

Latin America VoLTE Forecast, 2012 – 2017

Market Study
Fourth Quarter, 2013





Latin America VoLTE Forecast, 2012 – 2017

A Market Study

Published Fourth Quarter, 2013

Version 1.0

Report Number: 4Q2013-07

iGR
12400 W. Hwy 71
Suite 350 PMB 341
Austin TX 78738

Table of Contents

Abstract	1
Executive Summary	3
Figure A: KPIs for Operators in Latin American Region.....	4
LTE Deployment Status	4
VoLTE in Latin America.....	4
Forecast for LTE and VoLTE in Latin America	5
Figure B: Latin America LTE / VoLTE Subscriber Forecast, 2012 – 2017 (000s)	6
Methodology	7
Key Findings.....	8
Key Performance Indicators (KPIs)	8
Spectrum	8
LTE / VoLTE Trends	9
VoLTE Market Drivers	11
Superior Spectrum Efficiency	11
VoLTE makes better use of available spectrum	11
Overcome competition from OTT.....	11
Single network technology (Network Consolidation).....	12
Interoperability.....	12
Superior Quality of Service.....	12
VoLTE Operator Commitments and Vendor Selection	13
Table 1: KPIs for Operators in Latin American Region	13
America Movil	13
KPIs in Latin America region (June 2013).....	13
LTE Deployments	14
VoLTE Trials.....	14
LTE Vendors Selected.....	15
Table 2: LTE Network and Device Vendors Selected by America Movil per Country (November 2013).....	15
Spectrum available in major LTE market	16
Table 3: 3G/4G Frequency Bands and Amount of Spectrum Allocated (MHz) to America Movil per Country	16
iGR Assessment.....	17
Telefonica Group	17
KPIs in Latin America region (June 2013).....	17
LTE Deployments	18
VoLTE Trials.....	18
VoLTE Vendors	18
Spectrum available in major LTE markets	18

Quoting information from an *iGillottResearch* publication: external — any *iGillottResearch* information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from *iGillottResearch*. *iGillottResearch* reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from *iGillottResearch*. The use of large portions or the reproduction of any *iGillottResearch* document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2013 *iGillottResearch*, Inc. Reproduction is forbidden unless authorized.

FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.

Table 4: 3G/4G Frequency Bands and Amount of Spectrum Allocated (MHz) to Telefonica per Country	18
<i>iGR Assessment</i>	19
Entel	19
Overview	19
KPIs in Latin America region (June 2013)	19
LTE Deployments	20
VoLTE Trials	20
LTE Vendors selected	20
Spectrum available in major LTE markets	21
Table 5: 3G/4G Frequency Bands and Amount of Spectrum Allocated (MHz) to Entel per Country	21
<i>iGR Assessment</i>	21
Cable and Wireless (CWC)	21
Overview	21
KPIs in Latin America region (June 2013)	22
LTE Deployments	22
VoLTE Trials	22
LTE Vendors selected	23
Spectrum available in major LTE markets	23
Table 6: 3G/4G Frequency Bands and Amount of Spectrum Allocated (MHz) to Cable & Wireless in Cayman Islands.....	23
<i>iGR Assessment</i>	23
VoLTE Tests in 450MHz in Brazil	24
Table 7: 450MHz and 2.6GHz Frequency Bands Allocated in Brazil by Operator	25
Challenges for VoLTE in Latin America	26
Insufficient LTE coverage	26
Monetization of LTE networks	26
Spectrum Availability	27
Technology challenges	27
Device availability.....	28
OTT (Over The Top) challenge	28
Latin America VoLTE Forecasts	29
LTE and VoLTE Subscriber Forecasts	30
Table 8: Latin America LTE / VoLTE Subscriber Forecast, 2012–2017 (000s).....	30
Figure 1: Latin America LTE / VoLTE Subscriber Forecast, 2012 – 2017 (000s).....	31
Vendor Profiles	32
Alcatel-Lucent	32
Cisco	35
D2 Technologies	38
Ericsson	40
Huawei	43
Imagination Technologies Group	44
Mavenir	46

Quoting information from an *iGillottResearch* publication: external — any *iGillottResearch* information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from *iGillottResearch*. *iGillottResearch* reserves the right to deny approval of external usage for any reason. Internal quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from *iGillottResearch*. The use of large portions or the reproduction of any *iGillottResearch* document in its entirety does require prior written approval and may have some financial implications.

