

Remote Monitoring for Autonomous Driving over Intermittent Wireless Networks



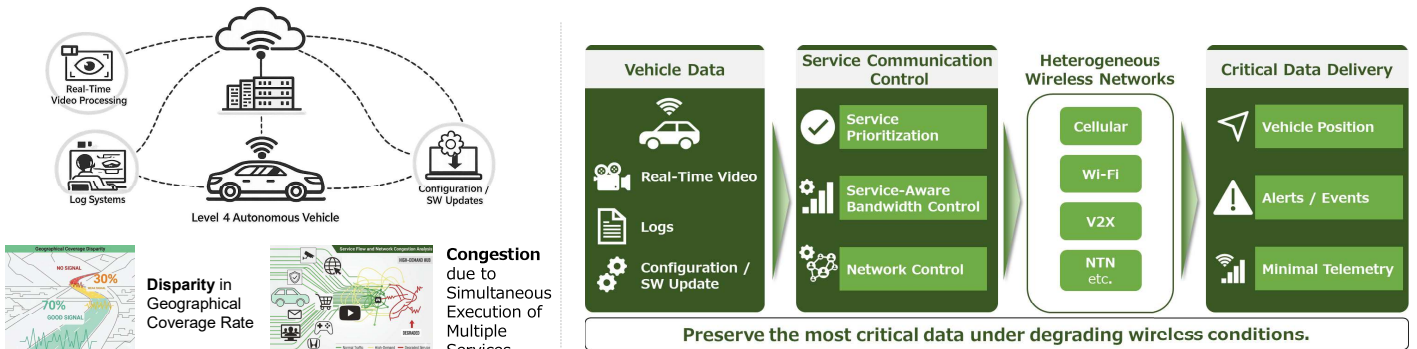
Honda, Linpra

Goal

Maximize communication continuity for remote monitoring of autonomous vehicles and enable rapid recovery of critical data delivery.

Concept

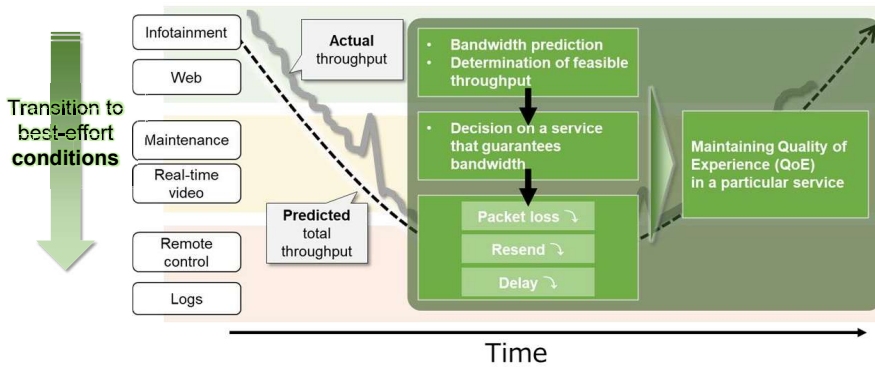
A resilient system over heterogeneous wireless networks, combining bandwidth adaptation, traffic prioritization, and agile recovery.



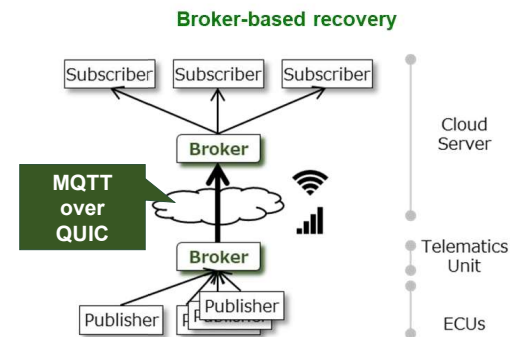
PoC Trials

- ① Real-time video **uplink** and remote vehicle operation
- ② **QoE-guided bandwidth** adaptation and **traffic prioritization**
- ③ MQTT over QUIC with Broker-to-Broker **cache architecture**

PoC①② : QoE-Guided Video and Traffic Control

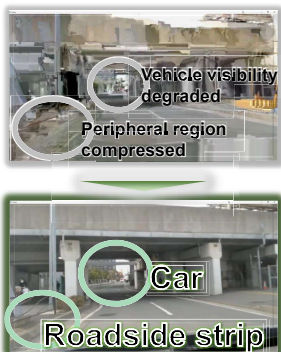


PoC③ : High-Priority Data Recovery

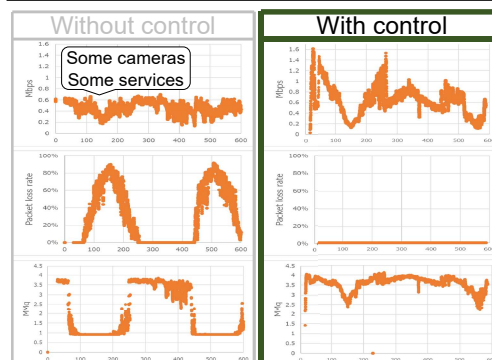


Key Results

Priority and bandwidth control preserved video continuity



Service-aware control reduced throughput degradation



Broker-based recovery reduced undelivered messages

