



VoLTE DELIVERS SUPERIOR VOICE AND VIDEO CALLING FOR BROADBAND LTE

IP MULTIMEDIA SUBSYSTEM STANDARDS BASED VOICE OVER LTE





VoLTE IMPROVES COMMUNICATIONS AND PERFORMANCE FOR LTE

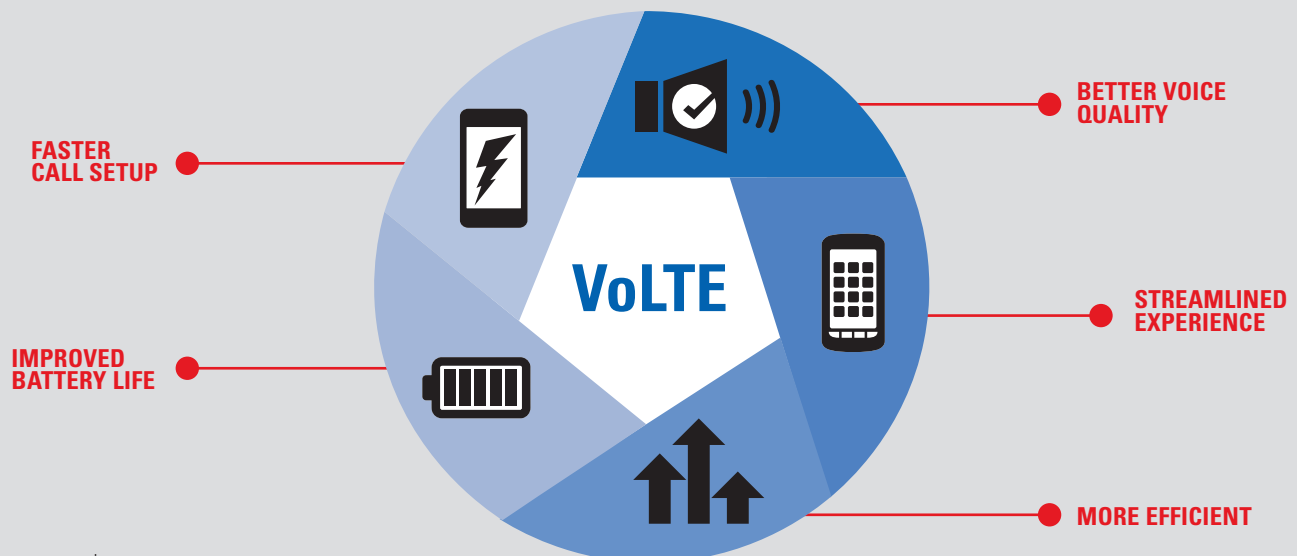
You rely on critical information getting to the right person at the right time and with Voice over LTE (VoLTE) there's a new way to optimize your LTE experience and improve the awareness, efficiency and safety benefits provided by high speed broadband data.

Already a game changer, until now LTE Broadband has been better known for fast data speeds than for voice. That's because LTE Broadband was designed and optimized to carry data traffic, and not traditional circuit-switched voice calls. Adding VoLTE changes all of that by handling voice as a data service and taking

full advantage of a new set of capabilities. The result is clear high definition voice (HD Voice) and the enablement of rich communication services for multimedia experiences including text messaging, multimedia chat, live video calls and file sharing from one user to another or across groups of users.

KEY FEATURES

- VoLTE Calling (GSMA IR.92)
- Supplementary Services Including:
 - Call Forwarding
 - Call Blocking
 - Call Waiting
 - Ad-Hoc Conferencing
- HD Voice
- Video Calling (GSMA IR.94)
- SMS over IMS
- Voice Mail
- 9-1-1 Emergency Calling
- PSTN/3G Interworking
- SIP PBX Interworking
- Geo Redundancy Support



HIGH DEFINITION VOICE AND MULTIMEDIA CAPABILITIES YOU NEED TO SUCCEED.

