

# Multi-carrier Switching in Adaptive Communications

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## Goal

A single network cannot always meet service requirements as vehicles move across different locations.

→ **Telco APIs and SGP.32 features enable predictive QoS control and smooth network switching with avoiding service degradation.**

## Demo Overview

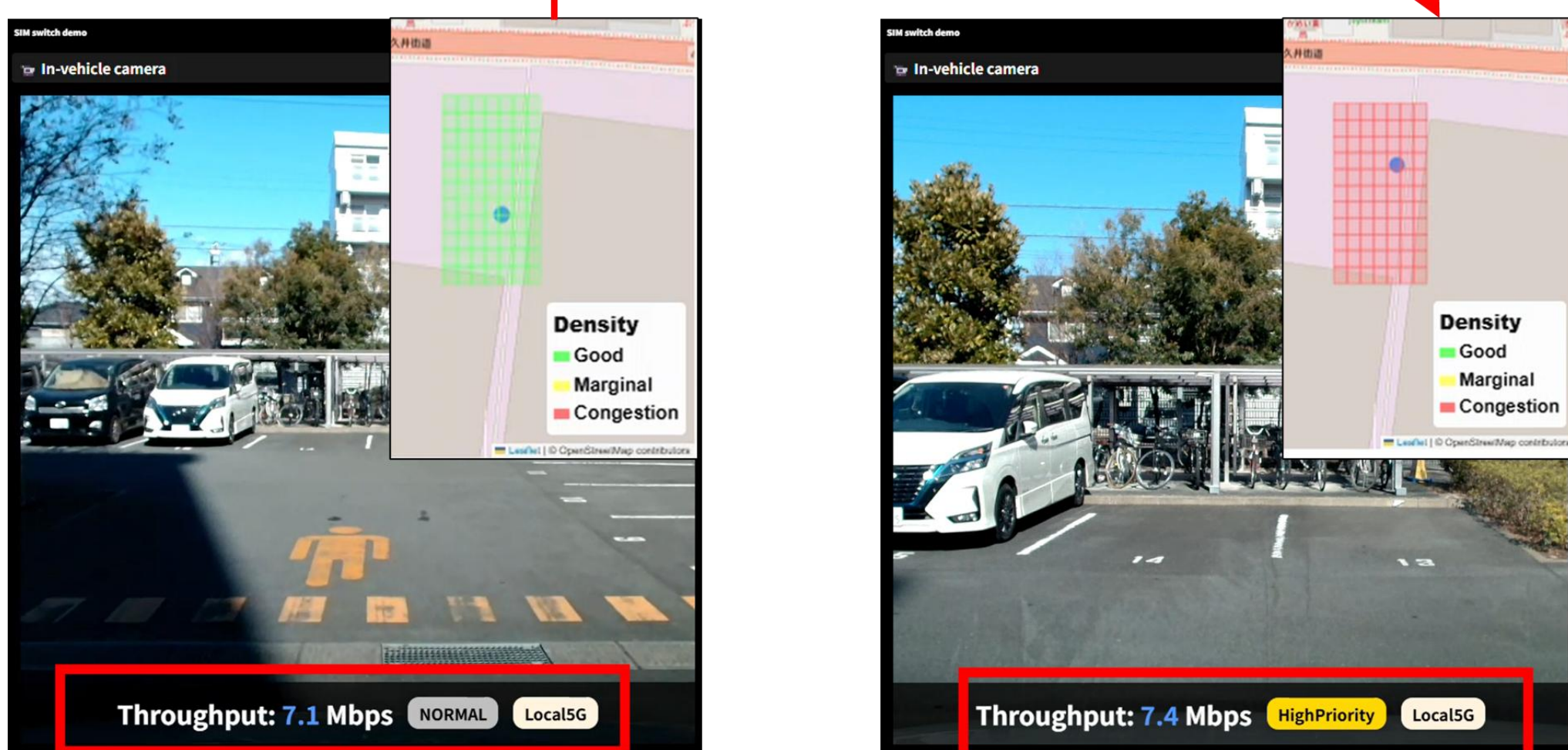
We focused on various situations in a vehicle lifecycle: in end-user case, in factory case.

### [1] Predictive QoS control

Use case: High priority communication

To enable critical data uploads and downloads in a congestion area

Network congestion is detected via **Population Density Data API**.



