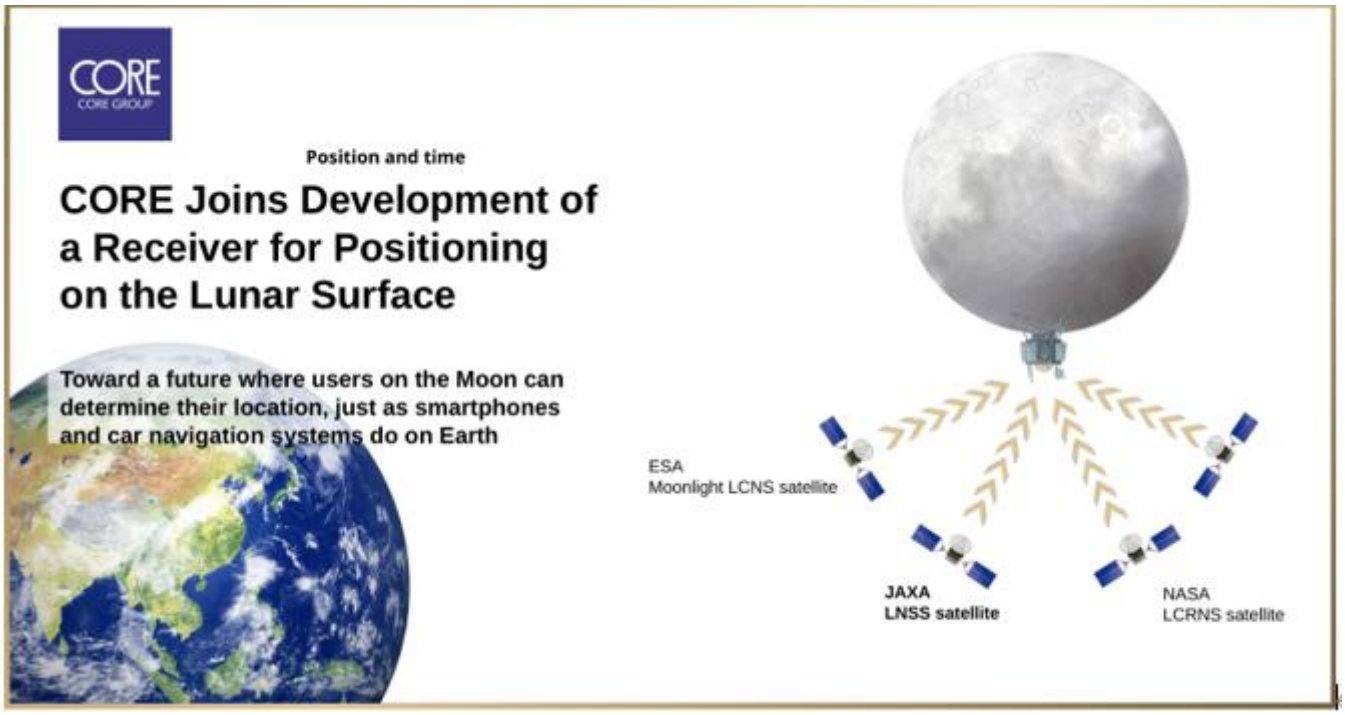
News Release

October 15, 2026
CORE Corporation

CORE Joins Development of a Receiver for Positioning on the Lunar Surface

～Toward a future where users on the Moon can determine their location, just as smartphones and car navigation systems do on Earth～

CORE CORPORATION (headquartered in Setagaya-ku, Tokyo; Koji Yokoyama, Representative Director and President, Executive Officer; "CORE") will participate in the Lunar Navigation Satellite System (LNSS) project led by ArkEdge Space Inc. (headquartered in Koto-ku, Tokyo; Takayoshi Fukuyo, Representative Director and CEO; "ArkEdge Space"). CORE will develop a receiver for use in an interoperability demonstration involving lunar navigation satellites from Japan, the United States and Europe.



