Highlights of 3rd quarter

- Annual orders for FY2020/03 is on track (over 1 BN JPY at Q3 end).
  - ✓ Sales (completed projects) were JPY335MM at Q3 YTD. Highly probable pipelines are 709 MM JPY.
  - ✓ “Provide Solutions” (STEP1, 2) and “Mass Production” (STEP3, 4) remained the same level compared to previous year. However, sales for national projects declined (from 65 MM JPY in FY19/03 to JPY18 MM in FY20/03).
  - ✓ Demand for “Provide Solutions” remains strong from existing customers, and ongoing large-scale projects. No change to annual forecast.
  - ✓ No significant change in cost structure since the forecast

- Deployments of drone solutions are accelerating among existing customers. Steadily developing top-tier new customers

- Strong demand for “Made in Japan” drones due to increasing need for data safety and reliability

Table of Contents

Financial Highlights

Achieved JPY335MM in Q3. Sales declined YoY due to increased seasonality and decline in sales from national projects

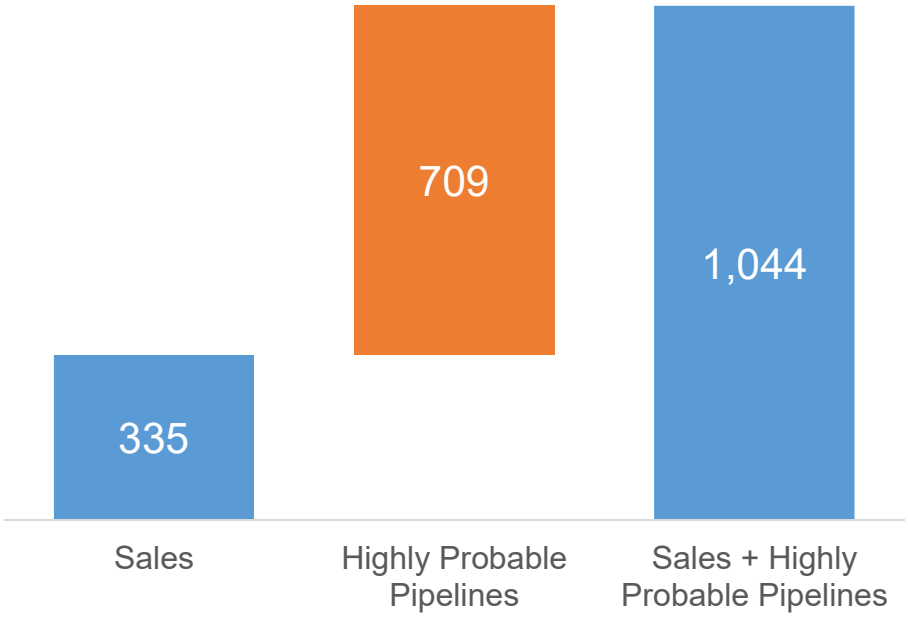
[MM JPY]

	FY20/03 Q2 Q3 (cumulative)		FY19/03 Q3 (cumulative)	FY19/03 Annual
	Actual	YoY	Actual	Actual
Sales	335	▲19.1%	414	807
Gross profit	152	▲23.2%	199	403
Gross margin	45.6%	▲2.5 ppt	48.1%	50.0%
Operating loss (▲)	▲426	-	▲374	▲330
Ordinary loss (▲)	▲209	-	▲215	▲176
Net loss (▲)	▲212	-	▲218	▲183

Order status for FY 20/03 at Q3 end

Highly probable pipelines[1] at Q3 is 1.04 BN JPY. Steadily confirming orders in Provide Solutions (STEP1, 2) towards annual sales forecast (1.4 BN JPY)

Sales and Pipelines
[MM JPY]



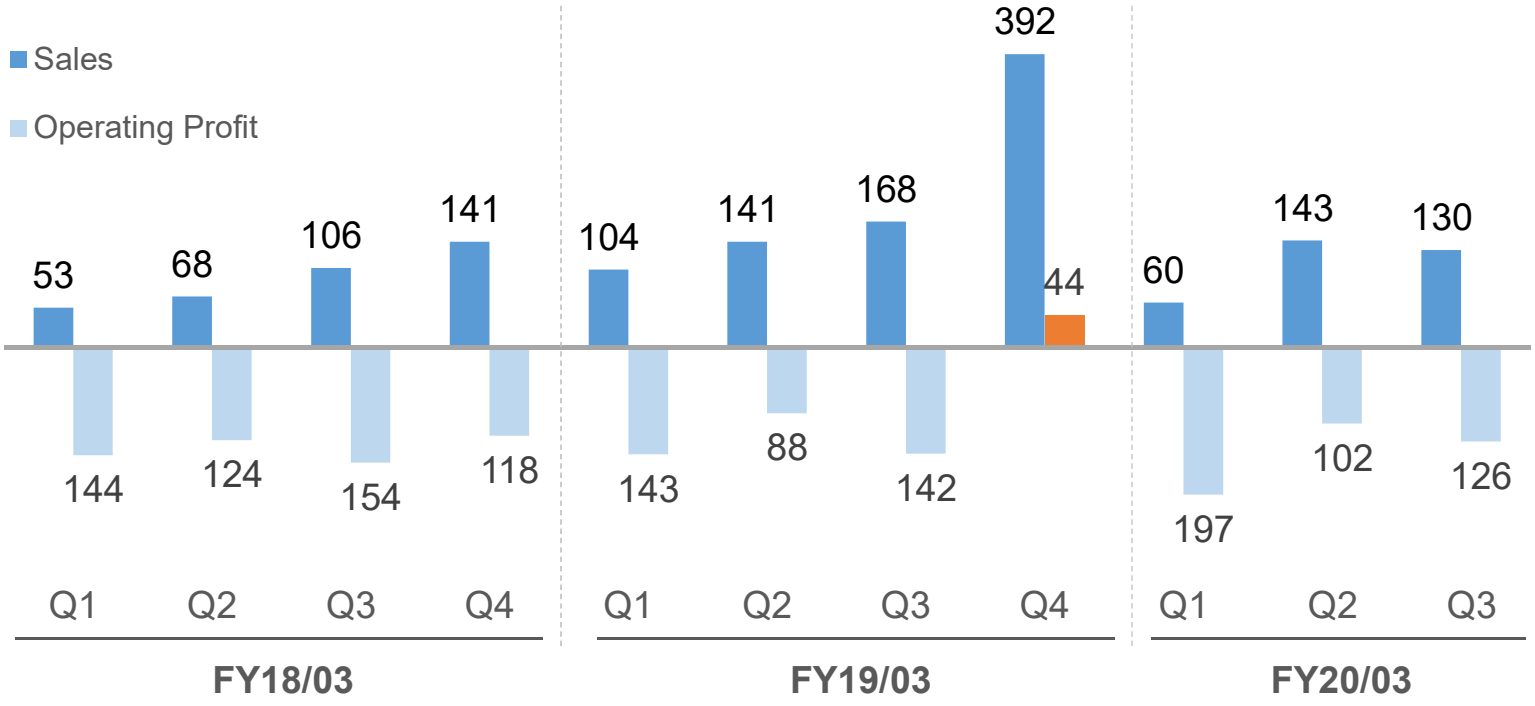
- Received 709 MM JPY orders at the end of Q3, mainly as large-scale projects
- As large-scale project sales are booked towards the end of the fiscal year, sales are concentrated in 4Q.
- Strong demand for “Provide Solutions” (STEP1, 2) from current and new customers

1：Highly probable pipelines is the total amount of sales for projects with a purchase order and related documents at the end of December

Sales and Operating Profit by Quarter

Scope of individual orders are getting larger, and sales are booked upon completion, creating increased seasonality with sales realized in Q4.

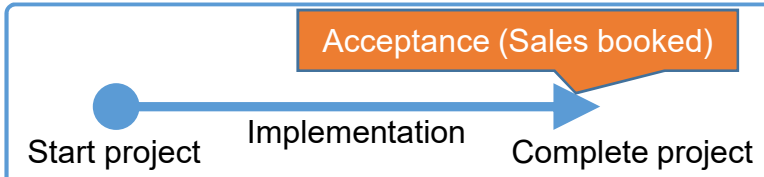
Quarterly Sales and Operating Profit
[MM JPY]



Sales Recognition and Seasonality

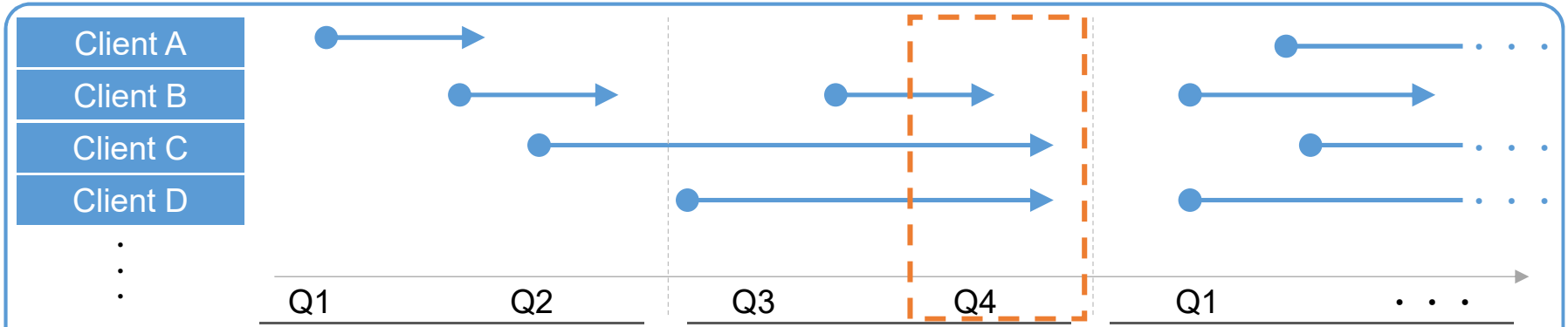
Sales are booked upon acceptance by client (at end of project). Seasonality increases towards 4Q driven by large-scale projects, mainly from existing customers

Sales Recognition



- Sales are booked at the time of acceptance by clients , at the end of each project
- Adopted for all projects regardless of duration or size

Large-scale projects and seasonality

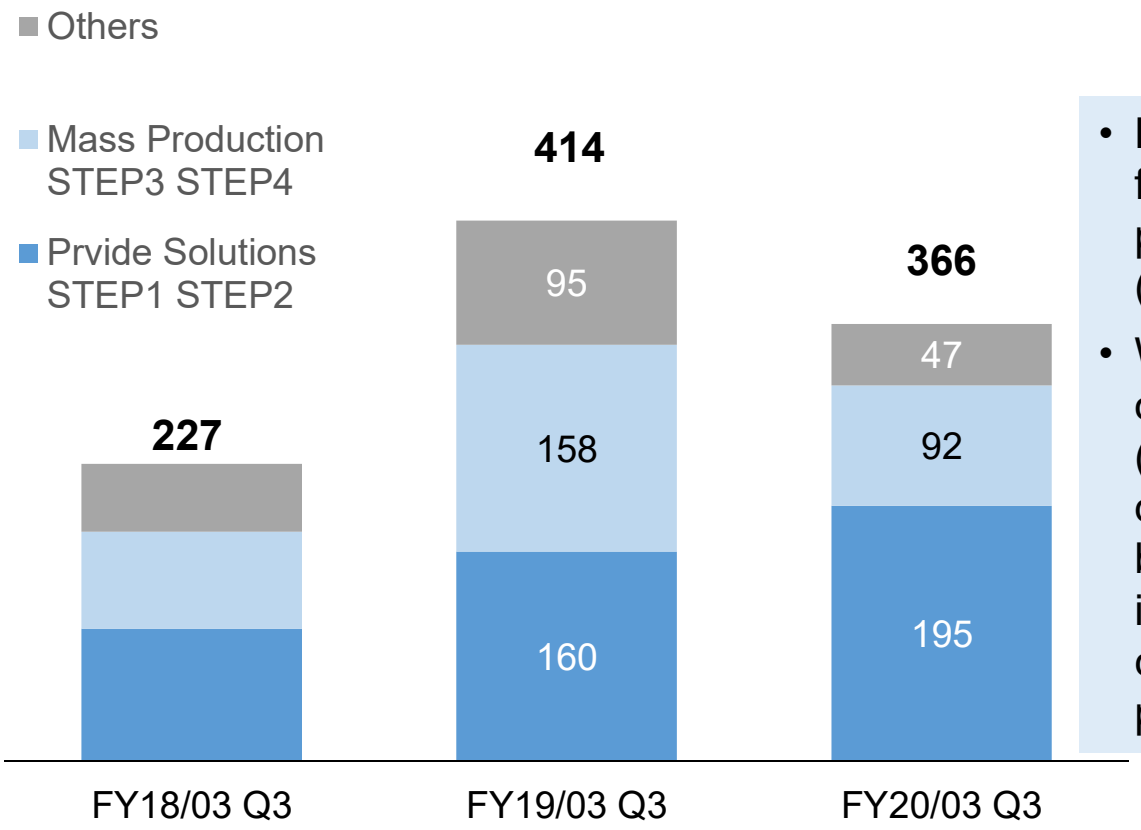


	1H of fiscal year	2H of fiscal year	Next fiscal year
Features	• Mainly small projects • Mainly with new customers	• Mainly large projects • Many large projects are booked in March	• Projects become larger • No projects across year end due to budget cycle

