

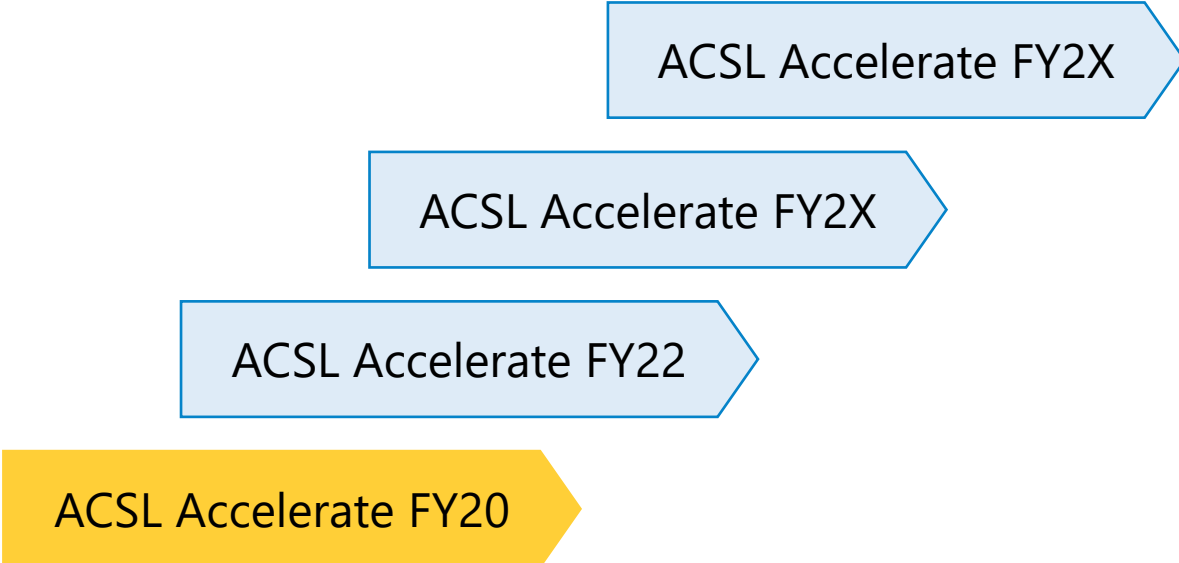


# Financial Results material for 2021/12 Second Quarter

ACSL Ltd.  
November 11, 2021

機密・専有情報  
ACSLによる個別の明示的な承諾を得ることなく、この資料を使用することを固く禁じます。

In order to realize the "Master Plan," announced in August 2020 as ACSL vision for the next 10 years, ACSL has established "ACSL Accelerate," a rolling medium-term management policy that adapts to the changing business environment



## "Master Plan" What we should aim for in 10 years (2030)

- 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

Business strategy in “ACSL Accelerate FY20” is progressing well, and cumulative Q2 sales reached a record high, and forecast was revised upward. The launch date of a small aerial drone for government procurement has also been determined.

## **Upward revision of sales forecast for this fiscal year**

Based on the sales results and backorder at 2Q end, earnings forecast for the current fiscal year has been revised upward from 350 million yen in sales to 480 million yen in sales

## **Small aerial drones release date was determined**

Announced that one of its application-specific drones, a small aerial drone designed for government procurement, will be put on the market in December 2021. Sales are expected to be booked from following fiscal year.

# Small Aerial Drone Teaser Site Released for Gov Procurement

On November 1, 2021, the teaser website for “Secure Domestic Drones to Support the Future” was released, and the sales of a small, high-security drone developed under the NEDO <sup>1</sup>project “Development of Safe and Secure Drone Basic Technology” are scheduled in December.

2020  
September

## Government announces procurement policy for security-enabled drones

The government announced its policy of "limiting procurement to drones with guaranteed security" and "promptly replacing existing drones."<sup>3</sup>

2021  
November

## Teaser site for "Secure Domestic Drones for the Future" released

Announced that it will launch a high-security, low-cost standard drone for government procurement, etc., in December 2021, which is being promoted under the NEDO project



Teaser site released



Small Aerial  
Drones

1: New Energy and Industrial Technology Development Organization (NEDO)  
2: "Outline of the Draft Law Concerning the Promotion of the Development, Supply and Introduction of Specified Advanced Information and Communications Technology Application Systems," February 19, 2020, Ministry of Economy, Trade and Industry  
3: "Policy on the Procurement of Unmanned Aerial Vehicles by Government Agencies, etc.," September 14, 2020, Liaison Conference of Relevant Ministries and Agencies on Small Unmanned Aerial Vehicles

# Small aerial drones attract attention even before its release

The small aerial photography drone is a drone that responds to the recent demand for security measures and has attracted a lot of media attention and high expectations even before its release.

## Nikkei Electronics Inc. <sup>1</sup>

Recently, **concerns about the security of Chinese-made drones have been growing in Japan among government procurement projects and private companies with infrastructure, such as power companies, and several organizations are working on projects to develop domestically produced drones.**

A prime example of this is the "Development of Safe and Secure Drone Basic Technology" launched in May 2020 by the New Energy and Industrial Technology Development Organization (NEDO). The objective of the project is to **design and develop standard drones that ensure safety and reliability to meet the business needs of the government, public sector, and private infrastructure operators,** and to foster an ecosystem to strengthen the competitiveness of Japan's drone industry.

In fact, **DJI products have been used in a number of Japanese government operations.** An executive of a domestic drone manufacturer said, "The reality is that DJI drones account for about 90% of the drones on the list of those granted flight permission by the Ministry of Land, Infrastructure, Transport and Tourism. Government officials felt a sense of crisis about this, and that's what led to the development of this product.

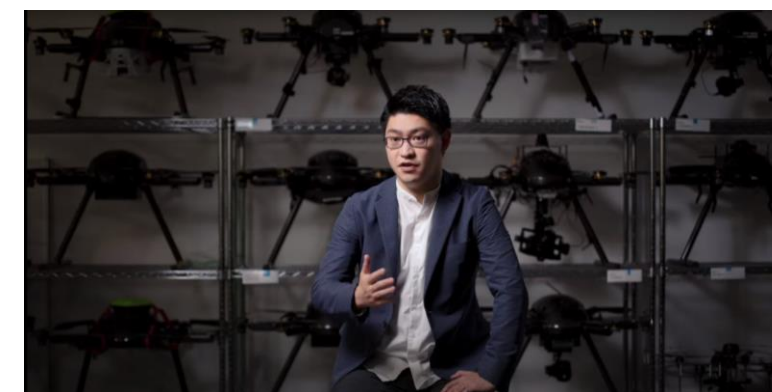
(Highlighted by ACSL)

## BBC World news

"The SRD (Secure Reliable Drones) project is a **national project to develop small aerial drones for government procurement in a short period of time.** In order to do this, we need to make decisions quickly and at the same time make things meaningful. The other four companies in the consortium **complement us in terms of mass production, quality control and quality assurance capabilities. It's when startups and large companies develop together that disruptive innovation can happen.**"

(President and COO Washya interview, highlighted by ACSL)

1: "Vehicle inspection system" to be introduced for drones to ensure safety in urban airspace," Nikkei Electronics, October 18, 2021.



