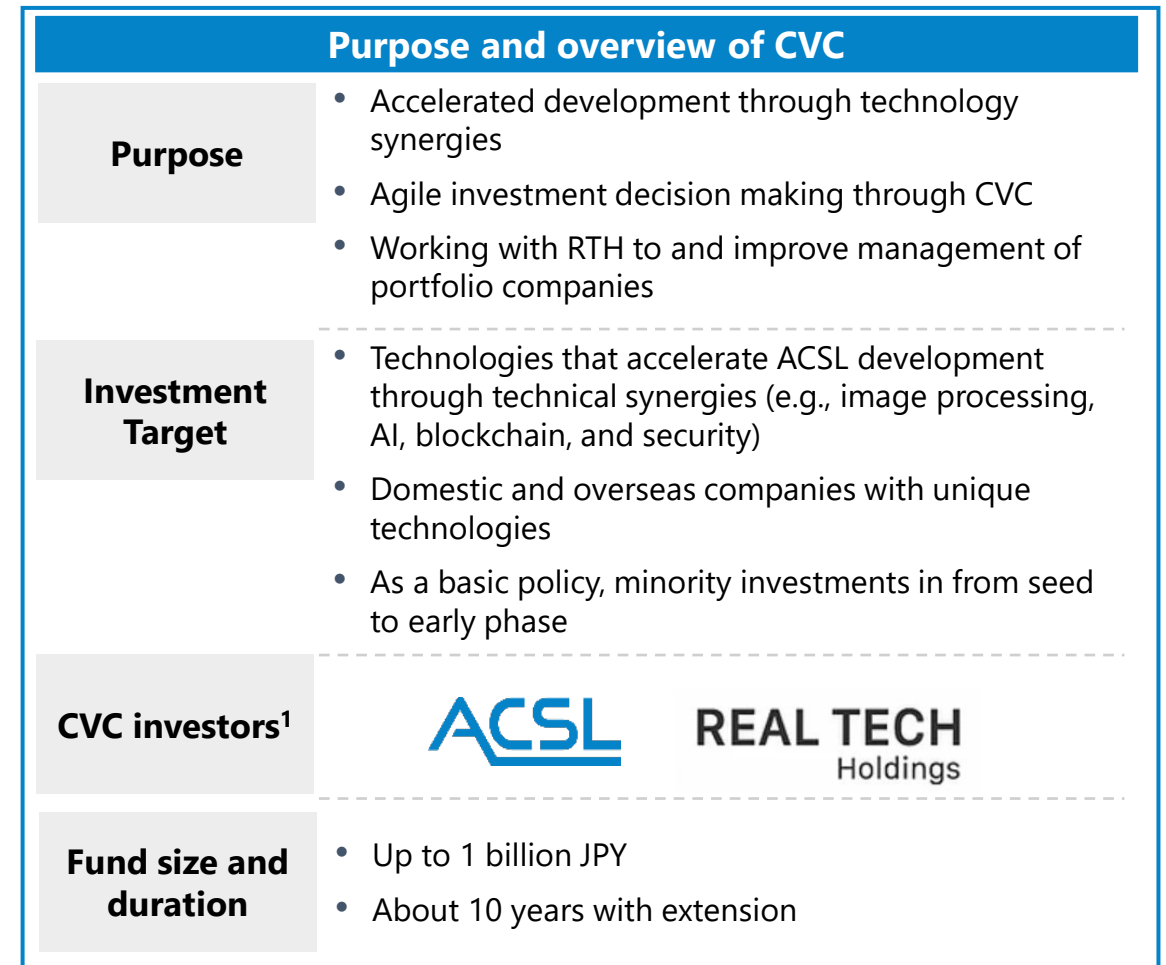
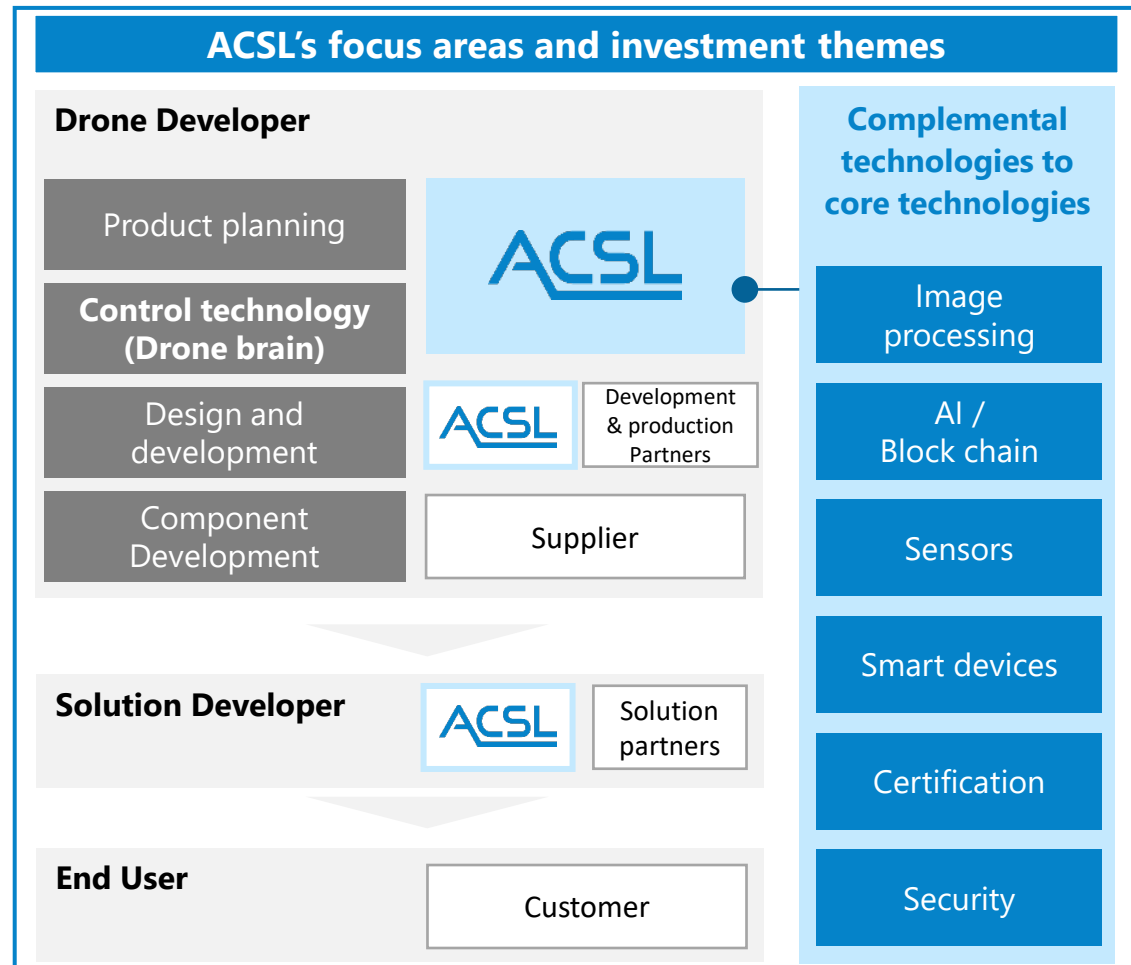
5 kg payload delivery drone prototype



