News Release

INCJ to invest in iQPS, Fukuoka-based space venture company developing the world's lightest small radar satellite

INCJ to invest up to 850 million JPY, with iQPS raising a total of 2.35 billion JPY

Tokyo, November 6, 2017 – Innovation Network Corporation of Japan (INCJ) announced today its decision to invest in the Institute for Q-shu Pioneers of Space, Inc. (iQPS), a company engaged in developing the world's lightest, small Synthetic Aperture Radar (SAR) satellites.[1] INCJ will invest up to 850 million JPY in growth capital, through a third-party allocation of shares. The eight co-investors will invest a total of 2.35 billion JPY.[2] The funding will be used for further R&D to spearhead key technology development and manufacturing, and for satellite launches.

iQPS was established in 2005 to research small satellites, based on R&D at Kyushu University. iQPS has participated in a range of space R&D projects: a project led by Kyushu University to pursue the development of ultra-small general-purpose satellites (QSAT-EOS) , providing comprehensive support for satellite development as well as a project for Chiba University which includes the development and manufacture of small satellite advanced environmental disaster facilities. Through these projects, iQPS has steadily produced results, including a successful launch of QSAT-EOS and a development and production of micro debris observation sensors.

iQPS has developed an innovative SAR antenna, with which the company aims to develop a high-quality SAR satellite that is superior to existing models, being lighter, smaller, more energy efficient and lower cost. There are two types of satellites designed for Earth observation, SAR satellites and optical satellites which record visible light in a similar way to digital cameras. SAR satellites can be made to function as large virtual antennas by moving their position in space, enabling the high-resolution observation of microwave wavelengths, which are longer than visible light and infrared light wavelengths.

While optical satellites are not able to observe at night or in bad weather, SAR satellites remain functional at any time, regardless of weather conditions. With the ability to gather detailed information by analyzing microwaves, such as identifying and characterizing objects, SAR satellites have the potential to be utilized in a range of areas, including disaster prevention, defense and

[1] A synthetic aperture radar (SAR) uses microwaves to acquire surface images. SAR has a feature in which it can transmit through clouds and smoke, and make observations at any time of the day.

[2] The 8 companies include Mirai Creation Investment Limited Partnership, Real Tech Fund, Mitsui Sumitomo Insurance Venture Capital Co., Ltd., SMBC Venture Capital Co., Ltd., FFG Venture Business Partners Co., Ltd., Mitsubishi UFJ Capital Co., Ltd., Dogan Beta Inc., Oita Venture Capital Co., Ltd.

environmental research. However, SAR satellites require large antennas and consume a significant amount of power, resulting in weight and cost issues that have made miniaturization a pressing matter for technical development.

iQPS' small SAR antenna is a parabolic antenna with a 3.6 meter diameter that creates a large reflector surface area. The small SAR antenna has the following advantages:

- Light weight and small: World's first to weigh less than 100kg (1/20th of existing models)
- High-resolution: A high resolution of 1m for various applications
- Low cost: Development and production expenses for SAR satellite 1/100th of existing models

In addition to existing satellite manufacturing contracts, iQPS has undertaken several earth observation trial experiments through the development, manufacturing and production of small SAR satellites, equipped with a proprietary antenna. Through this, iQPS will establish a business model which includes the production and sale of antennas, complete small SAR satellites, and also satellite images captured by iQPS satellites. Looking ahead, iQPS aims to create new economic value by supporting multiple small SAR satellite launches and establishing an advanced, innovative infrastructure that enables rapid, anytime observation of the Earth.

INCJ is supporting space business as a priority investment industry in addition to healthcare, elderly care, chemical materials, robotics, AI, IoT and big data. In the past few years, the scale of space-related business has expanded dramatically, reflecting progress in technology—specifically in creating smaller, higher performance satellites. There are also expanding needs for Earth observation satellites, particularly with respect to issues such as climate change, international affairs, energy resources and related national government policies. iQPS' innovative small antenna can accelerate the development of SAR satellites to address areas that optical satellites cannot currently handle, such as disaster prevention, defense and environmental research. Accordingly, INCJ considers this investment in iQPS to be an appropriate allocation of resources. iQPS members have been working on supporting space-related local companies in the Kyushu region since before the company's foundation, and INCJ strongly encourages these regional revitalization activities. Through its investment in iQPS, INCJ hopes to accelerate open innovation between university-based venture companies and large-scale companies in order to strengthen the international competitiveness of Japan in the space industry.

About iQPS, Inc.

Established:	2005
Business Outline:	Research, development, planning, production and sales of satellites, satellite equipment, precision equipment, and electronic equipment and software
Headquarters:	Fukuoka, Fukuoka Prefecture
Representative:	Shunsuke Onishi, CEO
URL	https://i-qps.net/

About Innovation Network Corporation of Japan (INCJ)

INCJ was established in July 2009 as a public-private investment company that provides financial, technological and management support for next-generation businesses. INCJ specifically supports those projects that combine technologies and varied expertise across industries and materialize open innovation. INCJ has the capacity to invest up to JPY2 trillion (approx. US$20 billion).

INCJ's management team is drawn from the private sector with diverse experience in investment, technologies and management. Through its Innovation Network Committee, INCJ assesses investment opportunities that contribute to industrial innovation in Japan in line with criteria set by the government.

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iQPS

Target: iQPS, Inc.
Business Outline: Develops the world's lightest small SAR satellite
Authorized Investment: 850 million JPY (maximum)
Date of Announcement: November 6, 2017

INCJ

Investment Management Support

Mirai Creation Investment Limited Partnership

REAL TECH FUND™

Investment Management Support

Other Venture Capitals

Mitsui Sumitomo Insurance Venture Capital Co., Ltd.

SMBC Venture Capital Co., Ltd.

Mitsubishi UFJ Capital Co., Ltd.

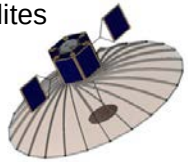
Investment

iQPS, Inc.

Kyushu-based space venture developing the world's lightest small SAR* satellite

Development of the innovative SAR antenna

- Lightest satellite in the world at less than100kg
- High resolution of 1m
- Low cost development and production of satellites



*SAR: Synthetic Aperture Radar

Investment

Venture Capitals in Kyushu Region

FFG Venture Business Partners Co., Ltd. (Fukuoka Financial Group)

大分ベンチャーキャピタル株式会社
Oita Venture Capital Co., Ltd. (Oita Banking Group)

DOGAN β

Collaboration

Kyushu-based companies and research institutions

Kyushu area companies
Kyushu University
Kyushu Institute of Technology
etc.

- Establishing advanced, cutting-edge infrastructure by contributing to social issues such as disaster prevention, defense, environmental research by accelerating business development and utilizing small SAR satellites for earth observation, which can bear the burden of areas that cannot be covered by optical satellites
- Supporting regional revitalization activities such as iQPS which is Kyushu based innovative R&D company in the space industry
- Accelerating open innovation between university-based venture companies and large-scale companies in order to strengthen the international competitiveness of Japan in the space industry