Without VoLTE, you open and navigate separate applications for most every task, including calling, video, chat and messaging. Call set up time – the time it takes for your call to start ringing – takes longer. The result is shorter battery life, user confusion, delayed information exchange as well as increased support, maintenance and training. Additionally, spectrum is tremendously valuable. Without VoLTE you have to reserve spectrum for voice calls which could be reused for other purposes. In private LTE-only network deployments without a 3G network, VoLTE is the only standards-based way to offer telephony voice with dedicated quality of service (QoS) levels and carrier interoperability. The alternative of over-the-top voice services do not deliver guaranteed QoS.

In the past, these shortcomings were the price to pay for the benefits of broadband. As broadband capabilities become more prevalent and move from the category of nice to have, to that of absolutely required, shortcomings you once lived with become urgent to resolve. When you add standards based IP multimedia subsystem (IMS) VoLTE to your LTE system, you gain new levels of performance. High definition voice quality, faster call set up times, improved battery life, streamlined apps and better spectral efficiencies are all possible.

HIGH DEFINITION VOICE QUALITY

Poor voice quality not only potentially leads to misunderstandings and delays, but to missed verbal cues, inability to correctly interpret voice inflection, caller fatigue and high levels of frustration all resulting in an impaired ability to communicate clearly and effectively. These are all important factors to effective communication in stressful environments. With VoLTE High Definition Voice (HD Voice) conversations are heard more clearly for quick collaboration – improving decisions and saving time.

FASTER CALL SETUP TIME

The time it takes your call to connect and begin ringing is termed call set up time. In your fast paced world where a split second can make all the difference, you require the quickest setup times possible. Without having to connect to different networks like a traditional voice call has to, VoLTE delivers the quicker call setup times you need, saving valuable time and speeding the flow of information.

STREAMLINED EXPERIENCE

When you eliminate the need to run multiple apps and perform tasks directly from the native keypad dialer, you eliminate user confusion, improve the ability to quickly access and exchange information and speed coordination. Device storage space, memory and processor utilization, training, security concerns and maintenance burdens are all reduced.

OPTIMIZE BATTERY LIFE

Running multiple applications and scanning different networks quickly takes a toll on your device's battery. The more applications you are running, the heavier the load is on your Device. Processor demands, memory allocation, keep alive messages to maintain sessions, checking for and downloading updates all result in increased battery consumption. Different networks require devices to use battery power hunting for the best system and traversing different networks to complete traditional voice calls. VoLTE is built into the device and optimized to eliminate the need for multiple applications and simplifies spectrum requirements so power demands are reduced and battery life optimized.

BETTER SPECTRAL EFFICIENCIES

In a typical LTE network with fallback to 3G voice, spectrum necessarily is inefficiently utilized. Additionally, legacy networks reserve valuable spectrum for these traditional voice calls. When VoLTE is implemented, the need for between networks fall back call set up time and spectrum demand is eliminated. Voice and data both run on the LTE Broadband network freeing the legacy spectrum to be reused for other purposes creating lower total cost of ownership (TCO) and increased return on investment (ROI).





VoLTE FROM MOTOROLA SOLUTIONS

Our world becomes more complex with every passing moment. Community expectations are rising and personnel safety is an ever present concern. Real-time information can make all the difference in achieving successful outcomes. Improve the communications quality, spectral efficiency and performance for your LTE Broadband network and devices with IP Multimedia Subsystem Standards Based VoLTE from Motorola Solutions.

Add the other tools you need to help get the job done quickly and safely with our extensive portfolio of Applications, Devices, Networks and Services designed for mission critical operations.

To learn more about our Public Safety LTE Solutions, visit motorolasolutions.com/publicsafetylte



Motorola Solutions, Inc. 500 West Monroe Street, Chicago, IL 60661 U.S.A. motorolasolutions.com

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