Cargo transportation in on-site demonstration











Corporate venture capital for technology synergies

Established a corporate venture capital (CVC) to realize technological synergies and accelerate development through investment in domestic and overseas companies



Other Business Highlights

Collaborating with existing and new customers in demonstration and developing of application specific drones
Development and production systems for mass production is also in progress

Oct.	Delivery AIRDs and JUAVAC began offering specialized curriculum in drone delivery	
	Delivery Wind and Flow Platform selected ACSL project as a "Specific Use Proposals"	
	Delivery Built a remote island model of telemedicine using drone logistics and other services in Goto City, Nagasaki, and ACSL provided delivery drones and operational support.	      
	Inspection of river revetments degradation with Yachiyo Engineering	
Nov.	Selected for Open and Free Satellite Data Demonstration Project	
	Delivery Started collaboration with Aerodyne for continuous flight in ASEAN	
	Decided to establish corporate venture capital for technology synergies	
	Delivery Started delivery drone development for social implementation with VFR	VFR Inc.

Nov.	Started free supporting for disaster areas with ACSL drones	
	Launch of drones equipped with an ultra-high resolution camera	
Dec.	Development of drone emulator using VR with RIKEI and VFR.	 VFR Inc.
	Delivery Successful site demonstration with a 5 kg payload drone with ANAHD	
	Started hybrid technology drone development with AeroGLab	
	Provided solutions for wind turbine inspection with Arbito	
Jan.	Indoor DX solutions using drones with Blue innovation	 Blue innovation
	Launched ToA Project to achieve drone social implementation for Level 4 in 2022 with SUNDRED, SENSYN ROBOTICS, PHB Design, VFR, and RIKEI	    

Development of hybrid drone with AeroGLab

Started hybrid technology drone development with AeroGLab

Aiming social implementation of the drone capable of long time and long-distance flight

Project background

- Batteries used in most drones have a **flight time of about 30 minutes at most**
- Difficult to fly for long time and long-distances due to **the needs for battery exchange for flights longer than 30 minutes**
- Development of **long time and long-distance flight** drones is also an **important factor for Level 4 flight**
- AeroGLab(AGL) has developed "AeroRange PRO", a hybrid drone with **maximum flight time of 180 minutes, flight range 120 km, and payload of 10 kg**

Joint development with AGL

- In the development of "AeroRange PRO", ACSL **developed and provided ACSL flight controller** for AGL
- Strengthening collaboration through **contract for the development and manufacture of AGL's hybrid technology drone**
- Aiming social implementation of **drones capable of long flight time and long-distance**



Launch of the "Take Off Anywhere (ToA)" Project

Launched ToA Project to achieve drone social implementation for Level 4 in 2022 with SUNDRED, SENSYN ROBOTICS, PHB Design, VFR, and RIKEI

Project background

- **Significant costs and time consumption when using drones** for industrial applications
- Require building the **drone operation system and designing the whole system for actual social implementation**
- Identification of the issues for social implementation and **working together for all stakeholders as a team is necessary to tackle the problem**



Project overview

- Send clear **information of potential and challenges of drone technology, develop public knowledge, and building partnerships with the aim of reliable social implementation** of drones,
- **Jointly develop necessary technologies for social implementation**



Development of drone emulator

Development of drone emulator¹ using VR technology with RIKEI and VFR.

Aims to Improve development efficiency with emulator compatible with inspection drone camera

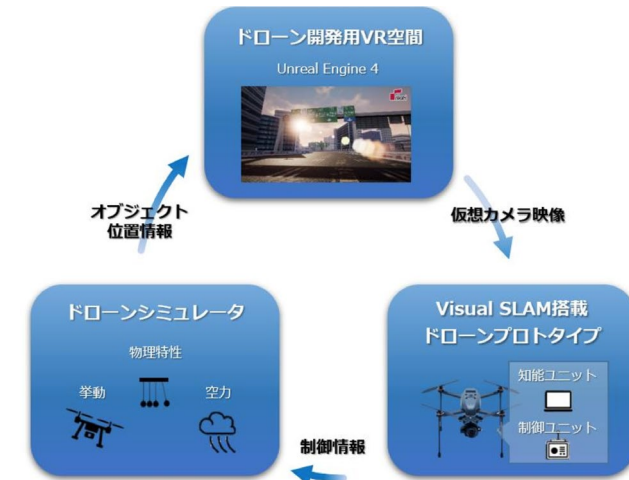
Project background

- For the development of industrial drones, **on-site verification at actual environments** is important
- Traditional emulators, which are **time-consuming to demonstrate and not supporting Visual SLAM² cameras**
- Started **development of drone emulator** based on Rikei's VR technology and **drone technology and demonstration knowledge of ACSL and VFR**
- Aim to develop an emulator compatible with **inspection drone cameras to improve drone development efficiency**

1: Emulator : A system that uses software instead of actual equipment to conduct verification for development

2: Visual SLAM : Simultaneous Localization and Mapping

Project overview



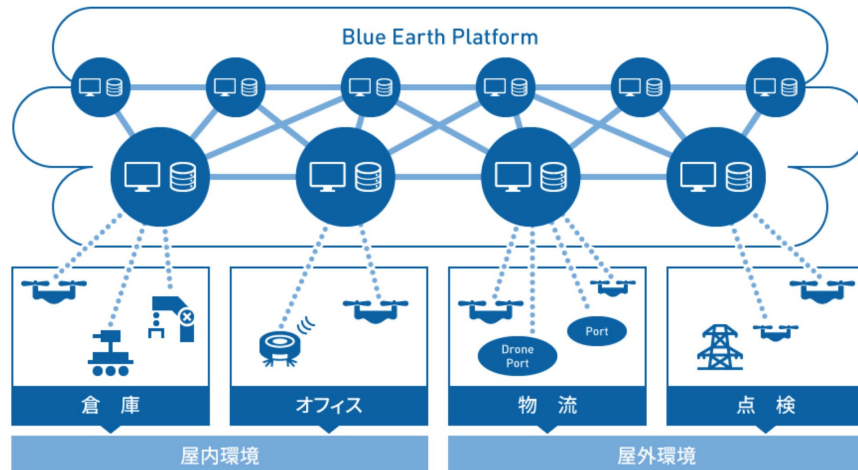
- ✓ Realize buildings, weather, and drone control models, etc. in VR field
- ✓ Place virtual cameras based on camera characteristics in VR
- ✓ Quickly generate enormous visual data required for Visual SLAM development

