

### Background

In the construction industry, labor shortages, long working hours, and the aging of engineers are becoming more serious. Work style reforms such as improving work efficiency and diversifying employment are required. Expectations are high for resolving problems by remote control of machinery.

### Summary

We confirmed that the APN connection between the machinery and the remote control system enables smooth operations, and that the transmission of images and other information with low delay enables operators to accurately grasp the situation, thereby improving the efficiency and safety of operations.

#### 【Technology Point 1】

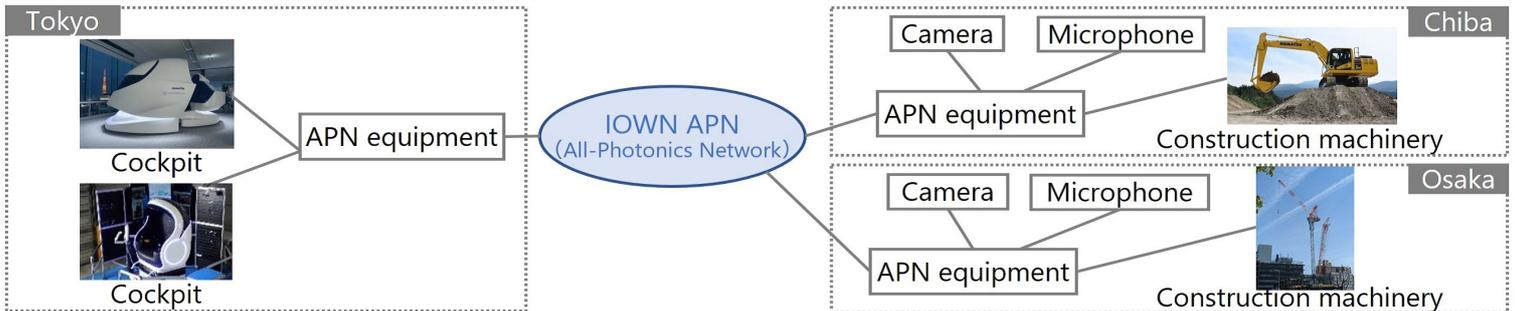
Improved operability by low-delay transmission of control signals when operating from a remote site to the field

#### 【Technology Point 2】

Utilizing high-capacity optical paths to transmit images with high resolution and without image deterioration, enabling remote operators to accurately grasp the field conditions

#### 【Technology Point 3】

Due to the fixed delay characteristics, it is possible to shorten the buffer time set for video transmission and realize real-time video transmission



### Features

- Improved operability by low-delay transmission of control signals when operating from a remote site to the field
- Utilizing high-capacity optical paths to transmit images with high resolution and without image deterioration, enabling remote operators to accurately grasp the field conditions
- Due to the fixed delay characteristics, it is possible to shorten the buffer time set for video transmission and realize real-time video transmission

### Future benefits

APN features high capacity, low delay, and fixed delay to expand application areas and use cases and contribute to solving issues in the construction industry.

### Collaboration partners

EARTHRAIN Ltd., Jizaie Inc., TAKENAKA CORPORATION

### Exhibiting Company

NIPPON TELEGRAPH AND TELEPHONE CORPORATION

### Contact

rdforum-exhibition@ml.ntt.com