

Seamless IoT for smart vehicles:

Overcoming APAC's connectivity gaps

Lagging IoT development in Asia Pacific

Why is the pace of IoT adoption in the Asia Pacific automotive sector slower than in Europe and the United States? The challenge isn't the technology; it's the fragmented infrastructure – from patchwork networks to inconsistent connectivity.

To overcome fragmentation, the solution is **Multi-Domestic Connectivity**.

Roadblocks to deployment

For automotive OEMs, these roadblocks drive up deployment costs, disrupt connectivity, and heighten security and compliance risks, complicating large-scale IoT adoption in APAC.

How multi-domestic connectivity overcomes these hurdles



Fragmented IT and patchwork networks

Inconsistent connectivity is the biggest barrier to cross-border IoT in APAC, with mobile gaps ranging from 7% in South Korea to 63% in Bangladesh¹. Remote areas add cost and complexity to maintaining seamless operations.



Uninterrupted connectivity across borders

Eliminate network fragmentation with eSIMs that automatically switch to local MNO partners across APAC. Singtel's Multi-Domestic Connectivity ensures seamless IoT operations without multiple SIM profiles or network agreements.



Security threats and compliance gaps

Rapid IoT innovation outpaces region-wide regulations.² APAC's regulatory misalignment exposes manufacturers to data breaches, cyberattacks, and compliance failures, making consistent security standards hard to maintain.



Seamless IoT integration for OEMs

Singtel's partnerships with 35 tier-one MNOs ensure secure, reliable IoT connectivity, mitigating cyber threats and compliance risks. Real-time firmware and diagnostic updates protect cars, even in complex regulatory environments.



Data governance complexity

APAC's fragmented data privacy framework³ poses compliance challenges. OEMs must navigate complex, country-specific regulations. Varying consumer consent laws complicate data collection and usage.



Always-on data compliance

Singtel's strong APAC presence and continuous connectivity power seamless as-a-service solutions, including data compliance. OEMs can personalise driver experiences while instant OTA updates across borders maintain compliance with evolving security and data standards.

Unlocking opportunities for automotive OEMs

Multi-domestic connectivity is the missing link for seamless IoT adoption. It unlocks opportunities for automotive OEMs such as:



Remote fleet management

Reduce operational costs with predictive maintenance and real-time diagnostics.



Personalised driving experiences

AI-driven telematics provide data-backed customisation for drivers.



Data monetisation

Leverage connected car data for insurance, infrastructure planning, and in-vehicle advertising.



Embedded commerce and subscriptions

Enable seamless biometric in-car purchases and premium connected services.

Singtel: Your partner for seamless IoT deployment

APAC's IoT challenges are not just obstacles – they present significant opportunities. With the right CSP partner, OEMs can transform cross-border complexity into a powerful competitive advantage.

Singtel's Multi-Domestic Connectivity

empowers leading OEMs and electric vehicle manufacturers such as BYD to thrive. Ready to take the next step?

Contact us today to learn more about our IoT-enabling services.

Contact us today

References:

1. Statista, *Mobile internet connection rate and gaps in the Asia-Pacific region in 2023, 2024*.
2. Science Direct, *Cybersecurity regulatory challenges for connected and automated vehicles – State-of-the-art and future directions, 2023*.
3. Hinrich Foundation, *Five things to watch in data governance in the Asia-Pacific in 2025, 2025*