Mehr Licht!
More Photonics for Intelligence

#D07

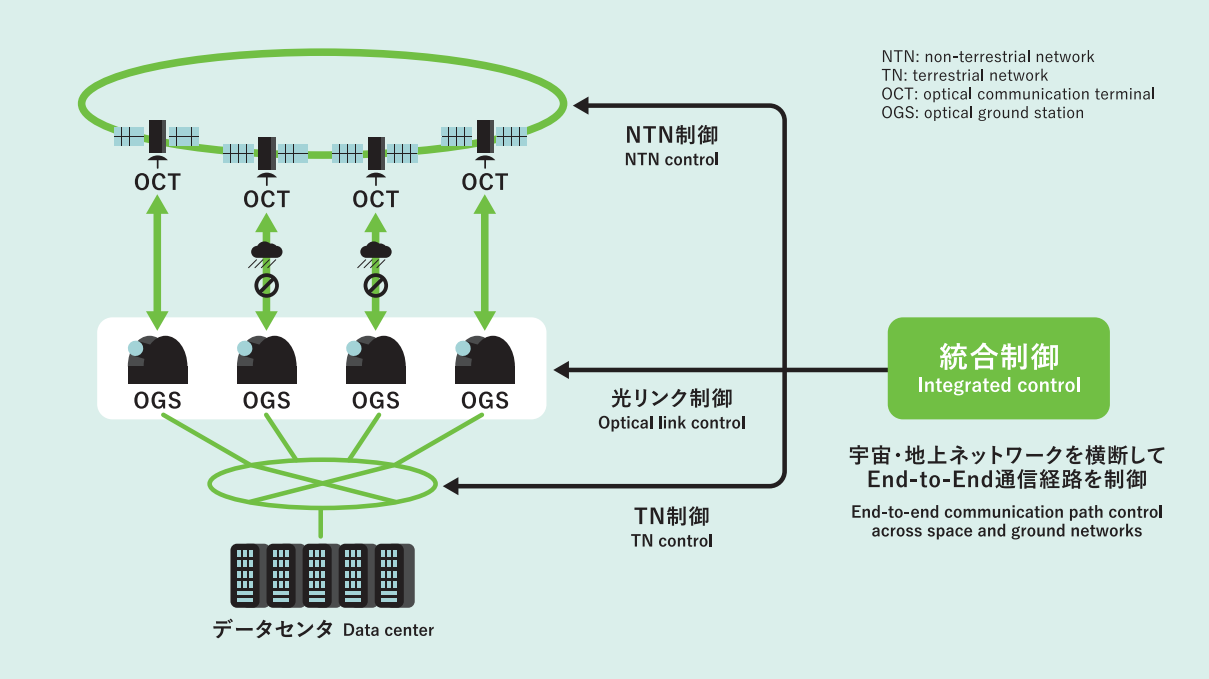
#Resilience#Safety and Security

Integrated Space-ground Network Control

Adaptive path switching keeps space-to-ground communications connected

Technical Challenges & Goals

As non-terrestrial networks expand, changing satellite, weather, and resource conditions make reliable connectivity challenging. Integrated space-ground control selects and switches optical paths across multiple ground stations to provide reliable communication services.



Key Technologies

Core Technologies

- End-to-end path control considering space, optical ground station, and ground network conditions
- Dynamic path optimization selects and switches ground stations based on orbit, weather, and resource

Key Differentiators

- Unlike separate control, we build paths using space, optical ground station, and network conditions
- Beyond satellite and ground station data, we optimize paths using orbit, weather, and network status

Use Cases

Aerospace & Defense

Integrated optical path control across space and ground networks flexibly switches paths to sustain end-to-end connectivity. It enables high availability for security, maritime surveillance, and remote control, supporting SLA-based service.

Exhibitors

Alliance Division

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