**1** "ACSL Accelerate" and Business Highlights

**2** FY21/12 2Q (21/07-09) Results

**3** FY21/12 (21/04-12) ) Plan

**4** Appendix

## MISSION

**Liberate Humanity Through Technology**

## VISION

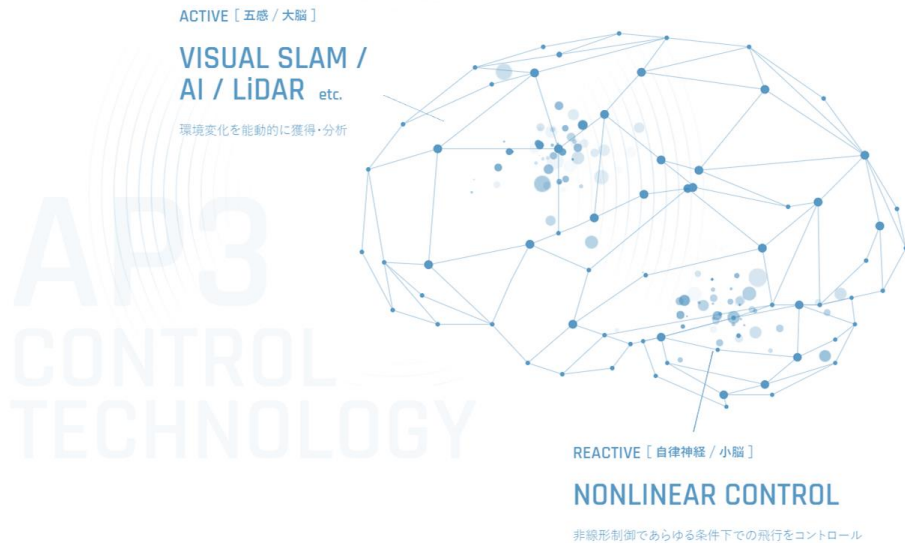
**Revolutionizing social infrastructure  
by pursuing cutting-edge robotics  
technology**

# ACSL is an industrial drone manufacturer pioneering drone market

ACSL is an industrial drone manufacturer developing application-specific drones through site visits, discussions, and demonstrations with customers to replace and improve operations, using proprietary autonomous control as its core technology.

## ACSL 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



## Knowledge through customer projects

Develop specific drones through verification of technical and economic requirement for each applications through discussions with customers and demonstrations in actual environments



Nihon Unisys, Ltd.





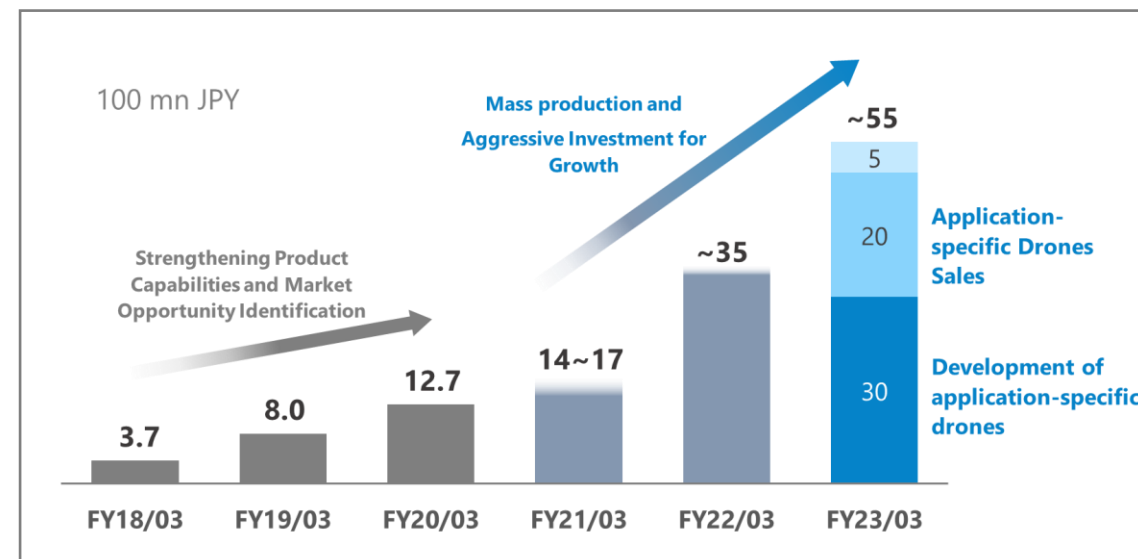
# Announced "ACSL Accelerate" in August 2020 to achieve market dev

In August 2020, ACSL announced "ACSL Accelerate", a plan consisting of a masterplan that defines what ACSL aims to be in 10 years, and a Mid-Term Management Direction (FY21/03-FY23/03) to realize the master plan.

## 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)
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## Sales in mid-term management direction (FY21/03-FY23/03)



\* FY21/03-FY23/03 sales are based on the mid-term management direction disclosed in August 2020.

# Medium-Term Management Policy and Current Progress



In response to the deregulation of Level 4 and the increasing demand for secure drones, the mid-term management policy has established four pillars of business strategy with the goal of "from a prototype factory to a mass production manufacturer."

	Strategies in Medi-term Management Policy	Progress
Development of application-specific drones	Commercialization of small aerial drones, medium delivery drones (Level 4 compliant), smokestack inspection drones, and enclosed environment inspection drones	<b>Commercialization of small aerial drone, closed environment inspection, and smokestack inspection has been completed</b> , and the aims to expand sales from 2022. Medium-sized logistics drone is underway through a series of demonstration tests.
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	<b>Announced the launch of a subscription model in May 2021.</b> Lowering the initial adoption hurdle to reach a wide range of customers.
Full-scale expansion into ASEAN and other Asian countries	Establish an office in Singapore, the core city in the ASEAN region, and India and hire local talents to conduct development and sales activities, and begin full-scale overseas expansion	<b>Established a JV in India in September 2021 to capture the huge market in India.</b> Preparing to enter Singapore in parallel.
Technology procurement through CVC	Establish CVC and actively procure technologies with potential for technology synergies, such as AI, blockchain, security, image processing and sensors	Established CVC in December 2020, and <b>invested in several companies including overseas companies</b> as of September 2021

# Market Changes and ACSL's Initiatives through Q2

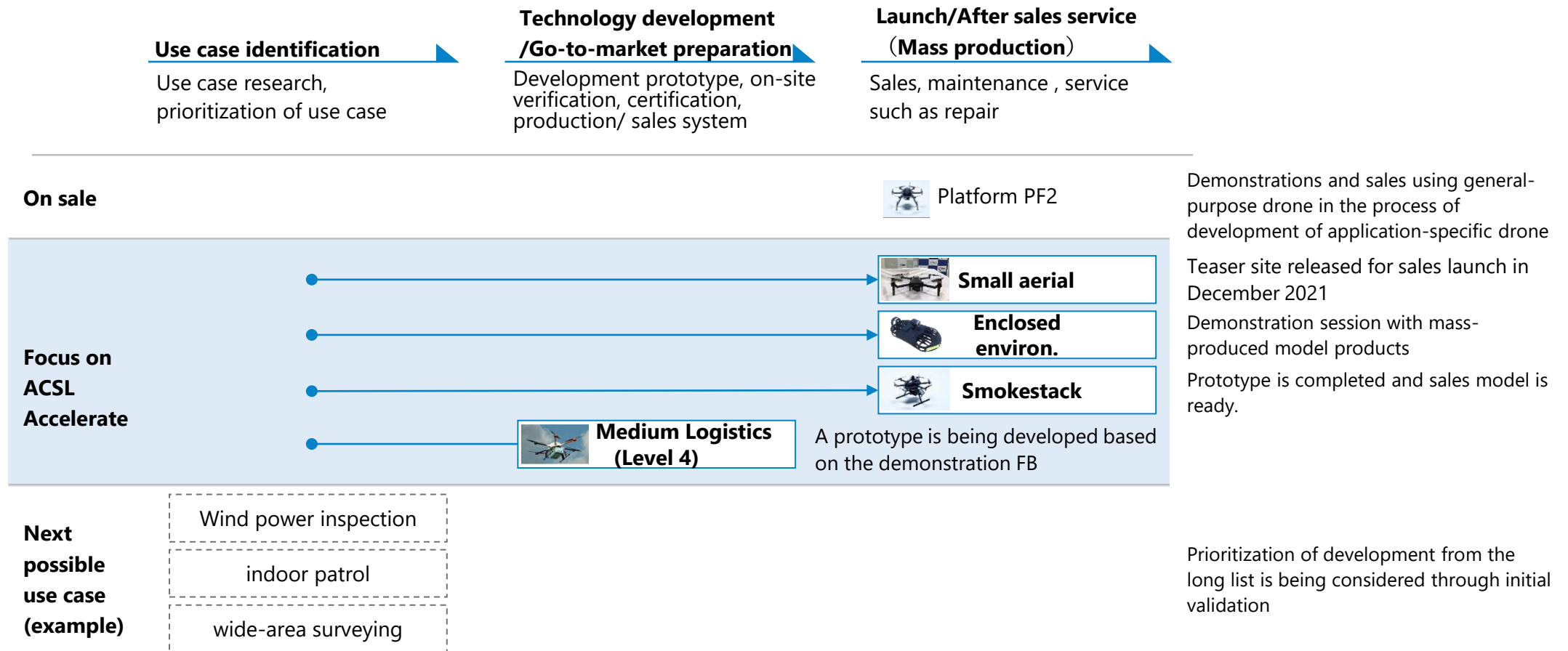
In Level 1 and 2, which are currently driving the market, social implementation of drones is progressing, while in Level 3 and Level 4, regulations and the development of application-specific drone are steadily progressing, and a huge space and market that can be used by drones is expected to emerge in the future.