Sales

"Provide Solutions" (STEP 1,2) and "Mass Production" (STEP 3,4) remain the same level YoY. "Others" decreased due to national projects

Sales by STEP
[MM JPY]

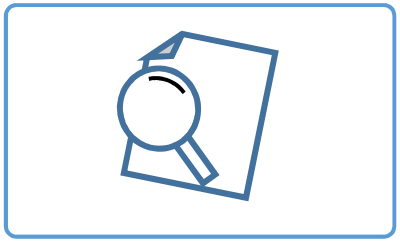


- Decrease in sales for national projects in "Others" (47 MM)
- While client-oriented business (Step1-4) slightly decreased on YoY basis, seasonality increased compared to previous year

Provide Solutions Sales

New client development and application expansion by current clients led to an increase in number of deals to 57

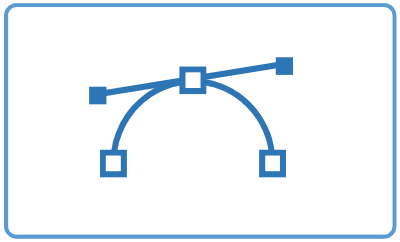
STEP 1
Proof of Concept



Proof of Concept
(Detail out drone usage)

- Verification of concept for drone usage is feasible or not
- Closed trials
- Use of ACSL platform drones

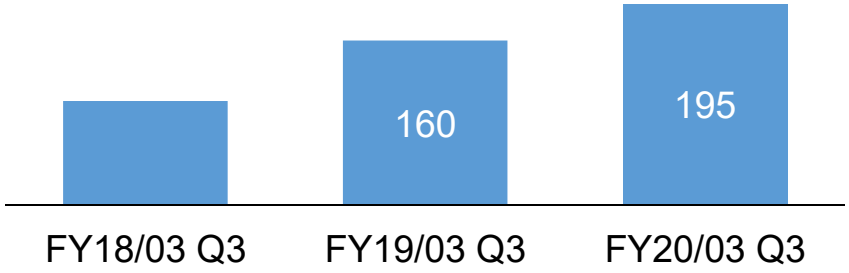
STEP 2
Custom Development



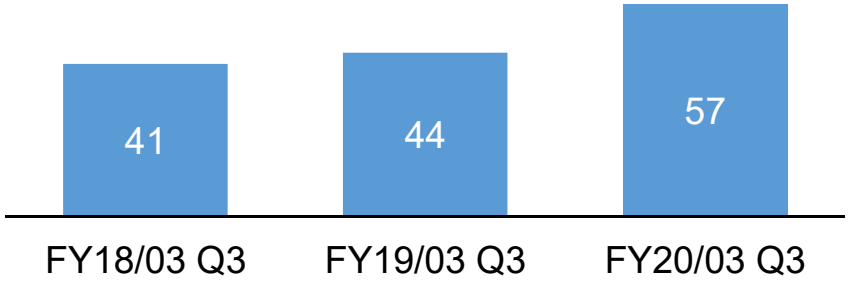
Custom development
(Design and develop entire system)

- Detail test designs
- Development of customized drones and systems
- Testing at low risk environment

"Provide Solutions" (STEP 1,2) Sales (MM JPY)



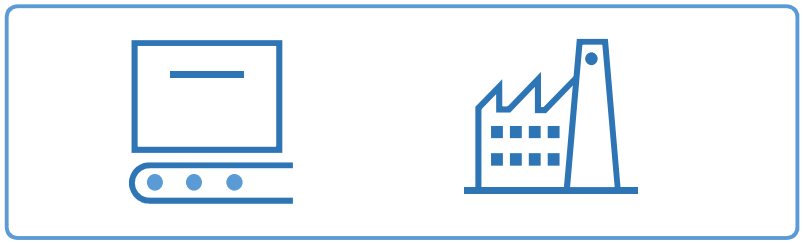
"Provide Solutions" (STEP 1,2) Number of Deals



Mass Production Trends

Mass Production (STEP3, 4) sales decreased YoY in Q3, but unit price remains the same

STEP 3 / STEP 4
Mass Production

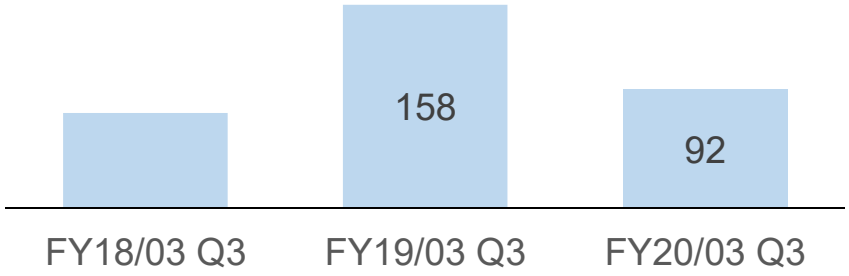


Deployment for commercial usage
(Sales of mass production model)

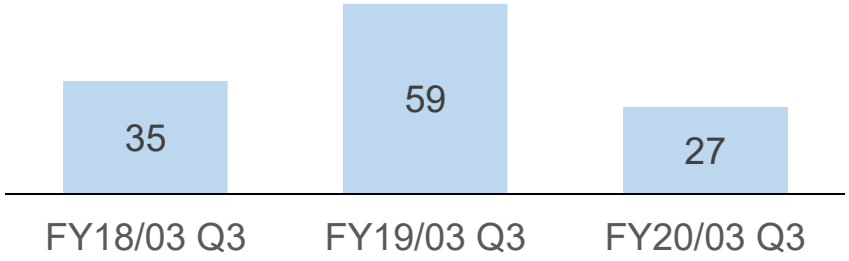
- Supply improved customized drones and systems
- Piloting or commercial use at actual sites by clients

*STEP 4 is more than 10 units sales per client in a year. Standard model sales is also included.

"Mass Production" (STEP 3,4) Sales (MM JPY)



"Mass Production" (STEP 3,4) Number of Units



Other Sales

Maintenance remained at the same level as last year while sales for national projects decreased from 65 MM JPY to 18 MM JPY

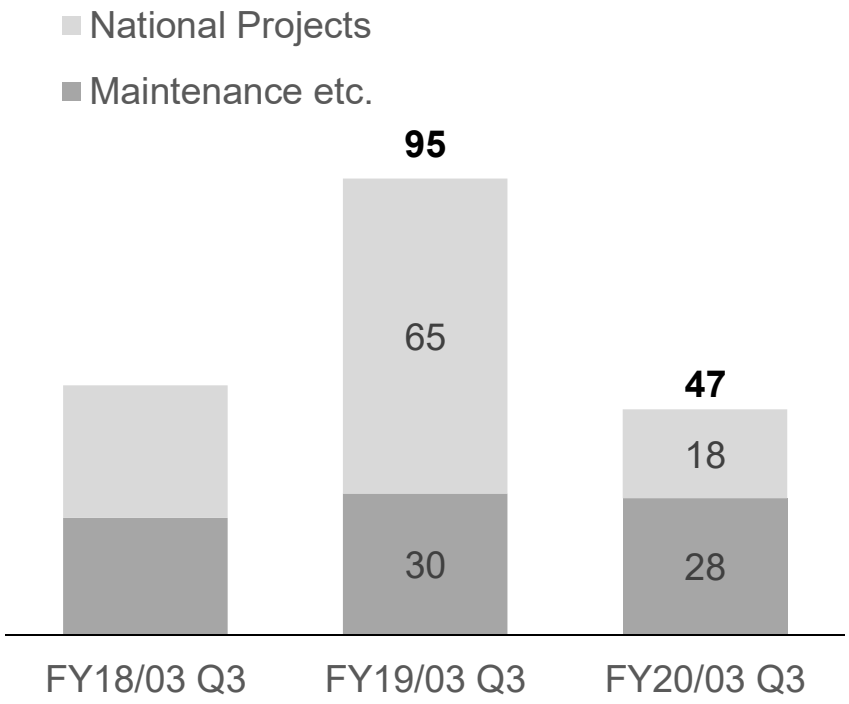
Others

Maintenance after drone installation
(Parts sales, Repair etc.)

- Sales of drone parts
- Repair service
- Some national projects

* While subsidies from national projects should in general count as a non operating income, some national projects count as a sales

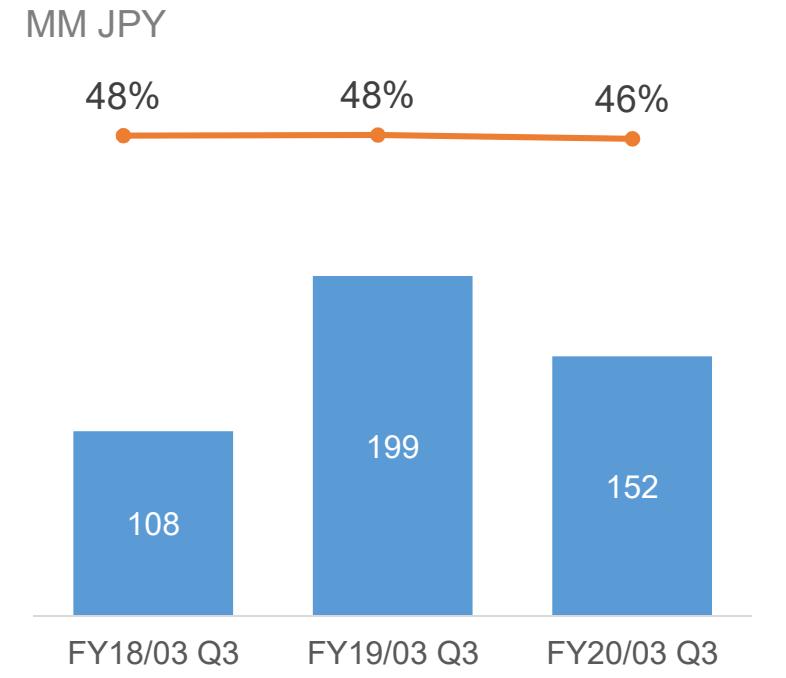
Others sales (MM JPY)



Gross Profit and R&D Expenses

Gross margin decreased on YoY basis. Annual R&D investment volume expected to remain similar to last year

