GSMA Intelligence

GSMA Open Gateway: State of the Market, H1 2025

Where the rubber meets the road

June 2025

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GSMA Intelligence

GSMA Intelligence is the definitive source of global mobile operator data, analysis and forecasts, and publisher of authoritative industry reports and research. Our data covers every operator group, network and MVNO in every country worldwide – from Afghanistan to Zimbabwe. It is the most accurate and complete set of industry metrics available, comprising tens of millions of individual data points, updated daily.

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State of the market, H1 2025

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Almost 80% of the sector on-board, with a plateau effect emerging

The supply side of GSMA Open Gateway has now reached nearly 80% by market share of telecoms operators – up 3 pp from December 2024. The new joiners primarily come from Southeast Asia (e.g. Vodafone Idea and Mobifone). However, the rise is beginning to plateau. This is likely to continue, given that activity in the under-represented regions (mostly Africa) is still somewhat muted.

02

The rise of QoD

There is clear evidence of an expansion into categories beyond security and anti-fraud over the last six months, including quality-on-demand (QoD), device location and edge compute. According to launch data for 2025 so far, security accounts for two thirds of API launches from operators, followed by communication quality and edge (24%), device location (9%) and payments (1%). While this may appear lopsided, security accounted for more than 80% of deployments in 2024. The rise of QoD, edge and device location is important as a validation of non-security use cases. The categories should also appeal more to enterprise buyers where there is the greatest potential for cross-sell with other 5G or AI-based services.

03

In with aggregation; out with bi-laterals

For 2025, the focus is on commercial availability and monetisation of the API base. Activity among channel partners reflects this objective, acting as important bridges between supply and demand. Some 15 partners – equating to 15% of the total channel support – have joined GSMA Open Gateway in 2025, including LotusFlare, Shabodi and Syniverse. Aduna's inception is a further sign of the aggregator model. The initiative is a venture between Ericsson and a collection of major operators, in part to overhaul prior API efforts with Vonage but at a deeper level to pool sales and marketing resources to support commercial outreach across a large number of enterprises. The 'Nokia as code' platform and operator-led business units dedicated to APIs (such as Orange LiveNet) have similar objectives.

04

Developing pricing flexibility

One of the key pain points of developers and enterprise buyers is flexibility in pricing models. The historic reliance on API subscription or call pricing has a place but will increasingly be complemented by revenue share or pay-as-you-go models that help enterprises de-risk API investments. For APIs to work at scale, it takes two to tango. 2025 is a key year for commercial validation and proof points of real revenue and real usage. Pricing flexibility is a sensible compromise and one that should be viewed with an open mind by operators and channel partners.

Numbers to note

79%

Global market share coverage

Telecoms operators accounting for global market share of nearly 80% are now part of GSMA Open Gateway. This is up 3 pp from December 2024 – a more marginal rise than that seen during 2024. This suggests a plateau effect and highlights how the focus now is on monetising APIs through enterprise customer usage.

15

New channel partners during the last six months

An eye-catching change on the supply side in H1 2025 has been the growth in channel partners. Some 15 partners have come on-board since December 2024, bringing the total to 43. Their significance is less in their number and more in the market-making capabilities these aggregators bring.

25%

Rise in QoD and communication

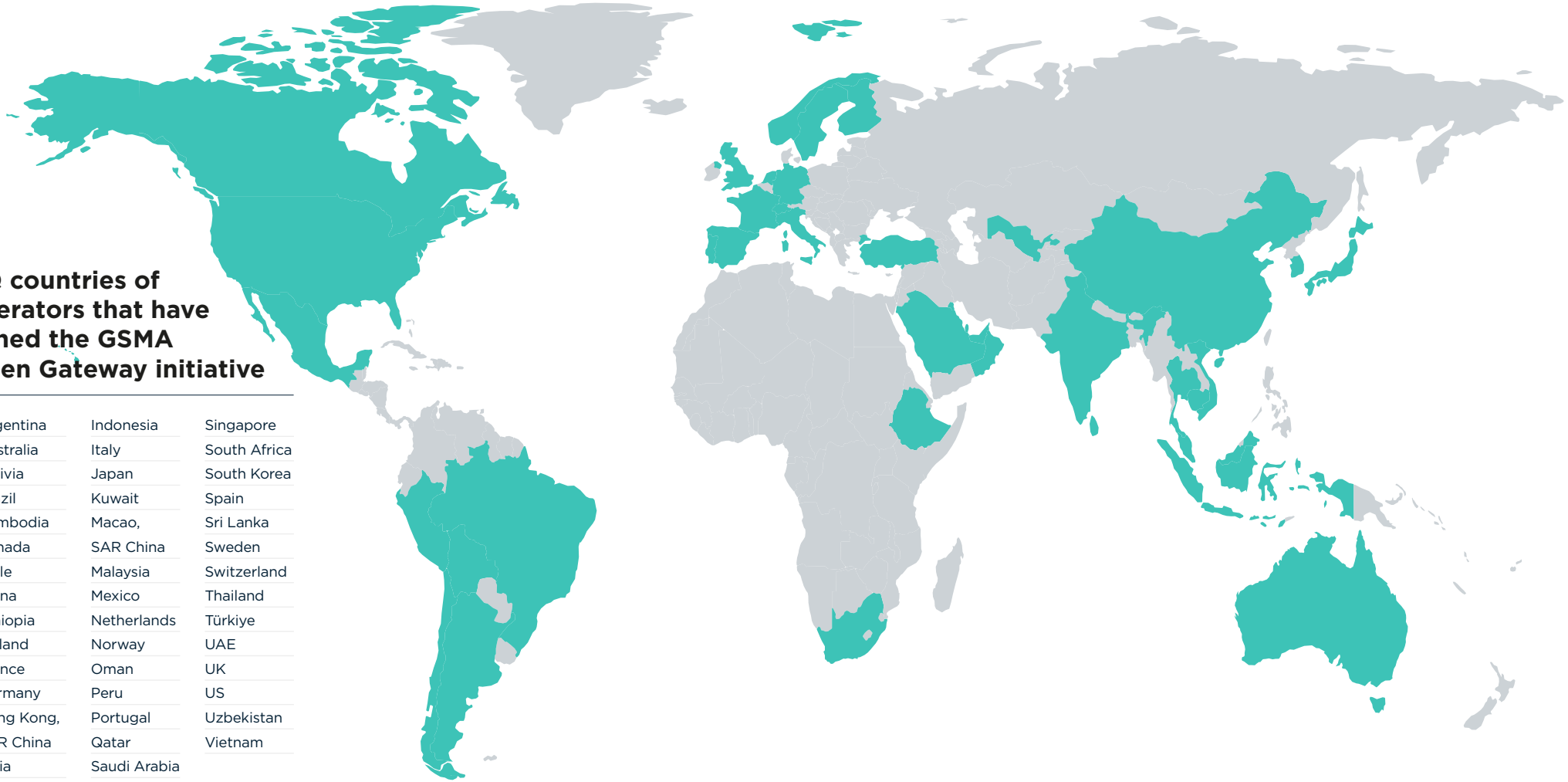
Security and anti-fraud remain the foundational use cases for network APIs. However, activity has widened in H1 to companies using APIs to track network quality and edge compute performance. QoD and communication use cases now account for around 25% of GSMA Open Gateway APIs commercially available from operators, up from less than 10% in 2024.

