



Press release
02/09/2021

BMW Group and Vodafone integrate 5G and personal eSIM networking into a vehicle for the first time. **+++ BMW iX first premium vehicle with 5G +++** **Vodafone introduces the first mobile phone contract for a Personal eSIM in the car +++**

Munich / Düsseldorf. With the BMW iX, the BMW Group is the first premium manufacturer to integrate the 5G mobile radio standard into a globally available production vehicle and Vodafone is offering the first 5G mobile radio contract for such a vehicle.

An existing multi-SIM contract can be extended with the Vodafone One Number Car option to activate the Personal eSIM in the vehicle. This makes the vehicle another interconnected device for customers, like a smartwatch. In addition to the high bandwidth and low latency of 5G, they also benefit from significantly improved telephone quality* by the use of four external aerials and a 5G WiFi hotspot* for up to ten devices in the vehicle. The activated Personal eSIM is linked directly to the customer's BMW ID and can be smoothly transferred to other eSIM-capable vehicles, including the corresponding functions.

Mobility is entering the 5G era for the first time.

The new 5G mobile radio standard will significantly increase the data transmission options compared to the previous standard. This will create new, data-based applications and increase the quality of existing applications many times over. For mobility, this means a comprehensive extension of data-based services in the fields of entertainment and infotainment, automated and assisted driving and, above all, road safety. The 5G standard is a decisive accelerator for future innovations in mobility and other fields of application.

Vodafone and the BMW Group use Personal eSIM and Vodafone One Number Car to connect the vehicle and the customer with mobile radio based on 5G for

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the first time. The vehicle becomes an integrated part of the networked ecosystem of the customer.

Personal eSIM, real ‘Dual-SIM-Dual-Active’ and WLAN hotspot

The BMW iX is the technology flagship of the BMW Group and represents a real world first in networking. 5G and eSIM are being used in a production vehicle here for the first time.

In addition to the standard integrated vehicle eSIM, an additional Personal eSIM will be integrated, as previously familiar from smart devices such as tablets or smartwatches. The mobile phone technology installed in the vehicle enables both eSIMs to be active with 5G simultaneously with the full range of services (Dual-SIM-Dual-Active). The BMW iX multi-aerial system, specially developed for 5G, routes the radio signal from the performance-optimised multi-band aerials directly to the vehicle's infotainment system via a Gigabit Ethernet connection. In future, all passengers will benefit from the improved connection quality and increased data throughput, because a WLAN hotspot* can be activated in the vehicle via the Personal eSIM, allowing up to ten end devices to surf or stream at 5G speed. At the same time, it is no longer necessary to book an additional service or a separate mobile phone rate for the vehicle for a hotspot.

“BMW has always been a pioneer in the networking of mobility. We already installed the first SIM card in a vehicle back in 1997. With the 5G Personal eSIM, we are now integrating a completely new level of connectivity for our customers in the car in cooperation with Vodafone.” says Stephan Durach, Senior Vice President of Connected Company Development and Operations BMW Group

Vodafone introduces the first 5G mobile radio contract for cars.

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Vodafone is introducing the first smartphone rate for the car. To be able to use all benefits such as a 5G-optimised connection, improved connection quality and the use of digital services with a high-speed connection in the car, no additional contract needs to be concluded. When the BMW iX is available on the market, Vodafone customers can extend their mobile phone contract with the Vodafone One Number Car option to include the BMW iX and later other enabled BMW models for only 5 euros per month.

"Together with BMW, we are bringing the first Vodafone 5G in a car on the road. The multi-aerial system integrates fast network and digital services even better into the vehicle. For the customer in the car, this means even higher mobile phone quality, fewer annoying phone call interruptions and more digital variety to make even better use of the driving time," says Michael Reinartz, Head of Innovations at Vodafone Germany.

The booking can be easily started in the vehicle and the customer is guided step-by-step by the My BMW App or the My Vodafone App to the conclusion of the contract. When you book the rate option, the eSIM is activated for the vehicle for a one-time fee of 10 euros. After that, Vodafone One Number Car costs € 5 a month. There is no permanent commitment for the customer. The rate option can be cancelled on a monthly basis. Families can thus e.g. book the digital services at short notice for the next holiday trip by car. The mobile phone rate for cars will also be available in other BMW models next year. In addition to the BMW iX, the BMW i4 will also be 5G capable and have the Personal eSIM functions.

