

Singtel worked with an original equipment manufacturer (OEM) to navigate the complex technical, business, and regulatory landscape in the Asia Pacific, and provided the company with one contact point for the rollout of its connected devices across all markets in the region. The Singtel Multi-Domestic Connectivity Solution also provided the manufacturer with a single, unified portal to manage multi-domestic connectivity across its target markets.

### Executive Summary

#### Company

An OEM device manufacturer supplying connected devices such as IoT sensors and actuators, CCTV cameras and other components used in commercial or industrial environments.

#### Industry

Building management, automotive, agriculture, manufacturing, security.

#### **Business Challenges**

- Navigating the complex business, communications, and regulatory landscape in the Asia Pacific.
- Dealing with multiple mobile network operators (MNOs) with different operational processes and agreements
- The complexity of managing different SIM profiles in different countries
- The complexity of managing different device variants of each IoT device for different countries
- High roaming costs

#### Singtel Solution

• Singtel Multi-Domestic Connectivity

#### **Business Value**

- Helps manage the complexity of regional operations
- Simplifies connectivity management with a unified platform
- Provides guidance for regulatory compliance
- Facilitates logistics
- Strengthens end-to-end security

# Customer Success Story: An original equipment manufacturer

#### About the customer

The Singtel customer is a German multinational engineering and technology company and an OEM of IoT sensors and actuators, CCTV cameras, and other components used in commercial or industrial environments.

#### **Business needs**

As an OEM supplying hundreds of thousands of connected devices for use in commercial and industrial environments across the Asia Pacific, the company had to ensure seamless and uninterrupted regional mobile connectivity for its products.



This involved liaising with a diverse set of mobile network operators (MNOs) operating in different countries across the Asia Pacific. Different MNOs may have different SIM management and billing systems, and work was needed to integrate these with the OEM's own device management platform.

Shipping its products to different countries also meant having to manage different device variants, and SKUs for different countries and the company faced the prospect of high roaming costs to maintain device connectivity.

Another challenge was the lack of knowledge and experience in navigating each country's domestic requirements and regulations. Unlike the European Union or the United States, the Asia Pacific region comprises many independent countries, each with its own regulations.

#### Solution

To address these issues and better manage the complexity of regional distribution, Singtel provided the company with a multi-domestic solution aligned with the needs of OEM device manufacturers with large volume distribution across the Asia Pacific.

With the Singtel Multi-Domestic Connectivity Solution, device connectivity is enabled via an embedded SIM (eSIM). The manufacturer has access to a centralised, open integration platform to support all its target markets and a single unified portal to manage the SIM lifecycle for all deployed countries.

To provide for end-to-end security, the solution makes use of private access point names (APNs) and MPLS/IPSEC virtual private networks which enable devices to connect securely to the network.



The multi-domestic solution is delivered by Singtel as the lead operator providing one contact point across all markets in the region. The manufacturer leveraged Singtel's knowledge of the local operator landscape and different in-country regulatory requirements to navigate regional complexities and harmonise the processes for distributing OEM devices across the Asia Pacific.

As a founder-member of the Bridge Alliance, Singtel also worked with major mobile telecommunications companies across the Asia Pacific to provide the manufacturer with localisation and in-country support.

#### **Benefits**

#### Helps manage the complexity of regional operations

The Singtel Multi-Domestic Connectivity Solution allows the OEM to work with a single operator to navigate the complexities of the region from a business, technical and regulatory perspective. This eliminates the hassle of dealing with different partners and regulators and offers a single process to streamline operations, engagements, and activities, with one contract and a standard service level agreement across multi-domestic markets.

#### Simplifies connectivity management with a unified platform

IoT connectivity is simplified with a unified portal for core network and connectivity management, supported by a dedicated team of experts. A single application programming interface (API) allows for rapid integration with various MNO systems, allowing all SIMs to be managed in real-time from a single pane of glass with centralised monitoring and support, unified reports and analytics, and a unified billing process. Support for the GSMA Embedded Universal Integrated Circuit Card (eUICC) standard for machine-to-machine and consumer devices also enables the remote SIM provisioning of multiple network profiles.

#### Provides guidance for regulatory compliance

Through its partnership with local Tier 1 operators, Singtel is able to guide the manufacturer through the regulatory requirements of each country and arrange for local support.

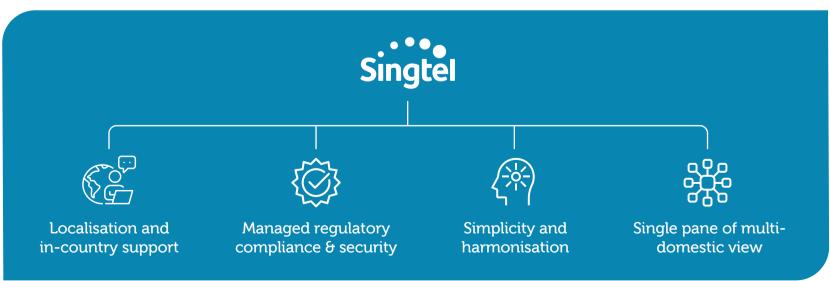
#### **Facilitates logistics**

The Singtel solution involves a single SIM/eSIM SKU, reducing logistics and inventory costs, and lowering subscription overheads. Providing multi-domestic connectivity with local operator support also enables the manufacturer to avoid hefty roaming charges.

#### Strengthens end-to-end security

Singtel helps strengthen end-to-end security by allowing the company to take critical IoT SIMs off the public Internet and to subscribe to on-demand private IP connectivity to IoT devices.





## About Singtel

Singtel is Asia's leading communications technology group, providing a portfolio of services from next-generation communication, technology services to infotainment to both consumers and businesses. For consumers, Singtel delivers a complete and integrated suite of services, including mobile, broadband and TV. For businesses, Singtel offers a complementary array of enterprise mobility solutions, data hosting, cloud, network infrastructure, 5G, IoT, analytics, robotics and cyber-security capabilities. The Group has presence in Asia, Australia and Africa and reaches 740 million mobile customers. Its infrastructure and technology services for businesses span 21 countries, with more than 428 direct points of presence in 362 cities.

#### **Awards**

Frost & Sullivan 2020 Singapore IoT Service Provider of the Year

Frost & Sullivan 2019
<u>Asia Pacific Secure</u> IoT Service

Carrier Community Global Awards 2020 Best WAN Solution Provider Frost & Sullivan APAC ICT Awards 2016-19 APAC Telecom Group of the Year

Asia Communications Awards 2020 Best Enterprise Business Service – Operator (Singtel SDN)

IDC MarketScape: Asia/Pacific Next-Gen Telcos Telecom Services 2020 Vendor Assessment (Singtel Named a Leader)