Mindspeed Technologies	48
NSN (Nokia Solutions and Networks)	51
OpenCloud.....	54
Qualcomm	56
Samsung Electronics	58
Taqua LLC	60
Appendix	63
Appendix 1: Frequency Band and Amount of Spectrum (MHz) Allocated by LTE Operators in Latin America	63
Appendix 2: LTE Network and Device Vendors Chosen by Operators in Latin America	65
Definitions	69
General.....	69
Device Types.....	69
Services	70
Network Technology.....	71
About <i>iGR</i>	75
Disclaimer.....	75

Quoting information from an *iGillottResearch* publication: external — any *iGillottResearch* information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from *iGillottResearch*. *iGillottResearch* reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from *iGillottResearch*. The use of large portions or the reproduction of any *iGillottResearch* document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2013 *iGillottResearch*, Inc. Reproduction is forbidden unless authorized.
FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.

Abstract

The Latin American region presents a great opportunity for the mobile telecom sector. This market study defines the Latin American VoLTE market landscape and its growth prospects in the coming years.

The study analyzes the business case of the major LTE mobile operators in Latin America that will likely be the first to deploy VoLTE: America Movil, Telefonica, Entel and Cable & Wireless. These operators combined, considering their consolidated operations across Latin America, represent 80 percent of the mobile subscribers in the region.

This report provides the following:

- **Operator Overview:** Brief explanation of the current operator's position in Latin America's mobile market.
- **Key Metrics:** Number of mobile subscribers, mobile ARPU, prepaid vs. postpaid, market share, etc.
- **LTE deployments:** Deployment date, countries where LTE is available, geographical scope, estimated number of LTE subscribers, etc.
- **VoLTE trials & tests (if applicable):** Where? When? Which vendors?
- **Type of VoLTE planned:** Circuit-Switched Fallback (CSFB), IP Multimedia Subsystem (IMS), and SVLTE (Simultaneous Voice and LTE).
- **LTE vendors selected:** LTE is in its early stage of implementation in Latin America and VoLTE is not yet deployed. However understanding which LTE devices and terminal vendors have been chosen by Latin American LTE operators will help determine some assumptions on which vendors are likely to be chosen for VoLTE's implementation in the region.
- **Spectrum:** Spectrum bands owned by operator for mobile usage and LTE per market and amount of spectrum allocated per frequency.

Additionally, the report forecasts the number of LTE and VoLTE subscribers in Latin America for 2012 to 2017.

Key questions addressed:

- What is VoLTE?
- Who are the major mobile operators in Latin America?
- What is the status of LTE deployment in Latin America?

Quoting information from an *iGillottResearch* publication: external — any *iGillottResearch* information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from *iGillottResearch*. *iGillottResearch* reserves the right to deny approval of external usage for any reason. Internal quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from *iGillottResearch*. The use of large portions or the reproduction of any *iGillottResearch* document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2013 *iGillottResearch*, Inc. Reproduction is forbidden unless authorized.
FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.

- Why are Latin American mobile operators interested in VoLTE?
- What are some of the challenges surrounding the implementation of VoLTE in Latin America?
- Which vendors have the Latin American mobile operators used for LTE?
- What is the expected deployment timeframe for VoLTE in Latin America?
- What is the forecast for the number of LTE and VoLTE subscribers in Latin America over a five-year period?
- Who are the major VoLTE vendors?

Who should read this report?

- Mobile operators
- Device OEMs
- VoLTE solution vendors
- Content providers and distributors
- Financial analysts and investors.

Quoting information from an *iGillottResearch* publication: external — any *iGillottResearch* information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from *iGillottResearch*. *iGillottResearch* reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from *iGillottResearch*. The use of large portions or the reproduction of any *iGillottResearch* document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2013 *iGillottResearch*, Inc. Reproduction is forbidden unless authorized.
FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.