



# GLOBAL MOBILE ROAMING MARKET 2025-2029

Competitor Leaderboard

Prepared for Orange Wholesale



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## 1.1 Why Read This Report

This section provides an overview of the product offerings of leading mobile roaming vendors. This does not consist of an exhaustive list of mobile roaming vendors operating in this market, rather a selection of 23 mobile roaming vendors that Juniper Research judges to be leading the market, due to a range of factors discussed below.

The mobile roaming market is ever-changing, with advancements in 5G networks, travel eSIMs and legacy network sunseting providing complexities that mobile operators and mobile roaming vendors must solve. Within this, network security within roaming is also crucial; making this another aspect for which mobile roaming vendors must keep track.

Juniper Research is a Europe-based provider of business intelligence. We specialise in providing high-quality data and fully researched analysis to manufacturers, financiers, developers, and service/content providers across the communications sector. Juniper Research is fully independent and provides unbiased and reliable assessments of markets, technologies, and industry players. Our team is drawn from experienced senior managers with proven track records in each of their specialist fields.

## Key Mobile Roaming Market Takeaways

### Mobile Operators Must Embrace Travel eSIMs as a New Revenue Opportunity, Rather Than View as a Threat

Travel embedded SIMs (eSIM) are increasingly being adopted as an alternative to traditional roaming practices. Initially, this has been considered a threat to mobile operators' retail roaming revenue, as mobile subscribers leverage travel eSIMs instead of their home mobile operators roaming services. Travel eSIMs are a cost-effective alternative to roaming which can be easily adopted and set-up by mobile subscribers. The uptake of these has been more popular than travel SIMs due to the ability to download the travel eSIM profile to the mobile device without having to swap the physical subscriber identity module (SIM) card.

However, Juniper Research notes that travel eSIMs can also provide new revenue streams for mobile operators, both on the retail and wholesale roaming levels. Firstly, mobile operators must develop their own travel eSIM offering, which will include significant investment in infrastructure, frameworks and distribution channels. This will allow them to limit retail roaming revenue lost to travel eSIM providers, as well as gain an essential new revenue stream from mobile subscribers who are not monthly customers. To widen the reach of their travel eSIM services, mobile operators must partner with travel agencies to offer travel eSIMs as an additional service to a travel package.

### 5G and VoLTE Roaming to Accelerate 2G and 3G Roaming Network Sunseting

With the increased deployments of 5G standalone (SA) roaming networks, alongside the adoption of Voice over Long-term Evolution (VoLTE) roaming to bridge the gap between legacy and new networks, mobile operators will accelerate the sunseting of 2G and 3G roaming networks.

Mobile operators in North America and Europe are already in the process of sunseting legacy networks to drive technological advancement and free up spectrum for newer 5G network deployments. However, not all mobile subscribers have mobile devices that are 5G compatible, meaning that they still rely on legacy networks. This is a particular concern for roaming, as when these mobile subscribers travel to locations where 2G and 3G sunseting has occurred, they will be unable to utilise roaming services.