- Development of application-specific drone
- Implementing Subscriptions
- Full-scale expansion into ASEAN and other Asian countries
- Technology procurement through CVC

	regulation	Technology & Products	Operation and implementation
<p><b>Level 1 and 2 Visual Flight</b> Majority of the current market</p>	<p>Relevant regulations are in place. Application-specific guidelines will be developed in the future.</p> <div style="border: 1px solid orange; padding: 2px; margin-top: 5px;"> <p>④ Establishment of JV in India</p> </div>	<p>Mostly foreign-made general-purpose GPS-type machines. Application-specific / non-GPS / secure drone required.</p> <div style="border: 1px solid blue; padding: 2px; margin-top: 5px;"> <p>① Decided launch date of small aerial drone</p> </div> <div style="border: 1px solid blue; padding: 2px; margin-top: 2px;"> <p>② Sales promotion activities Closed environment inspection Fi4</p> </div> <div style="border: 1px solid blue; padding: 2px; margin-top: 2px;"> <p>First shipment of smokestack inspection drone</p> </div>	<p>Prepared for general-purpose drones. Specialized operations and solutions are important.</p> <div style="border: 1px solid yellow; padding: 2px; margin-top: 5px;"> <p>⑤ Invested in WorldLink &amp; Company</p> </div> <div style="border: 1px solid gray; padding: 2px; margin-top: 2px;"> <p>⑦ Demonstration of marine litter analysis</p> </div>
<p><b>Level 3 Beyond visual line of sight / Uninhabited areas</b> Current market is limited</p>	<p>Related regulations are expected to continue to be revised.</p>	<p>Mostly application-specific drone. Need to improve foundation performance and safety.</p>	<p>Mainly individual efforts of individual companies. Systematized operations, training, etc. are required.</p>
<p><b>Level 4 Beyond visual line of sight / Inhabited areas</b> A huge market to be created in the future</p>	<p>Regulations expected to be in place by FY2022</p>	<p>Development and commercialization of technologies in line with regulations is essential.</p> <div style="border: 1px solid blue; padding: 2px; margin-top: 5px;"> <p>③ Total of 1,000 hours of drone flight tests</p> </div> <div style="border: 1px solid yellow; padding: 2px; margin-top: 2px;"> <p>⑤ Invested in VAIO subsidiary VFR</p> </div> <div style="border: 1px solid gray; padding: 2px; margin-top: 2px;"> <p>⑥ Collision avoidance at a relative speed of 200km/h</p> </div>	<p>Need companies that can respond to regulations and build operations.</p>

# 1. Application-specific drones : Steps toward launch

After identifying and prioritizing applications, ACSL is working with customers to develop application-specific drones for mass production. Out of application-specific drones, small aerial drone is to be launched in December following the closed environment inspection drone

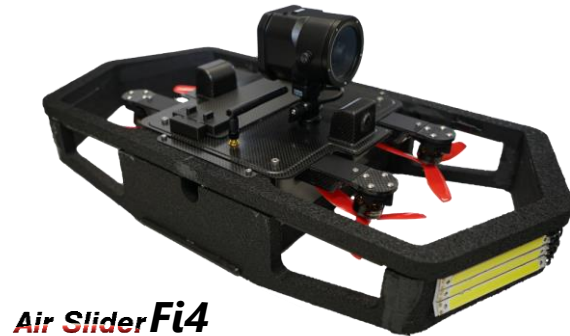


## 2. Conducted customer demo of closed environment inspection drone

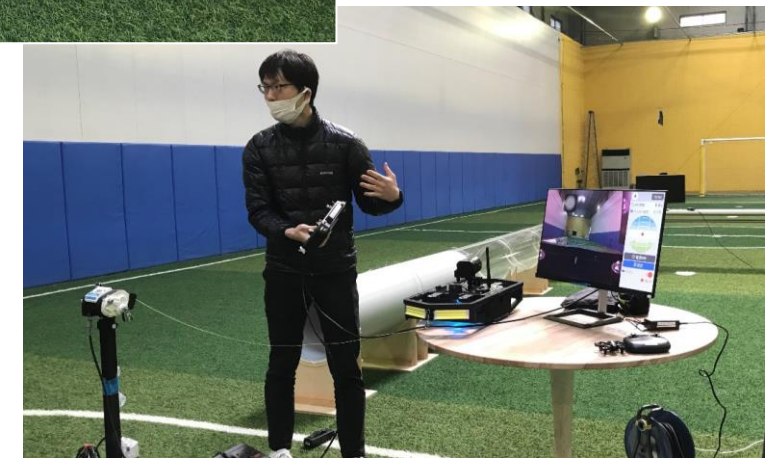
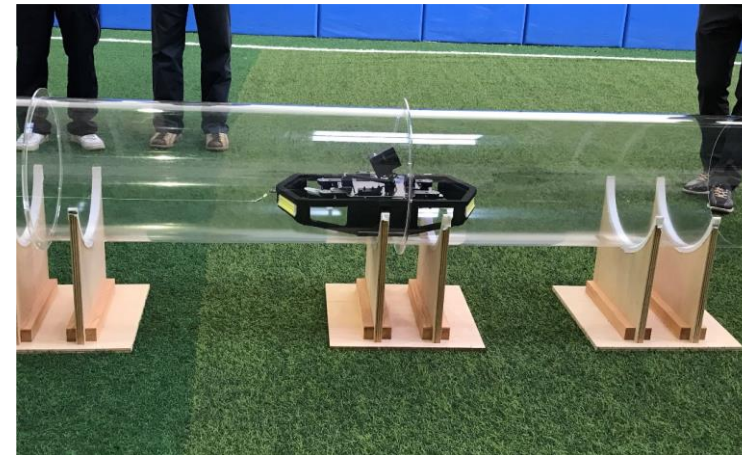
Hold a hands-on event for customers to experience the operation of the closed environment inspection drone (Fi4). In addition to demonstrations, the event provided hands-on experience in actual operation to help customers use the drone in the field.

### Closed Environment Inspection Drone Fi4

- **Launched the new Fi4**, a package that includes a drone designed for harsh research environments and a dedicated operation application with improved usability.
- Simultaneously provide **data analysis and functional diagnosis services to determine abnormalities such as the state of deterioration** based on images taken by the drone.
- In the future, the **drone lineup will be expanded to** include pipe line facilities where water is flowing, external inspections of facilities, and other application scenarios.