1%

Payments and charging category

APIs to facilitate mobile payments and charging (for example, operator billing for pay TV or public transport) account for only 1% of those commercialised. This comes despite developers and enterprise demand sentiment for this use case being much higher, implying an opportunity to address.

Global coverage of the GSMA Open Gateway initiative



HQ countries of operators that have joined the GSMA Open Gateway initiative

Argentina	Indonesia	Singapore
Australia	Italy	South Africa
Bolivia	Japan	South Korea
Brazil	Kuwait	Spain
Cambodia	Macao, SAR China	Sri Lanka
Canada	Malaysia	Sweden
Chile	Mexico	Switzerland
China	Netherlands	Thailand
Ethiopia	Norway	Türkiye
Finland	Oman	UAE
France	Peru	UK
Germany	Portugal	US
Hong Kong, SAR China	Qatar	Uzbekistan
India	Saudi Arabia	Vietnam

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02 Market and commercialisation update

Operator/ecosystem launches and announcements

JANUARY 2025	JANUARY 2025	FEBRUARY 2025	FEBRUARY 2025	MARCH 2025
Ooredoo adopts GSMA CAMARA APIs Ooredoo became MENA's first operator to adopt the GSMA CAMARA open network APIs, with a focus on integrating 5G and IoT technologies to enhance personalisation for both customers and developers.	**StarHub collaborates with Nokia on network APIs** StarHub and Nokia have partnered to work on creating 5G and 4G applications such as device status and quality of service on demand for banking, ports and other enterprise sectors.	**Globe Telecom teams up with Nokia for network APIs** Globe Telecom collaborated with Nokia to test its Network Exposure Platform, to expand and simplify the number of APIs available to customers in the banking and enterprise sectors with security verification tools.	**Batelco joins GSMA's Open Gateway initiative** Bahrain's Batelco signed an MoU with the GSMA to join the Open Gateway initiative. This provides Batelco with access to a framework of APIs to advance its 5G capabilities and improve network efficiency.	**Orange launches new API business, LiveNet** Orange has launched Orange LiveNet, a business unit focused on marketing network APIs to enhance developer and business access to advanced network capabilities.

MARCH 2025	MARCH 2025	MARCH 2025	APRIL 2025	APRIL 2025
Proximus and Nokia join forces to offer network APIs Proximus Global and Nokia have partnered to focus on expanding API capabilities in areas including network slicing for 5G private networks and fraud protection services.	**Telefónica, Nokia demo drones based on APIs** In partnership with Nokia, Telefónica showcased autonomous drone technology with three use cases from real-world applications at MWC 2025, powered by 5G and Open Gateway APIs.	**CelcomDigi, Aduna partner to boost network capabilities** CelcomDigi signed a partnership with Aduna to develop enhanced network API solutions such as Number Verification and SIM Swap services, unlocking new possibilities for fraud mitigation and more.	**Mobifone, Viettel and VNPT join GSMA Open Gateway** Vietnamese mobile operators Mobifone, Viettel, and VNPT signed an MoU with GSMA Open Gateway to combat online fraud and enhance identity verification.	**Motive, Telefónica test phone number verification** Using the Number Verification API from the GSMA Open Gateway, Motive and Telefónica have jointly completed a proof of concept for authentication technologies.

Implications of recent developments

The volume of news related to GSMA Open Gateway in H1 2025 points to no slowdown in industry interest or momentum. However, as always, it's important to ask what it all means and what can be learnt.

Asia and Europe leadership

- New operator signatories to GSMA Open Gateway continue to come primarily from Asia, and Southeast Asia in particular. This speaks to a network effect in which the value of commercialising APIs for one operator is highest when competitors do so as well for the scale benefits.
- Participation is still low relative to market size in Africa and Latin America.

Channel partner value

- Commercial success in APIs is driven by the technology and relationship building. This is underlined by Aduna's formation and several operator-led moves to form or expand dedicated business units for selling APIs.
- There is also closer engagement with the developer community. Expect to see more of this during the rest of 2025.
- Hyperscaler activity continues to be broadly muted, even if support is there in principle

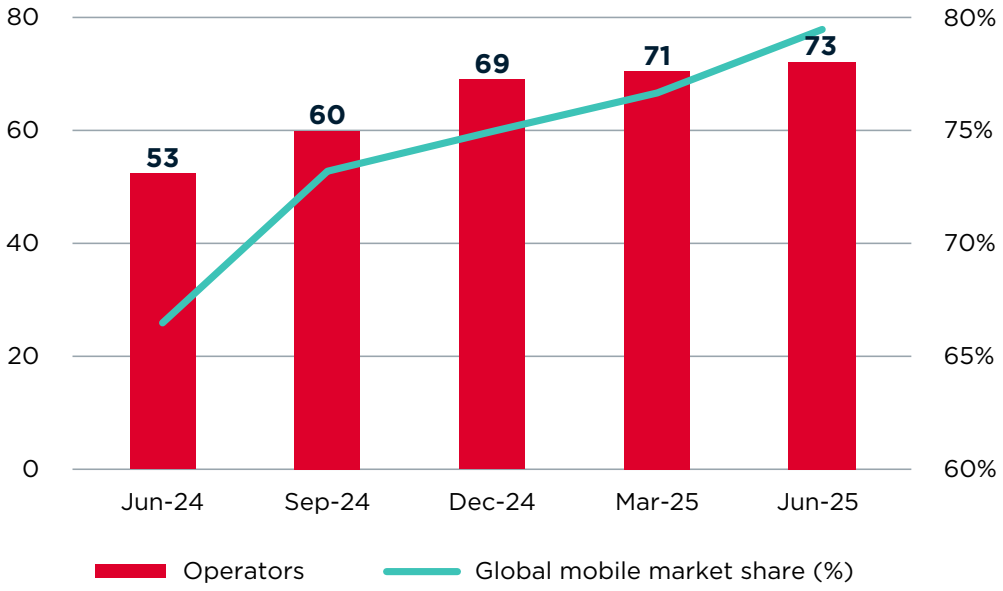
Diversification

- Trials and deployments of APIs beyond security and anti-fraud are an important sign of diversification to capitalise on a greater share of the CAMARA/Open Gateway library.
- Nokia is a leader in this respect; its partnerships with Proximus (slicing) and Starhub (quality on demand) are among several examples in H1 2025.