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Personal eSIM can be transferred to other enabled vehicles

Once the Personal eSIM has been activated via Vodafone with the Vodafone One Number Car rate, the data is not only stored in the vehicle, but also with the BMW ID. Customers can thus transfer the settings of the Personal eSIM to other enabled vehicles by activating the BMW ID. Activation of the Personal eSIM is carried out automatically with login with the BMW ID and is immediately available. Customers thus turn every 5G-capable BMW (rental or loan vehicle) into their connected device.

* The telephone and WiFi hotspot function will presumably be available by the end of 2021

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The BMW Group

With its four brands BMW, MINI, Rolls-Royce and BMW Motorrad, the BMW Group is the world's leading premium manufacturer of automobiles and motorcycles and also provides premium financial and mobility services. The BMW Group production network comprises 31 production and assembly facilities in 15 countries; the company has a global sales network in more than 140 countries.

In 2020, the BMW Group sold over 2.3 million passenger vehicles and more than 169,000 motorcycles worldwide. The profit before tax in the financial year 2020 was € 5.222 billion on revenues amounting to € 98.990 billion. As of 31 December 2020, the BMW Group had a workforce of 120,726 employees.

The success of the BMW Group has always been based on long-term thinking and responsible action. The company set the course for the future at an early stage and consistently makes sustainability and efficient resource management central to its strategic direction, from the supply chain through production to the end of the use phase of all products.

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Vodafone Germany

Vodafone is one of the leading telecoms and technology service providers in Germany. Half of all citizens in Germany are Vodafone customers – using Vodafone technology to access the internet, make calls and watch TV; and for connectivity at offices, farms and factories. Vodafone's networks keep Germany connected: families and friends, as well as politics, business and society. They are also helping essential sectors such as education and health care to continue operating in the COVID-19 pandemic.

The Düsseldorf-based company provides a comprehensive portfolio of internet, mobile, fixed and TV services. As digital transformation partner to German business and industry, Vodafone caters to enterprises of all sizes, from startups and SMEs to DAX-listed corporations. Vodafone is the #1 mobile network operator in Germany: no other market player connects more people and machines in Germany via its mobile network. It also has more gigabit fixed network connections and more TV customers in the country than any other German company.

Vodafone Germany employs some 16,000 people and generates service revenue of around 13 billion euros with more than 30 million mobile customers, almost 11 million broadband customers, over 13 million TV customers and numerous digital solutions.

As a gigabit company, Vodafone is a key contributor to the development of Germany's infrastructure. Its German cable footprint extends to more than 24 million households and it provides a gigabit service to around 23 million of those. Vodafone intends to provide two-thirds of all Germans with gigabit connections by 2022. With its 4G network, Vodafone reaches more than 99% of Germany's households and the Vodafone NB-IoT network for the industrial and business sectors is delivering IoT connectivity on 97% of Germany's total area. Vodafone has been operating Germany's first 5G network since mid-2019. Its 5G services are currently available to more than 25 million people, and 5G will have been rolled out to 30 million people by the end of 2021.

Vodafone Germany is the largest operating company of the Vodafone Group, one of the world's largest telecommunications companies, contributing around 30% of its revenues. Vodafone Group has over 300 million mobile customers, more than 28 million fixed broadband customers, over 22 million TV customers and connects 130 million IoT devices worldwide.

Vodafone is connecting people, places and things around the globe to improve lives and create a better future. A focus on sustainable business practices ensures that the technology building tomorrow's digital world does not come at the cost of our planet. The goals are: climate neutrality by 2025 and zero net emissions by 2040. To achieve them Vodafone is using electricity from renewable sources, switching to an electric vehicle fleet, has a sustainable supply chain and re-purposes re-sells or recycles 100% of network waste. Vodafone also helps other companies to minimise their carbon footprint with smart IoT technologies.

A diversity and inclusion agenda with a wide range of measures is at the heart of the Vodafone culture. It includes support for families, networks for women, fathers and members of the LGBT+ community, as well as diversity training programmes for managers. Vodafone is respectful of all individuals, regardless of nationality, disability, age, religious or sexual orientation, gender identity, belief or cultural background.

More information: www.vodafone-deutschland.de or www.vodafone.com.