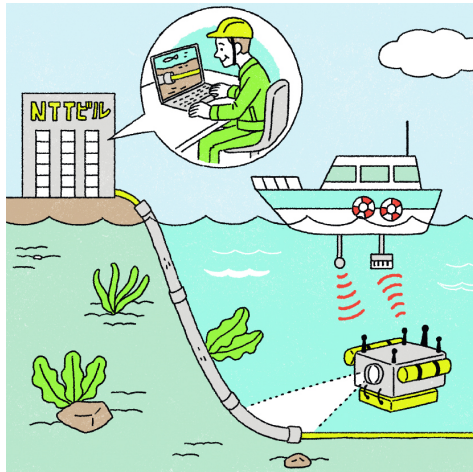


Underwater acoustic communication with spatio-temporal equalization

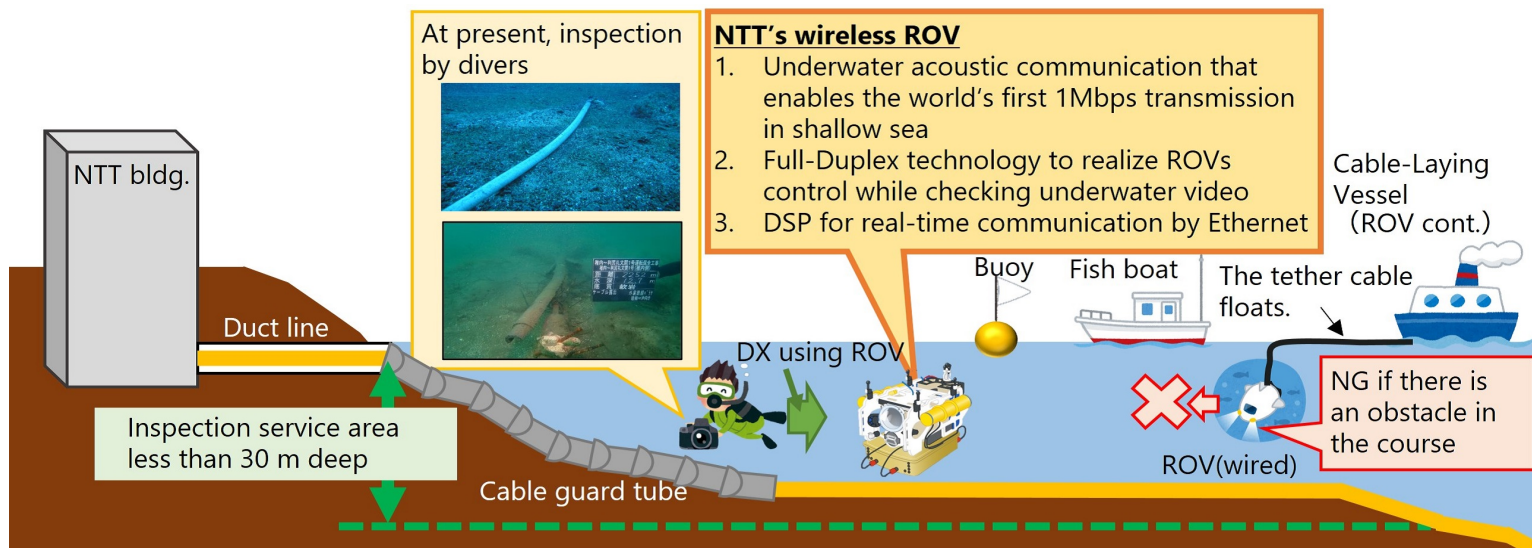


Background

Submarine communication cable maintenance service is performed manually by divers. Currently, the application of remotely operated vehicle (ROV) to this service is under active consideration due to safety, efficiency and sustainability issues.

Summary

Many submarine communications cable maintenance operations are conducted in shallow water areas of 30 m or less. However, wire-controlled ROVs have limited availability due to underwater obstacles. NTT's wireless ROV is expected to further improve the efficiency of maintenance operations.



Features

- Underwater acoustic communication technology that enables the world's first 1Mbps transmission over a horizontal distance of 300m in shallow sea
- Full-Duplex communication technology to realize ROVs control while checking underwater video
- Digital signal processing board realizing underwater real-time communication by Ethernet

Future_benefits

Underwater wireless network is expected to be applied to a wide range of fields such as underwater resource exploration and underwater smartphones.

Exhibiting Company

NIPPON TELEGRAPH AND TELEPHONE CORPORATION, NTT World Engineering Marine Corporation

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