Indoor DX solutions using drones with Blue innovation

Joint development of a DX solution for indoor work by collaborating drones and Blue Earth Platform with Blue innovation

Overview of joint development

- **Collaboration of drone with ACSL's autonomous control technology and Visual SLAM and the Blue Earth Platform**, a software platform that enables multiple autonomous mobile robots to cooperate and collaborate to conduct their tasks



Joint solutions

- **Automated Plant Inspection Solutions**
 - Fast and real time analysis of numerous image data using 5G
 - Realizing higher efficiency and lower costs in inspections
- **Warehouse Inventory Management Solution**
 - Data acquisition by drone with RFID reader
 - Realizing digitalization and efficiency of inventory operation in warehouses



Provided solutions for wind turbine inspection with Arbito

Provided a total solution of AI, ACSL drones, and experts in wind turbine inspections to automate whole processes from image capture to analysis, significantly reducing time and improving inspection accuracy

Project background and Joint solution

- **Wind turbines need to be inspected regularly** to check damaged parts
- Inspection method with ground-based camera needs to **stop the wind turbine and change the angle of the blades** to capture all blades
- **There are Issues** in **inspection costs and safety risks** due to work at high place
- Current drones are inadequate in terms of **durability against strong winds, usability, and connection of acquired data to the inspection system**
- **Provided a total solution** for wind turbine inspection though collaboration of **ACSL's autonomous drone and Arbito's AI service**

AI x Domestic drones x Experts

- Using secure and reliable domestic **drones equipped with ACSL's proprietary flight controller**
- Autonomous flight along wind turbine towers and blades **does not require for skilled drone pilots**
- **Able to analyze numerous data inspection images quickly and inexpensively with Arbito's AI**
- Analyzed AI data is **cross-checked by experts to create a final report**



Launch of drones equipped with ultra-high resolution camera

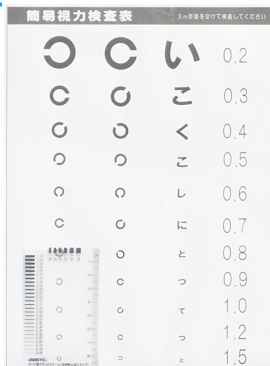
Launch of infrastructure inspection drones equipped with Phase One's cameras, which enable ultra-high resolution aerial photography and capture large areas in a short time

Project background

- **Low-quality images taken from a distance with current drone cameras** were **unable to be used in inspection** (e.g., structures that cannot be approached)
- **100-million-pixel ultra-high-resolution cameras** of Phase One (Denmark) enables drones to capture **wide-area, high-resolution images while in flight**



Image of an object taken
10 meters away



Recognizes 0.05mm
from 10m

Features of ultra-high-resolution camera drone

- Ultra-high resolution camera **enables precise imaging**
- **Shutter can be controlled** at any waypoint or interval and adjusted from the ground control station, even **autonomous flight of drone**
- **Acquiring high-resolution images with a wide dynamic range**, ideal for three-dimensionalization, AI judgment, etc.
- Integrated molding of the arm and body **improves not only strength but also dustproof and waterproof performance**



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Impact of Infection Expansion of COVID-19

In this fiscal year, decided to postpone projects, suspend demonstrations and shift to the next fiscal year due to COVID-19. The demand for unmanned solutions and efficiency improvement in operation is expected to grow as a macro trend

Short-term infection

Customer

- Some sales activity restrictions due to prolonged of COVID-19 and the state of emergency declaration
- Postponed some of projects planned this year to the next fiscal year. Some of scheduled demonstration tests were suspended or shifted to the next fiscal year, prioritizing customer safety

Operation

- Activity restrictions such as sales, development, and on-site demonstration due to COVID-19 expansion

Finance

- Negative impact on financial performance
- Impairment risk caused by sluggish business activities of overseas portfolio companies

Mid-term infection

- The demand for unmanned and efficiency improvement in operation is growing as a macro trend
- Accelerated social implementation of remote work, non-contact etc. as a new lifestyle
- Drone utilization continues to be considered positively in all customers
- Demand for secure drones grows

- Enhance human resources for future business expansion
- Establishment of mass production system

- Medium-term market expansion and growth story has not changed
- Sufficient cash holdings for operation

Financial Highlights

Sales decreased from the previous fiscal year due to projects postponed, demonstrations suspended and shifted to the next fiscal year. Sales booked 125 MM JPY and profit posted net loss of 812 MM JPY in Q3

[MM JPY]

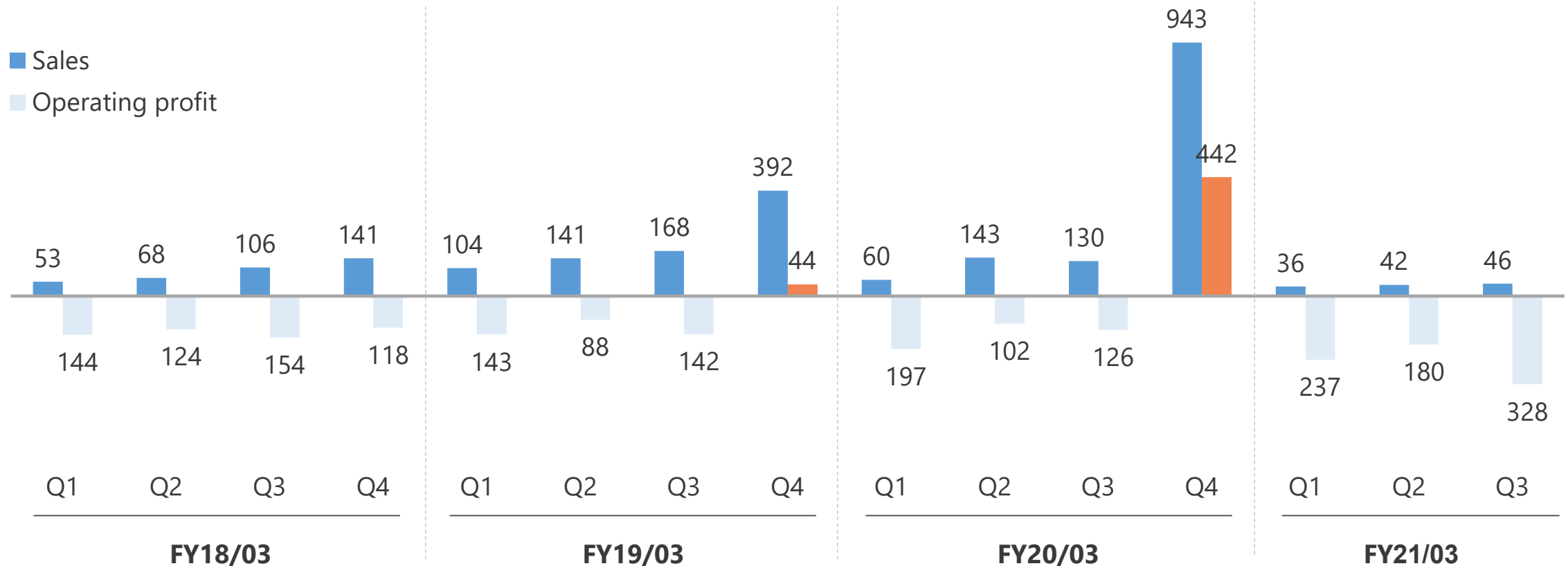
	FY21/03 Q3 ¹		FY20/03 Q3	FY20/03 Annual
	Actual	YoY Increase/Decrease	Actual	Actual
Sales	125	▲62.6%	335	1,278
Gross profit	▲26	-	152	808
Gross profit margin	▲21.2%	-	45.6%	63.2%
Operating income	▲745	-	▲426	15
Ordinary income	▲688	-	▲209	231
Net income	▲812	-	▲212	239