Almost 80% of operators have committed but the increase is plateauing

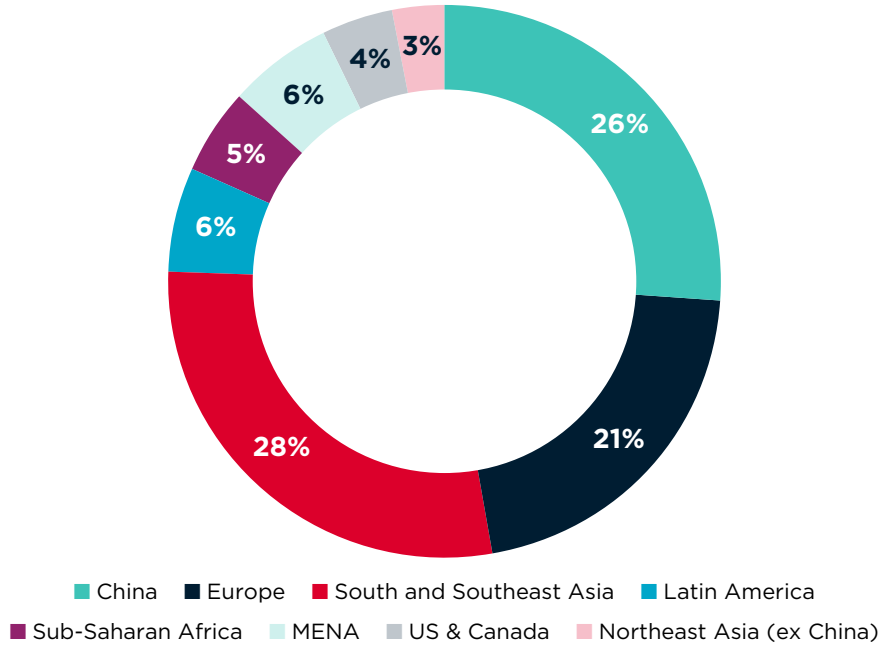
Some 73 operator groups representing 285 networks and almost 80% of mobile subscribers worldwide are now committed to GSMA Open Gateway. This is up on the last six months but only marginally. The regional splits have not changed significantly; China, Southeast Asia and Europe remain the centres of gravity.

Number of mobile operators participating in the GSMA Open Gateway initiative



Data as of June 2025
Source: GSMA Intelligence

Regional breakdown of operator participation



Data as of June 2025
Source: GSMA Intelligence

Participating operators: Southeast Asia and Europe still show the strongest uptake

Northeast Asia	South and Southeast Asia	Europe	North America	Latin America	Sub-Saharan Africa	MENA	Oceania
China Mobile	AIS	1&1	AT&T	America Movil	Ethio Telecom	du	Telstra
China Telecom	Axiata	Altice Portugal	Rogers	Entel Chile	MTN	e&	
China Unicom	Bharti Airtel	Bouygues Telecom	Verizon	Nuevatel		Omantel	
Chungwa Telecom	Cellcard	BT		Telecom Argentina		Ooredoo	
CITIC Telecom	Celcom Digi	CK Hutchison		TIM		STC	
Far EasTone	Globe Telecom	Deutsche Telekom				Turkcell	
KDDI	Jio	Iliad				Turk Telecom	
KT	M1	KPN				Zain	
LG U-Plus	Maxis	Liberty Global (ex UK)					
NTT Docomo	Mobifone	MasMovil					
SmarTone	Singtel	Orange					
SoftBank	Smart	Swisscom					
Taiwan Mobile	Starhub	Telefónica					
	Telekom Malaysia	Telenor					
	Telkomsel	Telia					
	True/DTAC	Veon					
	U Mobile	Virgin Media/O2					
	Viettel Networks	Vodafone					
	Vodafone Idea						
	YTL Communications						

