

## 1. Improving amenities at Narita International Airport—Utilizing High-precision indoor maps and geomagnetic positioning to facilitate the movement of visitors

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**Abstract:** The number of international visitors to Japan has been soaring. At Narita International Airport, the gateway to Japan, we aim to create airport services that allow everyone to spend time comfortably via the concept of a smart airport. In September 2018, a service called NariNAVI—Japan's first high-precision indoor navigation application introduced at an airport—was launched. This application utilizes geomagnetic positioning as indoor-positioning technology. To display the map, we adopted a 2.5D (two- and-a-half-dimensional) map, which stereoscopically expresses spaces inside complex airport terminals spanning multiple floors. Providing such a map that is intuitive and user-friendly supports customers' smooth movement inside the airport. © 2019 Nippon Telegraph and Telephone Corp.. All rights reserved.

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