1: ACSL has shifted from non-consolidated to consolidated financial results from FY21/03 Q3

Sales and Operating profit by quarter

As is typical year, sales is small in Q1-Q3 and tend to be skewed toward Q4. In this fiscal year, ACSL postponed projects, suspended demonstrations and shifted to the next fiscal year due to COVID-19

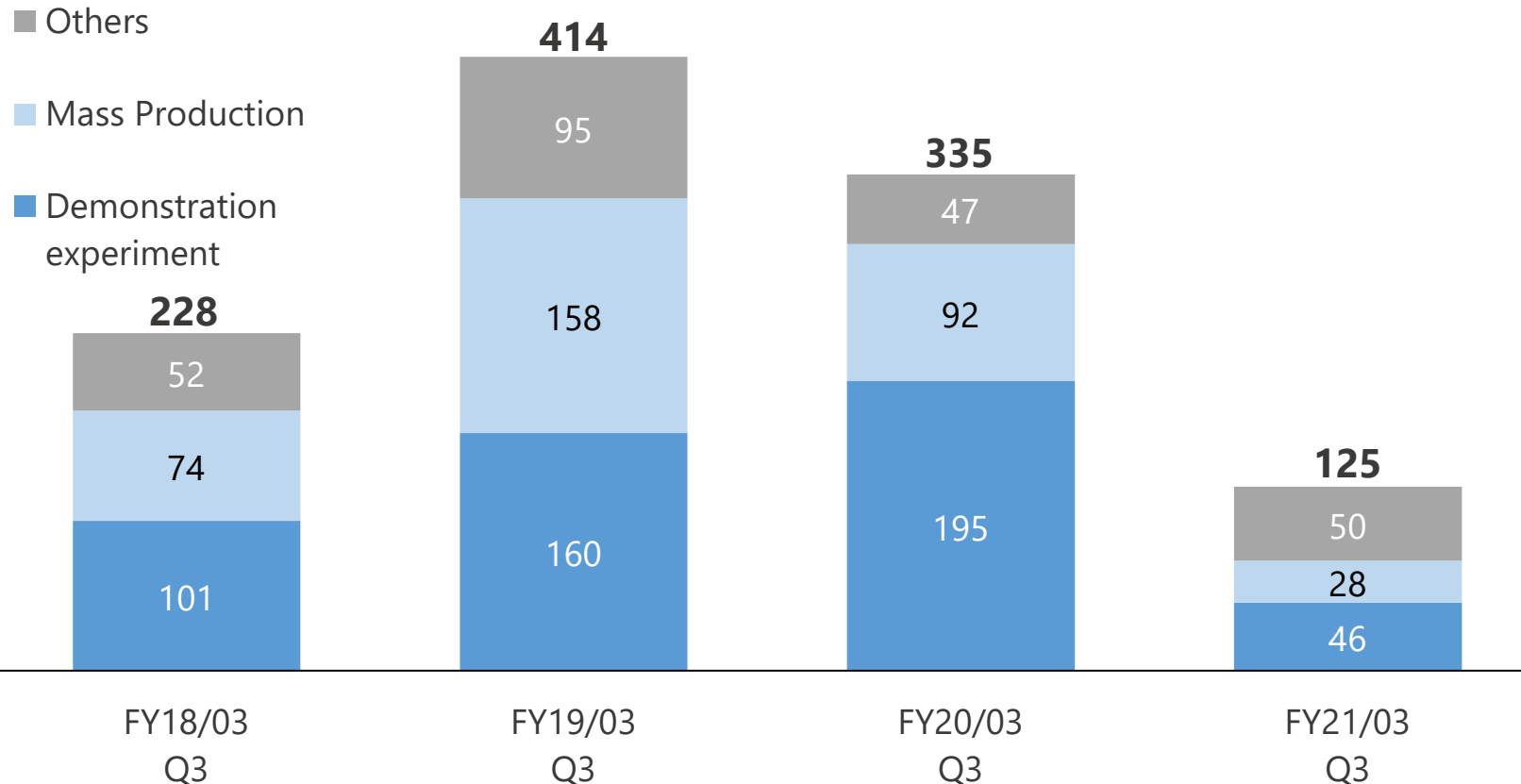
Sales and Operating profit by quarter
[MM JPY]



Sales transition

Demonstrations and platform drone sales decreased due to projects postponed, demonstrations suspended and shifted to the next fiscal year. "Others", including national projects, remained the same

Sales by STEP¹
[MM JPY]

