
TIM PERFORMS UNPRECEDENTED HIGH-SPEED MOBILE CONNECTION TEST IN BRAZIL AT FUTURECOM

- Demonstration is the first on an LTE-Advanced network aggregating three different frequency ranges (2600 MHz, 1800 MHz and 700 MHz) in Latin America
- Operator is prepared to supply the market with the best network infrastructure in Brazil, paving the way to 5G

TIM has provided the first technological demonstration of an LTE-Advanced solution with Three Carrier Aggregation (3xCA), combining three different frequencies to offer a unique Ultra Mobile Broadband experience. Working closely with Ericsson and Qualcomm Technologies, Inc., a subsidiary of Qualcomm Incorporated, the demonstration took place during Futurecom 2015.

The unprecedented test, performed at the operator's booth, combines the use of all LTE frequencies enabled in Brazil – 2600 MHz, 1800 MHz and 700 MHz – to provide a better data use experience. The three aggregated frequencies can enable data download speeds of up to around 260 Mbps. The companies are promoting tests supported by computers connected to devices with the advanced Carrier Aggregation feature.

"Spectrum efficiency is one of the main challenges over the coming years to ensure that the growing data demand is met, and LTE-Advanced 3xCA is one of the new technologies adopted by TIM to increase this efficiency. We are going to use the maximum available resources to allow the flow of data packets at greater speed," explains Leonardo Capdeville, CTO of TIM Brazil. "With this groundbreaking initiative, TIM once again proves its ability to be at the forefront of technological innovation."

Partnerships

A special license for the test was required from the National Telecommunications Agency (Agência Nacional de Telecomunicação - Anatel) due to use of the 700 MHz range. TIM conducts tests with support from Qualcomm Technologies – using the Qualcomm® Snapdragon™ 810 processor with X10 LTE – and from Ericsson, its 4G infrastructure provider in the metropolitan region of São Paulo.

"This is a crucial step in upgrading LTE technology in Brazil, given that it will enable much higher capacity and better performance for wireless networks. We are very pleased to

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support TIM's pioneering initiative in Latin America," says Rafael Steinhauser, Qualcomm's President for Latin America.

TIM initially plans to deploy Carrier Aggregation at the 2600 MHz and 1800 MHz frequencies in the primary regions of Brazil by 2016. As the 700 MHz frequency becomes available for mobile applications, the carrier has plans to implement 3xCA. "We want to show that we already have the technology available to handle the transition when the 700 MHz frequency range is released," emphasizes Capdeville.

According to the CTO, TIM already has 4G technology in Brazil and makes use of all features of that spectrum. "This is performance that demonstrates our efficiency in using all possible capacity, evolving toward the 5G standard," he states.

"We are pleased to be part of TIM's network with the LTE-Advanced solution, which will be able to offer its users extensive network coverage and a better mobile broadband experience, ensuring ongoing customer loyalty. Ericsson will be working with TIM to meet the growing expectations of users in Brazil," says Carina Martins, head of MBB Solution Development for Ericsson in Brazil.

TIM is the Brazilian operator investing the most in mobile telephony during the 2015-2017 period, with a R\$ 14 billion investment plan. The company holds roughly a third of the 4G market in Brazil, with 71 cities covered by the fourth generation network and the highest number of 4G antennas in Brazilian capital cities. The goal is to expand LTE coverage to more than 52% of the country's urban population by the end of 2015.

NOTES TO EDITORS

About Qualcomm Incorporated

Qualcomm Incorporated (NASDAQ: QCOM) is the global leader in advanced 3G and 4G wireless technology. Qualcomm Incorporated includes QTL, Qualcomm's licensing division and most of its patent portfolio. Qualcomm Technologies, Inc., a subsidiary of Qualcomm Incorporated, together with its subsidiaries, handles all engineering, research and development functions at Qualcomm, and all of its product and service divisions comprehensively, including QCT, its semiconductor company. For over 25 years, Qualcomm's ideas and inventions have been responsible for the evolution of digital communications, bringing people closer to all places, information and entertainment, and to each other. For more information, visit the Qualcomm website, the OnQ blog and the Twitter and Facebook pages.

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About TIM

TIM is the second largest carrier in Brazil and the leading company in the prepaid segment. It currently has 73 million customers and 26.21% market share.

The company's mission is to connect society and take care of each customer so that everyone can do more, enhancing users' lives through its communication services. To this end, in addition to focusing on innovation and accessibility, TIM prioritizes the quality of its network and service. Proof of this commitment is the R\$ 14 billion investment in Brazilian operations over the three-year period ending in 2017.

Transparency is also a pillar for the operator. TIM is the only telecommunications company in the BM&FBOVESPA New Market recognized as having the highest level of corporate governance, in addition to also being part of the Enterprise Sustainability Index (Índice de Sustentabilidade Empresarial - ISE) and the Carbon Efficient Index (Índice de Carbono Eficiente - ICO2). The Open Doors (Portas Abertas) project stands out, (www.tim.com.br/portasabertas), allowing consumers to keep up with the network expansion and enhancement actions, in addition to providing a real picture of TIM's coverage. Initiatives by the TIM Institute (www.institutotim.com.br) also deserve attention, striving to create and enhance strategic resources to democratize science and innovation in Brazil.

For further information, please visit www.tim.com.br, [www.twitter.com/timbrasil](https://twitter.com/timbrasil) or www.facebook.com/timbrasil.

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About Ericsson

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Ericsson is the driving force behind the Networked Society – a world leader in communications technology and services. Our long-term relationships with every major telecom operator in the world allow people, business and society to fulfill their potential and create a more sustainable future.

Our services, software and infrastructure – especially in mobility, broadband and the cloud – are enabling the telecom industry and other sectors to do better business, increase efficiency, improve the user experience and capture new opportunities.

With approximately 115,000 professionals and customers in 180 countries, we combine global scale with technology and services leadership. We support networks that connect more than 2.5 billion subscribers. Forty percent of the world's mobile traffic is carried over Ericsson networks. And our investments in research and development ensure that our solutions – and our customers – stay in front.

Founded in 1876, Ericsson has its headquarters in Stockholm, Sweden. Net sales in 2014 were SEK 228.0 billion (USD 33.1 billion). Ericsson is listed on NASDAQ OMX stock exchange in Stockholm and the NASDAQ in New York.

Ericsson has been present in Latin America since 1896, when the company established an agreement in Colombia and delivered equipment for the first time in the region. In the early 1900s, Ericsson increased its presence in Latin America by signing commercial deals in Argentina, Brazil and Mexico. Today, Ericsson is present in more than 50 countries within South America, Central America, Mexico and the Caribbean, which combined count the region as one of the few with complete Ericsson installations, including two Production Units, R&D Center and Training Center. Ericsson is the market leading telecom supplier, with over 40% market share in Latin America and more than 100 telecom service contracts in the region.

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