Gross Profit and Gross margin



R&D Expenses and Ratio to Sales

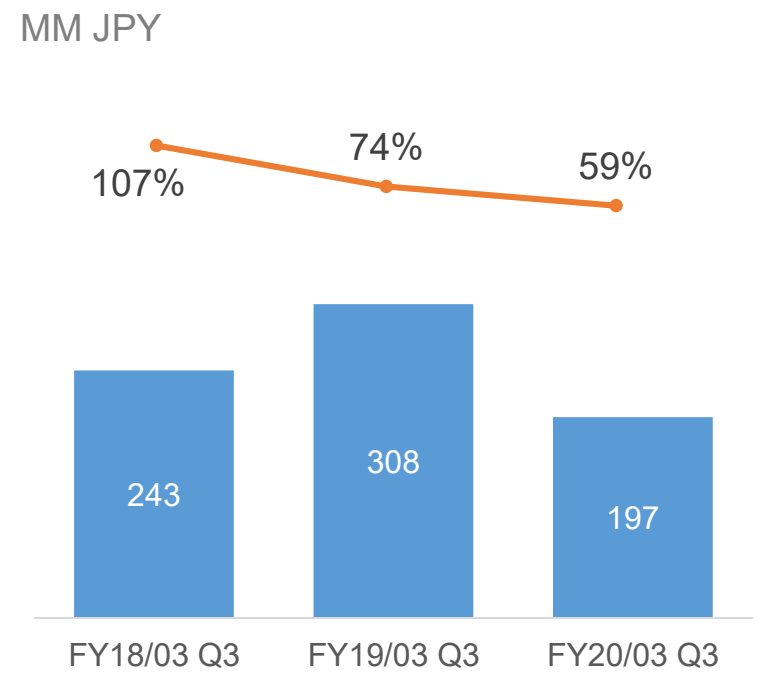


Table of Contents

Forecast for FY2020/03

Continued high sales growth ratio. FY20/03 sales is expected to be 1,418 MM JPY. Operating profit is expected to be 9 MM JPY

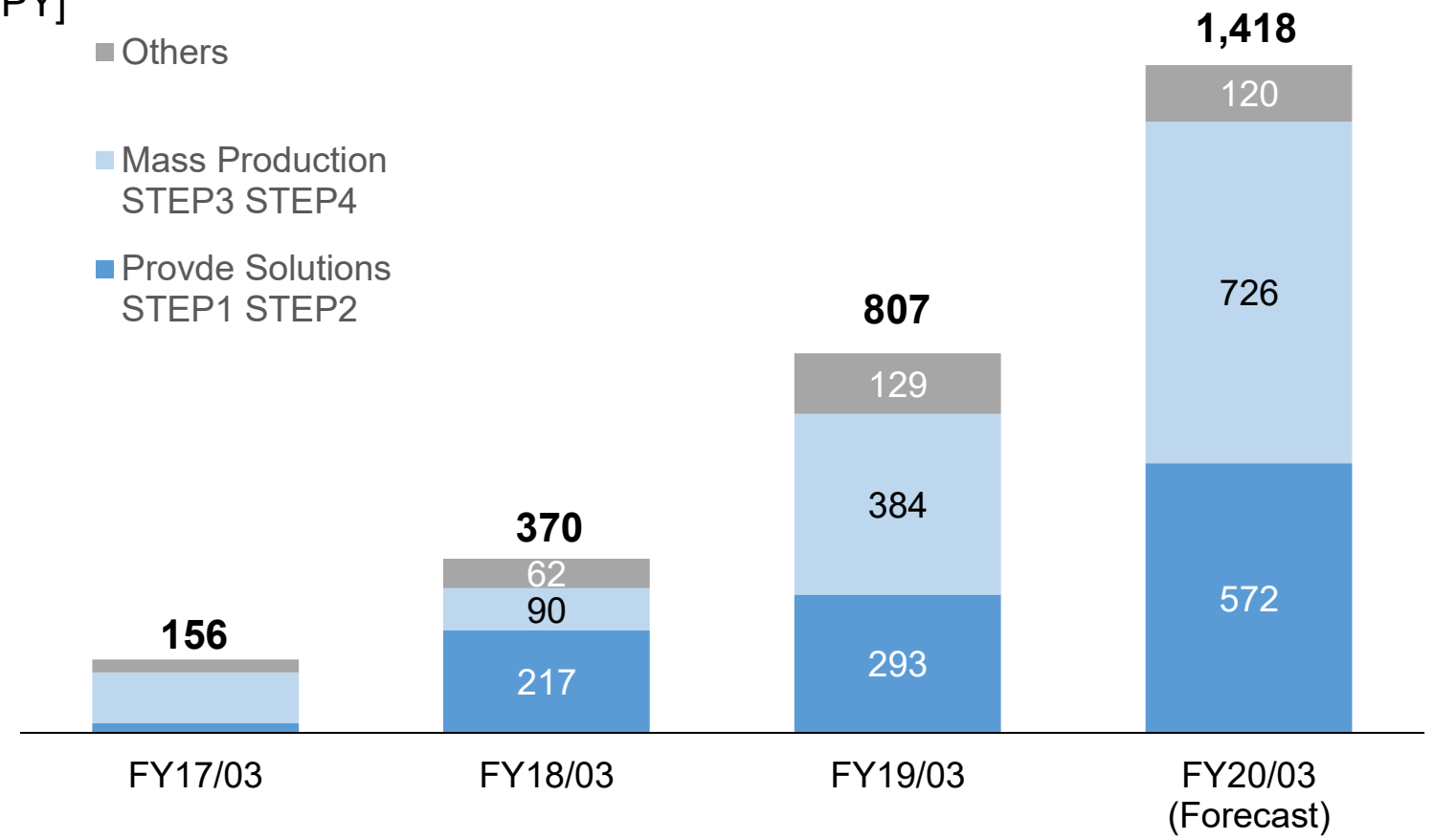
[MM JPY]

	FY2020/03 Q3 Annual		FY2019/03 Annual
	Forecast	YoY	Actual
Sales	1,418	76%	807
Gross profit	850	111%	403
Gross margin	60.0%	+10.0 pt	50.0%
Operating income	9	Turn Positive	▲330
Ordinary income	187	Turn Positive	▲176
Net income	119	Turn Positive	▲183

Sales Forecast

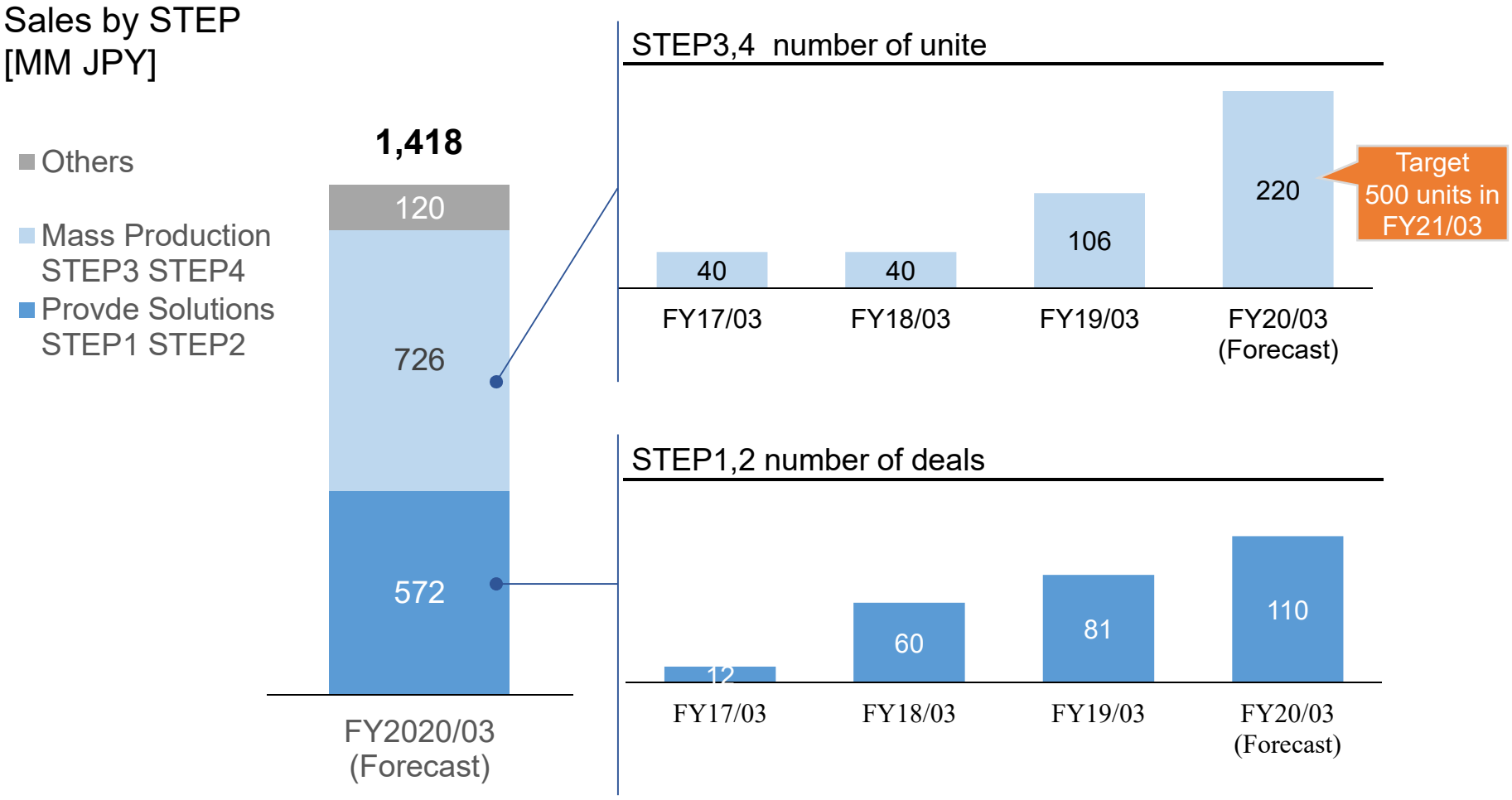
Expected to grow through customer based expansion and transitioning current customers to the mass production phase

Sales by STEP
[MM JPY]



KPI by STEP

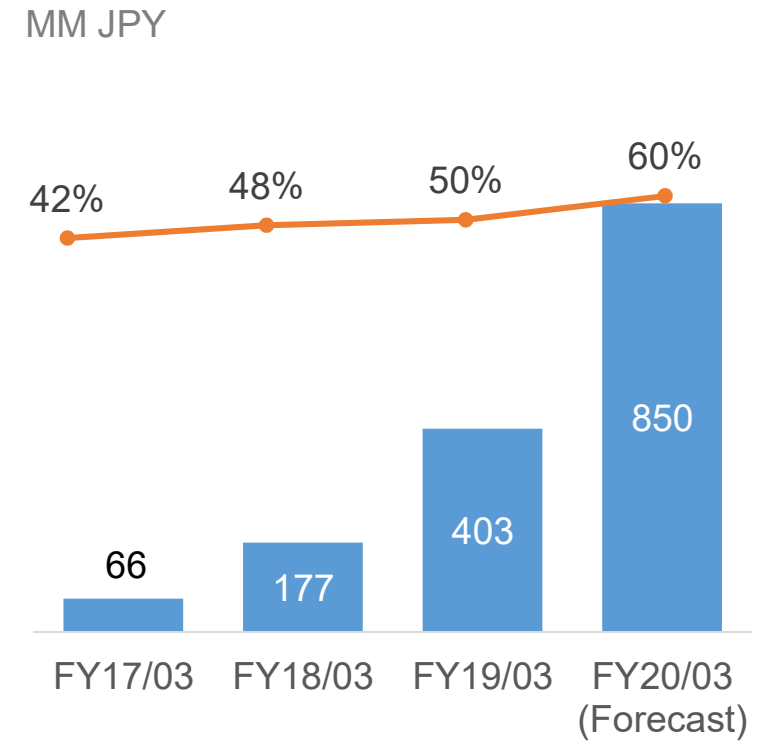
In FY 20/03, the KPI targets 110 solution deals, and 220 unit sales