Source: GSMA

Renewed channel activity beyond the hyperscalers

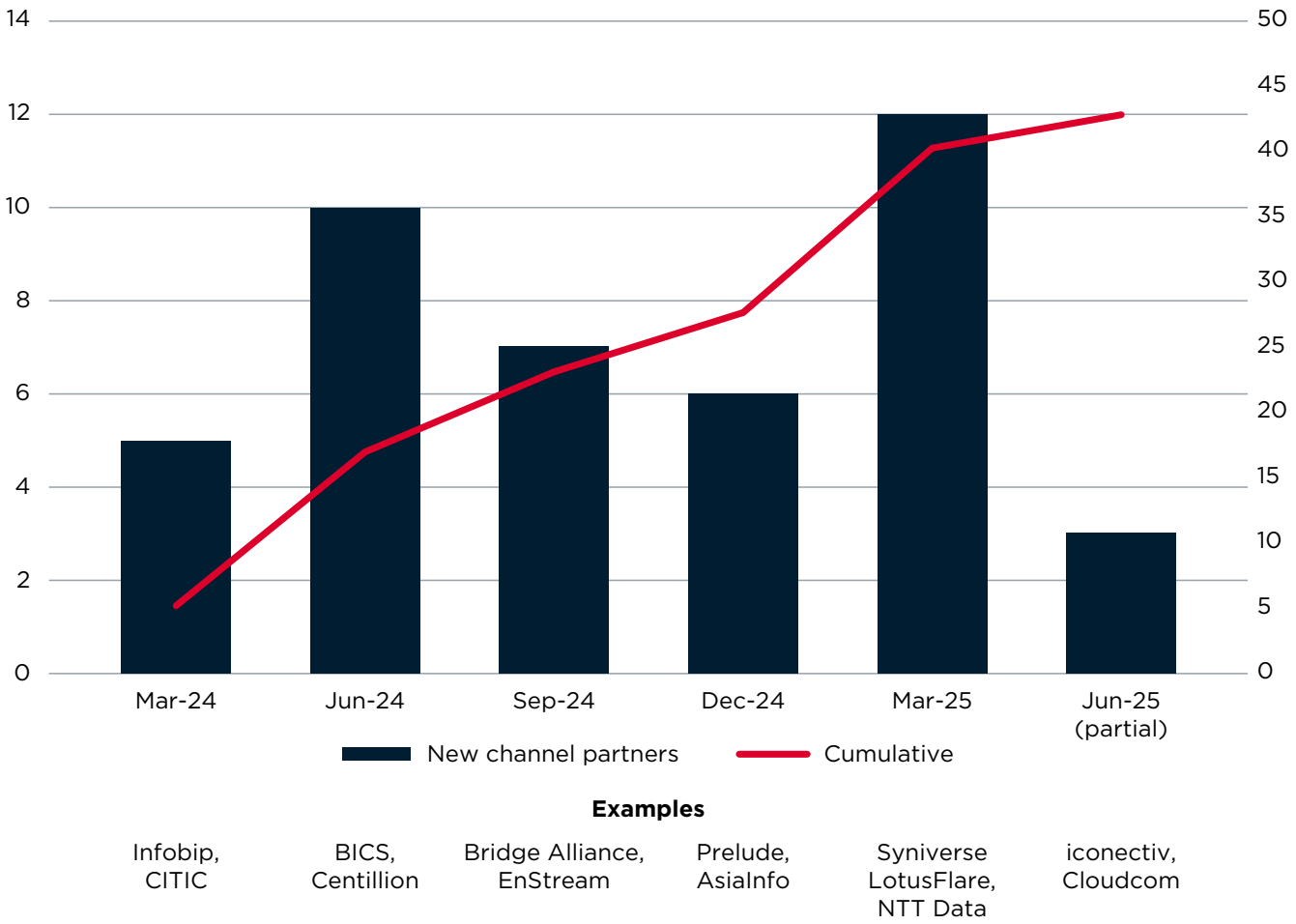
Channel resurgence

The plateauing effect seen on the supply side of new operators joining GSMA Open Gateway has been offset by a rise in channel partners in H1 2025. Twelve new partners signed up in Q1 2025 – the highest quarterly total so far. Including partial counts for June, channel reach now totals more than 40 companies.

Channel partners as market makers

The significance of channel partners is less in their number and more in the market-making capabilities the aggregators bring. Key assets include balanced geographic coverage, scale and the capabilities to deliver a range of API use cases – particularly in emerging areas such as QoD and device location. EnStream in Canada, for example, has consolidated access to each of the three Canadian operators as a single platform via Aduna.

The channel had its highest traction in Q1 2025



Source: GSMA Intelligence

Diversification: QoD, comms and edge start to show up in 2025

The rise of APIs targeting QoD and other network performance indicators, including for edge deployments, is an important shift in the CAMARA library as it validates the value proposition beyond security and anti-fraud. Commercial launches in H1 2025 have increasingly concentrated on these areas; communication quality and edge now account for around 25% of all live API deployments compared to less than 10% in 2024. Security applications remain the bedrock, though with regional variation. One Time Password, for instance, has been confined to Europe so far despite enterprise demand in other regions.

APIs launched so far: security still a bedrock but APIs expand to QoD, compute and location services

Higher number of stars indicates greater the number of APIs commercially launched.

	Payments and Charging	Authentication and Fraud Prevention						Communications Quality		Device Information		Location Services			Computing Services
	Carrier Billing	Number Verification	SIM Swap	Call Forwarding Signal	Device Swap	KYC Match	One Time Password SMS	Quality on Demand	Home Devices QoD	Device Identifier	Device Roaming Status	Population Density Data	Location Retrieval	Location Verification	Simple Edge Discovery
North America		★	★		★					★					★
Latin America				★★★	★★★★			★	★		★	★			★★★
Europe	★			★★★★	★★★★	★★★	★	★★	★	★★		★		★	★
MENA					★★				★						★
SSA				★	★★										
NE Asia				★★	★★★			★	★★	★★			★		★★
Total	★	★	★	★★★★	★★★★	★★★	★	★★★★	★★★★	★★★★	★	★	★	★	★★★★

Source: GSMA Intelligence

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03 Deep Dive: supply/demand gap analysis

How the supply side looks by region

The first thing to establish in a gap analysis is the state of supply and demand, which indicates whether they are in balance.

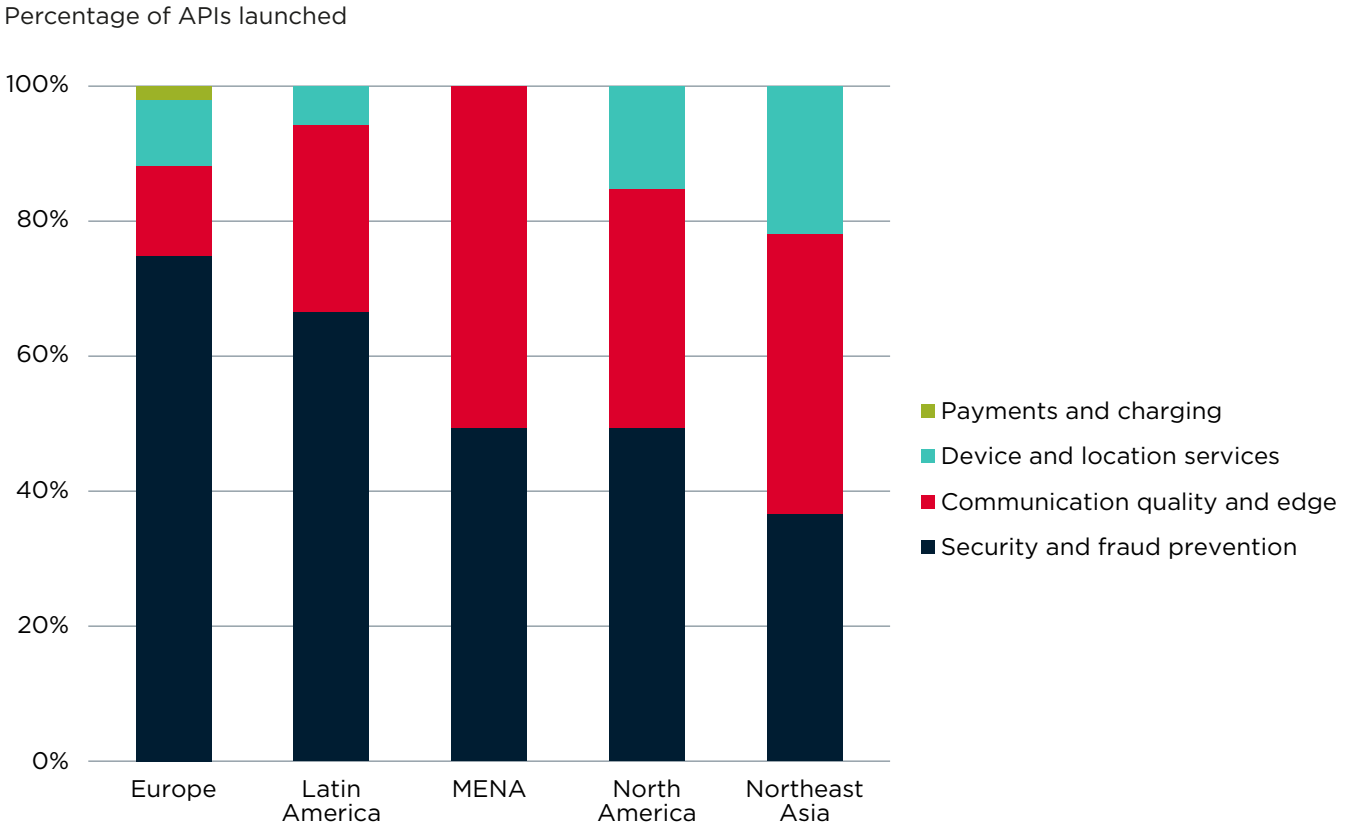
The rise of QoD and edge on the supply side

