

Orange International Carriers - Wholesale



January 17, 2023

COMPANY ASSESSMENT

REPORT SUMMARY:

Orange International Carriers is progressing in its digital transformations aims as it focuses on network enhancements and expansions, security and anti-fraud, and cloud-based solutions.

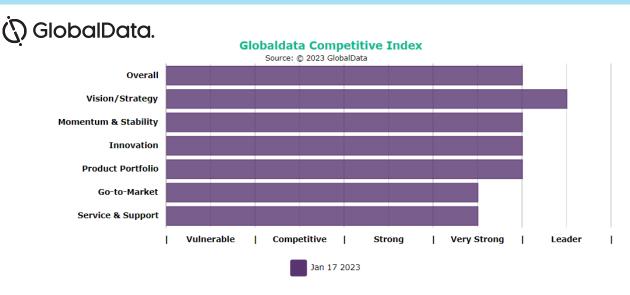
WHAT'S NEW

- **December 2022:** Orange and Mediterranean subsea neutral and independent infrastructure operator Medusa Submarine Cable System are joining forces to offer an open and high-performance interconnection solution to all partner operators of the Medusa cable. Orange will give users of the Medusa subsea cable the ability to access all data centers in Marseille (France), which it will interconnect by setting up new fully redundant infrastructure.
- **November 2022:** Orange has launched its commercial 5G network in Botswana, the first Orange country in Africa to launch 5G technology. The 5G network is already available in greater Gaborone (Botswana) and Francistown (Botswana), covering 30% of the population since November 2022.
- **November 2022:** Orange will support Gold Data in its decision to build what it claims is the first cable system in the Gulf of Mexico. The new US-Mexico digital highway will offer the bandwidth capacity and the quality of services required by the market and will play a key part in empowering growing data demand in Mexico.
- August 2022: Orange and Equinix announced a collaboration to expand the Orange Telco Cloud footprint, using Equinix's bare metal-as-a-service capability (i.e., Equinix Metal) to speed the deployment of Orange's New Generation International Network.

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RATING UPDATE SUMMARY

Very Strong

Orange International Carriers (IC) is progressing in its digital transformations aims as it focuses on network enhancements and expansions, security and anti-fraud, and cloud-based solutions.

PERSPECTIVE - ESSENTIAL ANALYSIS

STRENGTHS

- Well-Established Player: Orange IC is one of the leaders in wholesale voice in terms of revenue. Despite tough market conditions in recovering from COVID-19, Orange IC had EUR1.05 billion revenues in 2021. Orange IC posted a slight increase in Q3 2022, leading to EUR802 million for the first nine months in 2022.
- Leader in Innovation: Orange IC is backed by considerable R&D establishments, comprising 5,000 researchers and 12 labs on four continents. The carrier aims to offer value and differentiation through its experience in wholesale, retail, business, finance, and security services. Orange IC can capitalize on the Orange Group's annual investment of EUR750 million in 2021 in R&D to deliver inclusive products and services to meet customers' needs.

LIMITATIONS

- Powerful Rivals: Orange IC is threatened by the presence of powerful rivals with unique strengths in certain geographies (i.e., Telefónica in its home location and certain parts in Europe, NTT Communications in Asia).
- **Technology Disruption:** Orange IC faces competition from market disruptors such as Twilio and Epsilon
- **Global Downturn:** Like its competitors, Orange IC is threatened by the economic downturn, which is seeing inflation impacting equipment prices. At the same time, suppy chain shortages have delayed entry to service of cables as well as upgrades.

- Strong Product Line: The carrier has a comprehensive range of mobile wholesale products, including IPX, SS7, SMS A2P, 4G, and 5G. Transition to VoLTE is supported for both interconnection and roaming over Multiservice IP eXchange. Orange IC is an experienced player in the delivery of global data and bandwidth services, supported by network investments on land, undersea, and in space. In voice, Orange says it improved traffic retention thanks to an eight-fold increase in voice corridors.
- SDN: Orange IC has invested in SDN and is taking a prominent role in developing SDN interconnect standards with the Metro Ethernet Forum (MEF) and partners such as Colt and AT&T. This work is enhancing its value as a wholesale partner and will support features such as bandwidth on demand over network-to-network interfaces.