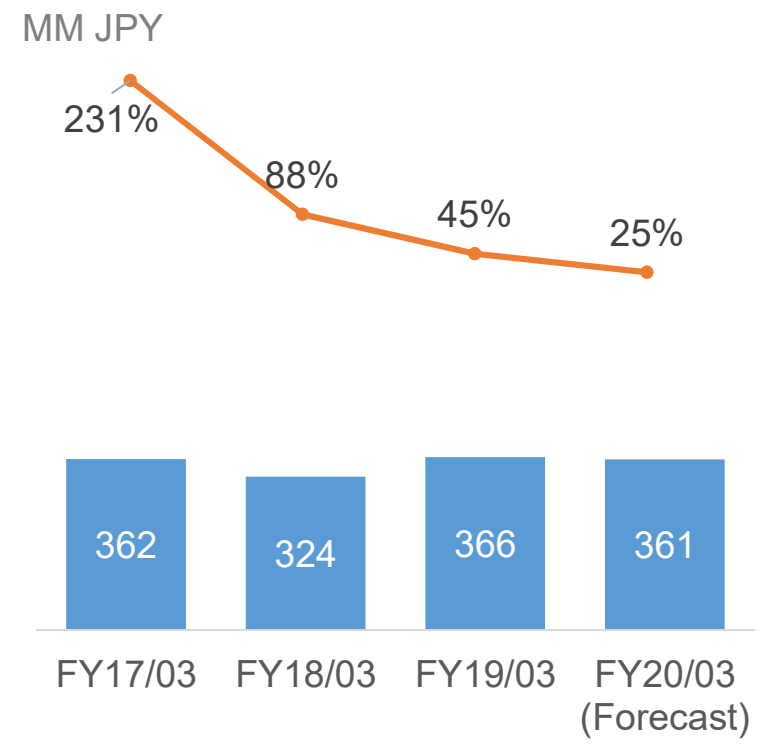
Gross Profit and R&D Expenditure

Gross margin is expected to improve due to sales expansion. R&D investment is expected to be kept in the same volume

Gross Profit and Gross Margin

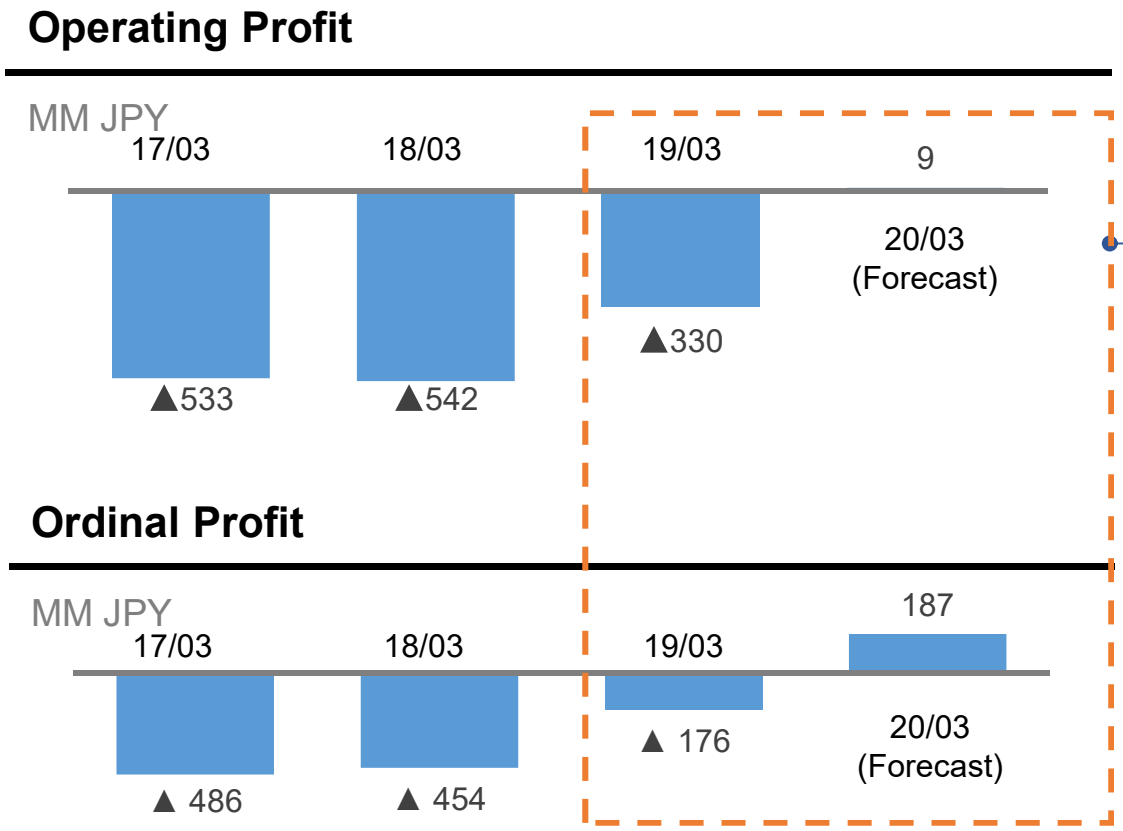


R&D Expenditure to Sales Ratio



Profit forecast

An operating profit is expected to be posted in FY2020/03. Ordinary profit is expected to be 187 with subsidies from national projects



- Expenditure for national projects is counted under R&D
- Subsidies for projects is count as non-operating income in the following fiscal year
- About 150MM JPY is counted in FY19/03 as subsidy for projects completed in FY18/03
- About 180MM JPY is expected in FY20/03 as subsidy for projects completed in FY19/03

Table of Contents

Major Business Highlights for Q3

In Q3, high media coverage for inspections, disaster prevention and package delivery. Flight demonstrations continued with customers.

Oct	**Transported daily necessities and health supplements with drones** to 70 people in 40 households in an isolated area **after typhoon Hagibis**	ANA docomo
	ACSL initiatives towards disaster prevention were highlighted in “Innovate Japan”, a broadcast by **CNN International.**	CNN
Nov	Supported flight demonstrations of **tunnel inspections conducted by Zenrin Datacom** and **JR Hokkaido**	ZENRIN DataCom JR北海道
	Jointly exhibited at **INCHEM TOKYO 2019 with Accenture,** and introduced **plant maintenance technologies using drones**	accenture
Dec	Selected as **CIO Advisor's Top 10 APAC Machine Vision Solution Provider**	CIO Advisor
	Supported **ANA Holdings** to conduct second phase demonstration of **unmanned logistics with drone between remote islands** in Goto City, Nagasaki Prefecture	ANA
Jan	Released **Mini, a “Made in Japan” small industrial drone** that can be used both indoors and outdoors	

Strong customer base in key applications

Steady expansion of customer base among major companies.

About 80 core clients are looking to deploy customized drones for operation

Application	Drone utilization	Examples of major customers (only disclosed base)
Inspection	▪ Substitution of existing visual inspection, reduction of high-site work risk ▪ Close inspection of a high-site/closed environment that have not been inspected	株式会社NJS, JSR, accenture, UNISYS, docomo, 西松建設, TODA, TAISEI, IDEMITSU, JR北海道
Logistics	▪ Substitution of existing distribution network, cost improvement, productivity improvement	日本郵便, ANA, Rakuten
Disaster prevention	▪ Surveying locations that inaccessible or at high risks	総務省消防庁 Fire and Disaster Management Agency, 建設電気技術協会 AETELI, MORITA モリタ

From testing to implementation phase

NJS, collaborating since 2016, has been conducting inspections and surveys of hydroelectric power plants in addition to drainage inspection

Developed drainage pipe inspection drones

- Developed **drainage inspection drones with NJS in 2016**
- Compared to previous crawler-type screenings costing 2,000 JPY/meter, the technology is expected to **reduce costs by ~20%**
- Significant market potential with approximately **470,000 kilometers of sewage and drainage pipes** nationwide
- Plan to **continue developing AirSlider™ improvements**

Applied to Hydroelectric Power Plant Inspections

- In 2018, NJS jointly developed customized drones together with Kansai Electric Power Co. and Kankyo Technos to inspect the **inside of hydraulic iron pipes at hydroelectric power plants**
- **Aiming for significant cost reduction** by replacing current scaffolding-based inspection with drone inspection

Source: NJS Drone for hydraulic iron pipe inspection

Transportation of Goods by Drone to Isolated Area

Used drones to transport daily necessities and medical supplies to an area that was isolated by typhoon damage to surrounding infrastructure

Governor Koike receiving explanation in front of drone

Emergency supplies transport

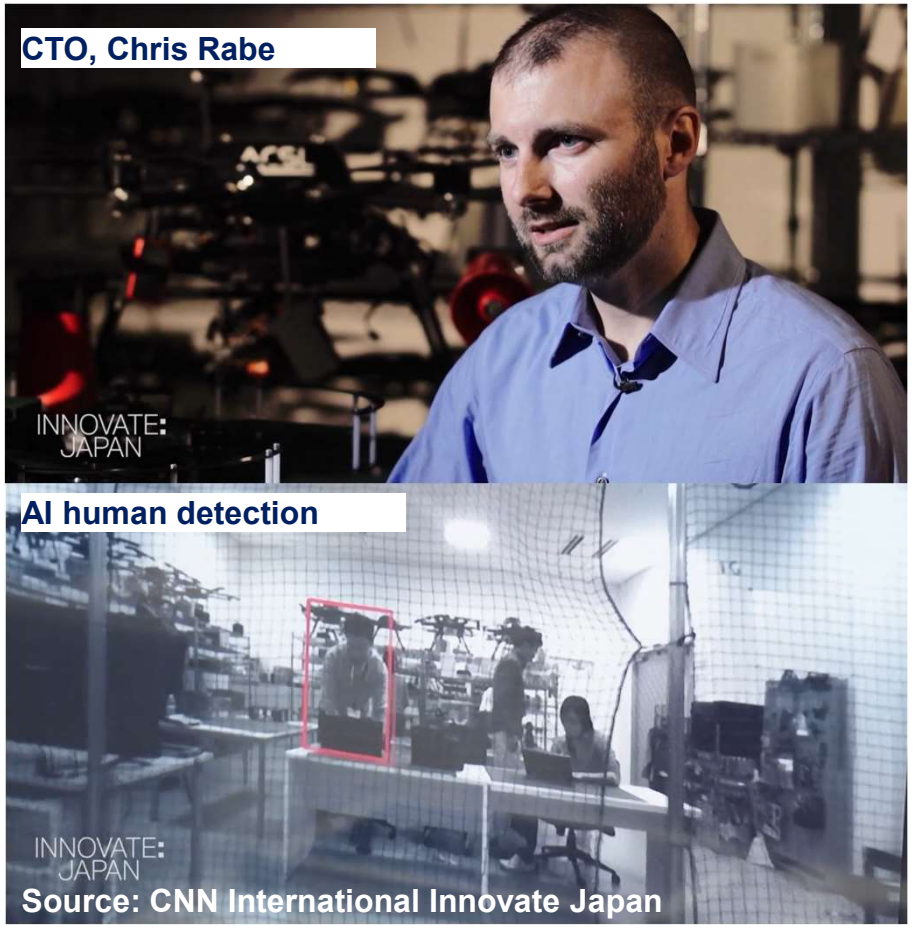
- Used drones to **transport daily necessities and medical supplies** to 70 people in 40 isolated households
- ACSL provided drone aircraft, and **ANA Holdings and NTT DoCoMo** assisted flight operations flight
- The drone flew **beyond visual line-of-sight (Level 3)** for 2.5 km and 5 minutes using LTE communication.
- While a normal flight requires prior application to the government, this flight was **performed under special permission, as granted under Japanese regulations for disaster response**

Covered on CNN Innovate Japan

ACSL's initiatives towards disaster prevention were covered by CNN Innovate Japan.

CNN Innovate Japan

- **A special feature program offered by CNN International** that broadcasts with a central theme for each program
- ACSL drones for disasters prevention were covered as a Japanese initiative of **"cutting-edge disaster prevention technologies"**
- **Chris Raabe, ACSL CTO,** commented on human detection technology using cutting-edge AI and the possibility of using drones at time of disaster.



