



# Financial Results Material for FY23/12 Full Year

**ACSL Ltd (TYO: 6232)**  
**Feb 14, 2024**

CONFIDENTIAL  
This materials should not be used without prior consent from ACSL Ltd.

## Company outline

<b>Corporate Name</b>	ACSL Ltd.
<b>Representative</b>	Satoshi Washiya (CEO and Representative Director)
<b>Established</b>	November 2013
<b>Location</b>	3-6-4 Rinkai-cho, Edogawa-ku, Tokyo Hulic Kasai Rinkai Bldg. 2F
<b>No. of Employee</b>	86 (as of Dec 2023)
<b>Description of Business</b>	Manufacture and sale of commercial drones and provision of solution services for unmanned and IoT applications using autonomous control technology

## At a glance<sup>1</sup>

**Ratio of engineers**

Approx. **59**%

**# of Non-Japanese**

Approx. **20**%

**ISO**

**2**

ISO9001 (Quality Management)  
ISO27001 (Security)

**Client**

**221**

companies

1: Percentage of engineers and number of foreign employees are as of Dec 30, 2023. The number of customers is the total number of customers from FY19/03 to FY23/12 4Q. All figures do not include group companies

- 
- A drone is shown in flight against a clear blue sky, positioned in the upper left quadrant of the image. Below the drone, a series of misty, layered mountain ranges stretch across the horizon, creating a sense of depth and atmosphere. The overall color palette is dominated by various shades of blue and white.
- 1. Market / Mission / Growth strategy**
  - 2. FY23/12 Q4 results and highlights**
  - 3. Business transformation based on current understanding of the situation**
  - 4. Appendix**

## **MISSION**

**Liberate Humanity  
Through Technology**

## **VISION**

**Revolutionizing Social  
Infrastructure By Pursuing  
Cutting-Edge Robotics  
Technology**

Issue

## Social infrastructure is not sustainable

### Lack of workforce

Decreasing workforce willing to work in tough, dirty, dangerous tasks driven by low birth rate

### Aging population

Transition of know-hows from experts have not progressed, and accidents still continue

### Rapid increase of workload

Aging infrastructure increasing and EC drives # of packages, resulting in increasing workload

## Free human from time and physical constraints, and Update social infrastructure

---

### Act autonomously

Drone thinks and act on its own using high level control and AI. No need for human intervention

### Become "Eye" and "Hand"

Can act as human's eye and hand using sensors and mechatronics

### Move space freely

Drone can fly both indoor and outdoor in any open space

### Control remotely

Drone can be controlled remotely using wireless radio, e.g., between Tokyo and Hokkaido

**Effectiveness of drones are being recognized. Further discussions taking place around geopolitics, economic security and data sensitivity**

**01**

## **Economic Security Data sensitivity**

Initiatives related to economic security and data sensitivity taken place at a national scale in the US, India, AU and Japan

**02**

## **Unmanned Optimization, DX**

Drones and robotics being implemented as unmanned and efficient operations are in demand. Japan promoting Digital Rural City concept

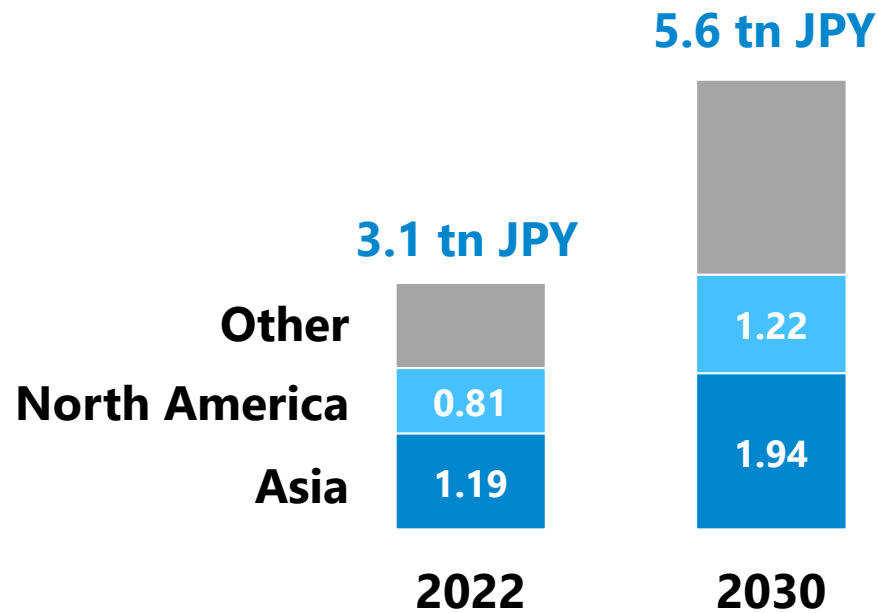
**03**

## **Decarbonization EV**

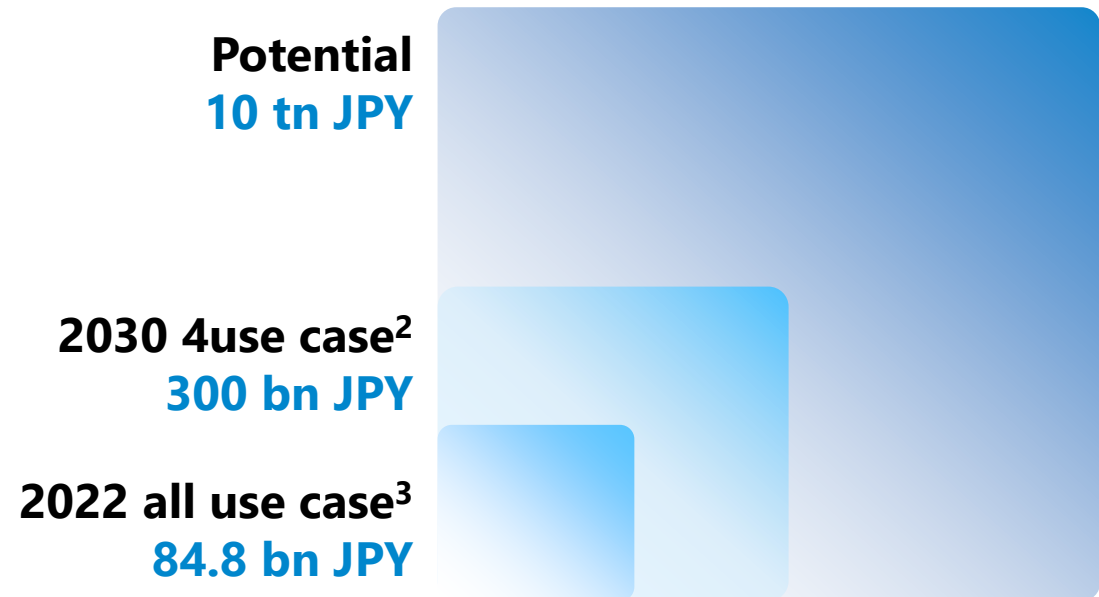
Drones recognized as a tool for decarbonation and EV. Drones are considered to work together with trucks in logistics field

## Drone market expected to reach more than 5 tn JPY in 2030

### Global drone market<sup>1</sup>



### Japan drone hardware market



1: Drone Industry Insights (Calculated at 100 JPY/USD)

2: Company estimate based on assumptions to number of assets, total service values, service frequency, drone unit sales on the following information  
 Ministry of Land, Infrastructure, Transport and Tourism, "Trends Surrounding Logistics"  
 Ministry of Land, Infrastructure, Transport and Tourism, "Conditions Surrounding Infrastructure Maintenance"  
 Cabinet Secretariat, "Estimation of the size of the private sector market for national land fortification"