CATEGORY RATINGS AND JUSTIFICATION

Vision/Strategy

Rating : Leader

- Orange is making progress in its digital transformation aims, focusing on cloud including CPaaS and digitising its network. The carrier is investing in points of presence (PoPs) and terrestrial fiber. It has earmarked a EUR7.1 billion global investment for diversified cable routes and is strengthening its submarine capacity. Orange has over 40 submarine cables globally covering 450,000km, including the 6,600km Dunant cable. Seven new-generation submarine cables were planned or announced in 2022, while 25 PoPs have been added.
- Orange IC is focusing on data transport requirements and adapting networks to suit the needs of end users. Orange says its intelligent network combines the footprint of a B2B network with the high bandwidth of a wholesale network. Targeted by the end of 2024, 40 IaaS PoPs out of 100 have been deployed. Separation between the infrastructure and service layers reduces latency and enables service fulfillment times of minutes.
- Orange says by 2023 its core networks are transitioning to 5G. It offers 5G non-standalone (NSA) on top of IPX and LTE services and is in the process of enabling 5G standalone (SA) for operators. It launched a 5G signaling offer to support roaming over 5G for MNO customers and launched its commercial 5G network in Botswana.

Momentum & Stability

Rating : Very Strong

• Orange IC is a leading carrier in terms of voice revenues, and it is seeing above industry-average growth, which it expects to maintain. Revenue continues to be driven partly by new wholesale business models for high-value, long-distance minutes as well as new ways of monetizing internet traffic. Orange Group revenues reached EUR42.5 billion in 2021, up 0.8 % year-on-year (YoY). Orange IC posted EUR1.05 billion revenues in 2021.

- Orange IC boasts 350 direct connections and 1,600 destinations and has strengthened its Orange Group cooperation by managing billions of additional voice minutes from its Romanian, Slovakian, and Polish affiliates. Orange has committed more than EUR750 million to Capital Investment through its Orange Digital Investment holding company. This is used to finance and support innovative projects, explore new business ventures, and contribute to Orange Group's transformation.
- Orange IC sits within the Wholesale & International Networks division, dedicated to wholesale customers and leveraging the unique assets of Orange. Orange sees wholesale activities as the third pillar of the group business. The carrier is increasing the level of automation in its processes, networks, and IT.

Innovation

Rating : Very Strong

- Orange IC has launched a comprehensive digitalization program to increase speed to market. As of July 2022, 50% of its applications embrace cloudification, with 33% now reachable via APIs and 64 use cases successfully automated. To enrich the customer experience, Orange IC offers tools such as voice routing automation and network virtualization enabled by an API and cloud-based architecture.
- Orange offers a strong, expanding network. With Nokia, Orange completed an optical capacity trial to support end-to-end 400 Gbps services. Its new Media Delivery Boost solution delivers high capacity, fast loading times, optimal streaming quality, security against web attacks, and minimization of bandwidth costs. Through EVPL Online, it offers an online point-to-point Ethernet connectivity based on SDN technologies. Orange IC has added protection options to its IPL Dynamic and Intense offers.
- Orange IC is a leader in anti-fraud and security, boosted by Orange Cyberdefense's 2,500 experts and backed up by a dedicated 24/7 fraud protection team. Orange IC offers a comprehensive portfolio of solutions around two pillars: detection and protection against fraud and cyber risks. Its 360° Checkup offer for security provides a fully consolidated and secured audit on identified existing weaknesses with a set of recommendations across voice, mobile, and data.

Product Portfolio

Rating : Very Strong

- Orange IC has created customer-centric segmentation for Orange wholesale services: roaming, messaging, voice, bandwidth, IP and content distribution, security, and anti-fraud. Orange IC has a large catalog of VAS, including steering of roaming available in OTA mode and troubleshooting for IPX and signaling services.
- Orange IC's IPX transport offers a single connection to voice and mobile services in a cloud. Orange IC's IPX and Voice Hubbing are ready to support IMS services including VoLTE. Orange IC's recently launched Voice Dynamic offer is based on a smart trading platform algorithm that competitiveness and flexibility on specific requirements. Orange IC also offers three international toll-free voice services, enabling customers to buy and sell online numbers worldwide.
- Orange IC continues to enrich its Roaming Big Data services, allowing operators to track customers roaming behaviors, build a strategic plan, and optimize revenues. Orange's ultimate goal is zero-touch provisioning, with operators using automation tools for all network and service configuration needs. Orange IC offers cloud services through its Orange Business Services affiliate.Orange has been investing to deliver CDN solutions and is continuously expanding its footprint by deploying new content PoPs closer to end users. A new CDN offer, Media Delivery Boost, is available for Orange customers.