Source: CNN International Innovate Japan

Supported Zenrin Datacom and JR Hokkaido

ACSL provided drones for JR Hokkaido and Zenrin Datacom to conduct autonomous flight demonstration in tunnels, a non-GPS environment

- JR Hokkaido is considering **drones to supplement inspections conducted manually by eye**
- **Using photographs taken by drones**, they aim to improve maintenance efficiency and management of facilities in sight of future labor shortages, and to improve the safety of operations
- For stable flight in non-GPS environments, **laser sensors and computer vision technologies were used to recognize the cross-sectional shape of the tunnel in real-time and to calculate position of the drone relative to the tunnel**

Current
Inspection by human eye

Future
Inspection by drone

Source: Zenrin Datacom Press Release

Plant Maintenance Technologies with Accenture

Jointly exhibited at INCHEM TOKYO 2019 with Accenture, to promote plant maintenance technologies using drones

INCHEM TOKYO 2019

- INCHEM TOKYO 2019 is a exhibition held every 2 years, with total of **~20,000 visitors over 3days**
- Jointly exhibited with **Accenture**, and introduced **plant maintenance technologies using drones**

Exhibited rust pipes and drones

Accenture articles online

- **Accenture**'s website released "**The world's first practical application of automating plant maintenance using AI x drones**"
- The article featured partnership between **ACSL and Accenture**

Source: Accenture HP

Increasing Demand for “Made in Japan” Drones

Increasing demand for “Made in Japan” drones in pursuit of data safety and reliability, a tailwind for ASCL

Support for “Made in Japan” drones

- In December 2019, the Ministry of Economy, Trade and Industry posted a **supplementary budget of JPY1.61 BN.** The budget is allocated towards development and production of drones for government procurement, titled **"Development of Foundational Technologies for Safe and Secure Drones"**

- In December 2019, news was reported that the **Japan Coast Guard has decided not to procure Chinese drones** used for rescue photography, warning and surveillance

Source: Outline of the draft amended budget for 2019 by the Ministry of Economics and Industries.

Released a Small “Made in Japan” Drone: Mini

Released a “Made in Japan”, affordable small-size drone in January 2020 in response to increasing demand for small-size drones

Key features of small drone “Mini”

- Control technologies **developed fully in-house** and quality control that meets **ISO9001**
- Designed to mount camera on top of the body for applications such as **bridge inspections**
- 6-direction sensor, and additional stereo camera in the front for **collision avoidance**
- **Top-of-the-class flight time with 48 minutes**

Small-sized domestic drone “Mini”

Table of Contents

About ACSL

- **Name** Autonomous Control Systems Laboratory Ltd.
- **Office** WBG Marive West 32F, 2-6-1 Nakase, Mihama-ku, Chiba-city, Chiba
- **Established** 2013 November
- **Capital** 2,988 MM JPY
- **#of Employee** 47（As of 2019 December）
- **Business** Manufacturing and providing industrial drone and providing solution service for automation with autonomous technology

Management team

President **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 COO from July 2016 and became President from March 2018.

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/CAO **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

Mission, Corporate value

Mission

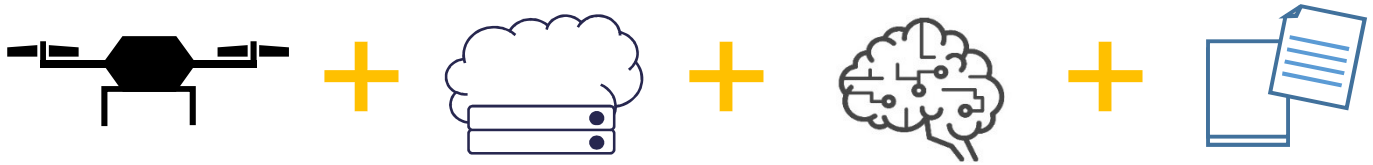
Liberate Humanity through Technology

Corporate value

Pursue world-class autonomous technology and accomplish social implementation, to automate and unman human tasks and promote evolution of humanity

Business overview

Unmanned IoT platform for industrial applications using drones



Why autonomy – ACSL realizes unmanned IoT systems

ACSL provides an integrated, autonomous, unmanned IoT drone systems to supplement human labor in inspection, delivery, disaster and surveys

Today

Chemical plants

Inspection workflow

Taking photos → Filing → Analysis → Reporting

Current Drones (Others)

"Consumer drones"

Limited impact as **standalone drones** only compensate part of current workflow

\+ **Same as today**

ACSL

ACSL

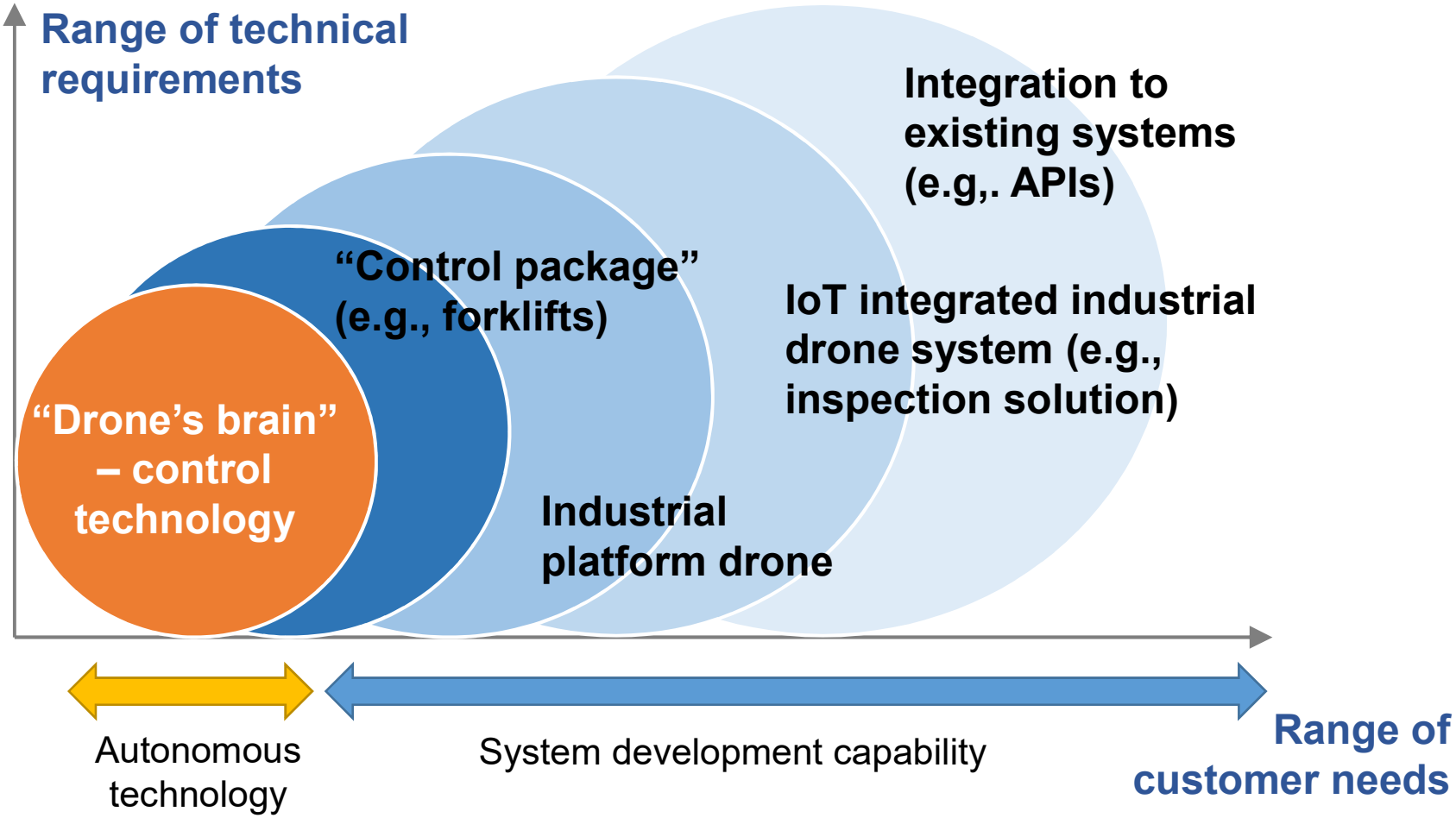
Industrial drone systems

Provide an end-to-end integrated drone systems to fully automate current workflow

Drones +  Cloud +  AI +  UI

Core technology – Drone's brain and system development

Propriety "drone's brain" – environmental recognition and controls – enables ACSL to meet a wide range of customer demands



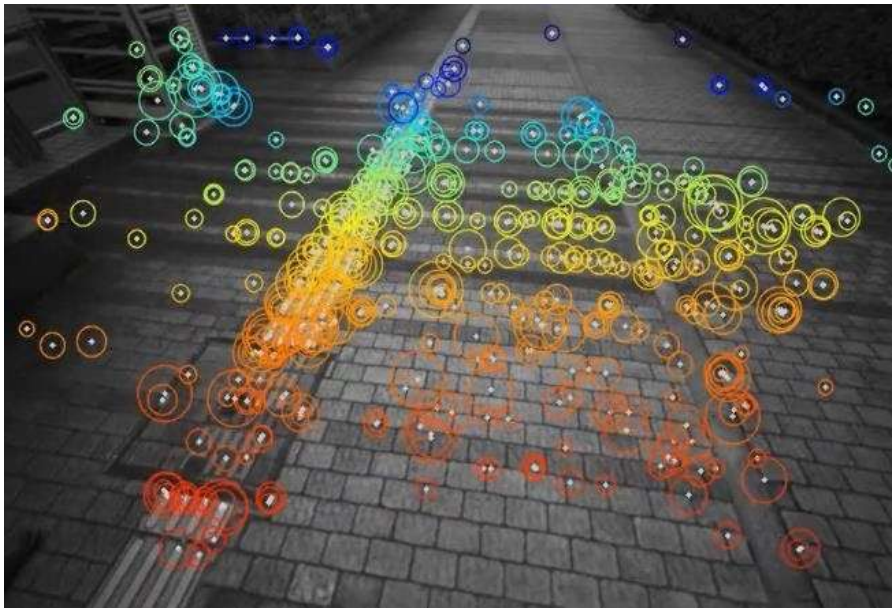
Core technology – Cutting edge non-GPS based controls

Image processing based localization and mapping (i.e., Visual SLAM) enables drones to fly in GPS-denied environment

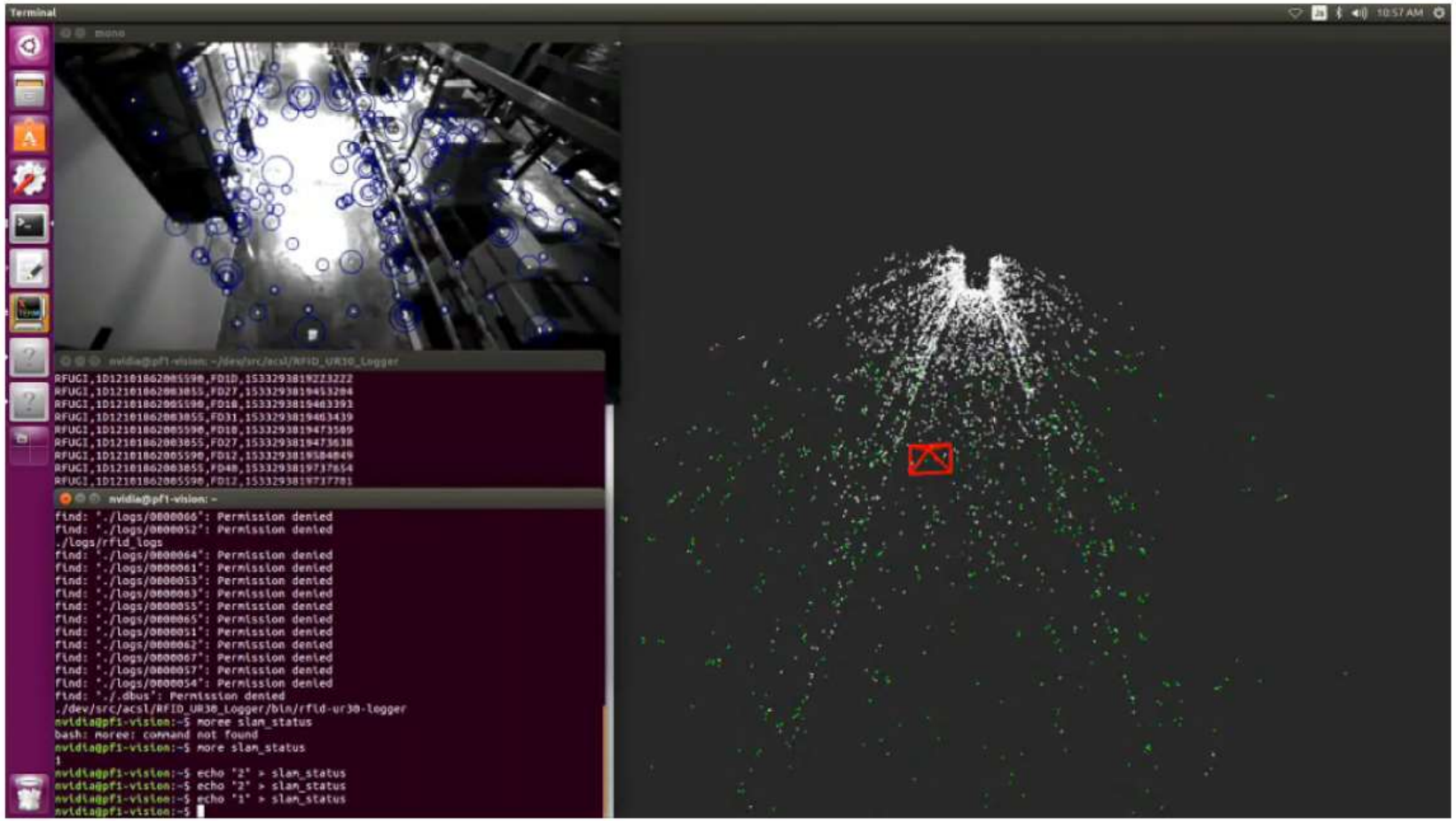
Visual SLAM does not use air pressure sensor, magnetic compass or GPS/GNSS for autonomous flight