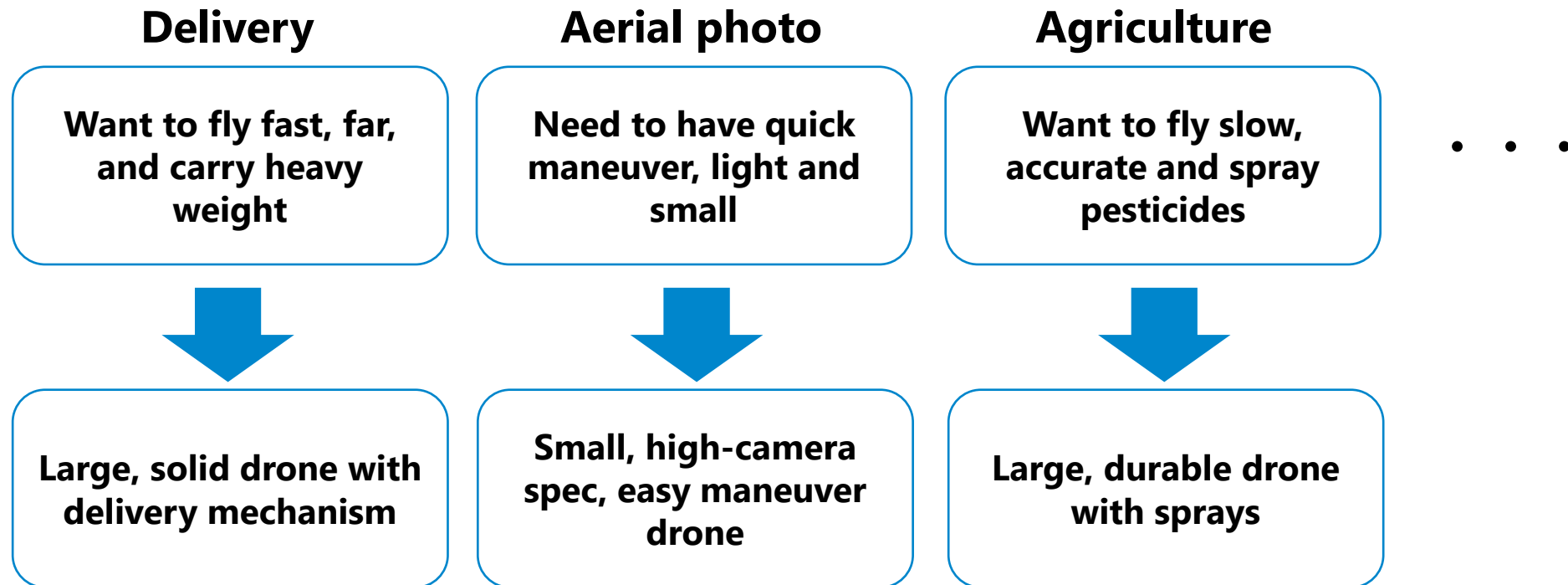
Ministry of Economy, Trade and Industry/Digital Architecture and Design Center (DADC) "Autonomous Mobile Robot Architecture Design Report"

3: Impress Research Institute "Drone Business Report 2023"



**Drones that serve social infrastructure will be tailored to meet the requirements of individual applications**

## Drones will have specific features tailored to each applications



**A global manufacturer that **update social infrastructure** through realization of **autonomous control technology** and **co-existence of robotics and humans****

**5 pillars for growth in this mid-term plan to realize a sustainable business with global footprints.**

ACSL Accelerate FY22

**Shift to a sustainable  
global manufacturer**

**Development and commercialization of  
four application-specific drones**

**Development of new application drones  
and compliance with security**

**Full-scale launch into the Indian market**

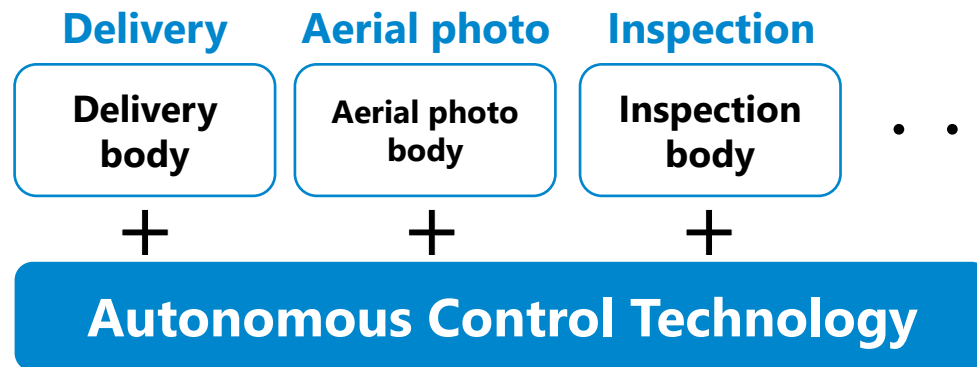
**Reinforce ESG initiatives**

**Exploring potential adaptation of  
autonomous control systems to other fields**

**Leverage core autonomous control system to customize and conduct trial based on customer demand. Mass produce those that are identified as marketable**

## Solution development


ACSL develops proprietary autonomous control system, which can be customized based on customer demand



## Sales of application-specific drones

Develop, manufacture and sell mass production model of applications identified as marketable based on PoC



- 
- 1. Market / Mission / Growth strategy**
  - 2. FY23/12 Q4 results and highlights**
  - 3. Business transformation based on current understanding of the situation**
  - 4. Appendix**

## Summary

US expansion progressed but **Japan sales struggled for SOTEN**. India large project will be booked in FY24, and sales declined

**Gross profit declined with inventory write-down**

## Sales

Q4	Full year
<b>239</b> mn JPY	<b>896</b> mn JPY
YoY -50%	YoY -45%

Struggled Japan sales. India large project will be booked in FY24. Backlog for FY24 is 207 mn JPY

## Profit rate

Gross profit rate  
(full year)

**-26%**

YoY -18pt

Marginal profit rate  
(full year)

**49%**

YoY +15pt

Marginal profit rate improved. Gross profit declined vs last year due to booking of inventory write-down

## Operating income

Full Year

**-207** mn JPY

YoY +132 mn JPY

Though sales declined, operating income improved compared to last year due to reduction in R&D expense

# FY23/12 Q4 results (consolidated)

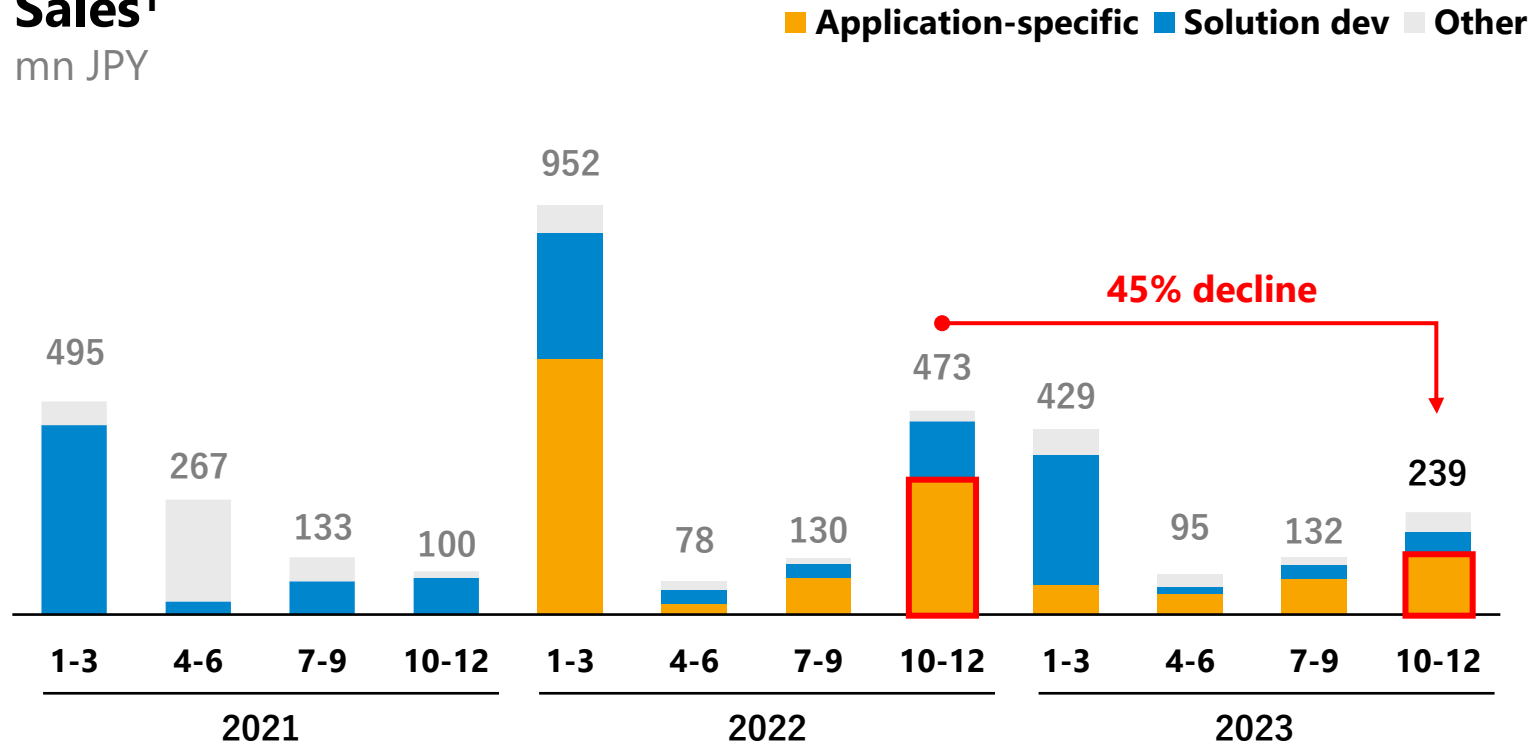
**Sales declined due to struggle in Japan sales. Gross profit worsened due to inventory write-down. Improved income by reducing R&D expenditure.**

