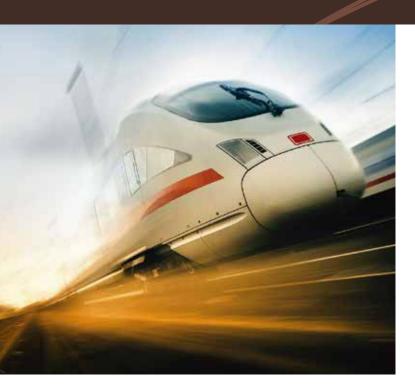


Increasing Efficiency, Safety and Savings - Wirelessly

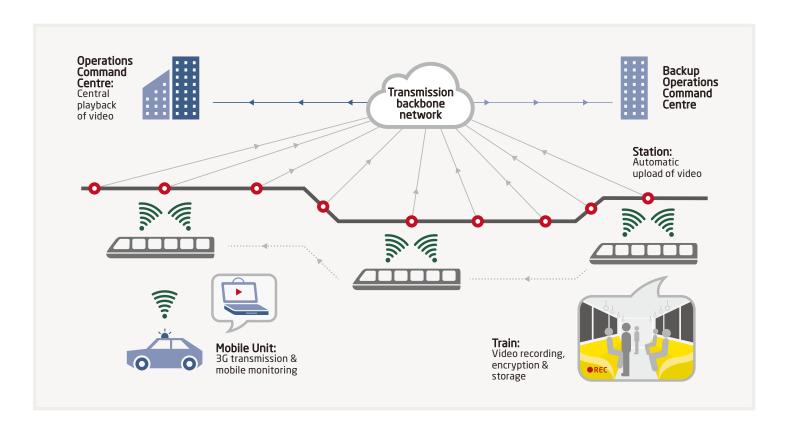
## Trainborne Video Surveillance System



NEC has been making mass transit systems more secure, efficient and cost-effective, through our utilization of the latest IT and Network Technologies, and Communication Solutions.

NEC's Trainborne Video Surveillance System provides real-time monitoring with central viewing and archival functions, and is also primed to support video analytics, man-search and other advanced capabilities. For emergency situations, there is the added advantage of the portable video viewing kits to obtain live or recorded videos from any train through the public cellular network.

The Trainborne Video Surveillance System is the advanced wireless solution that eliminates cable installation between train cars and costly infrastructure, optimizes operational efficiency and flexibility at lower operating costs, to deliver safer public transportation.



## NEC Trainborne Video Surveillance System



Cost-Effective Trainborne
Video Surveillance Solution
A combination of Wi-Fi and 4G
cellular transmission solution
to minimize CAPEX and OPEX.



Encrypted Video Images
The video images are AES
Encrypted before transmission
and storage.



Customized Wi-Fi Central
Operating Frequency
The Wi-Fi AP uses a customized
central operating frequency to
minimize radio interference.



**Operational Flexibility** 

With no cables between train cars, the operator is able to couple and decouple train car based on operational needs.



Redundant Disaster Recovery Backend Design

Main and hot standby backend system; video images of the backend system are reconciled during non-operating hours everyday.



Multi-Purpose Wi-Fi Connectivity

The trainborne Wi-Fi radio can be connected to existing trainborne communication systems for data downloading or uploading, enabling the operator to deploy for varied purposes.



**NEC Voice and Video Analytics** 

The recorded video images can be processed by NEC NeoFace® Watch video analytics engine to enhance railway security.



**Driver Video Monitor** 

Driver cabin can be equipped with wireless video monitors to view live video images when required.



Portable Viewing & Recording Kit

The portable video viewing kit allows the user to view live or recorded train borne video images wirelessly at 100m away from the train.



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