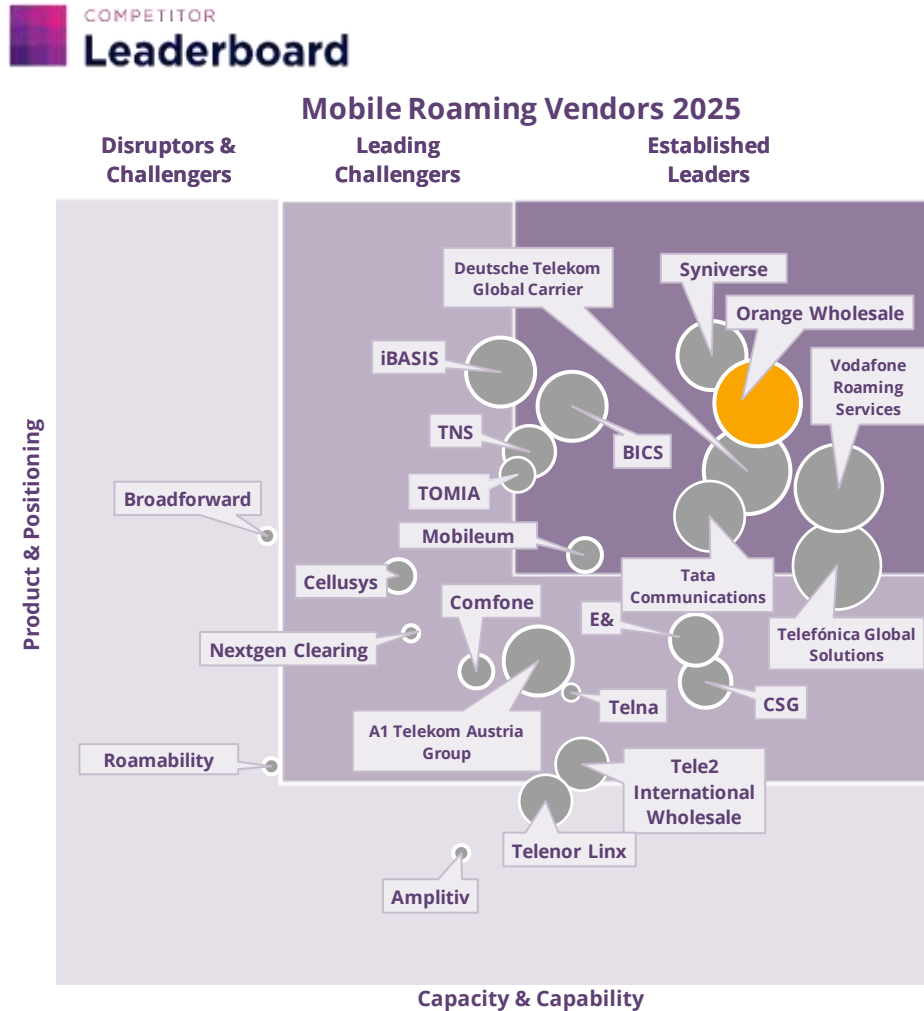
VoLTE roaming services bridge this gap; meaning that mobile subscribers on legacy networks can continue to utilise some roaming services while visiting these countries which have undergone network sunseting.

Mobile operators are increasingly deploying 5G SA networks, which will be followed by 5G SA roaming services. This, alongside an increasing penetration of 5G compatible mobile devices, will drive the uptake in 5G roaming services.

The increase in 5G roaming usage, alongside the adoption of VoLTE roaming, will allow mobile operators to sunset their legacy networks, providing several benefits such as improved roaming efficiency and reduced costs from supporting several network generations.



Figure 1: Juniper Research Competitor Leaderboard: Mobile Roaming Vendors



Source: Juniper Research

# Orange Wholesale

**Juniper Research has ranked Orange Wholesale as the leading global mobile roaming vendor in our Competitor Leaderboard – Mobile Roaming 2025.**

Orange Wholesale offers a comprehensive mobile roaming portfolio, including its new travel eSIM package offering. This solution leverages Orange’s global network footprint to launch a wholesale eSIM; positioning the company to lead the rapidly growing wholesale eSIM market.

Furthermore, Orange Wholesale holds a strong position in regard to sponsored roaming through their Roaming Sponsor solution. The solution facilitates low-cost roaming expansion for mobile network operators and mobile virtual network operators across key technologies such as 5G and VoLTE. It is also eSIM compatible; ensuring Orange Wholesale’s customers can meet consumer and enterprise demand for eSIM technology.

Orange Wholesale, as part of Orange Group, also has the advantage of access to millions of roaming customers and their usage data, allowing it to respond proactively to changing trends in consumer roaming behaviour. This will enable Orange Wholesale to remain at the forefront of the mobile roaming market.

Research author Georgia Allen commented:

*“In our latest mobile roaming study, Juniper Research has positioned Orange Wholesale to be the leading player in the market, with its comprehensive roaming portfolio and extensive market presence contributing towards its leading position.*

*In particular, Orange Wholesale’s Roaming Sponsor solution was a key differentiating solution, with it set to capitalise on the demand from users for high roaming quality and position Orange Wholesale to remain at the forefront of the mobile roaming market.”*



### 1.1.1 Orange Wholesale



Table.2: Juniper Research Competitor Leaderboard: Mobile Roaming Heatmap – Orange Wholesale

