

FOR IMMEDIATE RELEASE

**Global Positioning Augmentation Service Corporation (GPAS)  
Newly Established for Commercialization of Centimeter-level  
High-precision Satellite Positioning Service**

**Tokyo, June 14, 2017** ---Hitachi Zosen Corporation, Development Bank of Japan, DENSO Corporation, Japan Radio Co., Ltd., and Hitachi Automotive Systems, Ltd. today announced that they will establish a new company named Global Positioning Augmentation Service Corporation (GPAS) on June 15, 2017 in the form of a joint investment.

Recently, high-precision positioning information is increasingly used in fields such as agriculture, construction, and disaster prevention. Demand for such information is expanding worldwide for both land-based and maritime applications. In Japan, Michibiki No.2 (Quasi-Zenith Satellite) was successfully launched on June 1, 2017 and is expected to generate diverse services using high-precision positioning information.

Within a few years, GPAS aims to commercialize a service for centimeter-level precision global satellite positioning through verification testing utilizing a high-precision orbit and clock analysis tool. Seeking the cooperation of relevant authorities and businesses, GPAS will work to establish a fundamental technology that supports the global deployment of autonomous vehicles and agricultural/construction machinery, in addition to maritime and meteorological observation applications.

As the nature of this project contributes to strengthening corporate competitiveness through cross-industry collaboration, Development Bank of Japan is investing in GPAS under a special financing program for supporting the competitiveness of growing companies and industries.

## Overview of GPAS

Company name	Global Positioning Augmentation Service Corporation
Foundation	June 15, 2017
Headquarters	8-17-5, Ginza, Chuo-ku, Tokyo
Business	Verification for commercialization of centimeter-level high-precision satellite positioning service, etc.
Investors	Hitachi Zosen Corporation, Development Bank of Japan, DENSO Corporation, Japan Radio Co., Ltd., and Hitachi Automotive Systems, Ltd.
Representative	Hideshi Kozawa

### **About Hitachi Zosen Corporation**

Established as a shipbuilder in Osaka in 1881, Hitachi Zosen draws on engineering technology plus innovative welding and fabrication processes cultivated through its founding business—Zosen is Japanese for shipbuilding—to conduct global operations in the fields of Environment/Green Energy, Social Infrastructure, and Disaster Prevention.

- In Environment/Green Energy, Hitachi Zosen contributes to a sustainable society with its mainstay Energy-from-Waste plants, boasting a track record of more than 840 deliveries mainly in Europe and Asia. With onshore and offshore wind farms, it is equipped to provide comprehensive solutions ranging from engineering, procurement, and construction to operation.

- In Social Infrastructure and Disaster Prevention, the company supports efforts to enrich people's lives with desalination plants, resolving the problem of water shortage with a world-class delivery record of 90 facilities primarily in the Middle East. In Japan, it serves as an EPC contractor for water purification, sewage treatment, and night soil treatment plants.

- Incorporating information and communications technology into its advanced manufacturing technology, Hitachi Zosen also offers products and services such as high-quality reactors for oil refineries, casks and canisters for safe transport and storage of spent nuclear fuel, shield tunneling machines, and GPS ocean wave meters for the early detection of tsunami.

### **About Development Bank of Japan**

Development Bank of Japan (DBJ) is a 100% Japanese government-owned financial institution headquartered in Tokyo, Japan. Since the establishment of its predecessor, Japan Development Bank in 1951, throughout its history, the bank has been devoted to regional development, environmental conservation, basic social infrastructure, and the creation of technology and industry. With the customer-oriented innovative solutions drawn from its unique integrated business model of investment and loans, DBJ aims to promote joint risk capital-financing with business players, financial institutions and investors for the creation and promotion of the growth capital market.

### **About DENSO Corporation**

DENSO Corp., headquartered in Kariya, Aichi prefecture, Japan, is a leading global automotive supplier of advanced technology, systems and components in the areas of thermal, powertrain control, electronics and information and safety. Its customers include all the world's major carmakers. Worldwide, the company has more than 200 subsidiaries and affiliates in 38 countries and regions (including Japan) and employs more than 150,000 people. Consolidated global sales for the fiscal year ending March 31, 2017, totaled US\$40.4 billion. Last fiscal year, DENSO spent 9.0 percent of its global consolidated sales on research and development. DENSO common stock is traded on the Tokyo and Nagoya stock exchanges. For more information, go to [www.denso.com](http://www.denso.com), or visit our media website at [www.denso.com/global/en/news/media-center/](http://www.denso.com/global/en/news/media-center/).

### **About Japan Radio Co., Ltd.**

Japan Radio Co., Ltd. (JRC) is making the most of its knowledge, technology and experience built up over many years in various fields of information technology, contributing to the safety and security of people around the world. Based on its core technologies that it has developed since its founding, JRC is creating new worlds of communications from people to people and to environments by leveraging its three business units, Marine Electronics, Communications and Solutions.

For more information, please visit the company's website at <http://www.jrc.co.jp/eng/index.html>

**About Hitachi Automotive Systems, Ltd.**

Hitachi Automotive Systems, Ltd. is a wholly owned subsidiary of Hitachi, Ltd., headquartered in Tokyo, Japan. The company is engaged in the development, manufacture, sales and services of automotive components, transportation related components, industrial machines and systems, and offers a wide range of automotive systems including engine management systems, electric power train systems, drive control systems and car information systems. For more information, please visit the company's website at <http://www.hitachi-automotive.co.jp/en/>.

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Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.

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