**Air Slider Fi4**



### 3. Successfully completed a total of 1,000 hours of drone flight tests

In cooperation with Aerodyne Japan, ACSL conducted 1,000 hours of continuous flight tests in Malaysia starting in December 2020. Successfully completed and obtained useful results for drone development with an eye on Level 4, which will become law in the future

#### Background and Objectives

- **Sufficient flight time, risk level assessment**, and basic data to **demonstrate safety and reliability are important to** achieve flight in a Level 4 environment.
- The hardware is composed of individually made parts, and the issue of **insufficient performance and durability evaluation of the entire drone system**
- **1,000 hours of** flight testing to reveal the true performance of each component and to **evaluate the entire drone system**

#### Results

- The test was completed without replacing any motors, ESCs or propellers, and **important basic data was collected for the development of Level 4**
- Performance evaluation that is not based on theoretical values is carried out through actual environment tests. **Collecting important data related to maintenance such as parts replacement that leads to reduction of operation cost.**
- Conduct training and operations remotely; an example of how **ACSL's training and operations system can be implemented remotely**



# 4. ACSL India established for full-scale entry into India

In India, where Chinese drone are expected to be replaced, new drone regulations have been revised, and the government is promoting the drone industry. a joint venture was established in September 2021 after receiving local approval, and it aims to capture a huge market

## Changes in the Indian market

- **Cyber security risks** in drones are also noted in India. Moves to **replace Chinese** drones, which account for a large share of the general purpose drone market<sup>1</sup>.
- Indian government overhauls drone introduction and use policy, **new drone regulations issued in August**
- **With the** revision of drone regulations, the **Indian government is** reportedly planning to **promote the drone industry more**



Reports on new revised drone regulations and PM Modi's remarks

## ACSL India Initiatives

- Established ACSL India, a JV in India with Aeroarc, a local company, and completed registration after receiving **approval from local authorities in September 2021**
- Began **dialogue** with **DGCA** (Directorate General of Civil Aviation), **the regulatory authority, to comply with local regulations**
- Local marketing has begun, with plans for local **exhibitions and other events, which are already attracting media attention.**



Media reports on India expansion



# 5. Investment in WorldLink & Company and VFR

Invested in WorldLink & Company and VFR through CVC to accelerate operational adoption of drones and strengthen product development collaboration

## Business collaboration and CVC investment related to drone and peripheral technologies

	Control and Communication	Propulsion, on-board equipment and sensors	Analysis and operation support
<b>In-house</b>	<b>ACSL Core Technology</b> Proprietary "cerebrum" and "cerebellum" control and communication	Developing technologies for specific applications through collaboration with external partners	
<b>Main investment</b>	AutoModality Perceptive Navigation	unfunded	FINDi Closed environment Inspection ACSL INDIA India
<b>CVC</b>	<b>VFR Inc.</b> manufacturing and development collaboration	Actively reviewing potential investments	aerodyne WorldLink & Company AERONEXT

## Investment in WorldLink & Company

- Providing infrastructure inspection services and other services as a **solution partner** of ACSL
- **Accelerate the social implementation of drones by developing various operational support solutions that meet** customer needs

## Investment in VFR

- Possesses **advanced design and manufacturing technologies** cultivated through VAIO's PC business, and is entrusted with the development and manufacturing of several industrial drones
- Further strengthening of cooperation, including **joint development of logistics drone with an eye on Level 4**



# 6. Autonomous collision avoidance at 200km/h relative speed

SUBARU, Japan Radio, Japan Avionics, and Magellan Systems Japan successfully conducted the world's first autonomous collision avoidance test at a relative speed of 200 km/h, with a 10 kg class unmanned aerial vehicle equipped with miniaturized and low-power-consumption sensors.

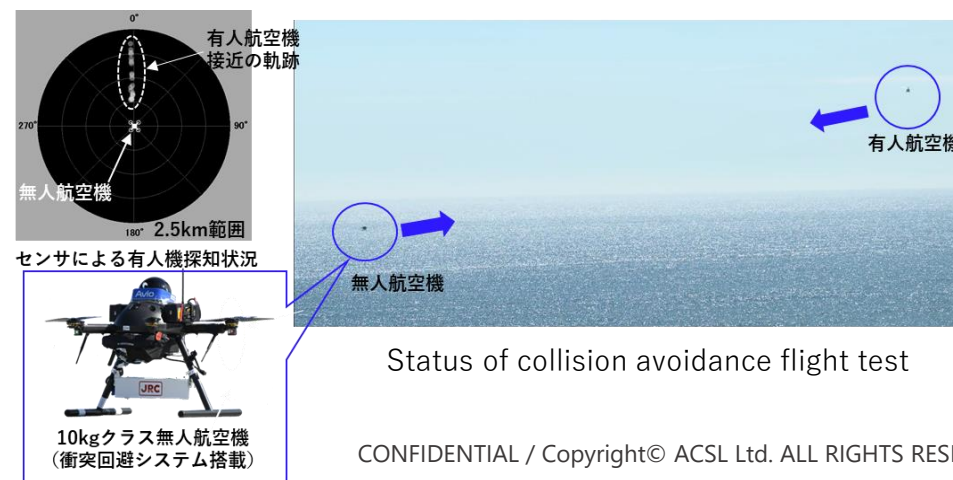
## Background and Objectives

- Conducted as part of NEDO's **project to develop an unmanned aerial vehicle operation management system and collision avoidance technology**
- Small and medium-sized unmanned aerial vehicles are already being used in agriculture and other fields, and there are high expectations for their use in **disaster relief, transporting supplies, searching for people in distress, logistics infrastructure**, and other applications, and the **number of operations is increasing**.
- Collision avoidance technology is an urgent issue for safe use**. In addition, collision avoidance technology is indispensable for the realization of **"unseen flight" and "flight over third parties,"** which are required for the practical use of unmanned drone.
- Establishing a collision avoidance system using this achievement to **promote social implementation of unmanned aerial vehicles**

1: Unmanned drone: about 50 km/h, manned helicopter: about 150 km/h

## test overview

- A 10 kg class unmanned drone and a manned helicopter were **brought close together at a relative speed of 200 km/h<sup>1</sup>**. Based on detection data from various sensors mounted on the unmanned drone, a collision avoidance path was generated in real time, and the **unmanned drone was confirmed to fly in autonomous avoidance**.
- Also confirmed that the** unmanned drone **returned to its original flight path after avoiding** the manned helicopter



Status of collision avoidance flight test

# 7. Marine litter analysis using drones and AI

The drone sub-team of the industry-academia collaborative marine litter reduction project "Debris Watchers" conducted a demonstration experiment of marine litter analysis using drones and AI on the coast of Tsuruoka City, Yamagata Prefecture, and confirmed its effectiveness.

## Background and Objectives

- There is a **tendency that there is a lot of marine litter in the area on the Japan Sea side, and** Tsuruoka City, which is located on the coast, is also focusing on the environmental improvement of fishing ports and beaches.
- To understand the actual situation and reduce the burden, Nihon Unisys, a member of the project, has been conducting **fixed-point observation of marine litter using DX** since FY2018.
- Verification of the practicality of marine litter identification technology by using AI to analyze images** taken from above of sandy beaches by drone
- Team **developed marine litter analysis AI for** both rocky coasts (Tsushima City, Aichi Prefecture, in 2020) and sandy coasts (Tsuruoka City, Yamagata Prefecture, in 2021), **and confirm that it can identify litter on these coasts.**

ACSL-PF2 used in projects



Using marine litter analysis AI to analyze the distribution and quantity of litter (Image taken (left), output of marine litter analysis AI (right))



# Major Business Highlights for Q2 FY12/2021 (21/07-09)

In addition to the development of application-specific drone, strengthen demonstration tests and collaboration with existing and new customers to develop new applications, and promote the business strategy in the mid-term plan.