Security and anti-fraud APIs account for two thirds of commercial deployments. Communication quality (mostly QoD) and compute services (mostly edge) account for 25% – a significant rise from less than 10% in 2024. The rise is a positive given clear enterprise demand for using network APIs to monitor their own IT investments in areas such as private wireless, IoT and edge.

Geographic variation beneath the top-line numbers

Operators in the Middle East, Asia and North America have all extended to QoD and edge (and to a lesser extent device/location) – a positive indicator of demand sentiment for these types of API use case.

Commercial availability of APIs launched by operators



Source: GSMA Intelligence

Enterprises want it all, so why hasn't supply risen to the challenge?

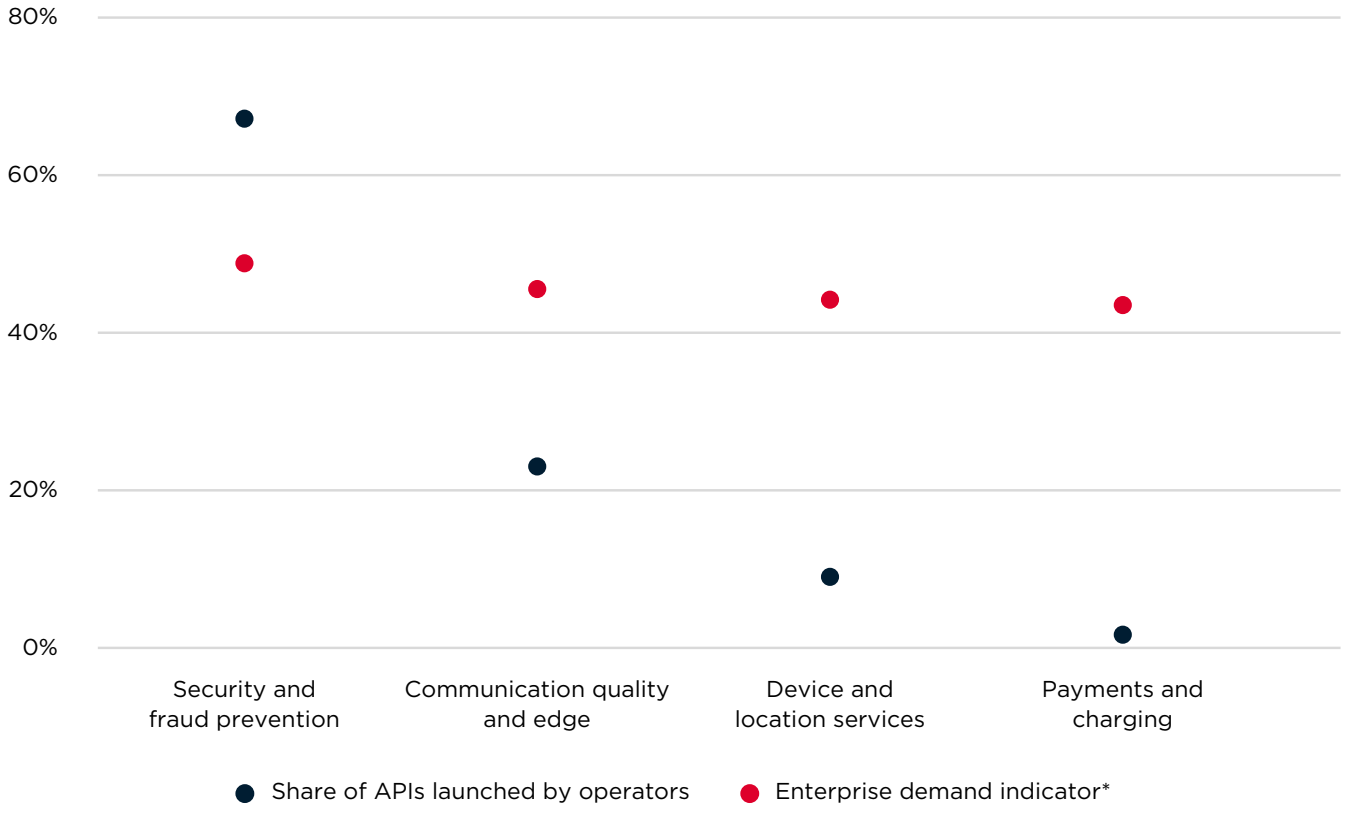
Enterprise demand remains unmet

Operators have not yet met market demand in some use-case categories. GSMA Intelligence's global enterprise survey asks IT and technology buyers from different industries about their perceived usefulness of different network APIs. Security is rated the highest – but only just. Other categories have a similar rating, as seen in the chart. By contrast, API availability still heavily favours security use cases, though with some regional variation.

Gaps to be plugged

Latent demand remains unmet. This offers a first-mover advantage for operators and channel partners that can fill the gap in 2025.

