Press release

TIM’s 5G overcome the 2 Gbps speed, a new European record achieved on the mmWave live network

This milestone was achieved thanks to 26 GHz frequencies to enable high speed, low latency and high-security services

Rome, 8 January 2020

TIM confirms its leadership in 5G innovation and in the development of next-generation networks and services by successfully completing the first connection in Europe able to permanently overcome the 2 Gbps speed on a 5G live commercial network with 26 Gigahertz (GHz) millimeter-wave (mmWave) frequencies acquired through MiSE’s 5G bid.

TIM has achieved this key record together with Ericsson and Qualcomm Technologies, Inc., a subsidiary of Qualcomm Incorporated, and this represents an additional milestone regarding millimeter-wave to those already achieved in Turin in 2017 through the first 5G connection in Italy and in Rome in 2018, with the first 5G videocall in Europe. The speed milestone was achieved using an Askey CPE RTL0200 powered by a Qualcomm® Snapdragon™ X50 5G Modem-RF System.

This result marks a significant milestone toward 5G evolution, kicking-off the use of 200 MegaHertz (MHz), acquired through MiSE’s bid on 26 GHz spectrum, in addition to further 200 MHz available thanks to the bid’s Club Use1, for a total amount of 400 MHz. The performances achieved will improve significantly during 2020, as the network will be able to use up to 800 MHz and afterwards up to 1.000 MHz.

Being able to achieve Gbps speeds and provide with high network capacity thanks to the wide bandwidth available, 26 GHz mmWave frequencies fit the further development of 5G Fixed Wireless Access (FWA) services both in the areas not yet covered by fixed ultrabroadband and the creation of “dedicated” 5G indoor coverage. Furthermore these features enable new Industry 4.0 scenarios based on services with exceptional high speed, extremely low latency and the highest security and reliability levels.

TIM achieved the significant milestone grounded on a standard 3GPP Non-Stand Alone (NSA) solution able to let devices and network components from different providers interacting and to aggregate TIM’s 4G and 5G network, already implemented in 3.7 GHz spectrum.

Michele Gamberini, TIM’s Chief Technology and Information Officer commented: “TIM has been pioneer in the millimeter-wave spectrum innovation and with this new European 5G record the company confirms its technological leadership, thanks to its strive toward innovation and a cutting-edge network infrastructure, able to enable the entire country’s digital transformation. This milestone paves the way to the development of new 5G solutions to grant fixed ultrabroadband to families, companies and public authorities not yet covered. This also includes coverage dedicated to the development of robotics and automation digital services in the smart manufacturing area. All of our customers will benefit from these features, making our network the most advanced in the world.

1 26GHz Club Use means the possibility - exclusive for 5G millimetre-wave spectrum assignees – to use the full 1 GHz band if not used by other assignees.

TIM S.p.A.
Sede legale: Via Gaetano Negri, 1 - 20123 Milano
Cod. Fisc./P. IVA e Iscrizione al Registro delle Imprese di Milano: 00488410010 - Iscrizione al Registro A.E.E. IT08020000000799
Capitale Sociale € 11.677.002.855,10 interamente versato Casello PEC: telecomitalia@pec.telecomitalia.it
therefore be able to take advantage of a wide range of integrated solutions that will allow them to fully enter the Digital Society”.

Emanuele Iannetti, Country Manager at Ericsson Italy, says “5G will be the main innovation platform of the next decade and it will allow Italy to be increasingly competitive and attractive in the global scenario. We are extremely pleased that TIM has chosen Ericsson’s 5G technology to achieve this important milestone, placing our country at the forefront of the commercial implementation of the fifth generation of mobile networks. Ericsson thus confirms its technological leadership and its readiness to anticipate any market demands.”

“Qualcomm Technologies congratulates TIM on this significant milestone which again demonstrates the potential of 5G mmWave technology and shows how operators are able to use a wide range of spectrum bands to deploy 5G. 2020 will see a significant expansion in 5G coverage and the use of mmWave bands will play a clear role in the build-out”, said Enrico Salvatori, president, Qualcomm EMEA.

TIM won the best 5G frequencies submitted by MiSE thanks to a 2.4-billion-euro investment, aimed at acquiring all three different available frequencies (3.7 GHz, 26 GHz and 700 MHz). The 3.7 GHz spectrum, where TIM has 80 MHz in total, already allowed the company to develop in 2019 5G coverage, with the goal of achieving 120 cities, 200 holiday destinations and 245 industrial districts by 2021, in addition to 200 large enterprises specific projects.

Thanks to this record TIM kicks off the use of the 26 GHz spectrum, where the company owns 200 MHz, while the 700 MHz spectrum (10 MHz in uplink and 10 MHz in downlink) will be available starting from 1st July 2022.

The wide 5G spectrum portfolio with complimentary features – together with the significant additional spectrum under 3 GHz already deployed by 4G network and “5G ready” – allows TIM to confirm its leadership in the 5G technology and in the development of all innovative services supporting digital transformation.

TIM Press Office
+39 06 3688 2610
https://www.telecomitalia.com/media
Twitter: @TIMnewsroom