<b>July</b>	Metroweather and the <b>integration of "wind" information into drone operation systems.</b>	
<b>August</b>	Adopted as a subsidy for a project to support the promotion of new business creation in Asia DX, etc.	
<b>September</b>	<b>CVC invests in WorldLink &amp; Company</b> to strengthen collaboration	WorldLink & Company
	<b>ACSL India's legal entity registered</b> after approval from local authorities	
<b>October</b>	<b>Invested in VFR from CVC</b> to strengthen collaboration with a view to Level 4	<b>VFR Inc.</b>
	Debris Watchers", an industry-academia collaborative project to reduce marine litter in which ACSL participates, discloses the <b>development progress of marine litter analysis service by drone.</b>	
	<b>Closed environment</b> <b>Hands-on experience operating a closed environment inspection drone</b>	
<b>November</b>	<b>Small Aerial</b> "Secure Domestic Drones for the Future" <b>teaser site released</b>	
	<b>SUBARU, Japan Radio, Japan Avionics, and Magellan Systems Japan Successfully Avoid Autonomous Collision</b> of Small Unmanned drone at a Relative Speed of 200km/h	
	<b>Successful completion of 1,000 hours of drone flight testing</b> in Malaysia with <b>Aerodyne Japan</b>	

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**1** "ACSL Accelerate" and Business Highlights

**2** FY21/12 2Q (21/07-09) Results

**3** FY21/12 ((21/04-12) ) Plan

**4** Appendix

# Results for 2Q FY12/09 (21/07-09)

Sales totaled 400 Mn JPY, mainly from projects implemented in the previous fiscal year such as national projects. Operating loss of 650 Mn JPY was posted due to aggressive upfront investment in R&D expenses. <sup>1</sup>

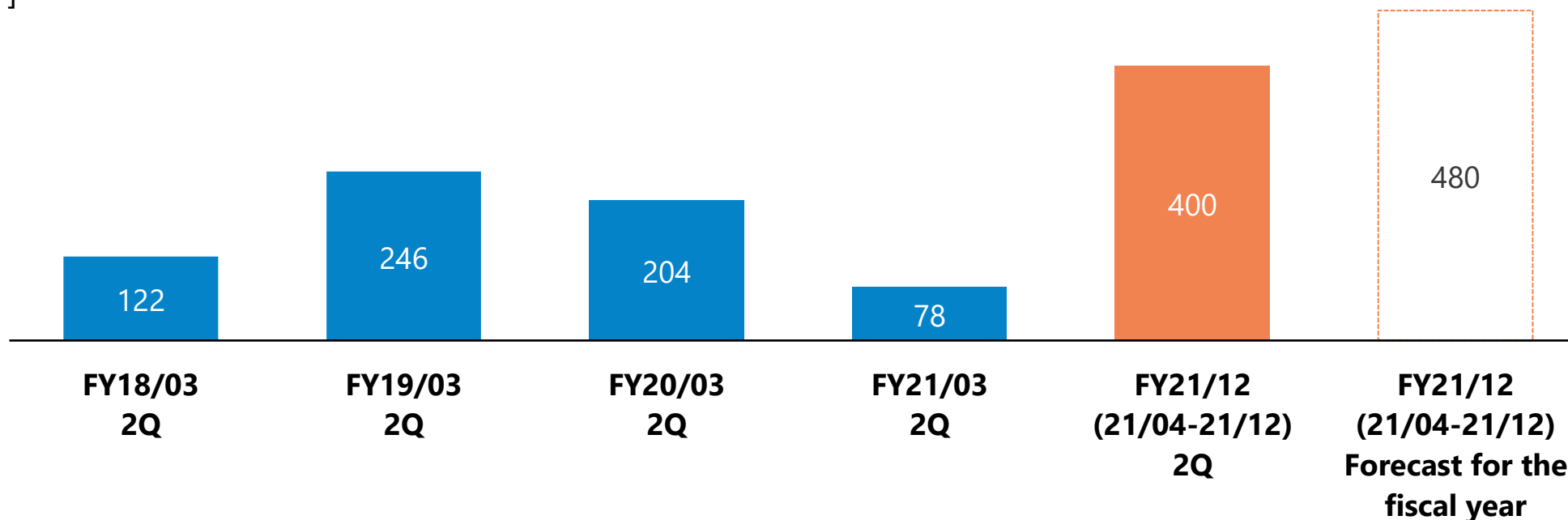
Mn JPY	Fiscal Year Ending 21/12 Q2 (21/04-09)		Previous fiscal year Q2 (20/04-09)	Previous fiscal year Annual (20/04-21/03)
	Actual	YoY	Actual	Actual
Sales	400	408%	78	620
Gross profit	23	-	▲13	68
Gross profit margin	6%	+23 pt	▲17%	11%
R&D expenditure	318	154%	138	583
Operating income	▲650	-	▲417	▲1,139
Net income	▲693	-	▲396	▲1,511

1: Figures for the third quarter of the fiscal year ending March 31, 2021 and thereafter are based on consolidated financial statements and figures for earlier quarters are based on non-consolidated financial statements

# 2Q Cumulative Sales Trend

Sales totaled 400 Mn JPY from April 1 to September 30, 2021, the highest ever for the half of the fiscal year (April-September). Cumulative sales through December are expected to reach 480 Mn JPY, a record high for the fiscal year.

## Sales by second quarter [Mn JPY]



# Net sales and operating income by quarter

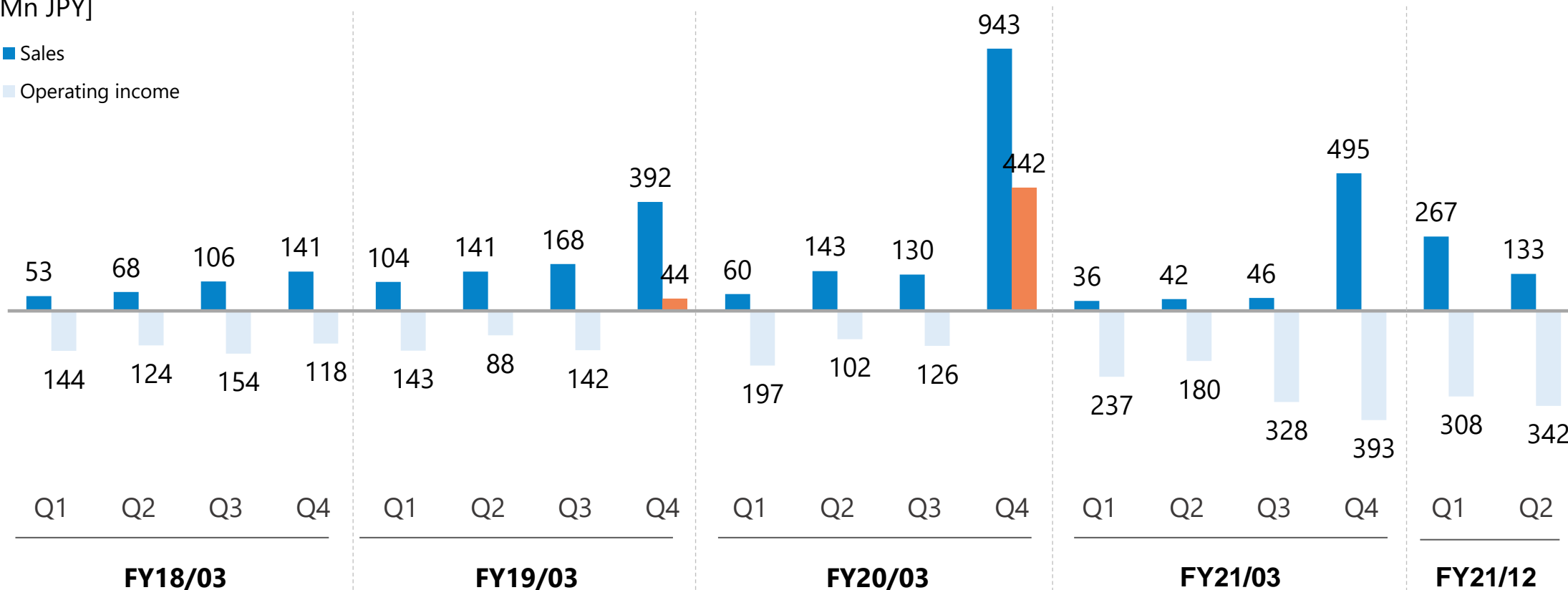
As is typical year, sales in Q1-Q3 (April-December) are small, and the trend is expected to continue in the current fiscal year. FY21/12 Q1(21/04-06) sales were larger than previous years due to the booking some projects conducted in previous year.

## Sales and operating income by quarter<sup>1</sup>

[Mn JPY]

■ Sales

■ Operating income



1: Figures for the third quarter of the fiscal year ending March 31, 2009 and thereafter are based on consolidated financial statements; figures for earlier quarters are based on non-consolidated financial statements.