	Capacity & Capability					Product & Positioning					Market Presence
	Financial Performance in the Mobile Roaming Sector	Size of Operations in the Mobile Roaming Sector	Extent & Breadth of Mobile Roaming Partnerships	Marketing & Branding Strength	Experience in the Provision of Mobile Roaming Services	Mobile Roaming Market Coverage	Mobile Roaming Services & Product Offerings	Mobile Roaming Product Strength	Extent of Innovation in the Mobile Roaming Ecosystem	Future Business Prospects	
Orange Wholesale	Green	Green	Green	Green	Red	Green	Green	Light Green	Green	Yellow	Green

Source: Juniper Research

#### i. Corporate Information

Orange Wholesale is the wholesale connectivity services division of Orange; a global telecommunications group which provides retail operations in 26 countries. Orange Wholesale leverages the assets of several acclaimed Orange businesses, offering complete wholesale telecommunication solutions for the French market, leading global connectivity services, as well as advanced network infrastructure development for voice, data and mobile, on land, under seas, in the air and in space. Orange Wholesale also operates the group’s Roaming Operational Centre.

Orange posted revenue worth of €44.12 billion (\$48.70bn) and €3.54bn of EBITDAaL in 2023; representing 1.8% and 1.3% increases on the previous year respectively. That same year, wholesale services accounted for €7bn in revenue.

Orange Wholesale’s executive committee includes Michaël Trabbia, CEO and member of Orange Group’s executive committee, Emmanuel Rochas, CEO Orange Wholesale International, Jean-Louis Le Roux, CEO International Networks, Marc Blanchet, CEO Orange Wholesale France, and Bénédicte David, CEO, Orange W-LoB.



## ii. Geographical Spread

Based in France, the Orange Group has operations in 220 countries and territories and is represented by a total of around 150,000 employees worldwide. Nine of the 26 MNOs affiliated with Orange in Europe, the Middle East and Africa provide 5G services. The Orange Group benefits from research and innovation centres in 12 countries, including China, Egypt, India and the US, employing 8,000 expert staff.

The Orange Wholesale division is present in 30 global offices, with 3,300 staff, serving 1,300 wholesale customers representing 1.5 billion users on 5 continents. Connectivity offerings rely on the Orange global networks accounting for 450,000km of subsea cables, 45,000km of terrestrial fibre, 27,000 mobile tower sites, 5,000 satellite antennas, 1,000 PoPs, 6 cable ships and 1 survey vessel. Roaming footprint includes 1,400 destinations, 1,000 A2P Networks in 152 countries, 700 roaming agreements, 224 IoT destinations – 40 with 5G.

Figure.3: Orange Operations Map



Source: Orange

## iii. Key Clients & Strategic Partnerships

Orange provides mobile network solutions to more than 200 mobile operators worldwide. It offers both GSM and 4G LTE roaming and has partnerships with most LTE networks across Europe, Americas and Asia.

The company has partnered with other operators including T-Mobile, Telecom Italia and Telia to form the FreeMove Alliance; providing services to multinational customers across an extended footprint.

Orange's 700 roaming agreements globally enable international carriers to offer 5G roaming services, SS7, IPX transport, Global eXchange and big data.

In November 2022, taking advantage of what it claims to be Europe's first fully virtualised mobile network based on Open Radio Access Network (OpenRAN) technology, 1&1 and Orange Wholesale concluded a long-term agreement to provide international roaming services for the 1&1 mobile network.

Sierra Wireless first entered a partnership with Orange Wholesale in 2021 to enhance connectivity to its IoT customers. Since then, it has further reinforced its Smart Connectivity services pan European coverage on its one Global SIM; made available in multiple form factors, as well as through the eSIM enabled Ready-to-Connect modules.

In March 2023, Eseye, a provider of edge mobile IoT connectivity solutions, entered into an agreement with Orange Wholesale to enhance its global IoT connectivity solution offering.

Also in March 2023, Orange Wholesale partnered with Networth to launch All Fibre; a VoIP telephony and Internet connectivity offer.

In October 2023, Orange Business and MachineMax announced a partnership to optimise Australian heavy machinery operations.

In February 2024, Orange Business announced Cavli Wireless had become a participant in the Orange Connected validation programme. The initial modules to secure the Orange Connected label were the Cavli C16QS-EA in Europe and its global



counterpart, the Cavli C16QS-WW. The validation programme offers a centralised testing point.

In June 2024, Orange Wholesale opened its IoT digital platform to energy suppliers in Africa and the Middle East. It will track payments, solar kits, and smart meters in rural locations and aims to boost uptake of Orange's services and electricity in emerging markets.

