

The World Is Turning to VoLTE. Are You Prepared?

LTE

442 commercially launched LTE or LTE advanced networks in **147** countries.

Source: GSA



111 operators in **52** countries investing in VoLTE deployments, studies or trials.

Source: GSA



83% of operators surveyed say they will deploy Voice over LTE (VoLTE) by 2016.

Source: Infonetics



By 2018, **600 million** smartphone users worldwide will use VoLTE as their default voice service.

Source: Analysys Mason



VoLTE roaming minutes of use (MOUs) will grow by a CAGR of **145%** over the next 5 years to reach 4.7 billion by 2020.

Source: HOT TELECOM



VoLTE-capable smartphones will account for **950 million** unit shipments by the end of 2020.

Source: Research and Markets



Benefits of Implementing VoLTE Roaming

Reduce Complexity

Use a single radio technology for both voice and data.

Improve Call Setup Times

Benefit from faster connections between callers.

Transitioning to VoLTE Delivers a Variety of Benefits

Gain Superior Voice Quality

Our IPX network delivers high levels of quality of service and class of service.

Maintain Control

With IP Multimedia Subsystem (IMS), home operators maintain full control of a roamer's voice traffic.

Understanding VoLTE Roaming Architecture

Choose

S8 Home Routing (S8HR)

VoLTE calls are served by the visited network provider as an LTE data roaming session the same way Internet traffic is supported, by leveraging the visited network provider's Evolved Packet Core (EPC).

Local Breakout (LBO)

VoLTE call control and bearer components are served by the visited network provider's call and process servers designated for IMS, also known as an IMS core. The voice bearer could be handled by the serve market network or home market network based on what is negotiated between the two parties.

Advantages

- Offers faster deployment than LBO:
 - Uses the same GPRS tunneling protocol (GTP) tunnel as LTE data roaming traffic
 - Uses the same components already in evolved packet core
 - Uses existing transferred account procedures (TAP) and roaming agreement exchange (RAEX)
- Allows operator to use the same data interoperator tariff (IOT) charges with roaming partners without updating roaming agreements for IMS services

Advantages

- Increases visibility of call information for both the home and visited operator by using IMS
- Provides the ability to offer lawful intercept and emergency call handling
- Supports single radio voice call continuity, allowing for a consistent voice call when moving between LTE and circuit-switched networks
- Supports TAP billing model

Preparing for VoLTE Roaming with Syniverse

Enabling VoLTE is a critical, complex milestone in the industry's transition to LTE, and it requires testing, resolving and ensuring the quality of a number of new processes among different operator networks around the world.

As a leading IPX solution provider, Syniverse is positioned to support current and future VoLTE roaming implementations. **Our IPX platform provides the foundation for global connectivity and critical LTE building elements necessary for mobile network operators to successfully deploy VoLTE roaming whether it be through S8HR or an LBO scenario.**

"The global reach of Syniverse's IPX network to nearly every operator that has launched LTE allows us to continue to expand VoLTE coverage and services in additional markets to achieve the critical reach and coverage our subscribers demand from their constantly connected devices."

- Lee KunHee, Senior Manager, Global Roaming Team, LG Uplus

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We make mobile work

[Contact us](#) to learn more about Syniverse VoLTE solutions.