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Research Dossier: Vodafone Germany



Country

Germany

Company Name

Vodafone D2 GmbH

Ownership Type

Subsidiary

Ownership/Controlling Entity

Vodafone Group

Website

<https://www.vodafone.de/>

MNC

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Company Overview

Vodafone Germany is one of the leading integrated telecommunications companies and also the largest TV provider in the Republic. With its 13,500 employees, the Group provides Internet, mobile, fixed network and television from a single source. As a gigabit company, Vodafone is driving forward infrastructure expansion in Germany. With more than 47 million mobile cards, 6.9 million fixed-network customers as well as numerous digital solutions generated Vodafone Deutschland's service revenues of more than 10 billion euros in the last financial year. Vodafone Germany is the largest subsidiary of the Vodafone Group, one of the largest telecommunications companies in the world.

Vodafone Deutschland 5G

Vodafone has implemented a progressive deployment strategy in which it expects to commercially release its 5G network in 2020. March 2018 saw the company begin deployment of its NB-IoT network, an essential component of 5G Massive Machine-Type Communication (mMTC), and within six months the company had achieved deployment in 90% of its network. In May 2018 the company implemented "5G Beam" technology across its existing network, which uses 128T128R beamforming to deliver faster data rates and improve capacity. By October 2018 Vodafone Germany had erected its first dedicated 5G base station, and demonstrated mobile holographic calling.

In June 2019 Vodafone Germany acquired a total of 130 MHz for the purposes of implementing 5G services, with 90 MHz acquired in the 3.5 GHz band and 40 MHz in the 2.1 GHz band. The acquisition requires relinquishing an existing 42 MHz allotment in the 3.5 GHz band to be replaced with a contiguous 90 MHz block.

Vodafone Germany officially launched its 5G network in July 2019 over the n78 (3500 MHz) band. 5G services were initially launched in Birgland (Bavaria), Lohmar (North Rhine-Westphalia) and Hattstedt (Nordfriesland), along with the cities of Cologne, Dusseldorf, Hamburg, Dortmund, and Munich.

▼ 3G UMTS Network Information

Details on UMTS network deployments are shown below. Data are often incomplete due to commercial nature. Consult dossier text for further details.

Launch Date 2006-03 Status Active

UMTS Band Packet Data Status

[B1 \(2100 MHz\)](#) [DC-HSPA+](#) Active

▼ 4G LTE Network Information

Details on LTE network deployments are shown below. Data are often incomplete due to commercial nature. Consult dossier text for further details.

Evolution	LTE Advanced Pro (LTE-A Pro)	Status	Active [Launched 2010-12]
Max. MIMO	Massive MIMO	Max. Modulation	256QAM
Carrier Aggregation	CA_7A-20A (B7+B20) CA_3A-7A-20A (B3+B7+B20)	Features	VoLTE

LTE Band	Channel Width	Status
B1 (2100 MHz)	5 MHz	Active
B3 (1800 MHz)	20 MHz	Active
B7 (2600 MHz)	20 MHz	Active
B20 (800 MHz)	10 MHz	Active
B28 (700 MHz)	10 MHz	Active
B32 (1500 MHz Suppl. DL)	20 MHz	Active
B38 (2600 MHz)	20 MHz	Active

▼ 5G NR Network Information

Details on 5G NR network deployments are shown below. Data are often incomplete due to commercial nature. Consult dossier text for further details.

Type	NR (Standard)	Status	Active [Launched 2019-07-17]
Max. MIMO	Massive MIMO	Max. Modulation	256QAM
Carrier Aggregation	-	Features	-

NR Band	Channel Width	Status
n78 (3500 MHz)	90 MHz	Active

▼ IoT Network - NB-IoT (LTE Cat-NB1)

Technology	NB-IoT (LTE Cat-NB1)	Status	Active
Band	B20 (800 MHz)	Launch Date	2018-03

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