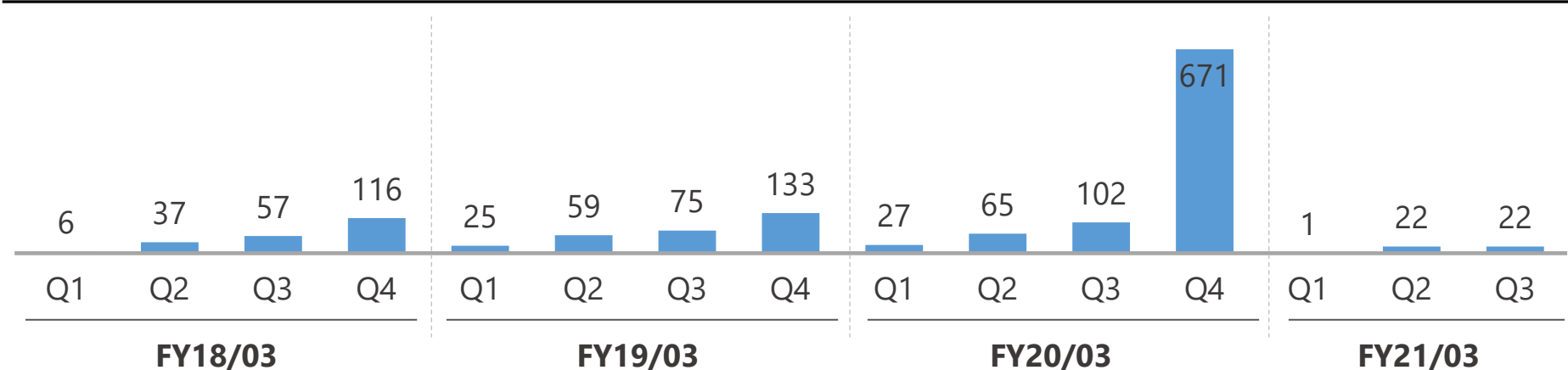


1: Solution development (STEP1, 2) and Mass production (STEP3, 4) were respectively renamed as demonstration experiment and platform drone sales from FY21/03 Q1.

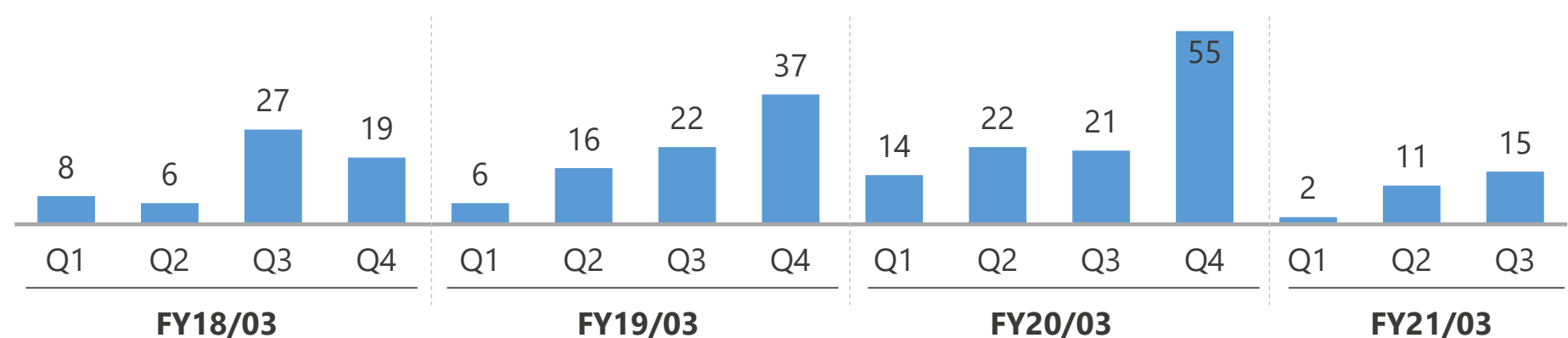
Quarterly change in the demonstration experiments

As is typical year, sales were small in Q3. ACSL postponed projects, suspended demonstrations and shifted to the next fiscal year due to COVID-19, resulting in a decline in revenue from the previous fiscal year

Quarterly sales (MM JPY)



Quarterly number of deals



Demonstration experiment ¹

Proof of Concept

- Private concept verification (PoC) of feasibility of drone use ideas
- Use of ACSL platform drones

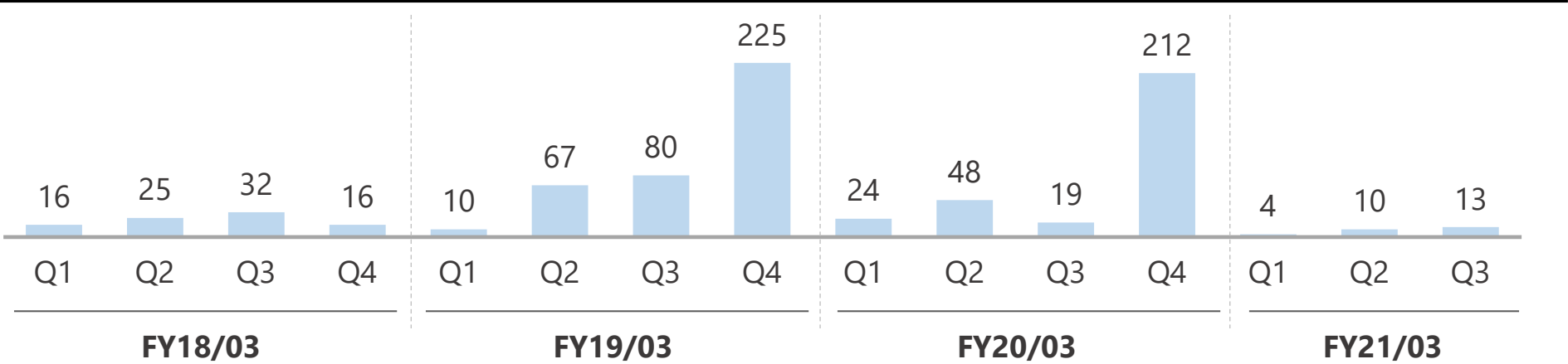
Customized development

- Detail test designs
- Development of customized drones and systems

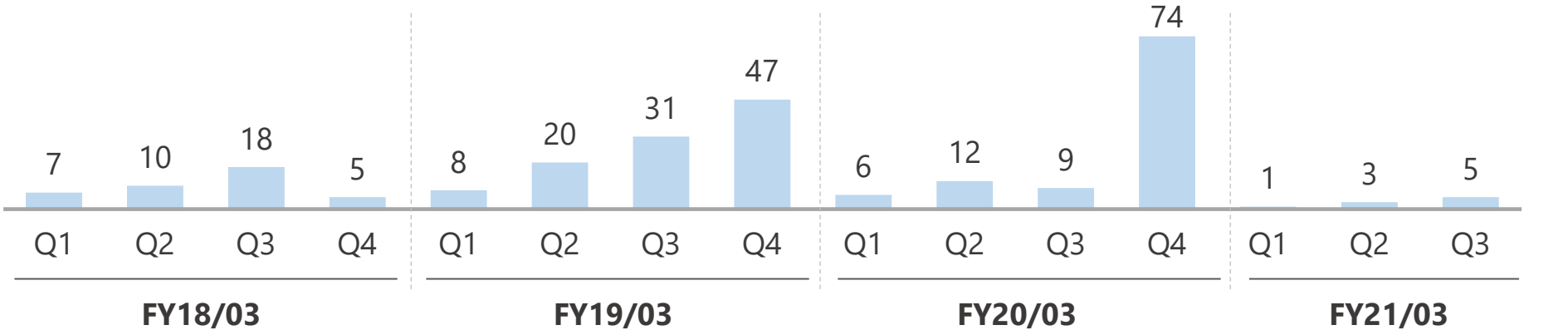
Platform drones sales

Sales are usually small in Q3 of each year. ACSL postponed projects, suspended demonstrations and shifted to the next fiscal year due to COVID-19 and it leads to the decrease in platform drone sales

Sales by quarter (MM JPY)



Unit by quarter (Units)



Platform drone sales ¹

- Sales of standard and general-purpose aircraft
- Production and supply of improved aircraft to customers based on standard aircraft

1: Mass production (STEP3, 4) was renamed to platform drone sales from FY21/03 Q1.