Go-to-Market

Rating : Very Strong

- Orange IC targets customers including operators, content providers and wholesalers, with six lines of solutions across three service levels: Essential, Dynamic, and Intense. In customer service, Orange has formalized improvements under four major areas: delivery, customer care, service management, and billing & cash management.
- Orange IC has implemented a multi-channel distribution strategy: direct (customer facing sales), indirect (sales through an intermediary via Orange entities or external partners), and digital (online interaction only). It has increased its sales and support presence with new offices in Latin America, Asia, and Africa, and is locally present in 21 countries and territories. The wholesale division's sales team consists of more than 150 sales and presales operatives globally. The sales strategy is an end-to-end process, with marketing and sales aligned with key addressable markets, as well as enhanced tools, training and incentives.
- The service provider reports approximately 1,000 operator and OTT clients worldwide, including direct interconnections with more than 350 operators in over 1,600 destinations and 220 countries and territories as well as the 26 operators from within Orange Group. In 2022, Orange IC added 100 new accounts in data, mobile, voice, and security solutions. Orange IC is developing its voice and submarine cable outsourcing solutions.

Service & Support

Rating : Very Strong

- The Orange customer portal includes 24/7 access and real-time monitoring and reporting (traffic and QoS) on IPX transport and IP transit, SMS, and a full history of invoices to date.
- As part of its digital program, Orange IC developed a digital trouble ticket management, and 70% of tickets are now generated online. The web portal includes an updated interactive digital map of its global network for instant visibility of worldwide options.
- Customers are supported by a team of more than 1,500 experts in 28 countries, working 24/7 in a 'follow the sun' mode. This includes PMI-certified project managers for complex deals, operations experts, and service design teams for tailor-made operating model. The Orange eCare portal allows customers to incorporate the Ethernet Online API directly into their systems, with authentication based on a state-of-the-art platform. The Looking Glass tool is now available to monitor IP transit performance.
- Service management includes customer communication, online live reporting and monthly reports, and a taskforce that can be dedicated to specific customers. Real-time service monitoring management and feedback, online ticketing, reports, and analysis related to fraud are available on the dedicated customer portal within a single interface.

Segment Ratings

| Market | Perspective |
|-------------------------|-------------|
| Wholesale | Very Strong |
| Fixed & Mobile Networks | Very Strong |
| Managed Services | Very Strong |

THREATS AND BARRIERS

Powerful Rivals: Orange IC is threatened by the presence of powerful rivals with unique strengths in certain geographies (e.g., NTT Communications in Asia).

Cloud Marketing: Orange IC launched its own brand of cloud services in September 2017 and is innovating in the space. It should highlight its strengths in this area amid creative cloud marketing within the wholesale space by GTT, TI Sparkle, and KPN.

A Need to be Nimble: Smaller wholesale operators such as Syniverse and iBasis have more nimble operations, which may help them to respond more quickly to unique customer requirements.

SUSTAINABILITY

Environmental: Orange is aiming to be net-zero carbon by 2040, with 50% of electricity from sustainable sources by 2025. It is prioritizing reduction of fuel and oil consumption by settling partnerships with energy services companies and by constructing solar farms in Africa and the Middle East (AME). Through its Green ITN 2025 program, Orange is targeting minimizing electricity usage in its networks and data centers. Orange launched a Sustainability Bond for EUR500 million to finance projects that reflect Orange Group's ambitions in the green and social fields.

Social: Orange focuses on diversity and inclusion for driving innovation, well-being, and performance. Gender equality has been central to its HR strategy for more than 15 years and is the subject of a dedicated internal governance. Orange opened a 'Hello Women' campus where women interested in careers in digital professions can access advice.

Governance: Orange promotes three layers to protect its customers' businesses: anti-corruption, inclusive AI, and responsible purchasing. Orange dedicated compliance teams play an integral role in a wider strategy to manage the risks of unethical behavior. Orange encourages its employees, contractors, suppliers, and partners to use its provided reporting platform 'Hello Ethics' to report any breach of conduct.

RECOMMENDED ACTIONS

Vendor

COVID-19: Orange can highlight its ability to cope with rising capacity demands via its dedicated COVID-19 team. At a time when fraud is rife, it can also outline its leading anti-fraud credentials.

Wholesale Cloud Services: In a highly competitive space, Orange IC must creatively market wholesale services that give its customers tools to deliver rich IP communications and the move to virtualization.

Data Analytics: Orange IC can further explore leveraging big data analytics to help prevent fraud and drive higher quality levels. Additional areas can be explored opening up usage data on traffic patterns within its network to give partners new commercial opportunities, such as targeted campaigns.

