

The Evolution of Roaming Services: New Technologies and Industry Adoption in 2024

Discover how international roaming service advancements are reshaping mobile connectivity, exploring new technologies, industry trends, and market impact.

1

eSIM & Remote Provisioning

Over 250 mobile network operators across 80 countries offer eSIM solutions, supported by 45+ device manufacturers. This enables instant activation of local data plans, reducing physical SIM reliance and streamlining logistics for global travellers and operators alike.

[GSMA Intelligence \(2024\)](#)

2

AI-Driven Roaming Analytics

More than 60 major telecom companies now deploy AI platforms for real-time roaming policy management, enhancing fraud detection, customer experience, and predictive billing, leading to fewer billing surprises and dynamic personalized packages.

[Deloitte \(2023\)](#)

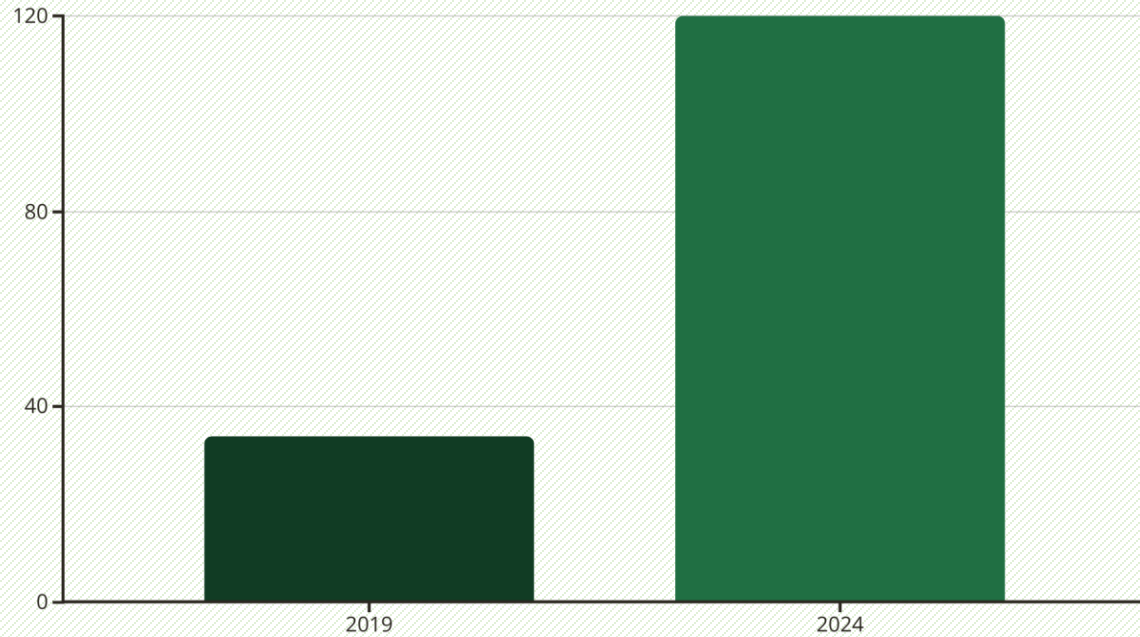
3

VoLTE & Data-First Roaming

Voice over LTE (VoLTE) is rapidly replacing circuit-switched calls, with over 120 international operators supporting VoLTE roaming in 2024, a significant increase from 34 in 2019. This ensures better call quality, faster connections, and simultaneous data/voice usage.

[GSMA \(2024\)](#)

VoLTE Roaming Operator Growth



Blockchain Roaming Billing

Blockchain roaming billing promises secure and efficient settlements between operators, with 15 Tier-1 operators trialling blockchain-powered roaming settlements in Europe and Asia-Pacific. This ensures faster, more transparent payments and reduced errors.

[Telecoms.com \(2022\)](#)

Sponsored & Zero-Rated Roaming

Around 30 major providers offer zero-rated roaming, allowing users to access selected apps without extra charges. This helps retain customers and minimises bill-shock related to OTT data consumption, such as messaging apps abroad with no extra data fee.

[Ovum \(2024\)](#)