

F-04

Extending the network area to the sky, sea, and space – Utilization of Non-Terrestrial Network technology –

Social Issues that we have focused on

Conventional terrestrial networks have difficulty extending coverage to mountainous and undersea areas due to geographical limitations in establishing base stations. Japan, in particular, is a mountainous environment, and as a result, even land coverage is limited to about 60% of the country.

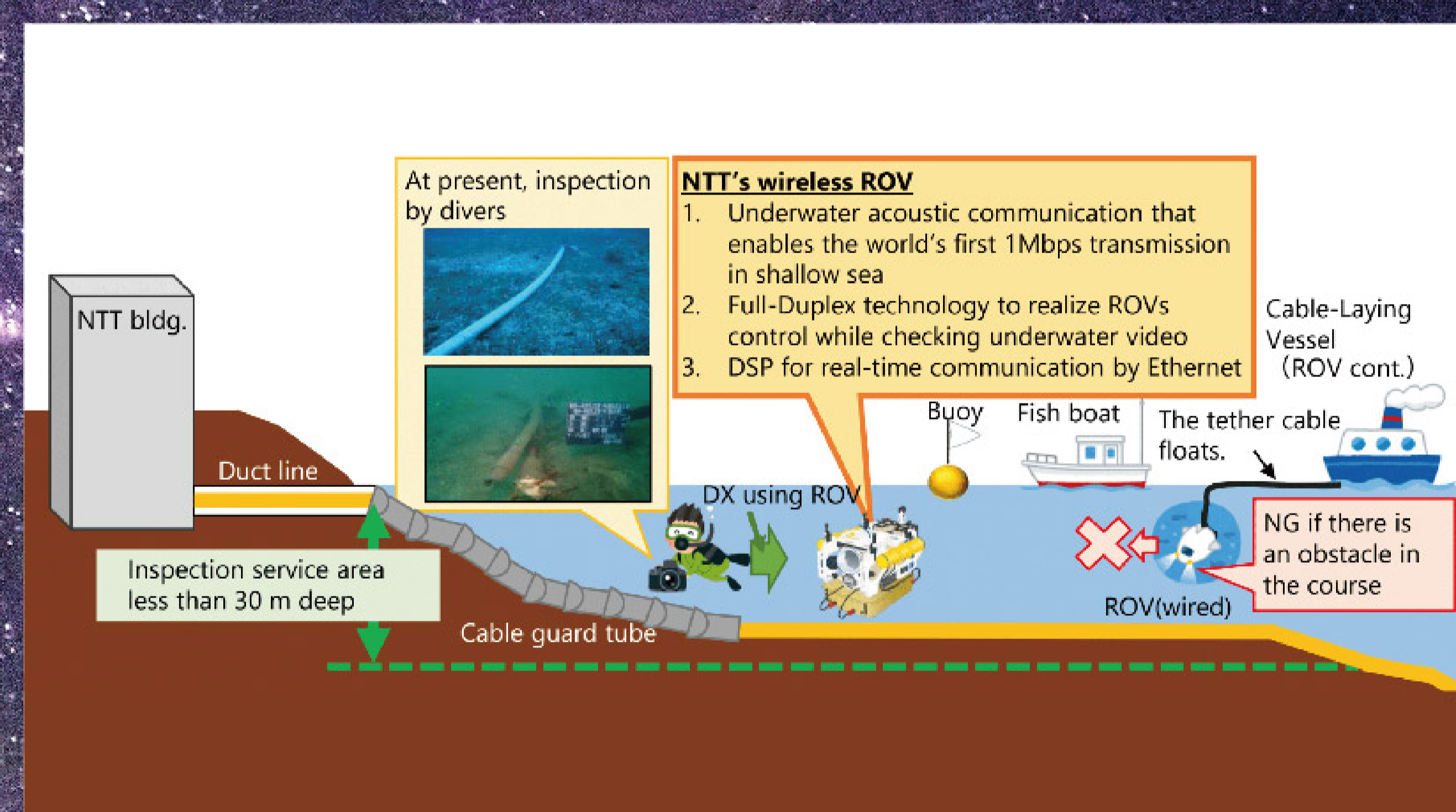
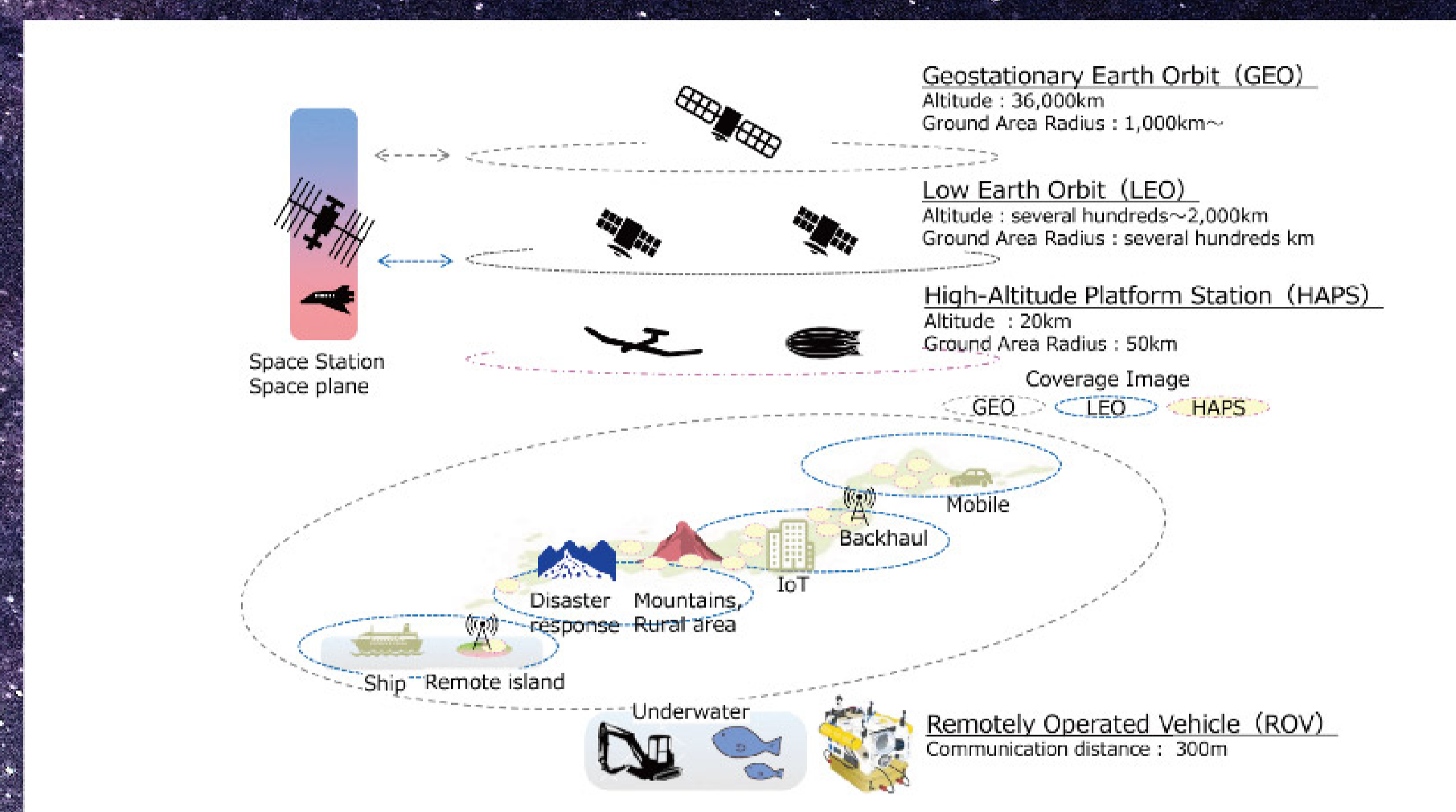
Initiatives to resolve issues

Overview

To extend communication areas to locations that cannot be covered by conventional terrestrial networks, we are developing Non-Terrestrial Network (NTN) technology that covers all locations on land, in the air, at sea, under the sea, and even in space, using a variety of methods.

Technology to Support Initiatives

For users on land, at sea, in the air, and in space, we provide communications through the construction of a network infrastructure that combines satellites and stratospheric flight HAPS. For underwater users, we will provide Mbps-class high-speed communications through underwater acoustic communications, enabling wireless remote monitoring by underwater drones.



Co-creation
Partners

AALTO HAPS LTD. / Space Compass Corporation
SKY Perfect JSAT Corporation / NTT World Engineering Marine Corporation

SDGs



NTN technology is expected to be used for many use cases, such as extending communication areas, disaster response, and securing communication capacity. By making it possible to provide communications to any location, we will realize a world where anyone can be connected to anybody, anywhere.

The world will be connected to anyone, anywhere, by land, sea, air, and even space.