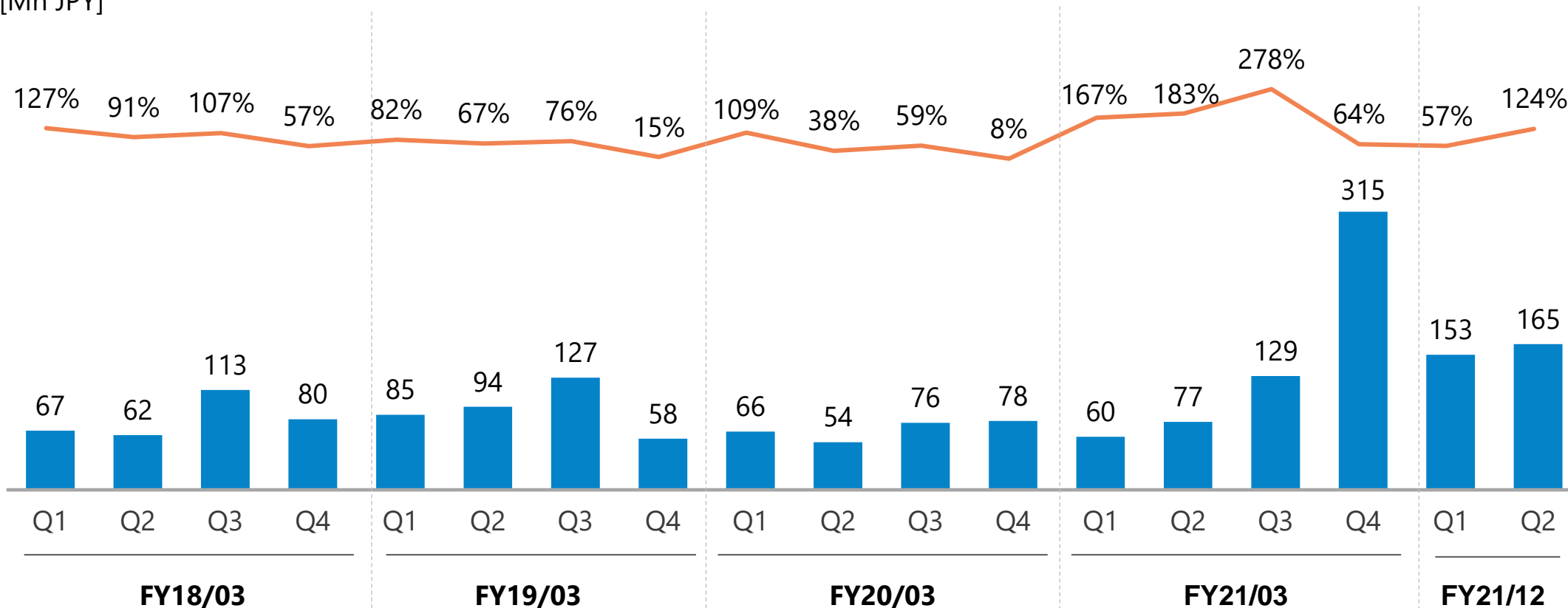


# Trends in R&D Expenses

Regardless of the sales situation, ACSL continued core R&D activities as an upfront investment for market expansion.

## R&D expenses by quarter and sales ratio

[Mn JPY]

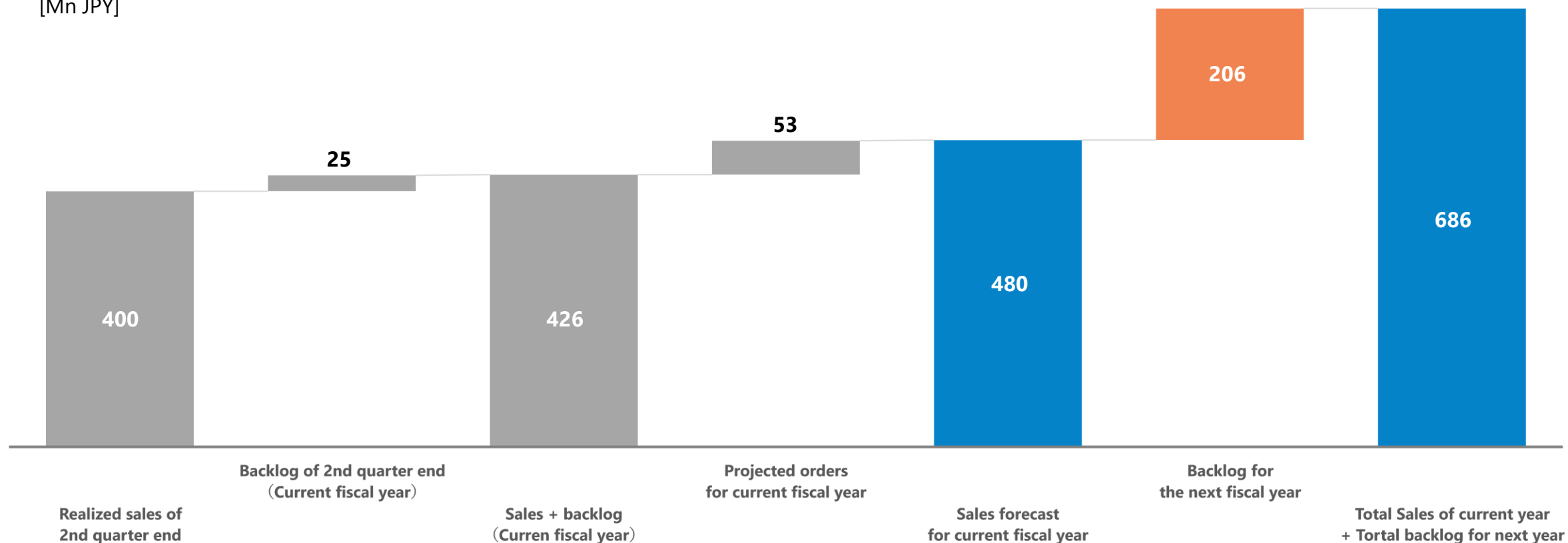


# Orders received as of the end of September

As of the end of September, backlog<sup>1</sup> was approximately 230 Mn JPY, including projects scheduled for acceptance in the next fiscal year. Total of realized sales of 2nd quarter end, projected orders for the current fiscal year, and backorder is approximately 680 Mn JPY.

## Sales and backlog as of the end of September<sup>1</sup>

[Mn JPY]



1: Order backlog is the total amount of orders received as of September 30, 2021.