Others

Sales of the national project by Q3 was 21 MM JPY

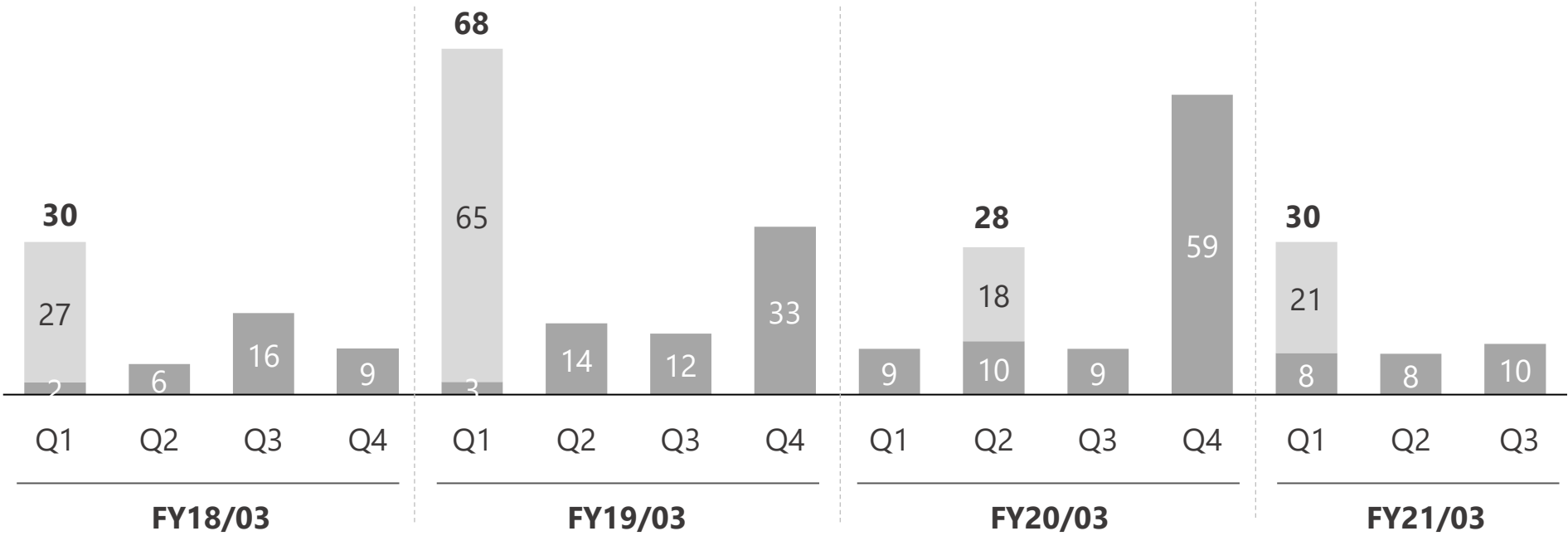
Maintenance services remained at the same level as the previous year

Other Sales (MM JPY)

- National Projects
- Maintenance services, etc.

Others¹:
Maintenance services

- Sales of drone components and modules
- Repair service
- Some national projects



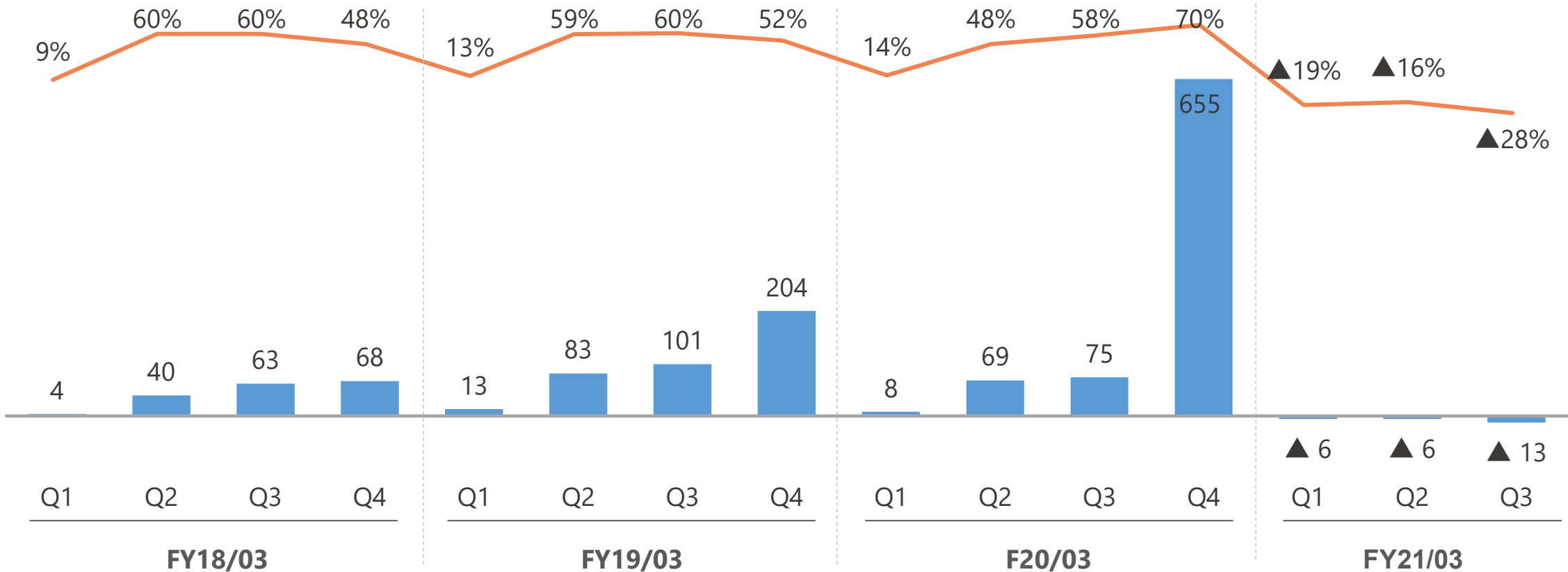
1: For national projects, subsidies received are generally posted as non-operating income. On the other hand, some projects whose main purpose is to conduct commissioned experiments are recorded as sales.
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Gross profit