#### iv. High-level View of Offerings

Orange Wholesale has a leadership positioning in signalling, IPX, messaging, sponsored roaming, analytics (Big data), roaming hubs, security and VAS. The group has dedicated Orange roaming experts working on the roaming hub offer.

- **Open Roaming Hub:** this roaming hub solution will help customers move from a bilateral to a multilateral roaming model with a simple connection; helping teams reach global partners and opening new roaming routes. Select operators and services accept demands for new openings through their online tool and make new technologies like 5G NSA, LTE-M, NB-IoT, and VoLTE available to roamers.
- **Roaming Sponsor:** with Orange Wholesale's roaming sponsor solution, MVNOs and MNOs can now meet the demands of customers in order to provide them with the best roaming quality at a lower cost everywhere. This service includes 5G, VoLTE and is eSIM compatible.
- **Professional Services Suite:** professional services assist customers during the implementation steps, advise them on roaming or wholesale domain or provide project management skills. Experts are versed in all mobile technologies and services, including LTE, GSM, hub products, roaming and data.
- **Big Data:** business intelligence services based on big data technology providing a holistic view of clients' roamers abroad and roamers in their network.
- **IPX and VAS:** IP connectivity solution for the interworking and roaming bilateral exchanges. Also provides access to the IPX Cloud of Service.

- **5G Roaming:** Orange Wholesale is expanding its portfolio with a 5G signalling offering to transport secured HTTP messages between MNOs. This enables MNO customers to progressively access the next generation of mobile networks.
- **LTE and VAS:** allows MNOs to offer 4G roaming services worldwide to subscribers and to generate additional revenue. The solution provides migration and detailed traffic reports for MNOs.
- **SS7 and VAS:** allows for a high-quality network and a rapid development of roaming.
- **Travel eSIM Package:** leveraging their global network footprint, Orange has launched a wholesale eSIM aimed at distributors and MVNOs worldwide.



## 1.2 Juniper Research Leaderboard Methodology

Juniper Research provides details about 23 mobile roaming solution providers. To qualify for the leaderboard, companies must be involved in the direct provision of mobile roaming solutions. The companies included here have developed specific expertise in the space, although some embarked on the route earlier than others and therefore have wider customer bases or geographical reach. Additionally, it must be noted that many service providers here have developed mobile roaming solutions alongside other services that comprise a higher proportion of a company's revenue.

This research covers a significant number of vendors; however, we cannot guarantee that this list is exhaustive. Juniper Research's approach is to use a standard template to summarise the capability of players offering mobile roaming services. This template concludes with our view of the key strengths and strategic development opportunities for each vendor.

We also provide our view of vendor positioning in the mobile roaming market using our Juniper Research Leaderboard technique. This technique, which applies quantitative scoring to qualitative information, enables us to assess each vendor's capability and capacity, in addition to its product and position in the market. The resulting leaderboard exhibits our view of relative vendor positioning.

## 1.3 Limitations & Interpretations

Our assessment is based on a combination of quantitative measures, where they are available (such as revenue and numbers of employees) that indicate relative strength, and also of qualitative judgement, based on available market and vendor information as published. In addition, we have added our in-house knowledge from meetings and interviews with a range of industry players. We have also used publicly available information to arrive at a broad, indicative positioning of vendors in this market, on a 'best efforts' basis.

However, we would also caution that our analysis is almost by nature based on incomplete information and therefore with some elements of this analysis we have

had to be more judgemental than others. For example, with some vendors, less detailed financial information is typically available if they are not publicly listed companies. This is particularly the case when assessing early-stage companies, where a degree of secrecy may be advantageous to avoid other companies replicating elements of the business model or strategy.

We also remind readers that the list of vendors considered is not exhaustive across the entire market but rather selective. Juniper Research endeavours to provide accurate information. While information or comment is believed to be correct at the time of publication, Juniper Research cannot accept any responsibility for its completeness or accuracy, the analysis is presented on a 'best efforts' basis.

The Leaderboard compares the positioning of mobile roaming vendors based on Juniper Research's scoring of each company against the above criteria that Juniper Research has defined. The Leaderboard is designed to compare how the vendors position themselves in the market based on these criteria. Relative placement in one particular unit of the Leaderboard does not imply that any one vendor is necessarily better placed than others. For example, one vendor's objectives will be different from the next and the vendor may be very successfully fulfilling them without being placed in the top right box of the Leaderboard, which is the traditional location for the leading players.