[mn JPY]	FY23/12 Full year	Last year	YoY	Summary
Net sales	896	1,635	▲738	<ul style="list-style-type: none"> <li>Japan sales struggled with SOTEN. India large project slided and will be booked in FY24. Total sales declined compared to last year.</li> <li>Backlog for FY24 sums up to 2.07 bn JPY</li> </ul>
Gross profit	▲235	▲124	▲110	<ul style="list-style-type: none"> <li>Though sales declined, impact of marginal profit improvement overwhelmed.</li> </ul>
Gross profit ratio	▲26%	▲8%	▲18pt	<ul style="list-style-type: none"> <li>Total gross profit declined due to recording inventory write-down of 139 mn JPY</li> </ul>
R&D expense	759	1,168	▲409	<ul style="list-style-type: none"> <li>R&amp;D investment curbed in FY23/12 from the previous year as major R&amp;D investment completed. 35% reduction for full year</li> </ul>
Operating income	▲2,071	▲2,203	132	<ul style="list-style-type: none"> <li>Improved operating and net income though sales declined, by controlling cost reduction</li> </ul>
Net income	▲2,544	▲2,593	48	<ul style="list-style-type: none"> <li>Booked write-down of investment securities</li> </ul>

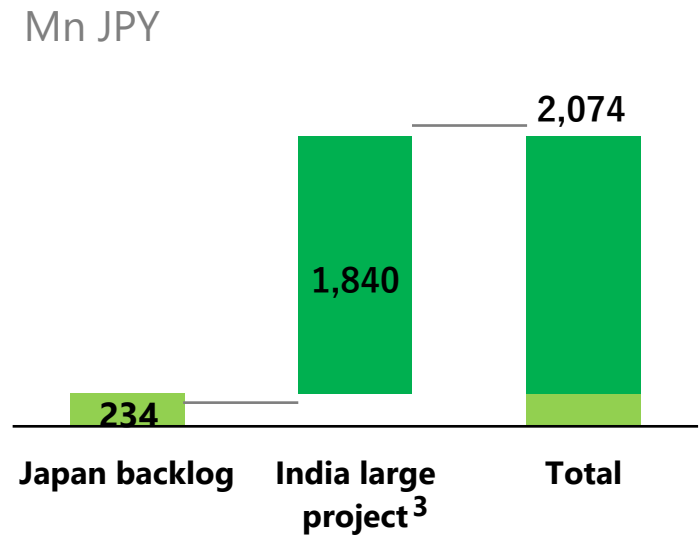
# Quarterly sales and backlog

## Struggled Japan sales of SOTEN. Total declined by 45% vs last year. Backlog tallies up to 2 bn JPY

**Sales<sup>1</sup>**  
mn JPY



**Dec end backlog<sup>2</sup>**  
(Will be booked in FY24)

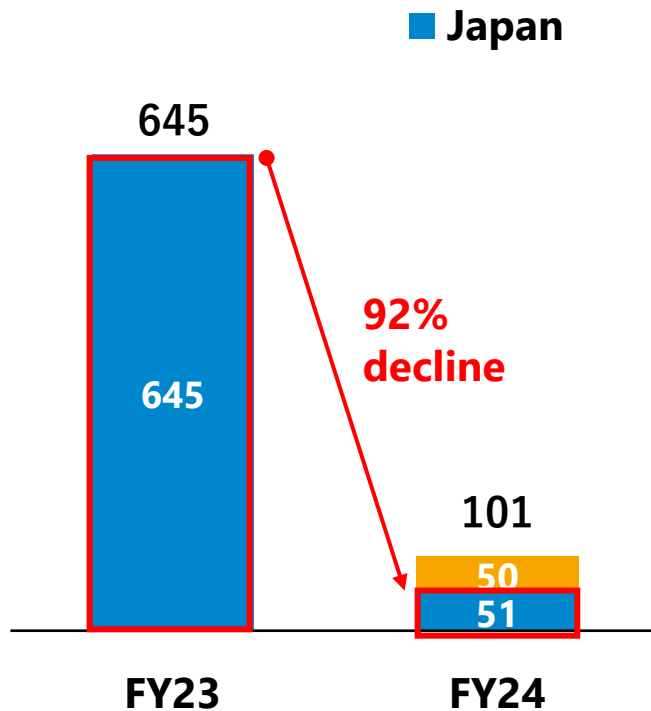


1: The fiscal year ended March 31, 2021, and the following fiscal year ended December 31 2021 is a 9-month irregular accounting period from  
 2: Order backlogs 234mn JPY is the total value of projects with a purchase order or similar documents at the end of Dec 2023, excluding large projects in India  
 3: The amount of sales and the timing of recording sales are currently being reviewed (1 USD = 135 JPY)



## SOTEN started US expansion, but Japan sales struggled. 92% decline vs last year

### SOTEN unit sales



### Major initiatives taken in FY23

**Japan demo** Conducted demo at 10 locations across Japan. Total of 269 participants

**US expansion** Established US subsidiary ACSL Inc. Build US distributor network, achieved export permit and made first sales



### Issues remaining for sales expansion

**Flight performance** Continuous improvement in performance around video capture and flight based on market feedback

**Price** Price competitiveness improvement with design changes and procurement improvement

**MOU signed for 400 unit sales globally, and over 5 bn JPY sales of drone and robotics project across FY23~FY25. Portion has already begun shipment.**

## US Started sales

- Export permit received in Nov 2023 for SOTEN. Sold 50 units to distributors
- Started sales to end user from Dec 2023
- 5 MOUs signed and started selling across US with 8 distributors from FY 24

## Taiwan Built sales network

- MOU signed in Aug 2023 to achieve 1 bn JPY drone project by FY25
- Evaluated highly by end users through exhibits and demonstration
- Signed distributor agreement in Dec 2023

## India Delivering on 1.84 bn JPY project

- MOU signed for 30 mn USD robotics project with local partner
- 1.84 bn JPY project initiated as portion of the MOU
- Export permit received and started shipment. Sales will be booked in FY 24

**Started sales of SOTEN in the US from Dec 2023. Strategic MOU signed in infrastructure companies. Expanding distributor and dealer network.**

