



Federal Ministry
of Transport and
Digital Infrastructure

Making 5G a success in Germany

National policies to promote the development of Germany to become a lead market for 5G networks and applications

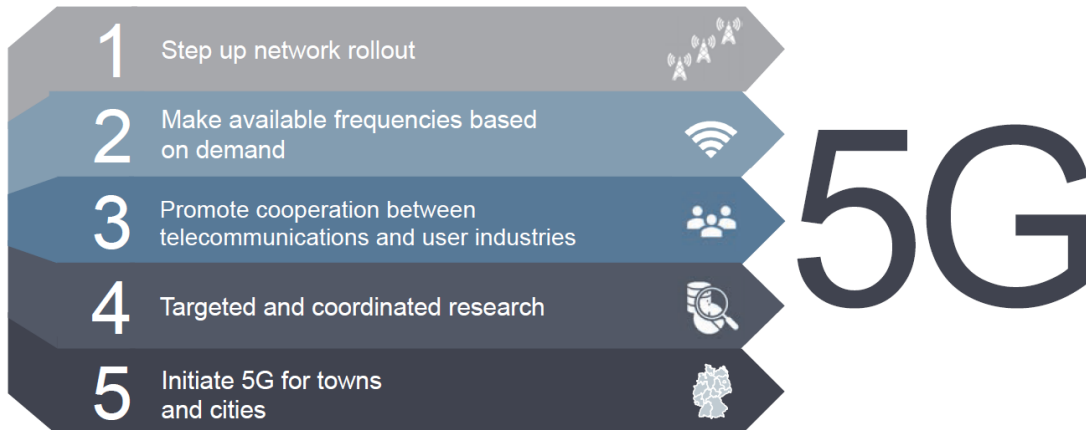


5G as key lever for the gigabit society

- Economy and society soon shaped by information and communications technologies
- 5G is key lever for gigabit society
- Keep up global race for leading markets in tech industries.
- Our goal: 5G fully implemented in Germany by 2025

5G-Strategy for Germany

- Launched by the German Federal Government in July 2017
- Describes political goals and fields of action
- The five fields of action are:





Five Fields of Action (1)

Step up network rollout (especially fibre optic cable)

- Facilitate connection of base stations via fibre optic cables
- Enhance co-usability of passive carrier infrastructures for 5G cells
- Create lean approval and decision-making processes



Five Fields of Action (2)

Make available 5G frequencies

- Step up harmonization of 5G spectrum at a global and European level
- Make available spectrum below 6 GHz
- Create planning certainty for the 26 GHz band early on
- Promote use of 700 MHz
- Make available test frequencies



Five Fields of Action (3)

Promote cooperation between telecommunications and user industries

- Hosted „5G Dialogue Forum“
- Actively support the standardization process



Mind mapping

4

Wo besteht im Gesundheitssektor Bedarf an:

- Übertragung sehr hoher Datenmengen?
- Übertragung in Echtzeit?
- Einbindung einer Vielzahl von Geräten?

Rascher Informationsaustausch zwischen den Sektoren (Krankenhaus - Praxis - Pflegeheim - Patient)

mobile Übertragung von Röntgenbildern

INTENSIV MEDIZIN

Tele-Pathologie

Sichere Datenübertragung von Fundusdaten

viele Patienten bei Event "Krankfeld" z.B. Distrikter-Treff → Verlust von Liveszenen

hohe Daten-ID Bilder Video

AUSNUTZUNG FÜR DEN EINZELNEN & VON BIG DATA

Biometrische Sensoren

... ist das so? (hohe Datenmenge)

Echtzeit-EKG

Zugang zu allen relevanten Fundusdaten Zeitnah (für Medik + Patienten)

NOTFALL MEDIZIN

Versorgung ländlicher Regionen mit Fachärzten und digitale Möglichkeiten

ein Datenkanal für alles

Warnungen bei kardiologischen Problemen

Retlungstransport

Medikation

Logistik von Medikamenten z.B. in Krankenhäusern

Tele-OP (aktive Chirurgie) + Lokalisation (3D-Kinematik)

BEHANDLUNG REMOTE VON EPIDEMIE, Daten-Kümmerei z.B. EBOLA

Verknüpfung der Leistungserbringer mit ambulanten / stationären

Fernübertragung von Patientendaten

hohe Anzahl von Daten pro Patient / pro Stadt

IOT-MEDTECH

OPEN DATA GESUNDHEITS- & FORSCHUNGSDATEN



Five Fields of Action (4)

Support 5G research

- Support and fund research and development activities within the scope of 5G applications
- Connect and coordinate research activities in Germany
- Eg. „A9 Digital Motorway Test Bed“ programme



Map showing 5G research activities in Germany

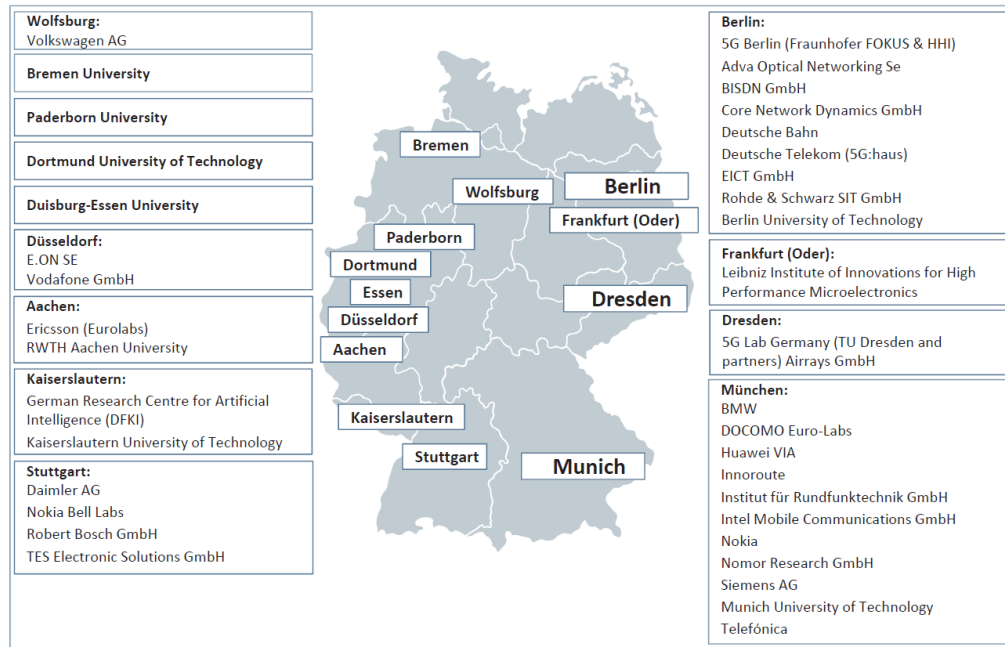


Figure 9 – 5G research centres in Germany (selection)
Source: Federal Government



Five Fields of Action (5)

Initiate 5G for cities and municipalities

- 5G offers solutions to societal challenges
- Cities, municipalities and counties should have necessary awareness, expertise and financial means to build 5G-hubs
- Organize a 5G competition → „5x5G Competition“

5G for smart regions



Figure 10 – 5G application examples for municipalities
Source: Federal Government

Thank you for your attention!

5G Strategy on the Internet:

<http://www.bmvi.de/goto?id=258024>

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