**1** "ACSL Accelerate" and Business Highlights

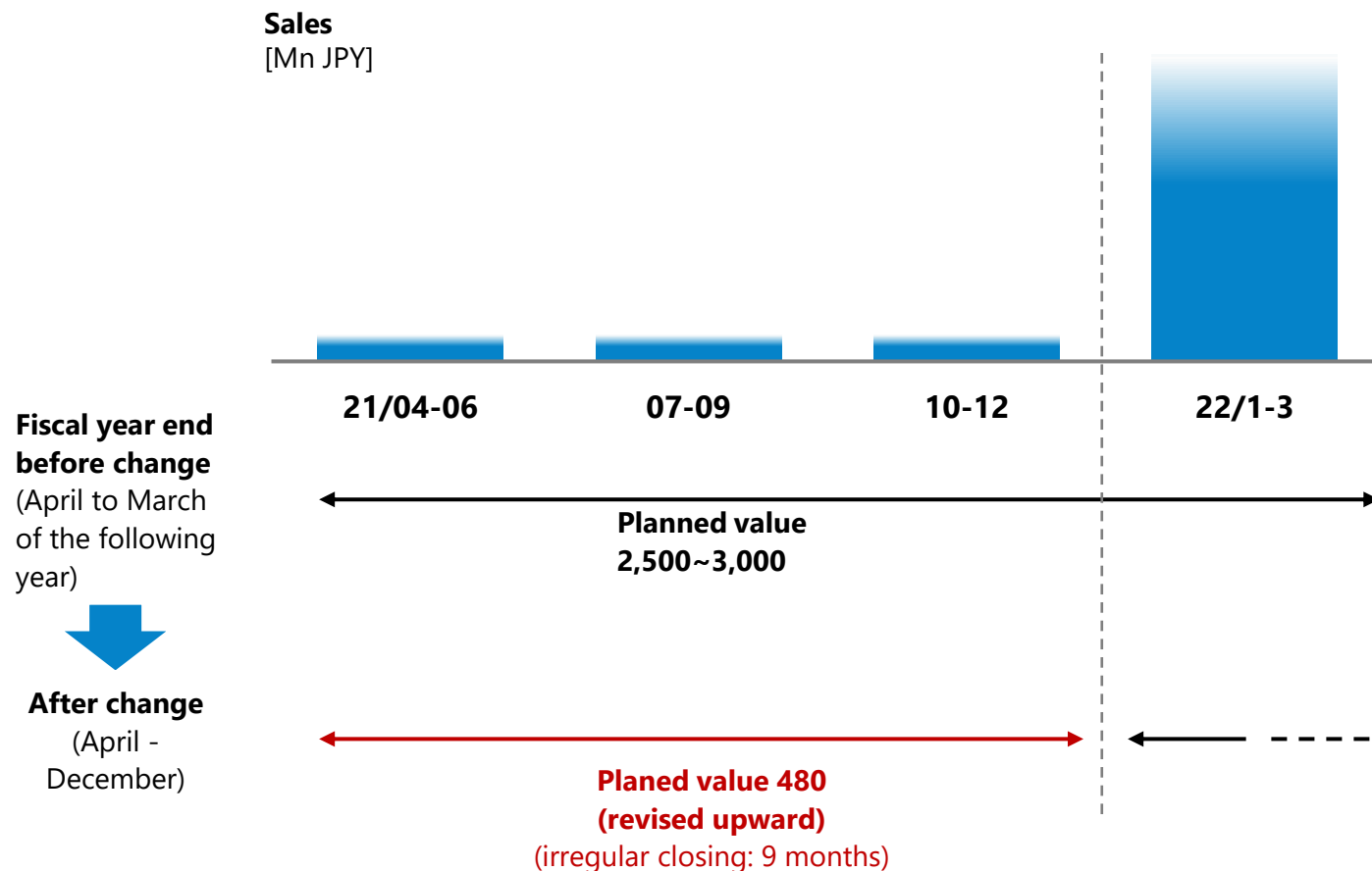
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# Changes to fiscal year end

As sales were mainly realized in January to March, in order to address the transparency of full-year outlook the fiscal year has been changed to January to December from the April to March of the following year. With this change, the plan for the current fiscal year was also split.



- ACSL records sales on an acceptance basis. Since most of the large projects are closed in March, sales are skewed to January and March quarter.
- Due to a change in the fiscal year end, the fiscal year ending December 31, 2021 will be irregular, with only nine months from April to December 2021.
- Upwardly revised forecast for the fiscal year from 350 Mn JPY to 480 Mn JPY.
- Sales of application-specific drone, such as small aerial drone, are expected to be booked from next year.

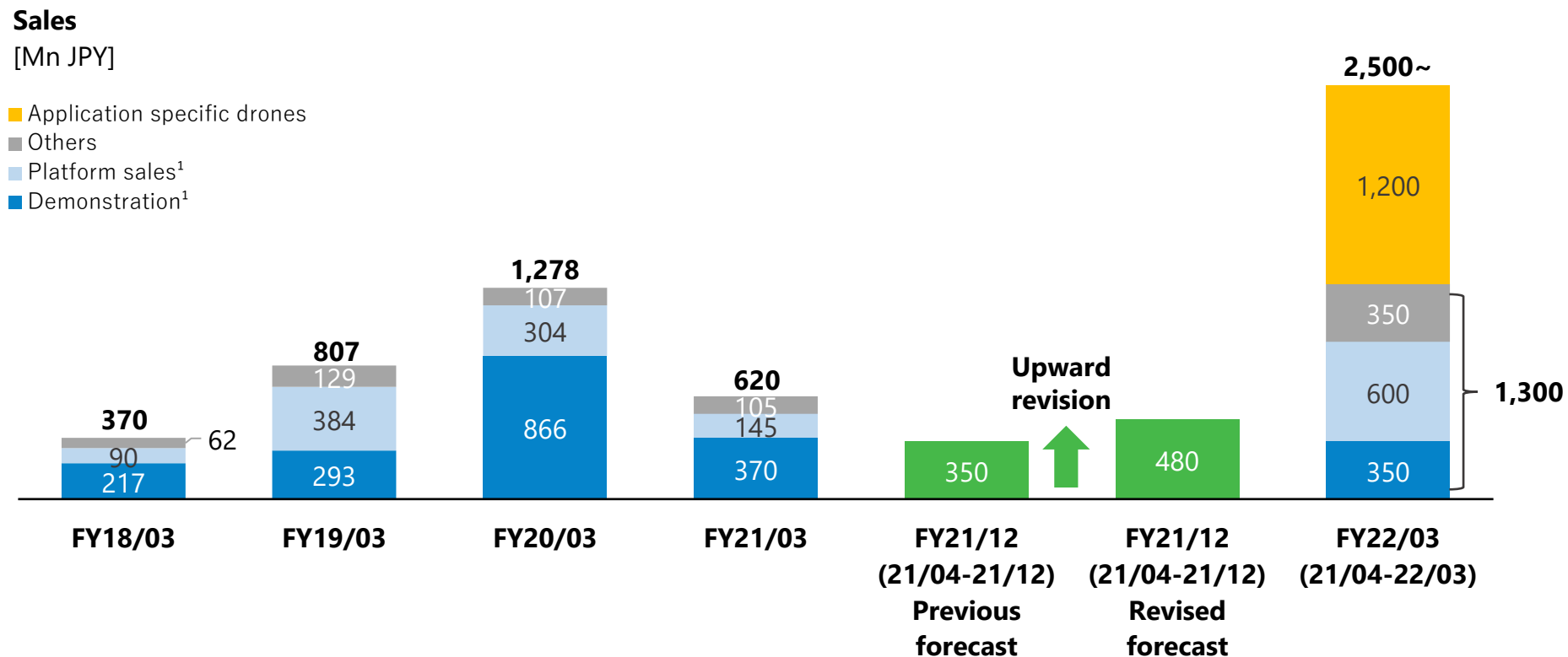
9-month sales are expected to be 480 Mn JPY in 9 months. In addition to regular PoC, development and sales of platform drone, sales from national projects are expected to grow, resulting in an upward revision with 130 Mn JPY from the previous forecast of 350 Mn JPY.

[Mn JPY]

FY21/12 (21/04-12)	Revised earnings forecast	Previous earnings forecast	Difference	Reference (22/01-03 3 Months) Forecast
Sales	480	350	+130	2,150~2,650
Operating profit	▲980	▲1,000	+20	-
Ordinary income	▲1,020	▲1,000	▲20	300~700
Net income	▲1,020	▲1,000	▲20	320~720

# Sales Trends and Breakdown

FY22/03 (Apr. 2021-Mar. 2022) sales are expected to be 2.5 Bn JPY~ due to the same level of sales as FY20/03 and increased sales from the sale of small aerial drone. FY21/12 (9 months) sales revised upward from 350 Mn JPY to 480 Mn JPY.



1: From the first quarter of the fiscal year ending March 31, 2021, solution construction (STEPS 1 and 2) will be renamed demonstration tests, and aircraft sales (STEPS 3 and 4) will be renamed platform aircraft sales

Although ACSL is addressing the risks associated with the global shortage of semiconductors and the various effects such as continued spread of the COVID-19, there is a remaining risk of the business environment could be worse in the next fiscal year and beyond.

## Impact of semiconductor shortage

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- In response to the global shortage of semiconductors, **there is also a shortage of semiconductors embedded in modules and other products that ACSL is procuring**
- Already **longer lead times and higher prices for semiconductors and modules**
- **No impact expected on sales achievement in the current fiscal year**
- ACSL currently expect to be able to **secure the volume of procurement for the next fiscal year in order to realize sales.** ACSL are **considering passing on the cost** of some products to sales prices.
- In the event of longer lead times and higher prices in the future, **there is a risk that sales expansion will be limited and profit margins will deteriorate.**

## Impact of the spread of coronavirus infection

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- **As of November 2021, business activities will gradually recover** after the declaration of the state of emergency is lifted
- Due to the nature of the Company's business, it is necessary to **conduct hearings and demonstration experiments by visiting customer sites, which are mainly located in regional areas**, and this involves travel, so a certain degree of restriction on activities continues to exist.
- ACSL assume that there will be **no major restrictions on our activities due to the declaration of a state of emergency in the period from January to March, which is the period** in which the majority of our sales are generated. ACSL will be able to carry out our activities in the period from April to December, although there will be certain restrictions.
- **Even if demonstration tests and drone sales are delayed** between January and March due to activity restrictions, the **impact throughout the fiscal year is expected to be small** because the project can be implemented by December, which is within the same fiscal year.