The receiver will be a LANS demonstration receiver for demonstrating interoperability of the Lunar Augmented Navigation Service (LANS), a lunar navigation service based on LunaNet, the international framework for lunar communications and navigation. It will receive signals on the lunar surface from navigation satellites orbiting the Moon and calculate its own position and time. Applying the technologies and expertise gained through this development to lunar rovers, landers and other systems will enable them to determine their own locations, helping establish positioning infrastructure to support future lunar exploration and activities on the Moon.

CORE aims to deliver a LANS demonstration receiver that operates reliably in the lunar environment by combining its longstanding expertise in high-precision GNSS (satellite positioning) technology with its capabilities in developing high-quality embedded software for industrial applications. Drawing on its comprehensive capabilities and track record in developing terrestrial GNSS receivers, from product planning and design through software development and commercialization, CORE will also work toward practical deployment of lunar positioning receivers and their integration into a wide range of systems, including lunar rovers and landers.

.

■Enabling users to determine their location on the Moon

On Earth, smartphones and car navigation systems can display their current locations by receiving signals from global navigation satellite systems (GNSS). Comparable positioning infrastructure has yet to be established on the Moon. To safely conduct future lunar activities, such as rover travel, lander operations, base construction and resource exploration, people and equipment will need a way to determine their own position and time in real time.

LNSS is a system that places multiple navigation satellites in orbit around the Moon to transmit navigation signals to the lunar surface. Receivers on the surface will receive and process these signals to determine their own position and time. In essence, the initiative seeks to establish a lunar positioning capability comparable to GPS on Earth. As the implementing organization for the "Lunar Positioning System Technology" development theme under the Japan Aerospace Exploration Agency (JAXA) Space Strategy Fund, ArkEdge Space is leading development toward the realization of LNSS.

■The LANS demonstration receiver being developed by CORE

Under this project, CORE will develop a LANS demonstration receiver that receives LNSS navigation signals on the lunar surface and calculates the receiver's position and time.

Development will cover LNSS navigation signal reception and processing, positioning algorithms to determine position and time, and technologies to improve positioning accuracy. With future integration into lunar rovers, landers and other systems in mind, CORE aims to deliver a reliable receiver that is easy to use.

By combining the positioning technologies developed through its high-precision terrestrial GNSS receivers with its expertise in developing high-quality embedded software for industrial equipment, CORE will extend its positioning capabilities from Earth to the lunar surface.

■Future plans

CORE has developed and commercialized its own high-precision GNSS receivers compatible with Japan's Quasi-Zenith Satellite System (QZSS), "Michibiki," with in-house implementation spanning positioning algorithms, embedded software and hardware. In recognition of this track record and technical expertise, ArkEdge Space has commissioned CORE to develop the LANS demonstration receiver for this project.

Under its contract with ArkEdge Space, CORE will apply its accumulated expertise to lunar positioning, improve the positioning accuracy and reliability of the LANS demonstration receiver, and steadily advance demonstration testing. Through these efforts, CORE will help establish an environment in which future lunar rovers, landers and other systems can operate safely and efficiently, contributing to positioning infrastructure that supports future lunar exploration and industry.

.

■About ArkEdge Space Inc.

ArkEdge Space is a space startup providing comprehensive satellite development solutions, from the planning and design of micro-satellite constellations through mass production and operation. As the implementing organization for the "Lunar Positioning System Technology" theme under JAXA's Space Strategy Fund, the company is developing a lunar navigation demonstration satellite and advancing initiatives to establish lunar infrastructure. https://arkedgespace.com/

■About CORE CORPORATION

As a "solution platform provider," CORE CORPORATION uses information and communications technology (ICT) to address challenges facing society and industry. With technical capabilities that span planning and design, development, operation and maintenance, CORE supports the evolution of its customers' business models and contributes to the creation of sustainable value. https://www.core.co.jp/

■Notice to investors

This press release provides a qualitative update on the progress of the Company's business activities and is not intended to solicit investment. For updates and forecasts concerning the Company's financial performance and management indicators, please refer to its financial results summaries and other financial disclosures.

Contacts

■Inquiries about this initiative
CORE CORPORATION, Space Tech Solution Business Center
Tel: +81-44-989-5115 Email: gc-sales@core.co.jp
■Media inquiries
CORE CORPORATION, Business Promotion Office
Tel: +81-3-3795-5111 Email: coo-office@core.co.jp

.