



# Porsche Engineering and Vodafone Business push 5G infrastructure

**12/12/2022** Porsche Engineering and Vodafone Business have established Europe's first 5G hybrid mobile private network (MPN) at Nardò Technical Center (NTC) for the development of intelligent and connected vehicles.

The proving ground in Southern Italy, which is owned by Porsche and operated by Porsche Engineering, now offers its customers a real-time communication network, which promises reduced delays, wider bandwidth, improved security and reliability, and faster deployment time. NTC thus further underlines its role as a leading technology partner for the integrated development and validation of intelligent and connected vehicles of the global automotive industry.

"At our proving ground in Nardò, we are committed to constantly push technologies to the next level—so our customers can successfully meet the increasing demands of future mobility," says Peter Schäfer, CEO of Porsche Engineering and Chairman of the Shareholder Committee of the Nardò Technical Center. "With the new 5G network, NTC offers its customers now an even better infrastructure to develop and test intelligent, autonomous, and connected vehicles."

The new mobile network infrastructure enables 4G and 5G coverage throughout the testing center, which occupies an area of over 700 hectares in the Apulian region and has more than 20 tracks for high-performance testing. With the Vodafone Business 5G solution, NTC aims to enable its customers to efficiently develop and validate a wide range of future business-critical applications, from new connectivity, vehicle-to-infrastructure, vehicle-to-vehicle and highly-automated driving functions to self-driving vehicles.

As a next generation MPN, the new system features a hybrid infrastructure, using a private network fully integrated into Vodafone's public mobile network. Thanks to this innovative design, both private and public coverage is provided at the same location. Thus, the local population can benefit from the availability of the fast 5G public network and at the same time NTC's customers can make use of a private network that guarantees high standards in data security. Besides the new mobile network, now NTC also offers its customers a high-performance 1 Gbit/s connection. This allows a fast and direct connection to the cloud, enabling a globally networked cooperation and even more efficient data-driven engineering.

"5G mobile private networks can act as a springboard for companies by enabling them to evolve the way they do business," adds Vinod Kumar, CEO of Vodafone Business. "In Nardò, MPN technology enables a facility that resembles an actual smart city, with coverage that is seamless on and off campus for the next generation of applications that will transform transportation and mobility. We're excited to help the team in Nardò to plan for the future and unlock the business potential with some of our latest technologies."

The new network marks another important chapter in the future-oriented development of the testing center. Since the acquisition of NTC by Porsche in 2012, continuous investments in the modernisation and technological upgrade of the proving ground have been made. Besides investments in workshops, safety systems, and other tracks, the famous 12.6 kilometers circular track, with a diameter of four kilometers, was completely renovated in 2019—including the laying of fibre-optic cables for fast data transmission and for appropriate road signage to validate automated driving. NTC's new 5G network is part of broader collaboration initiatives between the Porsche Group and Vodafone that, in August 2021, led to the deployment of a standalone 5G network at the Porsche Development Center in Weissach, Germany.

## About Nardò Technical Center

Nardò Technical Center in Puglia—since 2012 operated by Porsche Engineering Group GmbH—develops and tests connected and intelligent vehicles of the future. Founded in 1975, it now operates more than 20 test tracks and test facilities on more than 700 hectares and employs more than 160 people. Nardò Technical Center offers state-of-the-art engineering services for testing the vehicles of more than 90 automotive companies worldwide. Nardò Technical Center's high-speed ring in Salento is unique in the world with a length of 12.6 kilometers, allowing vehicles to be tested under extreme conditions. Throughout its history, Nardò Technical Center has hosted tests of considerable

importance, in several cases setting records of international significance.

## About Porsche Engineering

Porsche Engineering Group GmbH is an international technology partner to the automotive industry. The subsidiary of Dr. Ing. h.c. F. Porsche AG is developing the intelligent and connected vehicle of the future for its customers—including functions and software. Some 1,600 engineers and software developers are dedicated to the latest technologies, for example in the fields of highly automated driving functions, e-mobility and high-voltage systems, connectivity and artificial intelligence. Their aim is to carry the tradition of Ferdinand Porsche's design office, founded in 1931, into the future and develop the digital vehicle technologies of tomorrow. In doing so, they combine in-depth vehicle expertise with digital and software expertise.

## MEDIA ENQUIRIES



### Inga Konen

Head of Communications Porsche Schweiz AG  
+41 (0) 41 / 487 914 3  
[inga.konen@porsche.ch](mailto:inga.konen@porsche.ch)

## Consumption data

### Modelli Taycan Sport Sedan

Fuel consumption / Emissions

WLTP\*

emissioni CO combinato (WLTP) 0 g/km

consumo elettrico combinato (WLTP) 24,1 – 19,6 kWh/100 km

Gamma elettrica combinata (WLTP) 370 – 512 km

\*Further information on the official fuel consumption and the official specific CO emissions of new passenger cars can be found in the "Leitfaden über den Kraftstoffverbrauch, die CO-Emissionen und den Stromverbrauch neuer Personenkraftwagen" (Fuel Consumption, COEmissions and Electricity Consumption Guide for New Passenger Cars), which is available free of charge at all sales outlets and from DAT (Deutsche Automobil Treuhand GmbH, Helmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen, [www.dat.de](http://www.dat.de)).

## Image Sublines

Path: media/Images/img\_2.jpg

Title: Europe's first 5G hybrid mobile private network at Nardò Technical Center, 2022, Porsche AG

Subline: At NTC testing can be performed and monitored remotely thanks to real-time capability provided by 5G network.

Path: media/Images/gallery\_1/img\_4.jpg

Title: Europe's first 5G hybrid mobile private network at Nardò Technical Center, 2022, Porsche AG

Subline: The 5G technology contributes to enhancing the connectivity of a vehicle by improving multi-level interaction between backend services, roadside infrastructures and other vehicles. This enables the testing of complex traffic situations.

Path: media/Images/gallery\_1/img\_5.jpg

Title: Europe's first 5G hybrid mobile private network at Nardò Technical Center, 2022, Porsche AG

Subline: Nine basestations for the mobile network connectivity are interlinked via a fiber optic backbone, to guarantee high standards in data security and available bandwidth. The mobile network allows for managed hybrid access, allowing public SIMs to participate, as well as private SIMs managed by NTC.

## Link Collection

Link to this article

[https://newsroom.porsche.com/it\\_CH/2022/innovation/porsche-engineering-vodafone-business-5g-infrastructure-development-intelligent-connected-vehicles-nardo-technical-center-ntc-30633.html](https://newsroom.porsche.com/it_CH/2022/innovation/porsche-engineering-vodafone-business-5g-infrastructure-development-intelligent-connected-vehicles-nardo-technical-center-ntc-30633.html)

Media Package

<https://pmdb.porsche.de/newsroomzips/1302eede-5f69-4636-b1f6-f18de421b9b7.zip>

External Links

<https://www.porscheengineering.com/peg/en/>

<https://www.vodafone.com/business/home>