Index		FY18/03	FY19/03	FY20/03	FY21/03	FY21/12 (21/04~ 21/12)	FY23/03 (22/04~ 23/03)
		Actual	Actual	Actual	Actual	Forecast	Medium-Term Management Direction
<b>Sales of application-specific drones</b>							
Small aerial photo (low ASP)	Unit	-	-	-	-	-	1,000~
	Value (100 Mn JPY)						10
Other application-specific drones (high ASP)	Unit						300~
	Value (100 Mn JPY)						10
<b>Development of application-specific drones<sup>1</sup></b>							
PoC and Development	Project	60	81	112	82	39	-
	Value (100 Mn JPY)	2.1	2.9	8.6	3.7	1.2	20
Sales of Platform/ Evaluation drones <sup>1</sup>	Unit	40	106	101	46	16	-
	Value (100 Mn JPY)	0.9	3.8	3.0	1.4	0.5	10
Number of shipments <sup>1</sup>		-	136	128	71	23	~300

1: The number of Sales of Platform/Evaluation drones represents drone sold in the platform sales (former STEP 3 and 4), and the number of shipments represents the total number of drones shipped including the demonstration experiments (former STEP 1 and 2)



**1** "ACSL Accelerate" and Business Highlights

**2** FY21/12 2Q (21/07-09) Results

**3** FY21/12 ((21/04-12) ) Plan

**4** Appendix



**Establishment**

**November 2013**

**# of employees<sup>1</sup>**

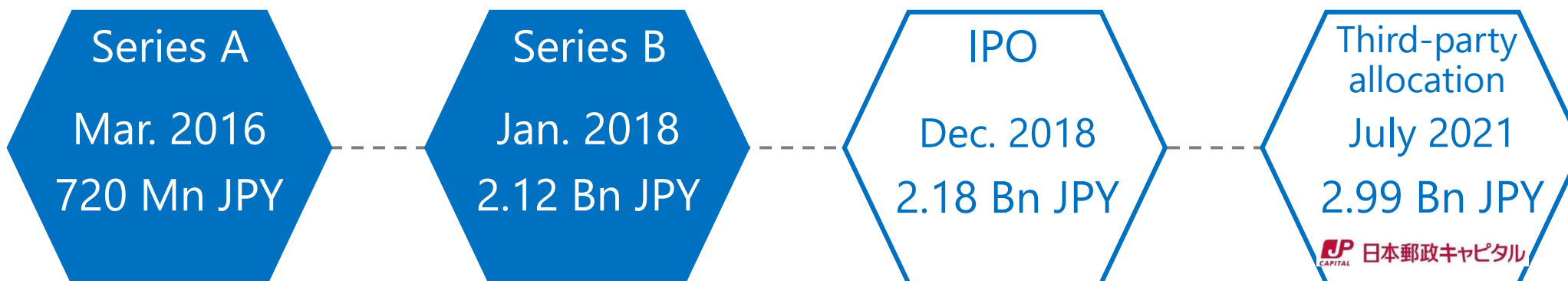
**68 ppl**

**Capital <sup>2</sup>**

**4.5 Bn JPY**

**National projects<sup>3</sup>**

**5 projects**



1: As of September 30, 2021

2: Including capital reserve (as of September 30, 2021)

3: Only major national projects of 10 million yen or more were counted.

# Management Team (as of September 30, 2021)



**President and 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.



**Chairman** **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.



**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**

**Audit & Supervisory member** **Akira Ninomiya**

**Audit & Supervisory member** **Hideki Shimada**

**Audit & Supervisory member** **Takeshi Ohnogi**

We will actively promote SDGs by providing drone solutions in delivery and disaster prevention fields, where we are focusing our efforts to.

	Issues to be resolved	Our Approach	Specific examples	Corresponding SDG targets
Delivery	<ul style="list-style-type: none"> <li>Increase in logistics volume due to expansion of EC</li> </ul>	 Development of delivery drone	 Conducted a demonstration on delivery between remote islands in Goto City, Nagasaki with ANA Holdings	  
	<ul style="list-style-type: none"> <li>Difficulty in maintaining existing logistics due to declining labor force</li> </ul>	 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"> <li>Need for rapid disaster response in the event of natural disasters</li> </ul>	 Development of drones for support disaster areas	 Conducted a survey as initial action using a drone during a rain disaster in Nagano	  
	<ul style="list-style-type: none"> <li>Local governments are burdened with disaster response cost</li> </ul>	 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	

# Balance Sheet

Mn JPY	FY21/12 2Q (21/09)		FY21/03 2Q(20/09)	FY21/03
	Actual	YoY Increase/Decrease	Actual	Actual
Current assets	4,974	+ 35%	3,696	3,257
Cash	4,015	+ 27%	3,173	1,891
Fixed assets	1,129	+ 6%	1,070	751
Current liabilities	167	+ 54%	108	432
Fixed liabilities	5	-	-	3
Total liabilities	172	+ 58%	108	436
Net assets	5,932	+ 27%	4,658	3,572
Total assets	6,104	+ 28%	4,767	4,008

Note: Figures for the third quarter of the fiscal year ending March 31, 2021 and thereafter are based on consolidated financial statements and figures for earlier quarters are based on non-consolidated financial statements

# Sales by quarter

Fiscal Year		FY18/03				FY19/03				FY20/03				FY21/03				FY21/12	
Quarterly Results		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
Demonstration Experiment <sup>1</sup> • Proof of Concept • Custom Development	Sales Mn JPY	6	37	57	116	25	59	75	133	27	65	102	671	1	22	22	323	14	42
	Number of projects	8	6	27	19	6	16	22	37	14	22	21	55	2	11	15	54	6	14
Platform Selling the drone <sup>2</sup> • Sales of standard and general-purpose drone • Drone modified for customers based on the standard drone	Sales Mn JPY	16	25	32	16	10	67	80	225	24	48	19	212	4	10	13	116	15	34
	Number of units	7	10	18	5	8	20	31	47	6	12	9	74	1	3	5	37	6	6
Other <sup>3</sup> • Sales of parts • Fuselage repair service • Some national projects	Sales (of which, national pro) Mn JPY	30 (27)	6	16	9	68 (65)	14	12	33	9	29 (18)	9	59	30 (21)	8	10	55	237 (219)	55 (50)

1: Solution development (STEP1, 2) was renamed to "Demonstration Experiment" from FY21/03 Q1

2: Mass production (STEP3, 4) was renamed to "Platform Selling the drone" from FY21/03 Q1

3: 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

# Major financial items by quarter

Fiscal year <sup>1</sup>	FY18/03				FY19/03				FY20/03				FY21/03				FY21/12	
Quarterly Results	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
Gross profit Mn JPY	4	40	63	68	13	83	101	204	8	69	75	655	▲ 6	▲ 6	▲ 13	94	17	5
Gross profit margin	9%	60%	60%	48%	13%	59%	60%	52%	14%	48%	58%	70%	▲19%	▲16%	▲28%	19%	7%	4%
SG&A Mn JPY	149	165	218	186	157	172	244	159	205	171	201	213	230	173	314	488	325	321
of which R&D expenses Mn JPY	67	62	113	80	85	94	127	58	66	54	76	78	60	77	129	315	153	165
R&D expense ratio to Sales	127%	91%	107%	57%	82%	67%	76%	15%	109%	38%	59%	8%	167%	183%	278%	64%	57%	124%

1: Figures for the third quarter of the fiscal year ending March 31, 2021 and thereafter are based on consolidated financial statements and figures for earlier quarters are based on non-consolidated financial statements

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