Security demand is being met, but operators are missing a trick for other use cases



*Percentage of enterprise respondents from a set of industries rating GSMA Open Gateway APIs from different categories as extremely valuable.
Source: GSMA Intelligence

Developers come closer to the mark

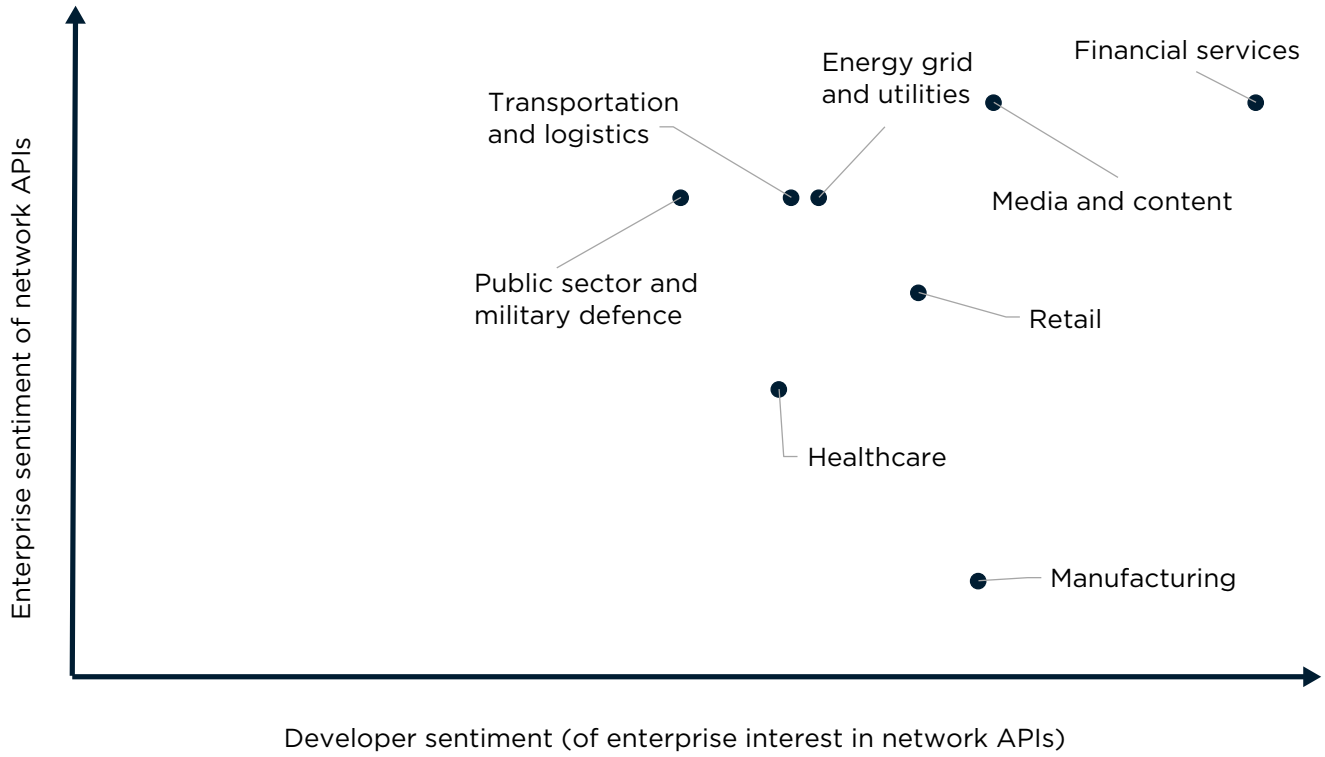
Developers have their finger on the pulse

In this analysis, 'sentiment' is measured as the share of enterprise buyers and developers rating network APIs as 'extremely useful'. On this basis, the developer community is closer than operators to where enterprise sentiment lies. The pattern diagonally up to the right (see chart) indicates alignment between developers and enterprises. Manufacturing is the main exception, with developers more bullish.

Working as a team

The implication for operators is to read the demand signals. Recent API commercialisation in non-security categories is a solid sign of this, but it is important to maintain momentum in 2025 before a demand window is closed by the hyperscalers or others.

Supply (developers) versus demand (enterprises) for network APIs



Source: GSMA Intelligence API Developer Survey (July/August 2024)

A role for the channel: market-making value

Channel partners can serve as a balancing mechanism

Channel partners are a key intermediary between operators and API customers. Through this role, they can help even out gaps where enterprises see a role for a certain API even if it has not yet been made widely available.

Proof points are key

The table (anonymised) shows examples of trials and commercially available APIs facilitated by channel partners in authentication/fraud prevention, edge compute, QoD and location-based services. The key now will be validating the return on investment of these use cases for enterprise customers.

Examples of trials and commercially available APIs facilitated by channel partners

Channel partner	Authentication and Fraud Prevention			Communications Quality	Location Services			Computing Services	
	Number Verification	SIM Swap	One Time Password SMS	Quality on Demand	Device Location Retrieval	Device Location Verification	Device Location Geofencing	Simple Edge Discovery	Edge Cloud -Traffic Influence
1			Launched	Planned					Launched
2									
3				Planned	Planned	Planned	Planned	Planned	
4									
5									
6		Planned							
7	Planned								
8	Planned	Planned	Planned	Planned					
9	Launched	Launched							
10									
11									
12	Launched					Launched			
13		PoC				PoC			
14									
15	Launched	Launched							
16	Launched	Launched		Planned		PoC			
17									
18	PoC	PoC							
19	PoC	PoC		PoC	PoC	PoC			
20									
21	Launched	Launched			Launched				
22		Launched							
23		Launched							
24		Launched							
25									
26	Launched	Launched				Launched			

Launched – API commercially launched; **PoC** – API at PoC stage; **Planned** – API deployment planned. Channel partners anonymised to preserve commercial confidentiality where commercial deployment details have not been made public.

Source: GSMA Intelligence

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04 GSMA Open Gateway in action: use cases

APIs in action: China Telecom

Improving drone connectivity with Network Quality and Location APIs

Background

In partnership with local enterprise service provider GrowthEase, China Telecom has developed the Reliable Link project. This aims to leverage innovative communication technologies to advance the capabilities of connected devices, including unmanned aerial vehicles (UAVs).

Challenge

Real-time communication is vital in drone inspections. However, network instability can delay commands, disrupt video feeds and impair situational awareness, increasing the risk of mission failure or safety incidents.

Solution

The Reliable Link Drone Communication Connectivity Project integrates multiple GSMA Open Gateway APIs with the Reliable Link platform and applet. The Geofencing API is used to define electronic boundaries and keep drones within permitted zones. When hazardous behaviour is detected, the drone automatically triggers an alert and shares its precise location using the Location Retrieval and Location Verification APIs. A video call is then initiated with a remote team, supported by the QoD API to ensure smooth, high-quality video streaming. During the call, the team can remotely control the drone to respond in real time and ensure safety.