## MOU signed in the US



**Distributor** leading the US drone market



**Drone solution provider** to infrastructure companies



**Drone service provider** to mining and infrastructure companies



**Largest utility company in Missouri.** Listed at Fortune 500.



**Global agri and infra company** with footprint in 21 countries

## Distributor and dealer network in the US

### Expanding US with wide coverage

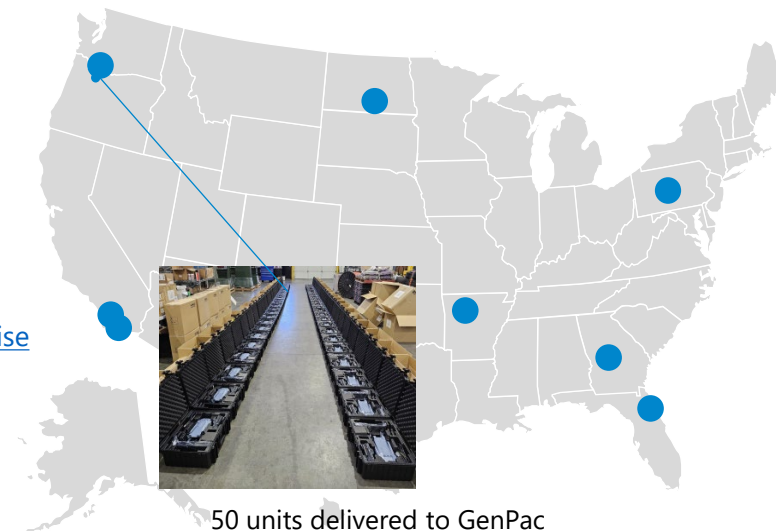
[Blue Skies Drones](#)  
Washington

[General Pacific](#)  
Oregon

[Frontier Precision](#)  
North Dakota

[Advexure Enterprise](#)  
California

[DronesMadeEasy](#)  
California



[Volatus Drones](#)  
New York

[Unmanned Vehicle Technologies](#)  
Arkansas

[Gresco Utility Supply](#)  
Georgia

[Frontier Precision](#)  
Florida

50 units delivered to GenPac

# Provided drones to trials as the only certified Lv4 drone

**PF2-CAT3 drone received the first Tier-1 type certification in Mar 2023.  
All Level 4 related trials are using ACSL drone as the only certified one.**

## Japan Post

- Provided PF2-CAT3 to the demonstration by **Japan Post in Mar 2023 to conduct drone postal delivery**
- 4.5km with 1kg payload. Flight was 9 min (**40% improvement vs Level 3**)



Drone for Postal Delivery

## ANA holdings

- ANA Holdings demonstrated at **Okinawa in Nov 2023**
- Delivered food to **residents located 2.3km away as part of last mile delivery**



Drone used at demo

## KDDI Smart Drone

- KDDI conducted the **first medical drone delivery with Level 4**

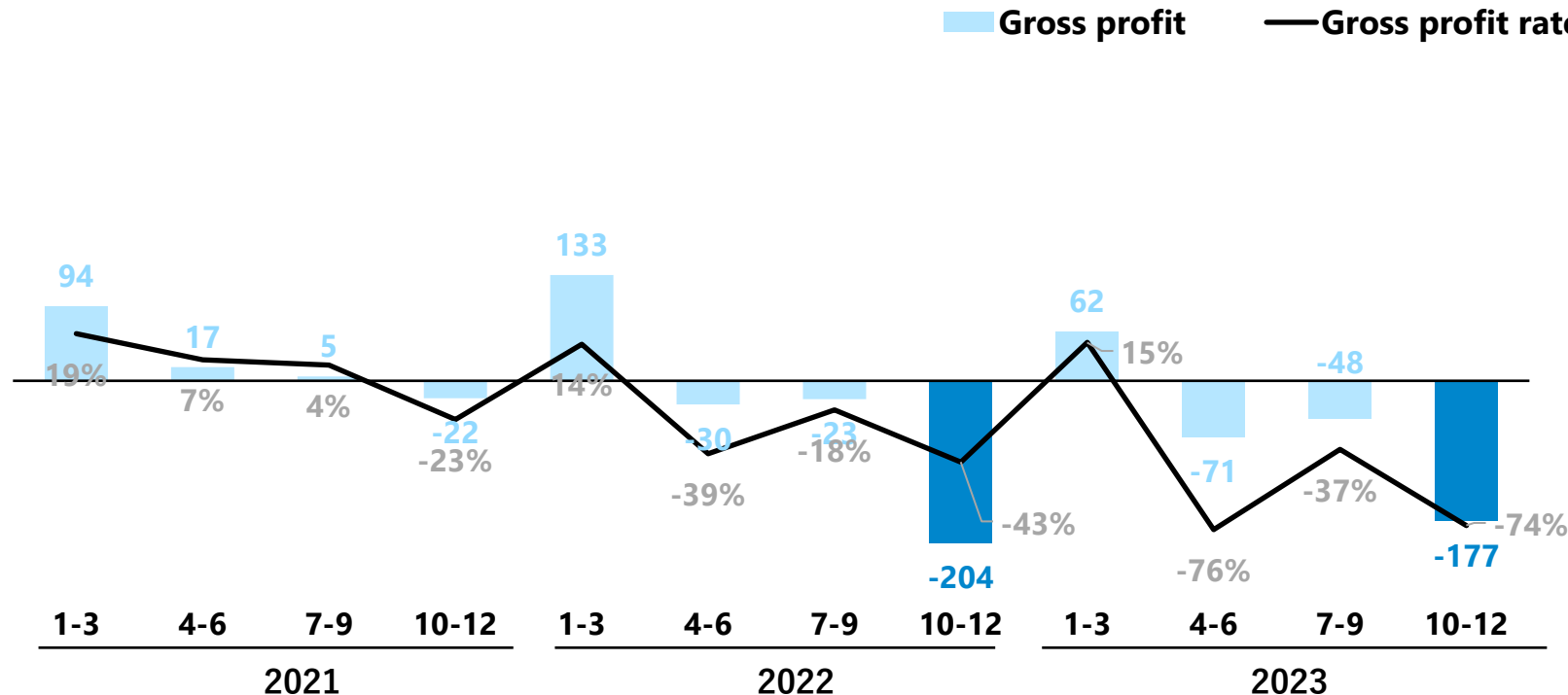


Drone landing

## Gross profit improved for Q4. Full year was lower than last year due to booking of inventory write-down

### Gross Profit and Gross Profit Ratio<sup>1</sup>

mn JPY



- Gross profit rate of Q4 improved compared to last year
- Booked one-time impact of inventory write-down (1.4 Oku JPY)
- Full year lower by 18 pts compared to full year last year