Q3 Gross profit was ▲13 MM JPY

Fixed costs were not fully covered and booked loss due to the small sales

Quarterly gross profit and gross profit margin
[MM JPY]



R&D Expenditure

Even under the influence of COVID-19, core R&D activities continued and increased R&D expenses compared to FY20/03 Q3 as an upfront investment for the next fiscal year and beyond

Quarterly R&D Expenses and Sales Ratio
[MM JPY]

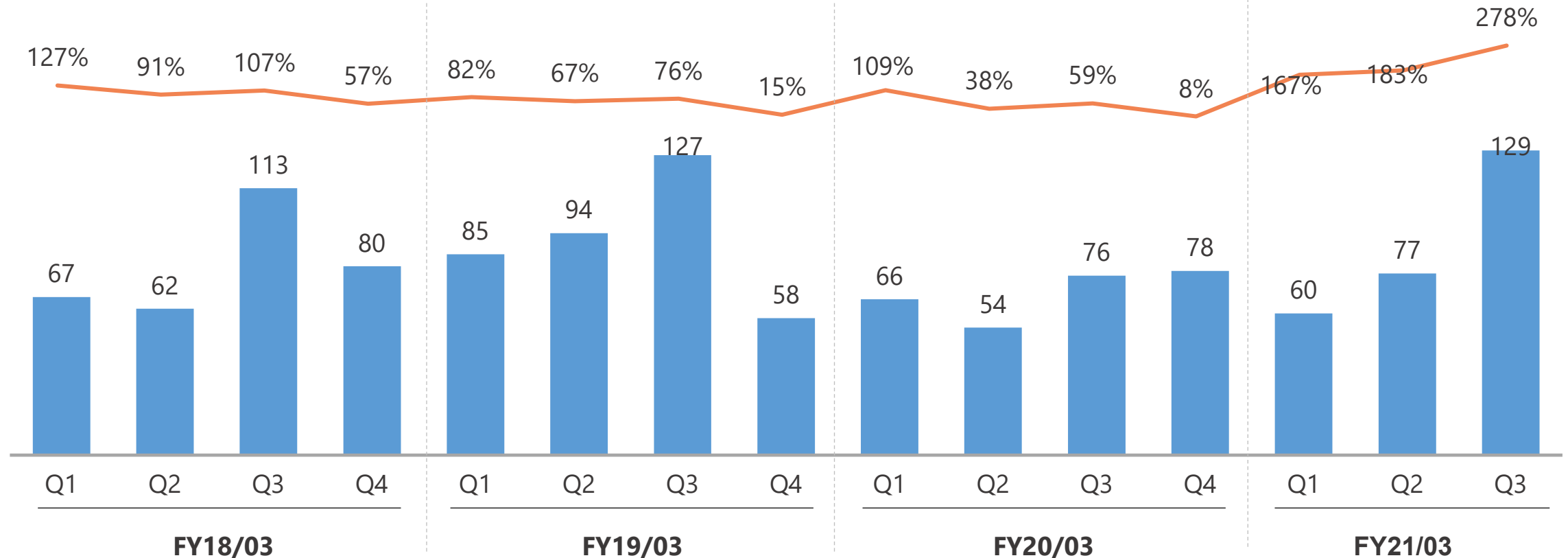


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FY21/03 Forecast

Sales fell short of the target due to the expansion of COVID-19

R&D activities continued as upfront investment to realize the mid-term management direction.

[MM JPY]

	Revised forecast	Previous forecast	Difference	Difference factors
Sales	600	1,400~1,700	▲800~1,100	Postponed projects, suspended demonstrations and shifted to the next fiscal year due to COVID-19
Gross profit	70	800	▲730	Decrease in absolute value due to sales decrease
Gross profit Margin	12%	57%	▲45ppt	Increase in fixed cost ratio to sales due to sales decrease
R&D	650	410	+240	Continued as upfront investment to realize the mid-term management direction (Switch to in-house development of development from client projects)
Operating Income	▲1,200	▲250~0	▲950~▲1,200	
Net Income	▲1,300	▲230~50	▲1,070~▲1,350	Impaired 86MM fixed assets due to revised forecast. Portfolio companies are at risk of impairment but not impaired at Q3

Numerical targets

While sales decrease significantly in FY20, ACSL will continue to develop application-specific drones.

In FY22, sales of application-specific drone are expected to drive sales growth

[JPY]	FY17	FY18	FY19	FY20 (Forecast)		FY22 (Mid-term Management Direction)
Sales	0.37 bn	0.8 bn	1.2 bn	0.6 bn		5.5 bn
Small aerial photo (low ASP)	-	-	-	-		1.0 bn
Other application-specific drones (high ASP)	-	-	-	-		1.0 bn
PoC and Development Sales of Platform drones	0.37 bn	0.67 bn	1.2 bn	0.48 bn		3.0 bn
Other		0.13 bn	0.1 bn	0.12 bn		0.5 bn
Gross profit Margin	48%	53%	63%	12%		50%
R&D	0.32 bn	0.36 bn	0.27 bn	0.65 bn		0.8 bn
Operating Income	▲0.54 bn	▲0.3 bn	0.01 bn	▲1.2 bn		0.75 bn

Sales breakdown

	指標	FY17 (18/03)	FY18	FY19	FY20 (Forecast)		FY22 (Mid-term Management Direction)
Sales of application-specific drones							
Small aerial photo (low ASP)	Unit	-	-	-	-		1,000~
	Value (100mn JPY)						10
Other application-specific drones (high ASP)	Unit						300~
	Value (100mn JPY)						10
Development of application-specific drones							
PoC and Development	# of project	60	81	112	-		-
	Value (100mn JPY)	2.1	2.9	8.6	~3		20
Sales of Platform/ Evaluation drones	Unit	40	106	101	~40		~300
	Value (100mn JPY)	9.0	3.8	3.0	~2		10

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Management Team



CEO

Dr. Hiroaki Ohta

Ph.D. from Kyoto University. Assistant professor at Department of Aeronautics and Astronautics, Kyoto University, followed by research scientists at University of California, Santa Barbara. Also served as Technical Advisor for a start-up in Silicon Valley. McKinsey & Company from 2010. Joined ACSL as in July 2016.



**President
& COO**

Satoshi Washiya

M.S. of Architecture from Waseda University. Served both domestic and multinational companies in corporate wide transformation projects at Tokyo and Stockholm office of McKinsey & Company. Joined ACSL in July 2016.



CFO

Kensuke Hayakawa

M.S. of Management of Technology from Tokyo institute of technology. Implemented operational improvement/transformation of Portfolio companies at KKR Capstone. Joined ACSL as CFO in March 2017.



