





**Press Release** 

# Ericsson, TIM and Comau test the "factory of the future" thanks to 5G network slicing

- The three leading companies have joined forces to develop, on an experimental basis, innovative solutions for Industry 4.0 and smart manufacturing by leveraging the potential of the 5G network
- This initiative is part of the EU-funded 5Growth project

**Turin, June 16, 2022** – Thanks to TIM and Ericsson's deployment of a 5G network at Comau's headquarters in Turin (Italy), three new applications have been launched to demonstrate the advantages of the new technology, and in particular those arising from the slicing functionality of the network, within an industrial environment. "Network Slice" is a virtual logical network slice of 5G that can support different application cases with special characteristics and requirements. The same physical 5G network can therefore have multiple slices, each dedicated to specific services or customers, thus offering greater flexibility, an efficient use of network resources, and more opportunities for companies to deploy differentiated services with specific requirements for speed, latency and reliability.

The experiment's first use case captures the movement of a robot and through an ultra-low latency radio link, produces a synchronized digital twin. The movement of the mechanical robot and the respective virtual renderings are perfectly aligned in time. Furthermore, as the central system is constantly updated, it can consequently decide which production process is most convenient while controlling all the function parameters.

The second application focuses on the real-time monitoring of industrial assets. Data is captured from a massive number of sensors and sent to an application that uses the acquired data to improve predictive maintenance planning, production processes and quality. Through the integration with Comau's in.Grid digital platform, effective recognition of deviations from normal operation can be fixed in a timely manner. Similarly, remote support and access to cloud-based resources, such as high-definition videos and live connections with Augmented Reality devices, strongly reduce the repair time in case of failure.





The third use case demonstrates immersive telepresence for an enhanced remote support scenario. Maintenance staff present on site are assisted remotely by an expert in order to resolve problems, taking advantage of both augmented reality (AR) and digital tutorials. Thanks to the high bandwidth capacity of 5G, it is possible for the operator to share what he sees in real time with remote experts, which translates to time and cost reducing benefits.

"We are proud to be able to support business development through a digital ecosystem that undoubtedly represents huge opportunities to produce innovative solutions," says Daniele Franceschini, Head of Innovation at TIM. "With partners such as Comau and Ericsson, we can guarantee the development of new services and networks that can be configured in real time with a high level of security to create customized business scenarios such as those related to Industry 4.0. Thanks to our skills we will contribute to digitalization, providing solutions that improve the production processes of businesses and public administration."

"Comau is committed to defining a disruptive automation paradigm, which involves the use of external sensors to perceive the automation environments and centralize in real time the data perceived to a central "brain". The information collected is used to automatically define and optimize the tasks to be performed by the machines in a flexible and efficient way" explained Alessandro Piscioneri, Digital Solutions and Services Segment Leader. "The 5Growth project, which we have developed in close collaboration with important partners TIM and Ericsson, has enabled Comau to directly field test the value of the private 5G technology as an enabling factor for this innovative architecture, especially in a mobile robotics context."





Alessandro Pane, Research and Development Director, Ericsson Italy, commented, "Together with TIM and Comau we have demonstrated some applications that are indispensable in a rapidly evolving manufacturing context, where production needs to be safer, faster and more flexible. Network slicing will play a crucial role in enabling innovative services, accelerating the digital transformation of all enterprises. With the tools that have been developed in Ericsson's R&D centers in Italy, and can efficiently manage network resources and provide differentiated services with dedicated performance, operators can now enable new use cases for different industrial sectors and leverage new market opportunities."

The European Union-funded 5Growth (5G-enabled Growth in Vertical Industries) project deals with the development of 5G solutions capable of meeting the rigorous requirements of major industry verticals such as Industry 4.0, Transportation, and Energy, following a field-based-trial approach. Started in 2019, the project represents a further step forward in the long-standing partnership among Ericsson, TIM and Comau.

## ABOUT ERICSSON

Ericsson enables communications service providers to capture the full value of connectivity. The company's portfolio spans the business areas Networks, Cloud Software and Services, Enterprise Wireless Solutions, and Technologies and New Businesses. It is designed to help our customers go digital, increase efficiency and find new revenue streams. Ericsson's innovation investments have delivered the benefits of mobility and mobile broadband to billions of people globally. Ericsson stock is listed on Nasdaq Stockholm and on Nasdaq New York.

www.ericsson.com

## ABOUT TIM

TIM is the leading ICT group in Italy and Brazil, developing fixed, mobile, cloud and data center infrastructure and offering services and products for communications and entertainment, placing itself at the forefront of digital technologies.

TIM addresses its offer to individuals, businesses and public administrations, as well as to the wholesale market, and makes use of specialized digital companies that create solutions, also in partnership with leading groups: Noovle is TIM's cloud company, Olivetti is the digital hub focusing on the development of loT solutions, Telsy is the cybersecurity company, and Sparkle builds and provides international infrastructure and services. Kena is the Group's second mobile telephony brand, while TIMVision produces and distributes entertainment content.

In Brazil, TIM Brasil is one of the main players in the South American telecommunications market and a leader in 4G coverage.







#### ABOUT COMAU

Comau, a member of Stellantis, is a worldwide leader in delivering advanced industrial automation products and systems. Its portfolio includes technology and systems for electric, hybrid and traditional vehicle manufacturing, industrial robots, collaborative and wearable robotics, autonomous logistics, dedicated machining centers and interconnected digital services and products able to transmit, elaborate and analyze machine and process data. With over 45 years of experience and a strong presence within every major industrial country, Comau is helping manufacturers of all sizes in almost any industry experience higher quality, increased productivity, faster time-to-market and lower overall costs. The company's offering also extends to project management and consultancy, as well as maintenance and training for a wide range of industrial segments. Headquartered in Turin, Italy, Comau has an international network of 6 innovation centers, 5 digital hubs, 9 manufacturing plants that span 13 countries and employ 4,000 people. A global network of distributors and partners allows the company to respond quickly to the needs of customers, no matter where they are located throughout the world. Through the training activities organized by its Academy, Comau is also committed to developing the technical and managerial knowledge necessary for companies to face the challenges and opportunities of Industry 4.0.

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