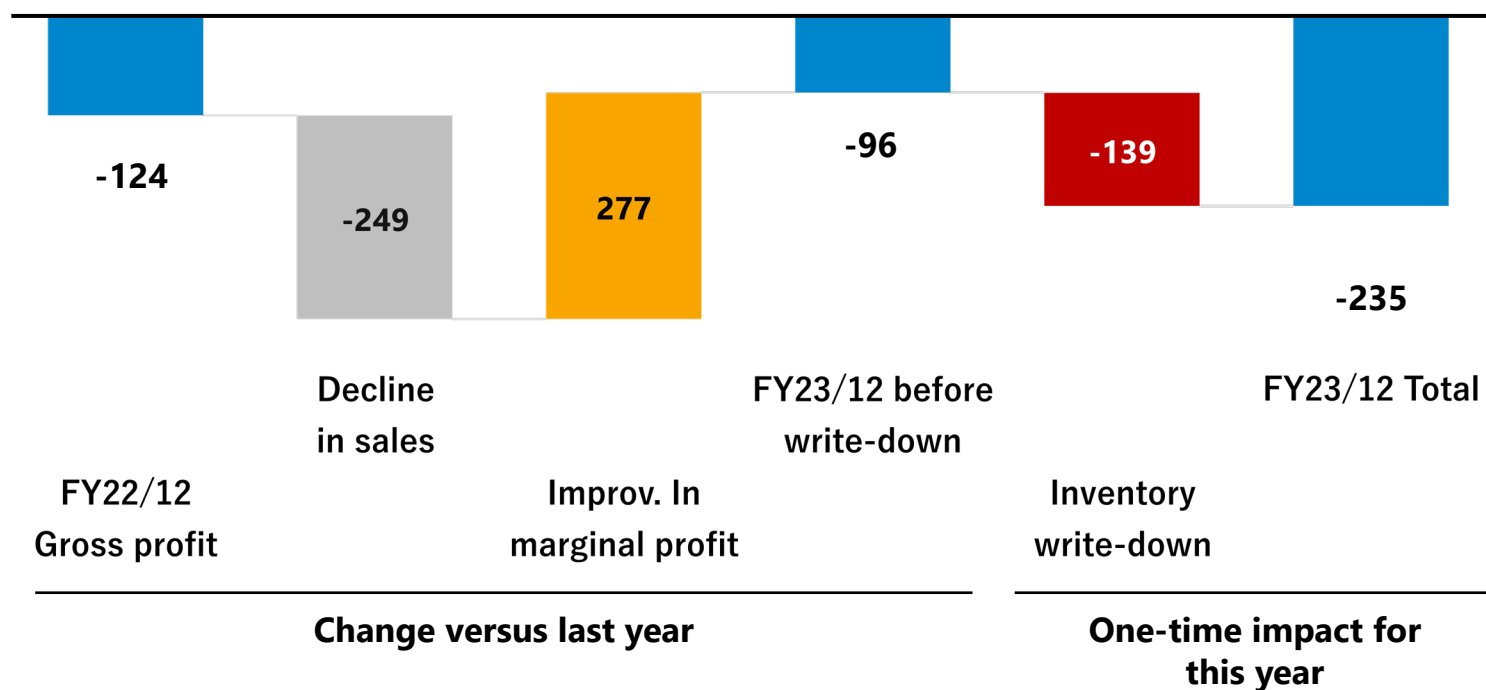
1: Fiscal year ending in March until FY21/3. FY21/12 is irregular with 9 months between 21/04~21/12. FY22 onward is fiscal year ending December

# Change in gross profit for FY22 to FY23

**Though sales declined, impact of marginal profit improvement overwhelmed.  
Total declined due to recording inventory write-down**

## Gross profit

Mn JPY



- Gross profit declined 2.5 Oku JPY due to decline in sales
- Marginal profit improved by 16%, improving gross profit by 2.8 Oku JPY
- Booked inventory write-down of camera, booking one-time loss of 1.4 Oku JPY

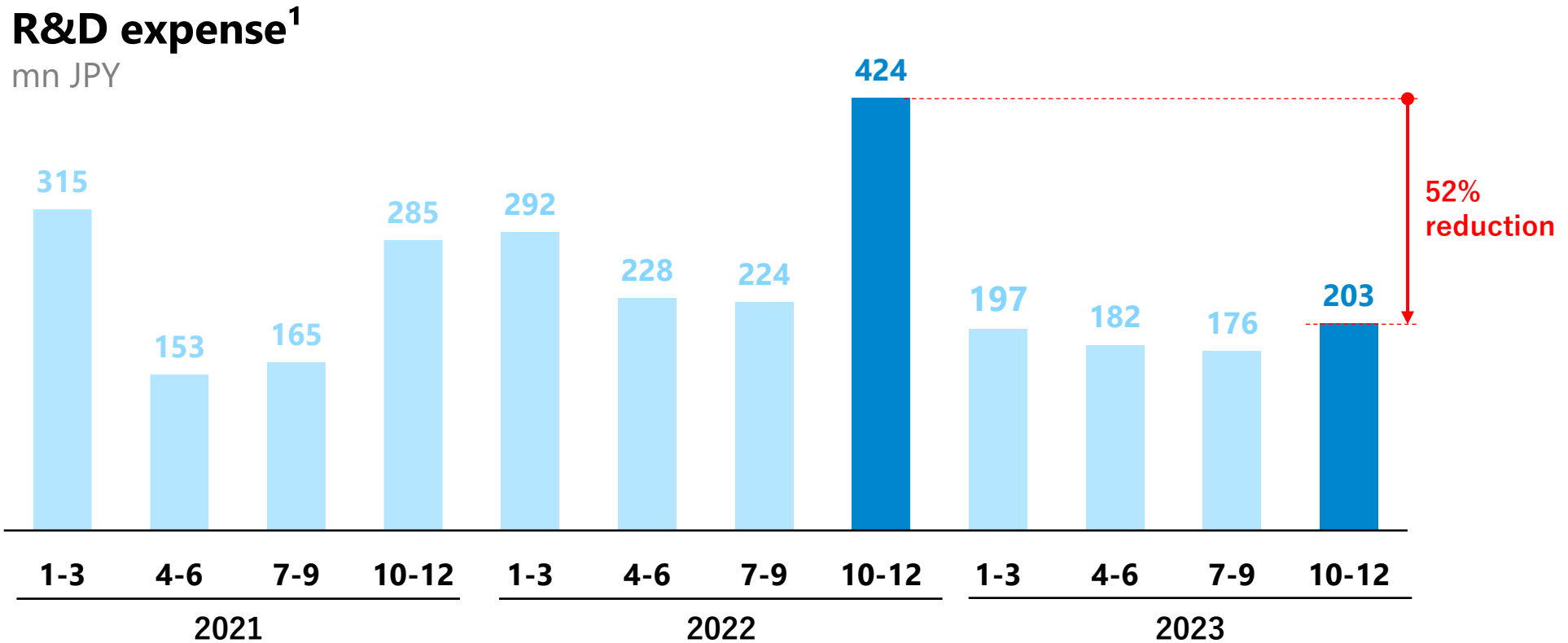
# Marginal profit ratio by segments<sup>1</sup>

**Both SOTEN and Solutions dev. achieved higher profit ratio than previous year**

		FY22/12 full year		FY23/Q3 full year
<b>SOTEN</b> (Aerial photography)	Sales (100 mn JPY)	9.3		2.0
	# of drones (units)	645		101
	Marginal profit ratio (%)	20	➔	46
<b>Solution Development</b> (Proof-of-concepts trials, sales of prototype drone)	Sales (100 mn JPY)	5.0		3.3
	Marginal profit ratio (%)	54	➔	61

1: Marginal profit by product is defined as net sales minus variable costs; for SOTEN and drone sales, it is defined as net sales minus material costs; and for proof-of-concept trials, it is defined as profit minus direct subcontracting costs. Gross profit is defined as marginal profit minus labor and manufacturing costs.

**R&D investment curbed in FY23/12 from the previous year as major R&D investment completed. 52% reduction for Q4, 35% reduction for full year**


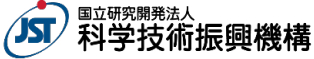


1: Fiscal year ending in March until FY21/3. FY21/12 is irregular with 9 months between 21/04~21/12. FY22 onward is fiscal year ending December



# Awarded 2 national projects for technical development

## Award SBIR to develop next generation of aerial photo drone with budget of 2.6bn JPY. Additional 1bn JPY by taking part in K program.