CTO

Dr. Chris Raabe

Ph.D. from University of Tokyo. Embedded software engineer at Boeing from 2006. Assistant professor at Department of Aeronautics and Astronautics, University of Tokyo from 2014. Joined ACSL as CTO in April 2017.

**External
Director**

Masanori Sugiyama

**External
Director**

Shinichi Suzukawa

**Audit & Supervisory
member**

Akira Ninomiya

**Audit & Supervisory
member**

Hideki Shimada

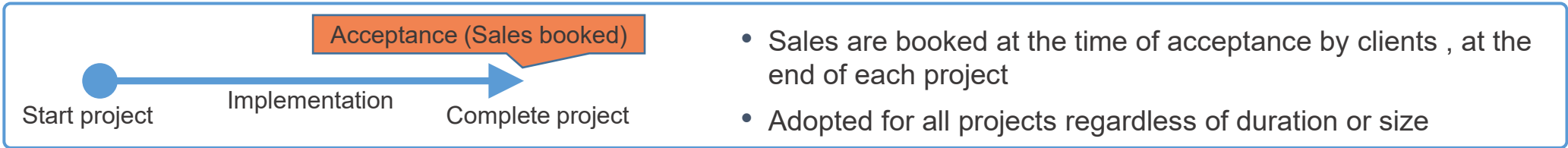
**Audit & Supervisory
member**

Takeshi Ohnogi

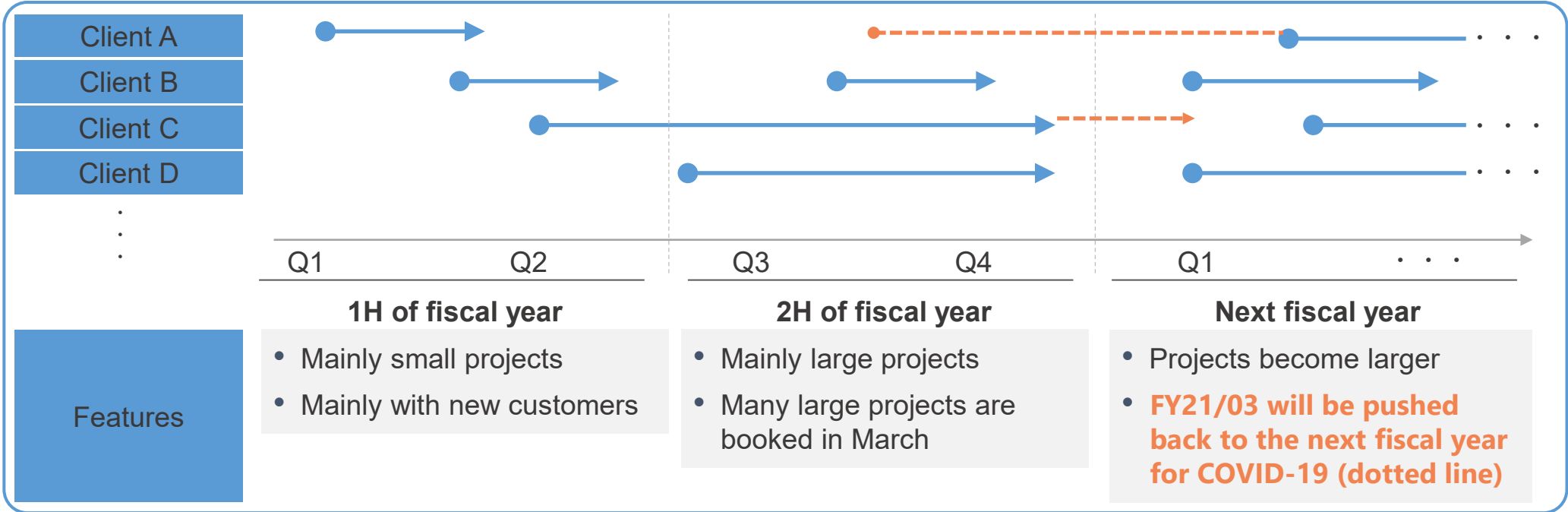
Sales Recognition and Seasonality

Sales are booked upon acceptance by client (at end of project). Seasonality increases towards 4Q driven by large-scale projects, mainly from existing customers

Sales Recognition








Large-scale projects and seasonality



SDGs Initiatives

Promoting the SDGs by providing drone solutions in the delivery and disaster fields, which ACSL is focusing on

Issues	ACSL Approach	Specific examples	SDGs Target
Delivery <ul style="list-style-type: none"> ▪ Increase in logistics volume due to expansion of EC ▪ Difficulty in maintaining existing logistics due to declining labor force 	 Development of delivery drone	 Conducted a demonstration on delivery between remote islands in Goto City, Nagasaki with ANAHD	  
	 Demonstration for drone logistics	 Conducted a demonstration of drone delivery in the Nishi-Okutama, Tokyo, with Japan Post	
		 Development of delivery drone with VFR	
Disaster <ul style="list-style-type: none"> ▪ Need for rapid disaster response in the event of natural disasters ▪ Local governments are burdened with disaster response cost 	 Development of drones for support disaster areas	 Conducted a survey as initial action using a drone during a rain disaster in Nagano	  
	 Free offer of ACSL's drones to disaster areas	 Conducted a survey to check the situation using a drone during a rain disaster in Kyusyu	
		 Transported emergency supplies in Nishitama-gun, Tokyo, with ANAHD and NTT DOCOMO	

Started supporting for disaster areas with ACSL drones

Started supporting disaster areas through free offer of ACSL's disaster drones.

Contribute development of small aerial drones and delivery drones to support disaster areas

- Decided to start supporting disaster areas through free offer of disaster prevention and disaster-specification drones in order to solve the problems faced by local governments and other organizations
- ACSL has a proven track record transporting emergency supplies based on a request from the Tokyo Metropolitan Government in October 2019
- Despite clear benefits of using drones, some organizations give up purchase due to issues such as maintenance costs
- Small aerial drones and delivery drones, highlighted in "ACSL Accelerate FY20," are used in disaster management and supporting disaster areas



Emergency supplies transported in Tokyo in October 2019
(Tokyo Metropolitan Government, "Providing Relief Supplies by Using Drones")

Balance Sheet

[MM JPY]

	FY21/03 End of Q3		FY20/03 End of Q3	FY20/03 End of the fiscal year
	Actual	YoY Increase/Decrease	Actual	Actual
Current Assets	3,454	▲19%	4,246	4,818
Cash	2,566	▲33%	3,808	3,775
Fixed Assets	965	+141%	400	449
Current Liabilities	181	+67%	109	233
Long-term Liabilities	0	-	0	0
Total Liability	181	+67%	109	233
Net Asset	4,238	▲7%	4,538	5,034
Total Asset	4,420	▲5%	4,647	5,268

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