Visual SLAM cameras

Extraction of feature points

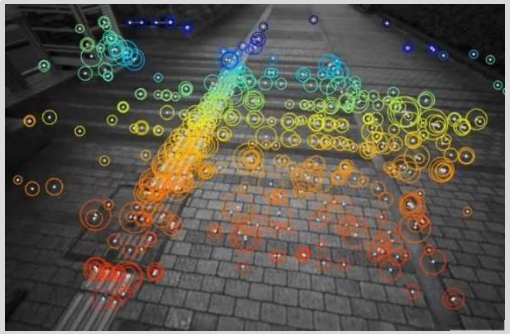


Core technology – GPS-denied flight for inventory management

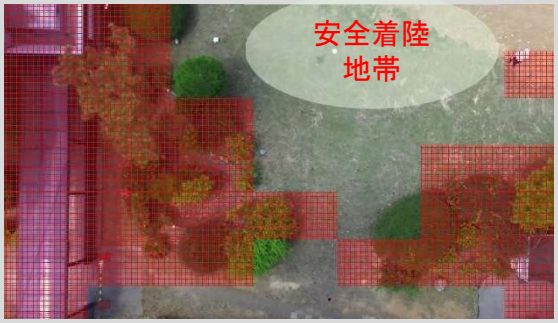


Core technology – Edge computing

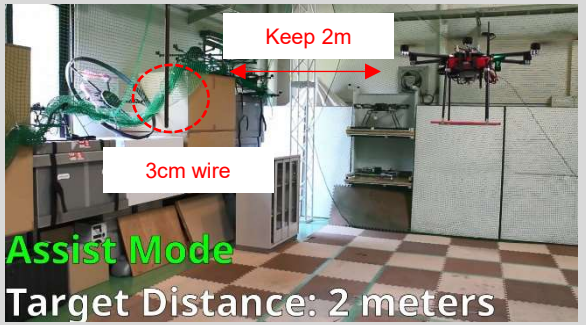
NVIDIA's embedded PC module Jetson TX2 is installed. Realizing highly reliable processing in real time with software that meets various needs



Visual SLAM

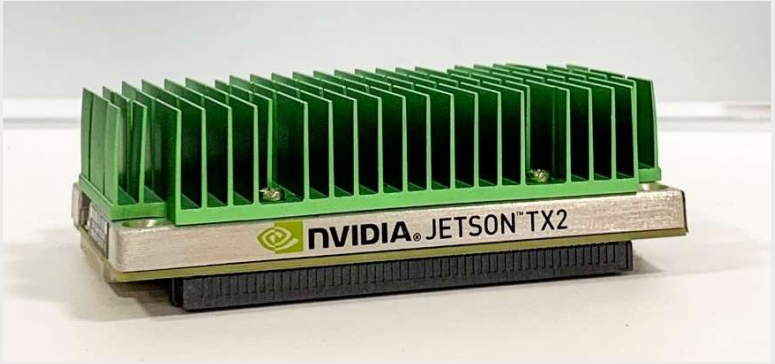


AI detecting safe landing spot



Distance control

Software is installed in embedded PC module mounted on drone

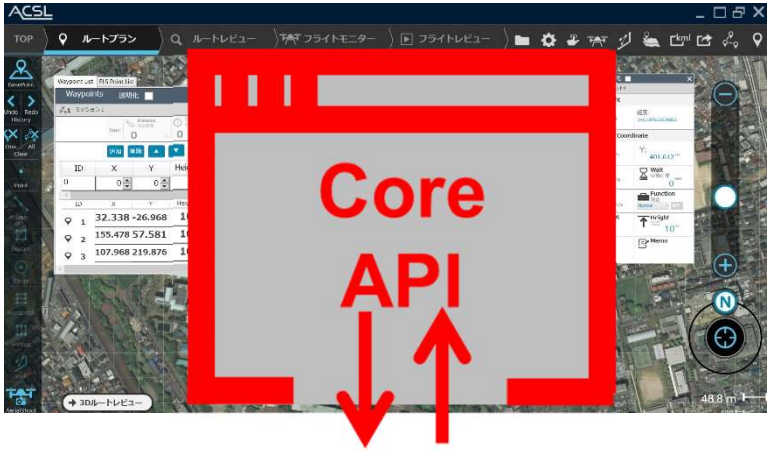


- ✓ Real-time and reliable data processing by edge computing
- ✓ Differentiate flight performance with image processing and AI
- ✓ Add safety features such as collision avoidance in combination with stereo cameras and LiDAR

Core technology – Embed system (Core API)

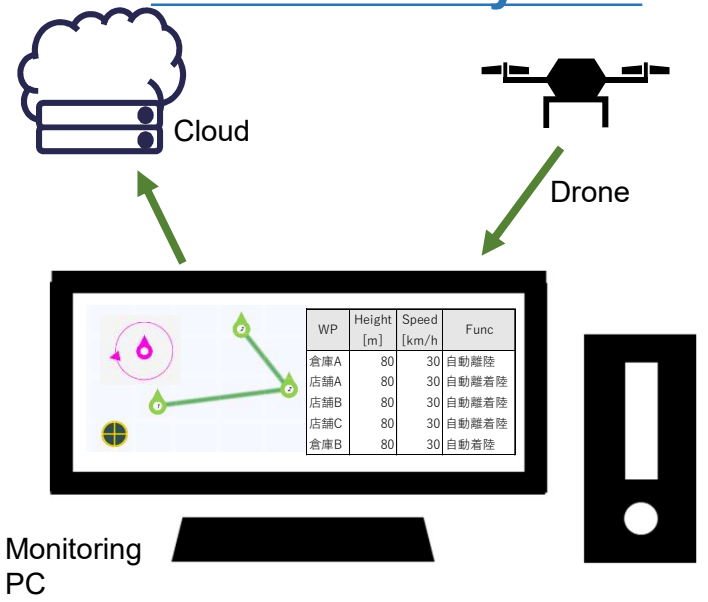
By opening APIs of in-house ground control stations, drone operation functions can be installed and extended to customer's systems

Core API



- ✓ API to communicate with ACSL drone
- ✓ Ground control station functions required for flight operations such as route plan creation and flight monitoring

Customer's system



- ✓ Optimize integration with customer's operations in system
- ✓ For example, integration into dedicated systems such as equipment inspection, logistics, and disasters

Core technology – Customization capability

Realize custom response by adding options based on drone for various needs such as delivery, inspection, surveying, etc.

4-eye high-speed camera for measurement surveying

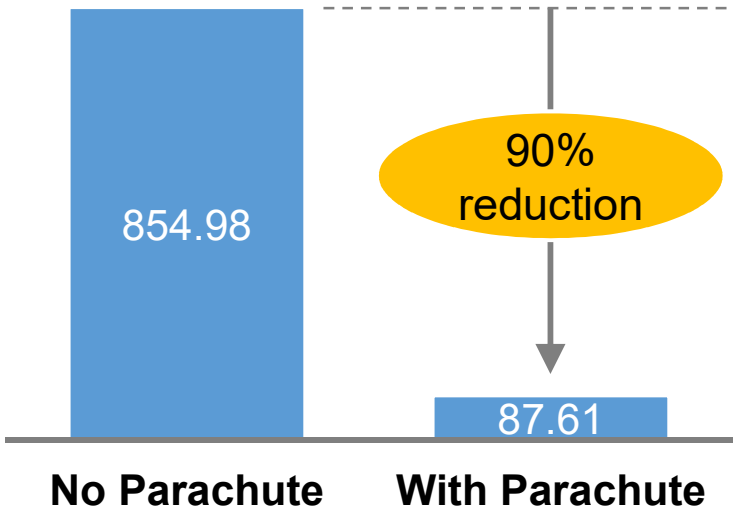
Catcher that automatically opens and closes for delivery

Core technology – Customized parachute for safety

ACSL provides customized parachutes to reduce 90% of falling energy, closely integrated to controls for autonomous performance

Parachute

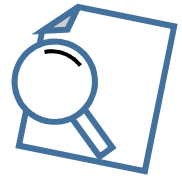
Falling energy [J](*1)



*1: Physical energy of 8kg drone dropped from 150m height

Growth model – Step-wise Proof-of-Concept approach

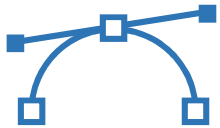
STEP 1
Proof of Concept



Proof of Concept
(Detail out drone usage)

- Verification of concept for drone usage is feasible or not
- Closed trials
- Use of ACSL platform drones

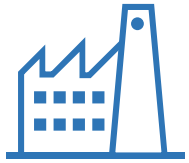
STEP 2
Custom development



Custom development
(Design and develop entire system)

- Detail test designs
- Development of customized drones and systems
- Testing at low risk environment

STEP 3 / STEP 4
Mass production



Deployment for commercial usage
(Sales of mass production model)

- Supply improved customized drones and systems
- Piloting or commercial use at actual sites by clients

✓ **Lower entry barrier for clients and verify economic impact through PoCs**

✓ **Enhance relationship and continuity with clients supported by customized systems**

Growth model – Example of end-to-end drone systems

Rakuten Drone

Rakuten drone “Tenku”

Rakuten promotes delivery drone systems to tackle last-one-mile issues across Japan

- Customized drone
- CoreAPI for software development

エアスライダー
Air Slider

NJS “Air Slider”

NJS rationalizes inspection of closed-loop environment (e.g, sewages) through this drone system