Competitors

Network Penetration: TI Sparkle and Telefónica can emphasize their network penetration in Latin America. AT&T and Level 3 should point to deep network penetration in the US Telia Carrier can point to its strong presence in the Nordic and Baltic states.

Stronger Foothold: BICS and Tata Communications can underscore efforts to build a stronger foothold in AME. Tata Communications can point to its investments in the region and participation in submarine cables such as SEACOM, I-ME-WE, and WACS.

Global Network: Verizon Partner Solutions can point to its global network spanning 446,000 route-miles as well as its strong presence in the US.

Buyers

Good Reputation: Orange IC has a positive reputation, a strong global network presence, and good levels of product expertise.

Global Coverage: Orange has a good global footprint, with specific regional strengths in parts of AME and Europe, but other carriers might offer compelling service in regions such as Latin America and the Nordics.

Compelling Product Line: The carrier's close affiliation with Orange has led to compelling and innovative products. It is in a position to deliver competitive prices and technically strong solutions.

COMPANY DETAILS

Company Snapshot

| Revenue | Orange Group full year 2022: EUR42.5 billion (+0.8% vs. 2021). 271 million customers worldwide. |
|--------------------------------|---|
| Employees | Group 2022 figure: 137,000 |
| HQ | Paris (France) |
| Market strengths/ solutions | Voice, including hubbing (Essential, Dynamic, Intense, HD voice for its footprint, etc) IDD; anti-fraud solution (IRSF, anti-spam, @first); Corridors offers and serenity voice management; call collect mumbers, Multiservice IP eXchange; mobile, includ- ing SS7, MMS global exchange, LTE signaling and 3GRX; roaming global exchange; internet and contents delivery solutions (IP Transit, CDN) ; bandwidth: backhaul circuits. The carrier's Marseille (France) hub is the center of its IP connectivity in Europe. |

NETWORK DESCRIPTION

Company Snapshot

| Fixed/Wireline Network | Transmission PoPs in major cities in Europe, North America, Africa, and Asia, ded- icated IP infrastructure, with more than 220+ ISPs/carriers connected in 100+ countries, complementary satellite capacity and participation in 450,000km of sub- marine cables. Interconnections allow direct connections to 350 operators in 220 countries and a total of 1,600+ destinations worldwide for fixed or mobile voice. |
|----------------------------|---|
| Mobile/Wireless Network | For mobile roaming services, Orange has SS7 connectivity to 980+ mobile networks in 220 countries and territories as well as 3GRX connectivity to more than 700 mobile operators in over 200 countries. Orange serves 224 million mobile custom- ers worldwide as of December 2021 and offers near 100% population coverage of GPRS and GSM 900/1800. 274 mobile operator 4G destinations are currently reachable with the Orange solution and connections are underway for 21 addition- al destinations. Orange offers access to 4G services across all continents (188 coun- tries and territories). Orange has now launched 5G in six of its European countries: Romania, Poland, Spain, Luxembourg, France, and Slovakia. |
| Data Centers | France, the UK, the US, Singapore, and Australia (including PoPs) |

KEY RECENT ANNOUNCEMENTS AND DISCLOSED STRATEGIC PLANS

Company Snapshot

| Date | Data |
|---------------|---|
| December 2022 | Orange and Mediterranean subsea neutral and independent infrastructure op- erator Medusa Submarine Cable System are joining forces to offer an open and high-performance interconnection solution to all partner operators of the Medusa cable. |
| November 2022 | 1&1 and Orange have concluded a long-term agreement for the provision of in- ternational roaming services for the 1&1 mobile network. Concurrently with the launch of Europe's first fully virtualized mobile network based on the new open RAN technology, 1&1 AG will also provide to its customers reliable mobile services when they travel abroad. |
| November 2022 | Orange has launched its commercial 5G network in Botswana, the first Orange country in Africa to launch 5G technology. The 5G network is already available in greater Gaborone (Botswana) and Francistown (Botswana), covering 30% of the population since November 2022. |
| August 2022 | Orange and Equinix announced a collaboration to expand the Orange Telco Cloud footprint, using Equinix's bare metal-as-a-service capability (i.e., Equinix Metal)to speed the deployment of Orange's New Generation International Network. |
| February 2022 | Orange and its subsidiary Sonatel are partnering with SES to deploy and manage the O3b mPower constellation's first gateway in Africa. Located at the Sonatel tele- port in Gandoul (Senegal), the gateway will deliver low-latency and cloud-optimized connectivity services in Africa. |