

Quality on Demand API

Connectivity Insights API

AECC's Scalable Vehicle Lifecycle Connectivity Management

Intelligent Mobility with Quality on Demand, Connectivity Insights and eSIM Remote Management APIs – [View API Descriptions](#)

Business Problem

Mobility services place variable demands on network performance, such as latency, reliability, capacity, security and continuity. These demands change based on location, time and context. Delivering a consistent vehicle experience remains challenging as capabilities vary across operators, requiring country-by-country integration with limited control.

Impact

End users benefit from safer and more reliable connected-vehicle experiences, including timely hazard notifications, smoother communications, cost efficient data uploads and flexible network switching. Operationally, mobility services remain available under changing conditions through dynamic connectivity selection and assurance, with differentiated treatment applied only when required using session-based Quality on Demand, slice or edge capabilities.

Technical Solution

This trial and interactive demonstration shows how standardised GSMA Open Gateway APIs, based on CAMARA standards, enable OEMs to program connectivity on demand and at scale across multiple networks. When in-vehicle or back-end triggers prompt the mobility platform to invoke relevant CAMARA APIs via an exposure platform, applying capabilities such as Quality on Demand, connectivity insights, number verification and eSIM management.

Value

For automotive OEMs, standardised network APIs reduce operator-specific integration effort and improve portability across markets, enabling SLA-based offerings such as safety flows, remote assistance and infotainment. For CSPs, Open Gateway APIs enable monetisation of 5G SA capabilities through developer-friendly APIs, aligned with GSMA Open Gateway and CAMARA standardisation at scale.

“Standardised Open Gateway and CAMARA APIs allow us to program connectivity per mobility service, so safety, automation and premium experiences can scale globally with fewer operator-by-operator integrations.”

Lei Zhong, Liaison Strategy Committee Chair, AECC and Principal Researcher, Toyota Motor Corporation