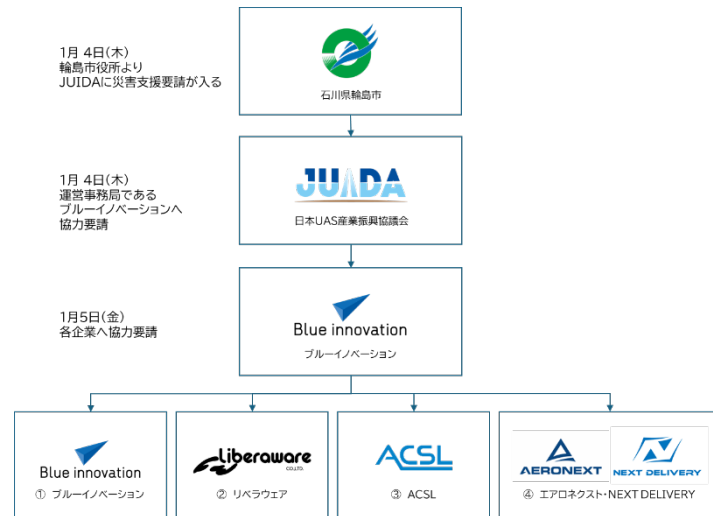
	Project Summary	ACSL Role	Period / Value
 <b>SBIR</b> (Small Business Innovation Research program)	A large-scale technology demonstration project to promote research and development by <b>small and medium-sized enterprises</b> and quickly bring innovative and superior technology to social implementation.	<ul style="list-style-type: none"><li>■ <b>Development of a new high-performance compact aerial photography drone</b> that takes economic security and security into consideration</li><li>■ Utilizing the knowledge gained through the development of SOTEN and feedback from the market, we will respond to the <b>demand for small aerial photography drones in Japan and overseas.</b></li></ul>	<ul style="list-style-type: none"><li>■ <b>Period :</b> Nov 2023 ~Dec 2025</li><li>■ <b>Subsidy :</b> <b>Max 2.6 bn JPY</b></li></ul>
 <b>K Program</b> (Economic security important technology development program)	Developing <b>cutting-edge and important technologies that are essential for Japan</b> to maintain a firm position in the international community	<ul style="list-style-type: none"><li>■ <b>Research and development of control technology and system construction</b> that can realize autonomous group flight in harsh environments</li><li>■ Development of technology for <b>multiple drones to estimate and understand their own spatial position</b> and share</li><li>■ <b>Establishment of distributed control technology</b> that enables highly autonomous flight and group flight even in unknown environments where GPS is not available.</li></ul>	<ul style="list-style-type: none"><li>■ <b>Period :</b> Dec 2023 ~Mar 2028</li><li>■ <b>R&amp;D subsidy :</b> <b>Max 1 bn JPY<sup>2</sup></b></li></ul>

1: Multiple drones flying simultaneously and in collaboration  
2: Value will be determined based on discussion with funding parties

## Under the direction of JUIDA and request from Wajima-city, ACSL supported early disaster support

### Structure of support

- Under JUIDA guidance, ACSL conducted disaster surveys and delivery



### Summary

- Used SOTEN with high wind resistance to survey the disaster area
- Conducted delivery of medical goods using AirTruck, a co-development with Aeronext



Soten in action



AirTruck

1. Market / Mission / Growth strategy
2. FY23/12 Q4 results and highlights
- 3. Business transformation based on current understanding of the situation**
4. Appendix

## Understanding of the current situation

- Macro environment are in support for economic security, DX and decarbonization becoming a tailwind for robotics. However, change in external environment such as rise in semicon prices, weak yen and global inflation has suppressed profit
- SOTEN was expected to be the growth driver, however, initial product defects and market feedback built a negative reputation immediate after product launch, which lead from customers refraining from procurement. Additionally, macro environment has lead to weak cost competitiveness, making the product not attractive
- In order to secure growth, market entry to countries accelerating China ban, such as US and Taiwan, has begun and country-wide demonstrations to rebuilt SOTEN reputation is being conducted, however this has not lead to clear resolution of the current situation

**Conduct transformation with focus on sales and profitability to improve corporate value**

## Overview

- **Select and focus** the widely offered market (application) and products based on profitability
- **Optimize resource** and transform to a profitable cost structure not relying on huge sales growth

### Growth

Select and focus regions, applications, customers and products to where ACSL can compete and be profitable

### Profitable

Negotiate and collaborate with key suppliers for cost reduction, and appropriate pricing based on individual customers

### Optimize

Reduce R&D expenditure based on the selected domain, rationalize work, and optimize human resource

# Select and Focus : Target domain with strong competitiveness

## Conduct immediate focus on domains with strong competitiveness and profitability

	<b>Current activity</b>	<b>Competitiveness</b>	<b>Focus</b>
<b>Domain 1</b> <b>Aerial photo</b> 	<b>SOTEN</b> (launched) <b>Development of next gen aerial photo drone</b> (SBIR ending FY26)	<b>Drone development that meets economic security demand</b> <b>One of the very few mass manufacturer in Japan for aerial photo drone</b>	<b>Japan : Defense and Disaster (public agency)</b> <b>Overseas : Focus on US and Taiwan that has shown strong China ban. Start with inspection and expand to defense and disaster</b>
<b>Domain 2</b> <b>Delivery</b> 	<b>Partnership with Japan Post</b> <b>Development of Postal delivery drone</b> <b>Continuous trials for social implementation</b>	<b>High technical capability that achieved the only Level 4 type certificate</b> <b>Abundant record of successful delivery trials in Japan</b> <b>In-depth technical and operational team setup with Japan Post</b>	<b>Japan : Continue development with Japan Post, and establish operations for social implementation</b>

# Optimize resource: Transform in sync with domain focus

## Optimize structure based on domain focus, and improve FY24 operating profit by ~400 mn JPY

		Initiatives for transformation	Remark	
Growth		Focus resource on aerial photo and delivery	60% of resource is currently allocated to aerial photo and delivery	Annualized impact of ~800 mn JPY. FY24 realize is ~400 mn JPY for operating profit <sup>1</sup>
		Stop other application dev		
Profitable		Continue with minimum resource customer projects that has solid demand and can secure profitability (PoCs)	Mainly improve SOTEN profitability	
		Negotiate and collaborate with key suppliers for cost reduction		
Optimize	Human Resource	Appropriate pricing based on individual customers	Max 50% reduction vs today	
	Expense	Optimize Japan headcount to focus on aerial photo and delivery		
			Increase human resources for US subsidiary	
		Reduce external expenditure based on select and focus	Stop excessive cost	
	Reduce service expenditure based on headcount reduction	Reduce service usage based on headcounts		

1: FY24 realize impact calculated on timing and one time expense for labor cost and expenditure

# FY24 financial plan after transformation (consolidated)

**Complete current business transformation to achieve solid revenue and profit improvement. In addition, India large project and SBIR will be booked.**

[mn JPY]	FY23/12 Full year	FY24 After transfor- mation	India large project	SBIR (Gov project)	FY24 Full year	Remark
<b>Net sales</b>	896	1,500	+1,840	-	3,340	<ul style="list-style-type: none"> <li>Focus on SOTEN and delivery and achieve solid revenue of 1.5 bn JPY in FY24</li> <li>Additional India large project to be booked in FY24</li> </ul>
<b>Gross profit</b>	▲235	70	+40	-	110	<ul style="list-style-type: none"> <li>Improve gross profit by completing the profitability initiative and book 70 mn JPY</li> </ul>
<b>Gross profit ratio</b>	▲26%	5%	-	-	3%	<ul style="list-style-type: none"> <li>India large project contributes additional 40 mn JPY</li> </ul>
<b>SG&amp;A (inc. R&amp;D, US subsidiary)</b>	1,836	1,570	-	+1,600	3,240	<ul style="list-style-type: none"> <li>Current business SG&amp;A to reduce down to 1.43 bn JPY. Re invest into US subsidiary.</li> <li>In addition to current biz, additional 1.6 bn JPY for R&amp;D for SBIR national project (fully funded)</li> </ul>
<b>Operating profit</b>	▲2,071	▲1,500	+40	▲1,600	▲3,060	<ul style="list-style-type: none"> <li>1.6 bn JPY to be booked under SG&amp;A for SBIR. the expenditure up to the third quarter is expected to be recognized as non-operating income of 1.2 bn JPY.</li> </ul>
<b>Ordinary profit</b>	▲2,102	▲1,500	+40	+1,200 (Non operating income)	▲1,860	

1: Income recognition to be booked for non-operating income as a subsidy at the timing when the expenditure amount is confirmed after inspection by the METI.



