

Press Note

Bari Matera 5G: TIM, Fastweb and Huawei present the first field applications based on the fifth generation mobile network

The first concrete applications of 5G in the tourism sector and Industry 4.0 are coming. Remote visits to the archaeological sites of Matera using Virtual Reality and maintenance of naval engines in Bari supported by Augmented Reality

Bari and Matera will be among the first "5G cities" in Europe for innovative services dedicated to health, culture, automotive and public safety sectors

The project involves a total investment of 60 million euros over 4 years

Bari, Matera, 25 May 2018 - 5G leaves the laboratories to enter the implementation phase. During a video press conference between Bari and Matera today, TIM, Fastweb and Huawei presented the first scenarios in which Virtual Reality and Augmented Reality will be used in the context of the 5G technology experimentation promoted by the Ministry of Economic Development. The presentation is one month ahead of the schedule declared at the launch of the project and is the first concrete application of 5G in our country.

The demonstration of the first scenarios of live use – just after the first 5G antennas in Bari and Matera were switched on – is a turning point for the project, which aims to reach 75% of the population in the two cities already by the end this year, to reach full coverage by 2019. The goal is to transform these territories into an actual digital laboratory.

The potential of the 5G network was shown during the press conference in terms of transmission capacity, significant decrease in latency and directionality of the signal on moving terminals through the first innovative applications of Virtual Reality for digital tourism and Augmented Reality for the support of production processes and Industry 4.0.

The first real end-to-end use scenario was presented in Matera, which was developed by the Bari-Matera 5G Consortium with the excellence of local partners who operate in the field of technological innovation and research, as well as local institutions that support digital tourism dedicated to the enrichment of the cultural and artistic heritage of Matera, European Capital of Culture 2019.

In particular, the Virtual Reality solution presented by Giorgio Castelli, Head of TIM Services Innovation, allows people to remotely visit some of Matera's main tourist attractions; the visitor, wearing a visor, is free to move in the dedicated areas, approach the walls and touch objects in a totally innovative and immersive experience; in this new virtual world, the visitor can meet other people who are in different geographical locations, and interact with them as well as follow the directions given by a real guide of Matera.

In Bari, the Augmented Reality solution for the maintenance of ship engines developed by the Bari-Matera 5G Consortium was presented by Michele Gramegna, Industrial Activities Manager for Isotta Fraschini Motori. Thanks to the use of a Smart Helmet and the high-level performance of the high speed and low latency network, remote assistance can be provided to the workers involved in the assembly and disassembly of a ship's engine, through assistance and reception of three-dimensional indications overlapping the image of the motor. The application therefore allows greater speed, effectiveness and quality of maintenance and staff training activities.

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The evolution of the project was illustrated to the press at the Terminal Crociere hall of the Port of Bari and at Palazzo Lanfranchi in Matera by **Enrico Maria Bagnasco**, TIM Technology Innovation Manager and General Assembly Secretary Bari Matera 5G, **Andrea Lasagna**, Technology Officer at Fastweb, **Fabio Moresi**, Wireless Marketing Manager at Huawei Italy, in the presence of the Bari Port Authority President, **Ugo Patroni Griffi**, FIM-CISL General Secretary, **Marco Bentivogli**, the Invitalia CEO, **Domenico Arcuri**, the Mayor of Bari, **Antonio Decaro**, the Mayor of Matera, **Raffaello Giulio De Ruggieri** and the Councillor for Innovation for the Municipality of Matera, **Enzo Acito**.

"In just over six months we have already witnessed the development of the first applications of 5G technology," commented the Mayor of Bari **Antonio Decaro**. "This shows how speed, a predominant feature of 5G, can be tested in the field, starting from these aspects of the application project. Today we have observed two different experiments of 5G applied to two aspects that exemplify the potential for development of Bari and Matera, tourism and innovation in industrial processes. We hope to soon be able to view other applications of 5G. Perhaps in reverse, on tourism for Bari and on industrial development for Matera, because regardless of the individual peculiarities of the respective cities, we believe that 5G is an extraordinary opportunity that the Government has given our territory. And also because if we keep industrial development and tourism together, we will be able to create a uniform and solid network that will allow the whole of the Mezzogiorno to grow".

"What is relevant here," says the Mayor of Matera **Raffaello de Ruggieri** "is the choice to link 5G to Matera. Matera is an intelligent guinea pig that can express the results of research. It is a city that cannot live on tourism alone, but rather must work on strengthening primary and secondary supply chains if it wants to solve the problem of unemployment. The municipality must become a vital propellant, that is, it must stimulate, provoke, and where possible create business. We have history and cultural heritage, but we must continue to produce new history, that of the present and that of the future. That of the knowledge economy. That of the digital economy. This is why we have affirmed, with a catch phrase, that we want to transform the farming neighbourhood into digital neighbourhoods and move from heavy industries to thinking industries".

"The new 5G network of Bari and Matera is one of the first installations in Europe and in the world through which we can offer innovative and excellent performance, bringing about new scenarios in which it can be applied," states **Saverio Orlando**, TIM Technology Manager. "The new low latency and high speed mobile technology, supported by the fibre optic network, allows us to create an innovative ecosystem that involves all industrial and service processes, with a particular focus on the development of new services related to tourism and Industry 4.0, as well as public safety and transport, thus creating digital value for the cities involved and for the entire country".

"We are at an important turning point in the roadmap for Italy towards 5G", **Andrea Lasagna**, Fastweb's Technology Officer, underlines. "With the launch of this new phase of the project, today we present the first experiences, and with these we lay the foundations for the development of completely new scenarios that will profoundly transform industry, tourism and all sectors in which 5G solutions can be applied. The time has come to bring this digital revolution to our cities so that they may become evolved ecosystems at the service of their inhabitants: 5G is not just a new network, it is a new way of thinking about telecommunications and services".

"We have finally moved from the laboratory phase to the field phase. Today's event allows us to experience first hand the first 5G-oriented products that enable the so-called Gigabit society. All this thanks to the Massive MIMO technology that increases cell capacity and the availability of 100 MHz broadband channels,"

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says **Fabio Moresi**, Wireless Marketing Manager Huawei Italy. "Today we also begin to see the first 5G terminals enabling mobile use".

For further information on the Bari-Matera 5G project, visit www.barimatera5g.it.

BariMatera5G is the project with which TIM, Fastweb and Huawei have jointly won the MISE call for tenders for the trial of the new 5G technology in the two cities. By means of an investment of more than EUR 60 million over 4 years, Bari and Matera will be among the first "5G cities" in Europe, in which innovative services in sectors like healthcare, Industry 4.0, tourism, culture, the automotive industry and Public Safety will be tested. The project involves, in addition to the three leading companies, 52 partners of excellence, including 7 universities and research centres, 34 large corporations and 11 public authorities. The 5G network set up in Bari and Matera will allow a transmission capacity ten times greater than that of 4G and the trials will involve 70 use cases, bringing about a radical transformation of the territories involved.

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