- Custom small drone
- Custom software designed for user-experience

MORITA

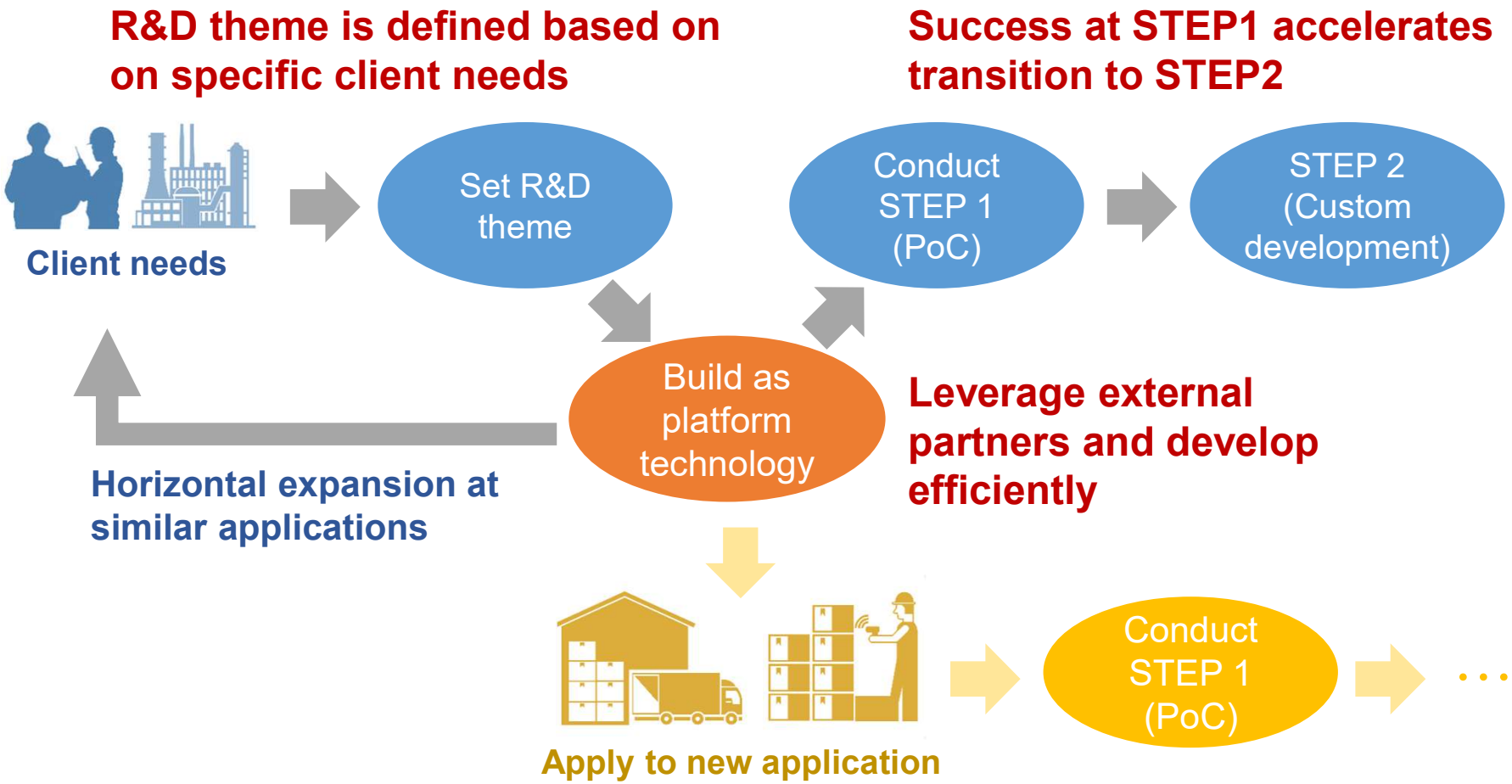
MORITA “Rei-Humming”

MORITA revolutionaries fire fighting by embedding aerial survey drone as part of the fire trucks

- Custom fire-fighter drone
- Switch between wired charging and battery

Growth model – Effective R&D cycle centering on client needs

Themes are defined based on client needs, developed as platform technology, and tested as STEP1 (PoC) for successful transition to STEP 2



Potential market - Potential market for drone applications

ACSL's main market

>2 trillion JPY

>4 billion packages

>1 trillion JPY

>10,000 contractors

>10,000 flight permits

>1.5 million farmers

Source: Inspection (MLIT; "インフラメンテナンスを取り巻く状況") Delivery (MLIT; "平成28年度 宅配便等取扱個数の調査及び集計方法")
Disaster reconnaissance (Sankei News; 2017/12/22; "公共事業では防災・老朽化対応に重点") Aerial survey (MLIT; "建設関連業 登録業者数調査")
Aerial photography (MLIT; "改正航空法の運用状況") Agriculture (MAFF; "農業労働力に関する統計")

Potential market - From “Testing" to "social implementation"

Illustrative examples

Inspection

Budget invested in infrastructure in FY18： 2 trillion JPY

Evaluation of drones is in the “Inspection Support Technology Performance Catalog” compiled by the Ministry of Land, Infrastructure, Transport and Tourism

METI establishes Guidelines for Safe Operation of Drones in Plants

Delivery

Delivered package by Japan Post in FY 18： 40 Billion

Japan Post carries out inter-post office transportation of for half a year

Rakuten conducts paid transportation service of food for one month

Disaster reconnaissance

FY18 budget for disaster prevention by local governments ：1 trillion JPY

ANA and ACSL use special exceptions to transport goods to isolated villages after typhoon

A drone was used to investigate a distressed girl

Potential market - Drone in social implementation phase

In social implementation phase, industrial drones are required to have customized specifications adapted for each application

Illustrative examples

	Flare stack inspection	Tunnel / sewage pipe inspection	Logistics in remote islands
Application	Visual inspection of the top of the flare stack of an oil and chemical plant Inspection only on sunny days Obtain visible light images during the daytime in an environment with GPS	Highway company road tunnels and power company drainage tunnels Regular inspections, conducted in all weather Visible light imaging in dark environment with non-GPS	Drone transport as an alternative to boat transport between remote islands Conducted in all weather (excluding typhoons)
Required functions/ specifications	Outdoor wind resistance (resistance in all directions) Combination of camera and gimbal to acquire high-resolution images without approaching equipment Minimize damage to petroleum and chemical plant equipment (explosion proof, absorption materials, etc.)	Autonomous flight technology under non-GPS environment (use of lidar sensor, etc.) Combination of flash, camera and gimbal for high-resolution shooting in dark environments IP certification such as dust resistance and waterproofness Flight stability against turbulence caused by a closed environment	Due to the directivity of flight (the direction of travel is fixed), lift and wind resistance utilizing directivity Risk control for third parties Flight stability in response to weight changes of luggage

For industrial applications, drones needs optimized for application , not “One fits all”

Inspection Case – Autonomous flight at chemical plant

ACSL provides autonomous systems where drone takes images of chemical pipelines, automated analytics by AI and issue inspection report

Inspection Case – Inspection of sewage pipelines

ACSL aims to supplement current sewage pipeline screening inspection with drone systems to reduce cost from 2,000 to 800 JPY/meter

Delivery Case – Japan post started long distance delivery

Japan Post initiated 9km inter-post office flight with ACSL drones after receiving the first permit as Level 3 Flight (BVLOS in unmanned areas)

国土交通省
Ministry of Land, Infrastructure, Transport and Tourism

平成３０年１０月２６日
航　空　局 運航安全課
航空機安全課
総合政策局 物流政策課

ドローンによる荷物配送が始まります！
～効率的な荷物配送の実現に向けて～

国土交通省は、日本郵便株式会社からのドローンによる福島県小高郵便局～浪江郵便局間約 9km の荷物配送（目視外補助者無し飛行）に向けた飛行申請について、平成 30 年 10 月 26 日付けで承認しました。

ドローン等の無人航空機については、官民協議会でとりまとめられた「空の産業革命に向けたロードマップ」に沿い、本年中を目途に離島や山間部等での無人航空機による荷物配送の実現を目指し官民一体となって取り組んでいるところです。

航空局では、本年 9 月に航空法に基づく飛行の許可承認の審査要領を改正し、無人航空機が目視外飛行※1を補助者無しで行うために必要な機体性能や飛行経路下の安全対策等の要件を定めたところです。

※１　操縦者が機体を視認できない範囲を飛行させること。この場合は、原則として、飛行経路下に補助者を配置し、周辺への第三者の立入りや機体の状態等を監視させることが必要。本年９月の審査要領改正により補助者無しで行うための要件を明確化。（別紙参照）

今般、日本郵便株式会社から 10 月 15 日付けで東京航空局に対し申請のあった無人航空機による郵便局間の荷物配送に向けた目視外補助者無し飛行について、10 月 26 日付けで承認を行いました。承認の概要は下記の通りです。なお、今後本番環境にて最終的な試験飛行を行い、その結果を踏まえて運航が行われる予定です。

また、国土交通省が公募した無人航空機による荷物配送の検証実験※2 の一つとして、日本郵便株式会社も参画する郵便事業配送効率化協議会が必要なデータ等を 11 月 5 日～6 日に取得し、調査受託者の株式会社三菱総合研究所が費用対効果等の検証を行う予定です。

※２　無人航空機による荷物配送の検証実験地域、内容等の詳細はこちらでご確認いただけます。
http://www.mlit.go.jp/seisakutokatsu/freight/seisakutokatsu_freight_tk1_20180628kobo.html

記

１．運　航　者：日本郵便株式会社
２．飛行経路：福島県南相馬市 小高郵便局 ～ 双葉郡浪江町 浪江郵便局 （約 9km）
３．飛行日時：平成 30 年 10 月 29 日から 1 年間
４．使用機材：株式会社自律制御システム研究所製 ACSL-PF1

ACSL realized drone delivery

- Japan Post began automation of luggage delivery in Minamisoma City and Namie Town, Fukushima Prefecture from November 2018
- ACSL offers the first fully autonomous control drone that can handle “BVLOS and non-assistant flight” for the first time after the revision of the Aviation Law Guidelines
- As a result, automatic delivery of approximately 15 minutes over distances that would have taken approximately 25 minutes with conventional trucks

Drone leaving post office

Disaster Reconnaissance Case – Survey after rain disaster

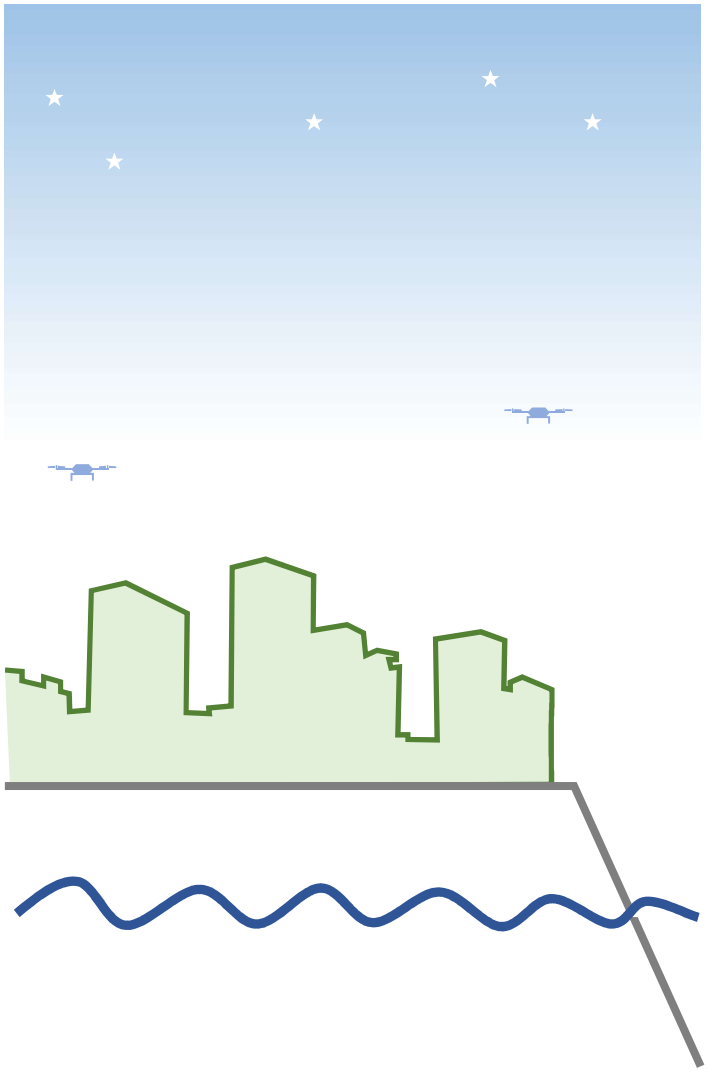
ACSL conducted large area survey of 6km distance at 50km/h flight speed on behalf of the fire department, after receiving special permit from MLIT

Disaster Reconnaissance Case – Survey after rain disaster

Quad-lens camera enabled 8 global shutters per second at 70km/h autonomous flight, realizing 2cm pixel image taken from 100m height

