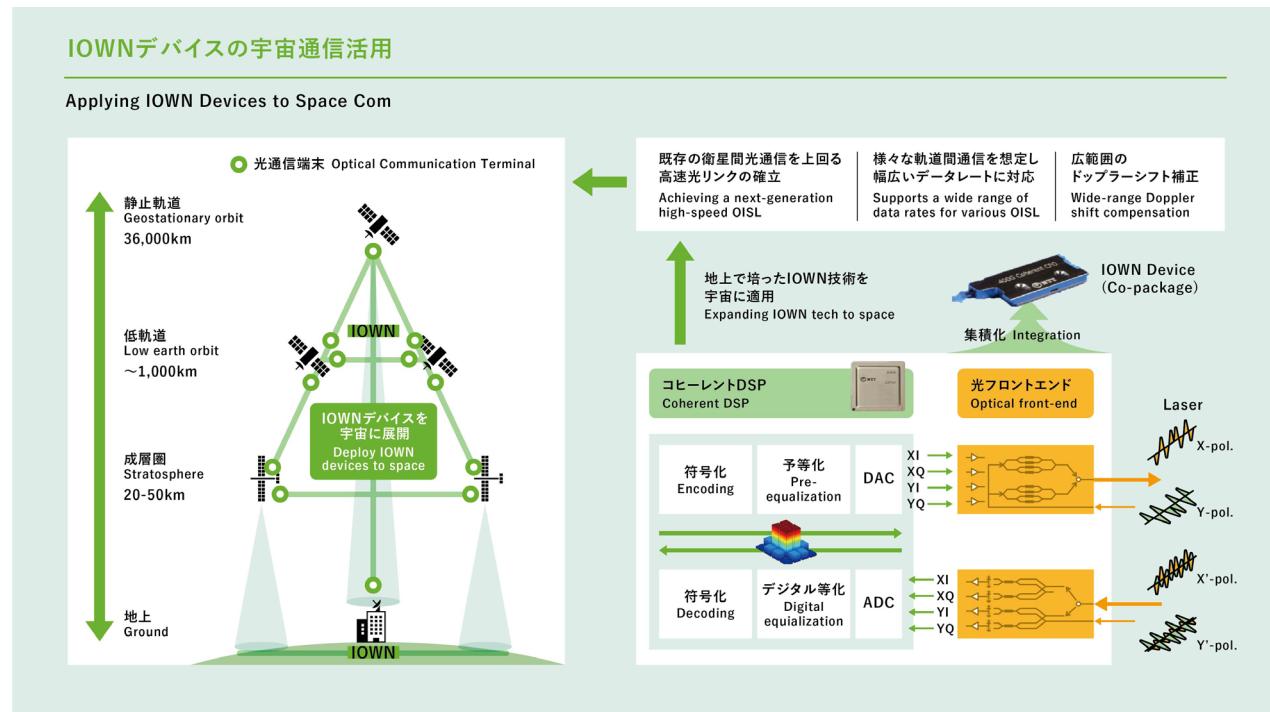




Expanding IOWN tech to space for high-capacity links Applying IOWN devices to space communications

Background and Technical Challenges

Inter-satellite communication is in a technological transition from radio to lasers, and actualization of OCTs is an issue, capable of high-capacity links between satellites in various orbits ranging from short to long distances.



R&D Goals and Outcomes

Development of IOWN devices for space, contributing to significant improvements in the OCTs, essential for high-capacity links.

Key Technologies

01 Core Technologies

- Achieving a next-generation high-speed optical inter-satellite link(OISL)
- Supports a wide range of data rates for various OISLs
- Wide-range Doppler shift compensation.

02 Key Differentiators

Establishment of high-speed OISL that exceeds the data rates of existing OCTs through digital coherent transmission, and enhancement of OISL quality through wide-range Doppler shift compensation.

Use Cases Aerospace & Defense

R&D phase Development

Technology Schedule FY25-26

Commercialization Schedule FY27-29

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