## 1.44 bn JPY financing completed from Japan Finance Corporation in Jan 2024 for overseas expansion

**Raised amount**

**1.44** bn JPY

**From**

**Japan Finance Corporation**

**Interest rate**

**Fixed rate**

**Period**

**10 years**

**Repayment method**

**Equal principal payment after 5 years (2029)**

**Use**

**Working capital for overseas expansion**

# Reduction in the amount of share capital and legal capital surplus and Appropriation of surplus

## For flexibility and mobility of capital policy capital reduction and deficit compensation will be implemented

mn JPY	24/2/14 Non-Consolidated Net assets
Share Capital	986
Capital Surplus	
Legal capital surplus	5,492
Other capital surplus	827
Retained earnings	
Other retained earnings (Retained earnings brought forward)	▲5,044
Treasury shares	▲0
<b>Total shareholders' equity</b>	<b>2,261</b>

### Reduction in the amount of share capital and legal capital surplus (Capital reduction)


The amount of share capital is reduced to 10 mn JPY, the amount of legal capital surplus is reduced to 1,424 mn JPY, and 5,044 mn JPY is transferred to other capital surplus.

### Disposition of surplus (Deficit offset)

5,044 mn JPY transferred from share capital and legal capital surplus to other capital surplus is transferred to other retained earnings, offsetting the negative retained earnings.

### Total shareholders' equity

No change after capital reduction and deficit offset

- 
- A drone is shown in flight against a clear blue sky, positioned in the upper left quadrant of the image. Below the drone, a series of misty, layered mountain ranges stretch across the horizon, creating a sense of depth and atmosphere. The overall color palette is dominated by various shades of blue and white.
- 1. Market / Mission / Growth strategy**
  - 2. FY23/12 Q4 results and highlights**
  - 3. Business transformation based on current understanding of the situation**
  - 4. Appendix**

Item	Question	Answer
<b>Macro</b>	Will the global expansion of military demand have an impact on the Company?	It is our policy not to develop or provide technology for drones used for offensive purposes. On the other hand, it is expected that drones used for defense purposes such as reconnaissance and patrol will either be produced domestically or procured from allied countries.
<b>Macro</b>	Will semiconductor shortage continue to have impact this year?	In 2022, the shortage of semiconductors and price hikes will continue to have a negative impact of about 600 mn JPY on gross profit. The marginal profit margin recovered in 2023 as a result of measures such as design changes.
<b>Sales</b>	The specific reasons for the decrease in SOTEN	In Japan, we have been receiving continuous feedback on performance aspects such as video shooting and flight performance. In addition, when compared in terms of price, we were less competitive than Chinese products. We expect to expand sales by focusing on government agencies through continuous improvement of performance and cost reduction.
<b>COGS</b>	The content of the inventory valuation loss	We revised the selling price of some cameras mounted on drones to make them price competitive. In accordance with accounting standards, we revised the inventory valuation and recorded a valuation loss.
<b>Overseas</b>	The progress in US and the specific timing of sales, future prospect	We have already signed MOUs with 5 companies including distributors and end users. We plan to expand sales through 8 sales agents. We obtained export permission in November 2023 and sold 50 units to distributors in December 2023. We have already finished selling from the distributor and are discussing new sales for 2024.
<b>Overseas</b>	The progress in Taiwan and the specific timing of sales, future prospect	We have signed a dealership contract with a local sales agent. We have already conducted demos and other activities locally and have received evaluations. We are currently applying for export permission for product sales and expect to sell this term. The products we plan to sell are SOTEN and PF2.
<b>Overseas</b>	The specific content, scale, profitability, and acceptance timing of the large project in India	We have received an order for a project to procure and supply ground running robots as one of the projects for 13.6 mn USD (1.84 billion yen) in the MOU to collaborate with an Indian partner company on a total scale of 30 mn USD (4.05 billion yen). We proceeded with export approval procedures and risk assessments during 2023 and carried out the first delivery without any problems. We are proceeding with acceptance work locally and expect to record it in FY24.

Item	Question	Answer
<b>Overseas</b>	What is the policy for other overseas?	We focus on countries such as the United States, Taiwan, and India that have a policy of decoupling from China. We are verifying the possibilities in Australia, some parts of Europe, South America, Southeast Asia, etc.
<b>Outlook</b>	What is the composition of sales, and the overseas ratio for FY24?	Excluding the large project in India, sales of SOTEN mainly accounts for 1.5 billion in sales, in addition demonstration experiments in the logistics field in Japan and sales of existing drones will be booked. Although domestic sales are the main, we expect to expand sales in the United States and start sales in Taiwan.
<b>Outlook</b>	Is there a possibility that sales and development cannot be done due to cost reduction	We aim to optimize resources by focusing on two areas (small aerial photography, logistics). Even after implementing redundancy plan, we expect to secure the personnel to achieve the current sales plan. We design incentives and career paths so that core personnel do not leave.
<b>Competitive environment</b>	Chinese drone manufacturers have a high market share, but how to compete against them?	We recognize that although Chinese manufacturers have a large share of the consumer market, there is no clear dominant player in the industrial drone market. In addition, we have three competitive advantages over Chinese manufacturers: (1) technological standards for industrial drones (autonomous control technology, application-specific drones tailored to each use case, and drone certification), (2) understanding customer operations and building a support system to meet local customer requirements, and (3) providing secure and reliable drone to exclude security concerns. Recently, due to growing security concerns, some overseas countries have explicitly banned the import or use of Chinese drones, a situation that we recognize is favorable to us.
<b>Competitive environment</b>	The possibility of emergence of competitors as drone manufacturers?	Companies that possess autonomous control system technology at the source code level, especially those that have commercialized the advanced model-based control technology that we employ, are rare worldwide. The development of autonomous control systems for industrial drones requires verification in the field. We have a strong customer base, and we can enhance our competitiveness by promoting development in response to actual demand for each application through dialogue with customers and verification in actual environments.

Item	Question	Answer
<b>Sales structure</b>	What is the sales structure in overseas market?	Depending on the situation in each country, in the U.S., a subsidiary was established with a sales function. In India, we have established a JV with a local partner company. In each of these regions, we believe that local sales and support functions are important, and we will work to deepen cooperation with local companies.
<b>Risk</b>	What are the biggest perceived risks?	We recognize that major accidents involving drones, including those involving drone manufacturers other than our company, are a major risk. Stricter laws and regulations on drones due to serious accidents, deterioration of public trust in drones, and other factors are expected to delay the commercialization of drones and delay the introduction of drones by customers, slowing the speed of the ACSL's business development.
<b>Manufacturing System</b>	Is there a potential shortage of manufacturing capacity?	As a fabless manufacturer, we outsource production to an external partner in Japan and can handle increased manufacturing capacity.
<b>Performance</b>	How seasonality in sales occurs?	For delivery of drones, sales are recorded when all the drones have been delivered and inspected by the client; for trial projects, sales are recorded when the entire project is completed. For large projects, sales are often recorded from January to March, depending on the budget cycle of the client company. On the other hand, sales are usually small from April to June. However, the recent supply side has had an impact on drone sales, and the concentration of sales in the January-March period tends to be less than in the past.