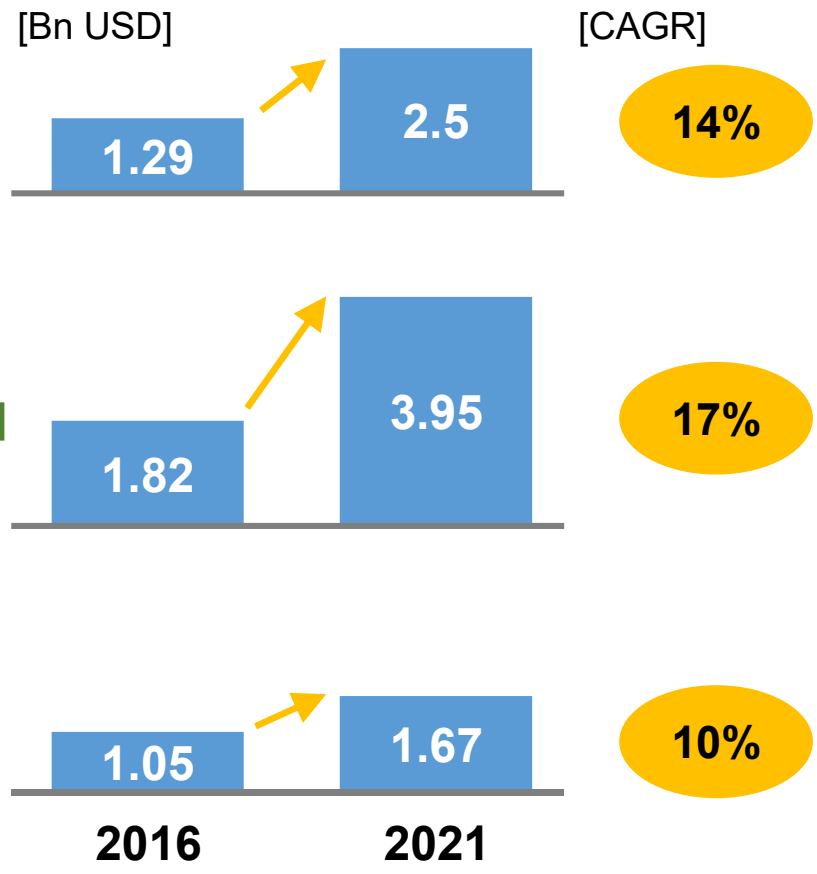
Date：2017/07/08

Potential market – Potential application to UGVs and Space



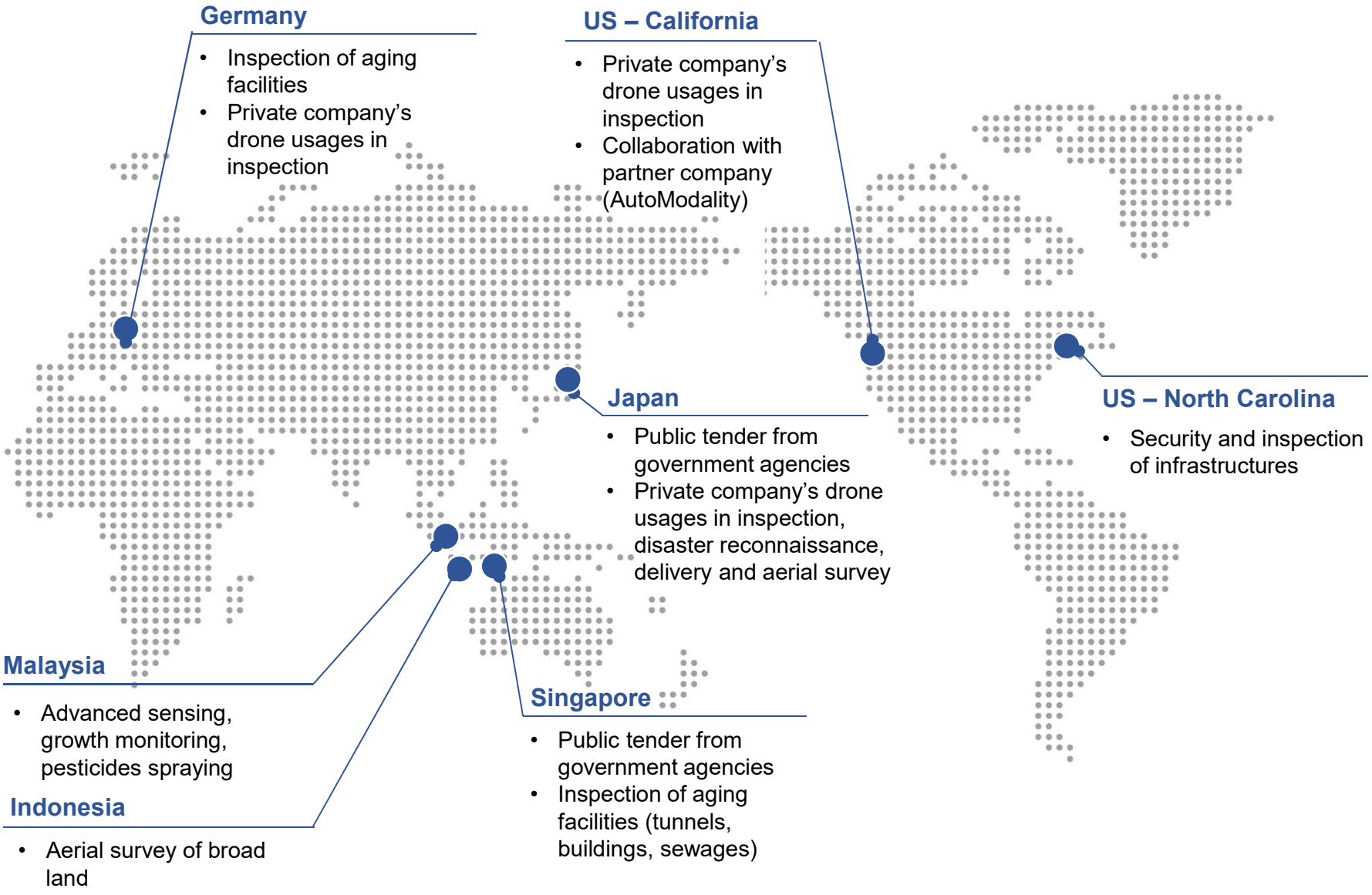
World autonomous robot market(*2)

Space High potential for robotics



*2: Source is Global Autonomous Mobile Robots Market; Technavio (Infiniti Research Limited)

Potential market – Similar demand seen overseas



Balance sheet

[MM JPY]

	FY20/03 Q3		FY19/03 Q3	FY19/03 Q4
	Actual	YoY	Actual	Actual
Current Assets	4,246	▲10%	4,732	4,858
Cash	3,808	▲15%	4,460	4,465
Fixed Assets	400	+602%	57	68
Total Assets	4,647	▲3%	4,789	4,926
Current Liability	109	▲23%	141	225
Fixed Liability	0	-	0	0
Total Liability	109	▲23%	141	225
Net Asset	4,538	▲2%	4,647	4,701
Total Asset	4,647	▲3%	4,789	4,926

Disclaimer

These materials have been prepared by Autonomous Control Systems Laboratory Ltd. (the "**Company**"). These materials are for the exclusive use of the persons attending an oral briefing to which these materials relate given by one or more authorised representatives of the Company and/or persons to whom these materials have been provided directly by an authorised representative of the Company (together, the "**Recipients**"). Without prejudice to the generality of the foregoing, these materials are directed only at persons who are believed to be investment professionals (as defined in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005) and who have professional experience in matters relating to investments, and any investment or investment activity to which these materials relate is available only to such persons or will be engaged in only with such persons. Persons who do not have professional experience in matters relating to investments should not rely on these materials.

These materials are being provided to the Recipients for information purposes only. These materials speak only as of their date, and the views expressed are subject to change based upon a number of factors, including, without limitation, macroeconomic and equity market conditions, investor attitude and demand, the business prospects of the Company and other specific issues. These materials and the conclusions contained herein are necessarily based on economic, market and other conditions, as in effect on, and the information available to the Company as of, their date. These materials do not purport to contain a complete description of the Company or the market(s) in which the Company operates, nor do they provide an audited valuation of the Company. The analyses contained in these materials are not, and do not purport to be, appraisals of the assets, stock or business of the Company or any other person. Moreover, these materials are incomplete without reference to, and should be viewed and considered solely in conjunction with, the oral briefing provided by an authorised representative of the Company in relation to these materials.

The Company strongly suggests that each Recipient seeks its own independent advice in relation to any investment, financial, legal, tax, accounting or regulatory issues discussed herein. Nothing herein should be construed as financial, legal, tax, accounting, actuarial or other specialist advice. In particular, nothing herein shall be taken as constituting the giving of investment advice and these materials are not intended to provide, and must not be taken as, the exclusive basis of any investment decision or other valuation and should not be considered as a recommendation by the Company (or any of its affiliates) that any Recipient enters into any transaction. Each Recipient must make its own independent assessment and such investigation as such Recipient deems necessary to determine its interest in participating in any transaction. No reliance should be placed upon these materials in connection with any actual mandate or transaction. These materials comprise a general summary of certain matters in connection with the Company. These materials do not purport to contain all of the information that any Recipient may require to make a decision with regards to any transaction. Any decision as to whether or not to enter into any transaction should be taken solely by the relevant Recipient. Before entering into such transaction, each Recipient should take steps to ensure that it fully understands such transaction and has made an independent assessment of the appropriateness of such transaction in the light of its own objectives and circumstances, including the possible risks and benefits of entering into such transaction.

These materials have been provided to the Recipients on the basis that each Recipient and such Recipient's representatives, directors, officers, employees and professional advisers keep these materials (and any other information that may be provided to such Recipient) confidential. These materials (and any other information which may be provided to any Recipient) may not be disclosed, in whole or in part, or summarized or otherwise reproduced, distributed or referred to, in whole or in part, without the prior written consent of the Company. Neither the Company nor any of its affiliates (nor any of its or their respective directors, officers, employees, professional advisers or representatives) makes any representation or warranty, express or implied, with respect to the fairness, correctness, accuracy, reasonableness or completeness of these materials, any of their contents or any of the results that can be derived from these materials. Without limiting a person's liability for fraud, no responsibility or liability (whether in contract, tort or otherwise) is or will be accepted by the Company or any of its affiliates or any of its or their respective directors, officers, representatives, employees, advisers or agents) as to, or in relation to, these materials, their contents, the accuracy, reliability, adequacy or completeness of the information used in preparing these materials, any of the results that can be derived from these materials or any written or oral information provided in connection therewith (including, without limitation, any responsibility or liability (i) in relation to the distribution of possession of these materials in any jurisdiction or (ii) for any loss or damage of any kind whatsoever arising as a result of the use or misuse of these materials) and any such responsibility, liability or obligation is expressly disclaimed, except to the extent that such responsibility, liability
or obligation cannot be excluded by law. Analyses and opinions contained herein may be based on assumptions that, if altered, can change the analyses or opinions expressed. No audit of these materials has been undertaken by an independent third party.

Any statement, estimate or projection included in these materials (or upon which any of the conclusions contained herein are based) with respect to anticipated future performance (including, without limitation, any statement, estimate or projection with respect to the condition (financial or otherwise), prospects, business strategy, plans or objectives of the Company and/or any of its affiliates) may prove not to be correct. No representation or warranty is given as to the completeness or accuracy of any forward-looking statement contained in these materials or the accuracy of any of the underlying assumptions. Nothing contained herein shall constitute any representation or warranty as to the future performance of the Company, any financial instrument, credit, currency rate or other market or economic measure. Information about past performance given in these materials is given for illustrative purposes only and should not be relied upon as, and is not, an indication of future performance. Neither the Company nor any of its affiliates has verified the achievability of any estimate or forecast of future financial performance contained herein (including, without limitation, any estimate of potential cost savings and synergies), nor of any of the methods underlying the preparation of any such estimate or forecast.

Neither the Company nor any of its affiliates accepts or will accept any responsibility, duty of care, liability or obligation for providing any Recipient with access to additional information, for updating, modifying or otherwise revising these materials or any of their contents (including, without limitation, any estimate or forecast of future financial performance), for correcting any inaccuracy in these materials or their contents (or any other written information or oral information provided in connection therewith) which may become apparent, or for notifying any Recipient or any other person of any such inaccuracy.

These materials shall not be construed as a prospectus or an offer to sell, or a solicitation of an offer to buy, any security or any business or assets, nor to enter into any agreement or contract with any Recipient, the Company (or any of their respective affiliates) or any other person. Any potential transaction that may be related to the subject matter of these materials will be made pursuant to separate and distinct documentation and in such case the information contained herein will be superseded in its entirety by such documentation in final form. By accepting these materials, each Recipient represents and warrants that it is able to receive them without contravention of any unfulfilled registration requirements or other legal or regulatory restrictions in the jurisdiction in which such Recipient resides or conducts business.