Impact

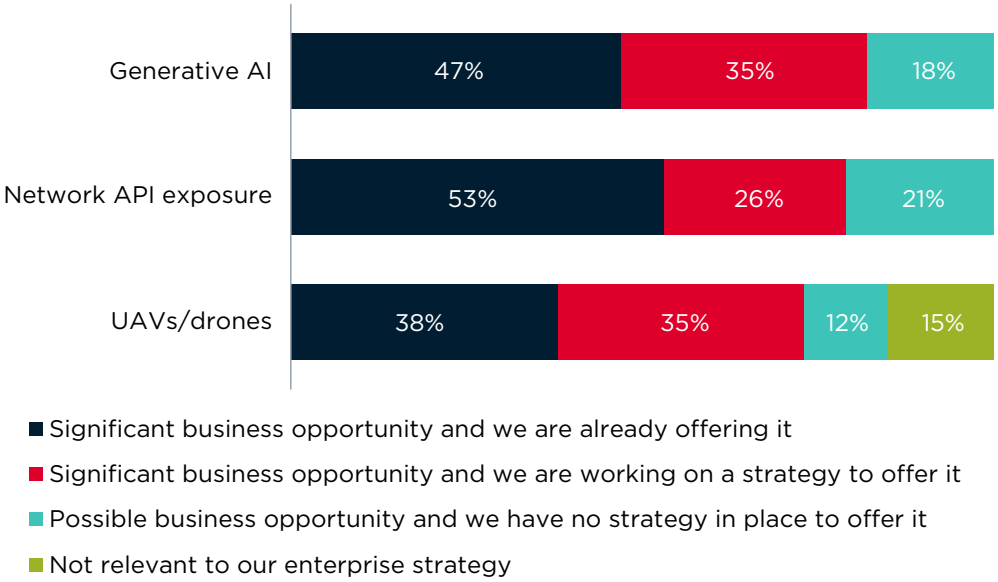
The Reliable Link project equips drones with improved safety and video transmission capabilities, enabling communication with remote teams even in challenging network conditions. The solution supports the continued development of China's low-altitude economy, which is projected to expand to more than $140 billion by 2026, according to a report by an MIIT-affiliated research institute.

APIs in action: China Telecom

Key data points

Operators are optimistic on the opportunity to monetise emerging technologies

Which of the following best describes your company's view for each service? (Percentage of operators in Asia Pacific)



Source: GSMA Intelligence Operators in Focus: Operator Enterprise Survey 2024

Operators should look to align on API launches to drive market demand

GSMA Open Gateway API deployments

	China Mobile	China Telecom	China Unicom
OTP Validation	Yes	Yes	Yes
Quality on Demand		Yes	Yes
SIM Swap		Yes	Yes
Device Status		Yes	Yes
Number Verification	Yes	Yes	
Device Location Verification		Yes	
Device Location Retrieval			Yes

Data correct as of 2 May 2025
Source: GSMA

APIs in action: Telefónica

Improving user onboarding with the Number Verification API

Background

In March 2025, Telefónica announced that ride-sharing app Cabify will simplify its registration process for new users by deploying the Number Verification API. Cabify has more than 50 million users in Spain and Latin America.

Challenge

Prior to implementing the Number Verification API, Cabify required new users to enter their phone number and receive an OTP code via SMS or WhatsApp. This sometimes led to delays in the registration process, leading users to abandon signing up for the app.

Solution

Cabify leveraged the Number Verification API to streamline its onboarding process. Users' phone numbers can now be validated silently in 10 seconds, without requiring any additional steps. The new process enhances user experience and reduces the abandonment rate during registration, boosting the conversion of new customers.

Impact

By leveraging GSMA Open Gateway APIs, Cabify expects a 7.7% increase in its sign-up completion rate. The adoption of Open Gateway APIs also enhances user security by verifying that the number entered matches the device number, reducing risks of credential theft or interception of OTP codes.

APIs in action: Telefónica

Key data points

Operators prioritise authentication and fraud prevention APIs

GSMA Open Gateway API deployments

	Orange	Telefónica	Vodafone
SIM Swap	Yes	Yes	Yes
Number Verification	Yes	Yes	Yes
Device Status	Yes	Yes	Yes
Device Location Verification	Yes	Yes	Yes
Carrier Billing		Yes	
OTP Validation		Yes	
Quality on Demand (QoD)		Yes	
Device Swap		Yes	

Data correct as of 2 May 2025. Note: Table is not exhaustive. Telefónica has also deployed the Population Density Data, Home Devices QoD and Know Your Customer APIs.

Source: GSMA

Operator priorities match developer preferences

Which use cases for network APIs do you find most appealing? (Percentage of developers in Europe)

Source: GSMA Intelligence Network API Developer Survey 2024

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05 Appendix

How GSMA Open Gateway works

A common framework

GSMA Open Gateway helps developers and cloud providers enhance and deploy services more quickly via single points of access to operator networks. This is achieved via common, northbound service APIs that expose mobile operators' network capabilities within a consistent, interoperable and federated framework.