Therefore, for avoidance of doubt in interpreting the Leaderboard, we are not suggesting that any single cell in the Leaderboard implies in any way that a group of vendors is more advantageously positioned than another group, just differently positioned. We additionally would draw the reader's attention to the fact that vendors are listed alphabetically in a unit of the Leaderboard and not ranked in any way in the cell of the Leaderboard.

The Leaderboard is also valid at a specific point in time, January 2025. It does not indicate how we expect positioning to change in future, or indeed in which direction we believe that the vendors are moving. We caution against companies taking any decisions based on this analysis; it is merely intended as an analytical summary by Juniper Research as an independent third party.





Figure 4: Juniper Research Competitor Leaderboard Scoring Criteria: Mobile Roaming Vendors

Category	Scoring Criteria	Relevant Information
Capability & Capacity	Experience in the Provision of Mobile Roaming Services	Here, Juniper Research has evaluated each company's experience in the Mobile Roaming market through consideration of the number of years since being founded and length of time each vendor has offered a roaming solution in the roaming market.
	Financial Performance in the Mobile Roaming Sector	This factor reflects reported revenue for the most recent available financial year for roaming services. For larger vendors, where roaming only represents part of their business models, only revenue attributable to roaming solutions was used in the scoring process. Here, we considered the total sector-based revenue, any investments since June 2020 and total funding received by the company since June 2020.
	Size of Operations in the Mobile Roaming Sector	This criterion considers the total number of locations in which a vendor has a physical presence, including offices, manufacturing, and client support centers and the geographical regions covered by mobile roaming services.
	Marketing & Branding Strength	For this criterion, Juniper Research has established each company's strength of marketing efforts, including the average duration of each site visit.
	Extent & Breadth of Mobile Roaming Partnerships	This factor relates to the variety of partners with which each vendor does business in the roaming sector. It takes into consideration the total number of partnerships, as well as the breadth of industries which the partner companies cover.
Product & Position	Mobile Roaming Services & Product Offerings	This criterion includes the offering of core wholesale roaming features including 5G integration, VoLTE, eSIMs, and IoT.
	Mobile Roaming Market Coverage	Here, Juniper Research scores vendors on the flexibility of their solutions and how the services serve various industries.
	Mobile Roaming Product Strength	This factor reflects any value-added services offered by each vendor, including (but not limited to): Steering of Roaming, Data & Financial Clearing, Sponsored Roaming, IPX Services and Roaming Analytics.
	Extent of Innovation in the Mobile Roaming Ecosystem	This criterion is a score of Juniper Research's opinion of the company's innovation or plans for innovation.
	Future Business Prospects	This criterion is a score of Juniper Research's opinion of the company's future prospects in the market.
Market Presence	Market Presence	Here, Juniper Research has used the total number of customers onboarded by the company.

Source: Juniper Research



## About Orange Wholesale



Orange Wholesale offers high-performance connectivity solutions for businesses, professionals, and the general public. This includes unbundling, infrastructure sharing, fixed or mobile high-speed and ultra-high-speed networks. Our offering also covers mobile connectivity and interconnection between operators, while ensuring high-quality service delivery.

Orange Wholesale brings content providers, Internet service providers (ISPs), OTT players, mobile network operators (MNOs) and other telecom operators and pure wholesalers high-bandwidth, low-latency, secure capacity for voice, mobile or data.

Visit the website: <https://wholesale.orange.com/en/>

## About Juniper Research



Juniper Research was founded in 2001 by the industry consultant Tony Crabtree, in the midst of the telecoms and dot-com crash. The business was fully incorporated in February 2002 and has since grown to become one of the leading analyst firms in the mobile and digital tech sector.

Juniper Research specialises in identifying and appraising new high-growth market sectors within the digital ecosystem. Market sizing and forecasting are the cornerstones of our offering, together with competitive analysis, strategic assessment and business modelling.

We endeavour to provide independent and impartial analysis of both current and emerging opportunities via a team of dedicated specialists – all knowledgeable, experienced and experts in their field.

Our clients range from mobile operators through to content providers, vendors and financial institutions. Juniper Research's client base spans the globe, with the majority of our clients based in North America, Western Europe and the Far East.

Visit the website: <https://www.juniperresearch.com/home>