What is VoLTE?

VOICE OVER LTE
What is VoLTE

Voice over LTE

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Non-VoLTE Scenario (Pre-VoLTE Era)

- Internet
- 4G Network
- 3G/2G Network
Non-VoLTE Scenario (Pre-VoLTE Era)

Voice Call in Non-VoLTE Scenario uses 2G/3G Circuit Switch Fall Back

Voice Carried over Dedicated Channel
Circuit Switched Networks

4G Network

3G/2G Network

Internet

Voice Call

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How VoLTE works

LTE Network

Packet Switched Networks
Voice Carried over IP Network

VoLTE Benefits for Users

- Better User Experience
- No drop in background data speeds
- Better battery life
- HD Calling
- Faster calling
- Inbuilt Support for Video calls

Voice call on VoLTE Runs on 4G itself

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Evolution of Mobile Technology

Year: 2014
1\textsuperscript{st} Commercial VoLTE Launched

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How to Enable VoLTE in handset

**#*#4636#*#**
Secret Menu
VoLTE Enable

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Requirements for VoLTE Service

Mobile Operator

- Good 4G Coverage

Customer

- VoLTE Supporting Handset
- Software Build in Handset supporting VoLTE
- ISIM or USIM*
- VoLTE Switch enabled in handset

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VoLTE - Benefits for Operators

- Increased Spectrum Efficiency
- Voice is Still Business Driver
- Network Simplification
- New Service Integration
VoLTE Challenges ..

1. Not all Operator Supports VoLTE
2. Not all Handset Supports VoLTE
3. Increased Complexity
4. LTE Coverage is mandatory for VoLTE
5. No Inter-Operator Connectivity
6. Every Operator needs to Test Every Device

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Congestion Handling

Voice Packets are Faster

- Voice is Highest Priority
- Data is given low Priority
- Quality of service Used
- Helps in Handling Congestion

LTE Network

Internet

4G

Low Priority Path

High Priority Path

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It does not matter how slowly you go as long as you do not stop.

Confucius