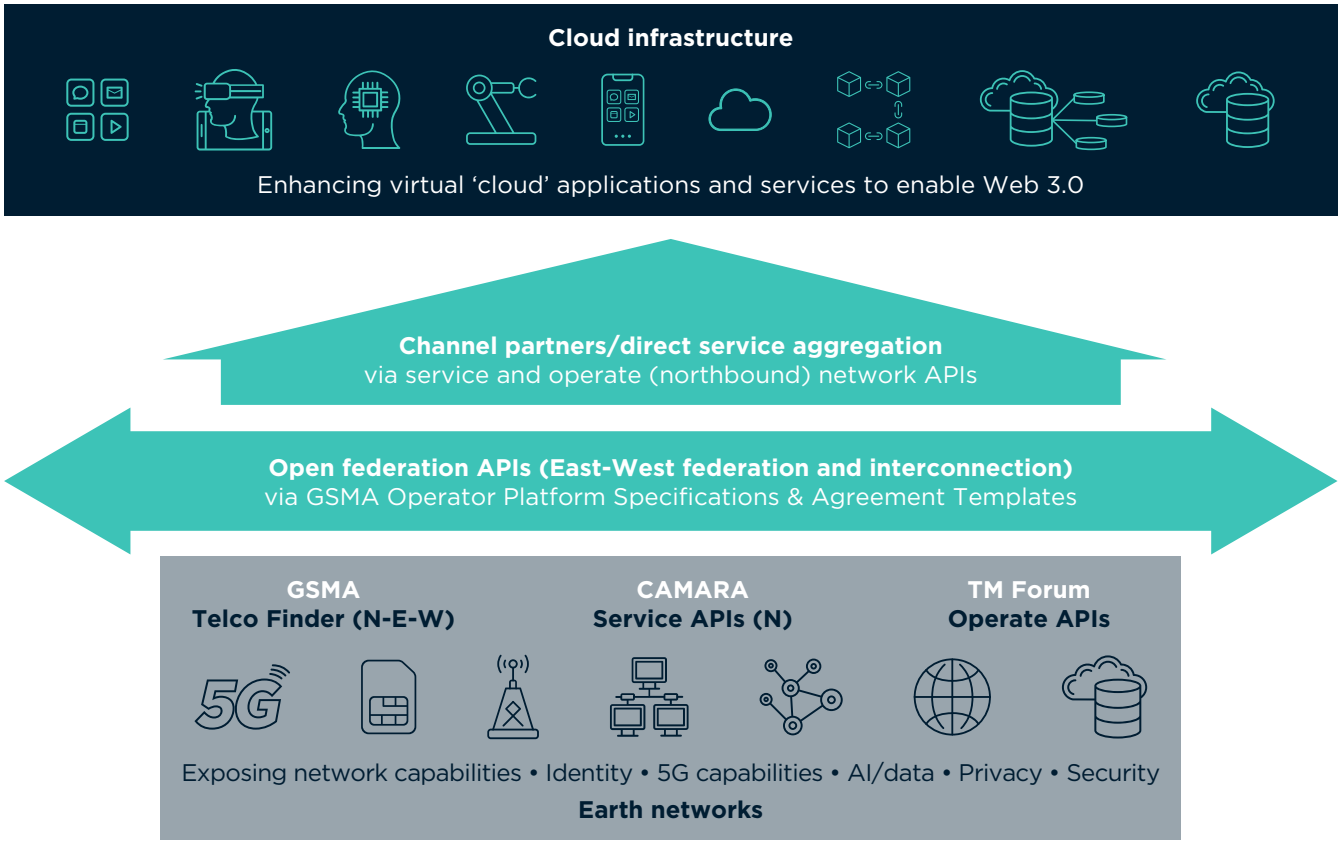
An open-source approach

GSMA Open Gateway APIs are defined, developed and published in CAMARA, the open-source project for developers to access enhanced network capabilities, driven by the Linux Foundation in collaboration with the GSMA.

New APIs and use cases

The GSMA Open Gateway initiative launched with eight network APIs, including SIM Swap, Device Status, Number Verification and Quality on Demand. The APIs have the potential to facilitate numerous use cases, including tackling digital fraud, simplifying user authentication and addressing quality of service issues.

GSMA Open Gateway facilitates direct access to network capabilities for developers via a common set of APIs, promising to unlock innovation at a global scale



Source: GSMA

Mapping the ecosystem: who is driving momentum?

Mobile operators

Exposing APIs (which connect into network functions) allows developers to directly tap into network capabilities. This removes the need to connect directly with individual developers or applications, promising the scale that could unlock network innovation and deliver an important new revenue stream for mobile operators and their partners.

Network vendors

Major network equipment vendors (such as Ericsson, Huawei, Nokia and ZTE) provide platforms that expose network APIs across various operators, irrespective of the underlying network vendor. These platforms offer developers a variety of tools to build new use cases and capabilities for their customers.

Hyperscalers

Hyperscalers offer cloud infrastructure and services via APIs to developers and customers. Developers consume thousands of these APIs. Now, with increasing collaboration between hyperscalers and operators, developers can gain access to network APIs for building and hosting new applications on hyperscale infrastructure.

CPaaS companies

Communication platform-as-a-service (CPaaS) companies offer cloud-based platforms that provide developers with the tools and APIs needed to embed communication features (such as voice calling, video conferencing, SMS and chat) into their applications. The emergence of GSMA Open Gateway presents CPaaS companies with the chance to provide a wider array of capabilities via their platforms.

Systems integrators

Systems integrators (SIs) play a crucial role in bridging the gap between various technologies, systems and processes in industrial settings. SI developers are expected to be among the primary users of network APIs, implementing them in use cases on behalf of their enterprise customers. Examples of SIs include Capgemini and Accenture, and specialised OT integrators such as Atos and Kyndryl.

Industry groups

Collaboration between the GSMA, TM Forum and the CAMARA Project on the Open Gateway API ecosystem is important to increase interoperability. The GSMA focuses on how network capabilities support service APIs, while TM Forum leads the definition and development of operations, administration and management APIs, which provide programmable access to OSS/BSS capabilities.

Developers

The GSMA Open Gateway initiative needs a community of developers to succeed. Mobile operators can work directly with external developer teams to build this community, or they can work with network vendors, hyperscalers and other companies that are positioning themselves as API aggregators. Developers are employed across various types of organisation, ranging from large corporations with dedicated software development teams to startups where developers often fulfil various responsibilities. Understanding the developer landscape and focusing on the developers most likely to use network APIs will be key to driving Open Gateway momentum.

Source: GSMA Intelligence

GSMA Open Gateway APIs

API family						
Authentication and Fraud Prevention	**Location Services**	**Communication Services**	**Communication Quality**	**Device Information**	**Computing Services**	**Payments and Charging**
Call Forwarding Signal	Geofencing Subscriptions	Web RTC Call Handling	Application Profiles	Connect Network Type	Simple Edge Discovery	Blockchain Public Address
Customer Insights	Location Retrieval	Web RTC Event Subscription	Connectivity Insights	Connect Network Type Subscription		Carrier Billing
Device Swap	Location Verification	Web RTC Registration	Connectivity Insights Subscriptions	Device Identifier		Carrier Billing Refund
Know Your Customer Age	Population Density Data		Home Devices QoD	Device Reachability Status		
Know Your Customer Fill-In	Region Device Count		QoD Provisioning	Device Reachability Status Subscriptions		
Know Your Customer Match			QoS Profiles	Device Roaming Status		
Know Your Customer Tenure			Quality on Demand	Device Roaming Status Subscriptions		
Number Recycling						
Number Verification						
One Time Password SMS						
Scam Signal						
SIM Swap						
SIM Swap Subscriptions						

Source: GSMA Full descriptions are available at GSMA Open Gateway API Descriptions

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