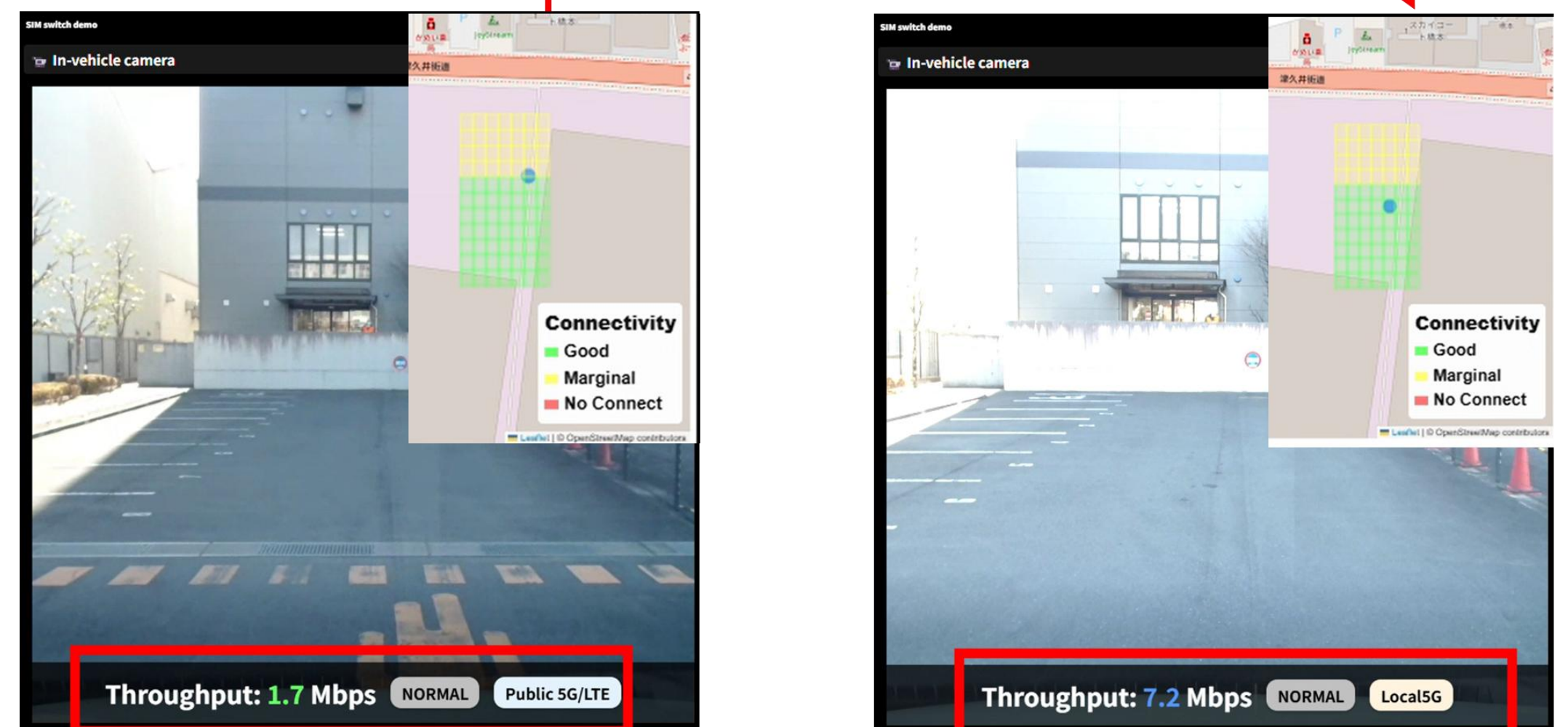
The session is prioritized (i.e. 5QI = 9 → 6) by **QoD API**.

### [2] Predictive Network Switching

Use case: Public to private network change

To enable better application quality in vehicle factory automation

Good quality of Local 5G area is detected via **Predictive Connectivity Data API**.

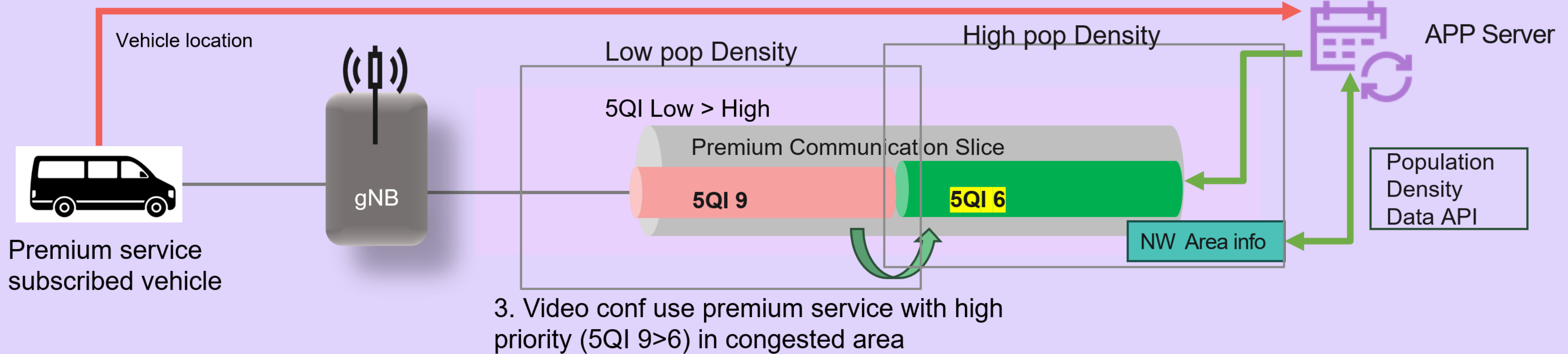


The network changes LTE to Local5G by **SGP.32** SIM switching.

## Enabling Technology

### Population density API x QoD API

1. CAMARA QoD API requested by population data on area



### Predictive Connectivity + eSIM switch