# Characteristics of the launched application-specific drones

## Developed and launched 4 application-specific drones by the end of 2022



### **SOTEN**

(Aerial photography)

- Secure drones targeting government procurement, etc., in the context of economic security
- Four types of cameras can be hot-swapped, and the drone is wind-resistant, dustproof and waterproof



### **Fi4**

(Pipe inspection)

- Drone capable of flying in pipes such as water and sewage pipes, co-developed with NJS
- Screening surveys can be conducted to narrow down the scope of detailed surveys



### **Smokestack inspection**

- Autonomous flight to capture highly accurate inspection images of smokestacks, boilers, and water control tanks at factories and power plants in dark locations where it is GPS-denied



### **AirTruck**

(Delivery)

- Delivery drone capable of flying 20 km with 5 kg payload
- KDDI SmartDrone and Aeronext form AirTruck Starter Pack to expand nationwide

# Balance Sheet

Mn JPY	FY23/12		FY22/12	FY21/12
	Actual	YoY change to same period previous year	Actual	Actual
Current assets	4,203	+18%	3,572	4,117
Cash	1,499	+11%	1,356	2,759
Fixed assets	891	▲36%	1,403	1,537
Current liabilities	1,603	▲20%	2,003	287
Fixed liabilities	1,227	+3,472%	34	8
Total liabilities	2,830	+39%	2,037	295
Net assets	2,264	▲23%	2,938	5,419
Total assets	5,094	+2%	4,976	5,715



Indicator		FY19/03	FY20/03	FY21/03	FY21/12 (9か月)	FY22/12	FY23/12
		Actual	Actual	Actual	Actual	Actual	Actual
<b>Sales of application-specific drones</b>							
Small aerial photography drone (Low ASP)	Units					645	101
	Amount (100 mn JPY)					9.3	2.0
Other application-specific drone (High ASP)	Units	-	-	-	-	18	26
	Amount (100 mn JPY)					0.7	1.3
<b>Solution development<sup>1</sup></b>							
PoC and Development	Projects	81	112	82	41	71	52
	Amount (100 mn JPY)	2.9	8.6	3.7	1.2	3.9	3.3
Sales of Platform/ Evaluation drone <sup>1</sup>	Units	106	101	46	18	27	15
	Amount (100 mn JPY)	3.8	3.0	1.4	0.6	1.0	0.6
Number of shipments <sup>1</sup>		136	128	71	25	42	23

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)

# Quarterly Sales Trends



Fiscal Year <sup>1</sup>		FY21/03				FY21/12				FY22/12				FY23/12			
Quarterly Results		1Q	2Q	3Q	4Q	1Q	2Q	3Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
<b>Demonstration experiment<sup>2</sup></b> <ul style="list-style-type: none"> <li>• Proof of Concept</li> <li>• Custom development</li> </ul>	Sales mn JPY	1	22	22	323	14	42	67	252	16	25	103	262	5	28	40	
	Num. of projects	2	11	15	54	6	14	21	34	2	12	23	28	4	10	10	
<b>Sales of platform drone<sup>3</sup></b> <ul style="list-style-type: none"> <li>• Sales of standard and general-purpose drone</li> <li>• Drone modified for customers based on the standard drone</li> </ul>	Sales mn JPY	4	10	13	116	15	34	17	42	17	7	37	39	9	3	15	
	Num. of units	1	3	5	37	6	6	6	8	4	2	13	7	3	1	4	
<b>Other<sup>4</sup></b> <ul style="list-style-type: none"> <li>• Sales of parts</li> <li>• Fuselage repair service</li> <li>• Some national projects</li> </ul>	Sales (of which national projects) mn JPY	30 (21)	8	10	55	237 (219)	55 (50)	15	64	20	11	24	59 (16)	30	16	46	

1: FY21/03 fiscal period is from April to March of the following year; FY21/12 is an irregular fiscal period from April to December; FY22/12 fiscal period is from January to December

2: Solution development (STEP 1 and 2) changed to demonstration testing from FY21/03 1Q

3: Drone sales (STEP3, 4) changed to platform drone sales from FY21/03 1Q

4: National projects generally record subsidies received as non-operating income. On the other hand, some projects whose main purpose is to conduct commissioned experiments are recorded as revenues

# Major financial items by quarter



Fiscal Year <sup>1</sup>	FY21/03				FY21/12			FY22/12				FY23/12			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Quarterly Results	1Q	2Q	3Q	4Q	1Q	2Q	3Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>Net sales</b> mn JPY	36	42	46	495	267	133	100	952	78	130	473	429	94	132	239
<b>Gross profit</b> mn JPY	▲6	▲6	▲13	94	17	5	▲22	133	▲30	▲23	▲204	62	▲71	▲48	▲177
<b>Gross profit ratio</b>	▲19%	▲16%	▲28%	19%	7%	4%	▲23%	14%	▲39%	▲18%	▲43%	15%	▲76%	▲37%	▲74%
<b>SG&amp;A expense</b> mn JPY	230	173	315	488	325	348	515	535	442	431	670	419	451	469	495
<b>Of which R&amp;D expenses</b> mn JPY	60	77	129	315	153	165	285	292	228	224	424	197	182	176	203
<b>R&amp;D Expenses ratio to sales</b>	167%	183%	278%	64%	57%	124%	285%	31%	290%	172%	90%	46%	192%	133%	85%

1: Figures are based on consolidated financial statements from 3Q FY21/3 onward, and figures for earlier quarters are based on non-consolidated financial statements. FY21/12 is an irregular accounting period from Apr. to Dec. FY22/12 is an irregular accounting period from Jan. to Dec.

# Potential Risks and Responses



Item	Major Risks	Our Perceptions and Risk Response Measures
<b>Macro</b>	<ul style="list-style-type: none"> <li>▪ Shortage of materials procurement against production plan due to semiconductor shortage and price hikes, material cost to sales ratio, and increased development costs</li> <li>▪ Increase in prices of products procured from overseas due to the weak yen and strong U.S. dollar</li> </ul>	<ul style="list-style-type: none"> <li>▪ Semiconductors used for high-power output shortages and price hikes continue to be a constant. As a result of design changes made in consideration of procurement stability, we expect a certain level of cost reduction effect from 2023</li> <li>▪ Overseas parts procured from domestic suppliers were partially affected by foreign exchange rate fluctuations which increased costs</li> </ul>
<b>Overseas deployment (e.g. military forces)</b>	<ul style="list-style-type: none"> <li>▪ Risk of being outperformed by overseas competitors in terms of competitiveness</li> <li>▪ Potential impact of laws and regulations and local business practices</li> <li>▪ Necessity of upfront investment for overseas expansion</li> </ul>	<ul style="list-style-type: none"> <li>▪ In overseas markets, economic security and unmanned needs may be stronger than in Japan, and demand for secure drones is expected to be significant.. SOTEN's demonstration in the U.S. market and subsequent inquiries have shown that SOTEN has sufficient competitiveness</li> <li>▪ A certain amount of man-hours may be required to comply with local laws, regulations, and business practices. In addition, depending on the location, it is necessary to consider local partner cooperation and collaboration parts</li> <li>▪ Possibility of aggressive upfront investment to acquire sales in overseas markets, including development of functions for local markets, export support, and initial customer acquisition</li> </ul>
<b>Regulation</b>	<ul style="list-style-type: none"> <li>▪ Impact of the Civil Aeronautics Act, etc. on our business</li> </ul>	<ul style="list-style-type: none"> <li>▪ ACSL has managed to get Tier-1 type certification for Level 4 flight. No impact foreseen by Civil Aeronautics Act in the coming years</li> </ul>
<b>Performance</b>	<ul style="list-style-type: none"> <li>▪ Uncertainty and seasonality of revenue recognition and cost execution</li> <li>▪ Need for aggressive investment in R&amp;D</li> </ul>	<ul style="list-style-type: none"> <li>▪ Japan sales are expected to be at least the same as the previous year, while overseas sales will be announced once a reasonable estimate is made. Seasonality will continue to be affected by customers' budget cycles, but sales of SOTEN and other products may fluctuate depending on supply</li> <li>▪ Flexible investment policy in R&amp;D and other areas for product development, overseas expansion, and other high-potential initiatives</li> </ul>

Copyright © 2024 ACSL Ltd.

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law.

Information in this material is subject to change without notice, its accuracy is not guaranteed and it may not contain all material information concerning ACSL Ltd. (the "Company"). The Company makes no representation regarding, and assumes no responsibility or liability for, the accuracy or completeness of, or any errors or omissions in, any information contained herein.

In addition, the information contains projections and forward-looking statements that may reflect the Company's current views with respect to future events and financial performance. These views are based on current assumptions which are subject to various risks and which may change over time. No assurance can be given that future events will occur, that projections will be achieved, or that the Company's assumptions are correct. It is not the intention to provide, and you may not rely on this presentation as providing, a complete or comprehensive analysis of the Company's financial or trading position or prospects.

This presentation does not constitute an offer or invitation to purchase or subscribe for any securities or financial instruments or to provide any investment service or investment advice, and no part of it shall form the basis of or be relied upon in connection with any contract, commitment or investment decision in relation thereto.

ACSL