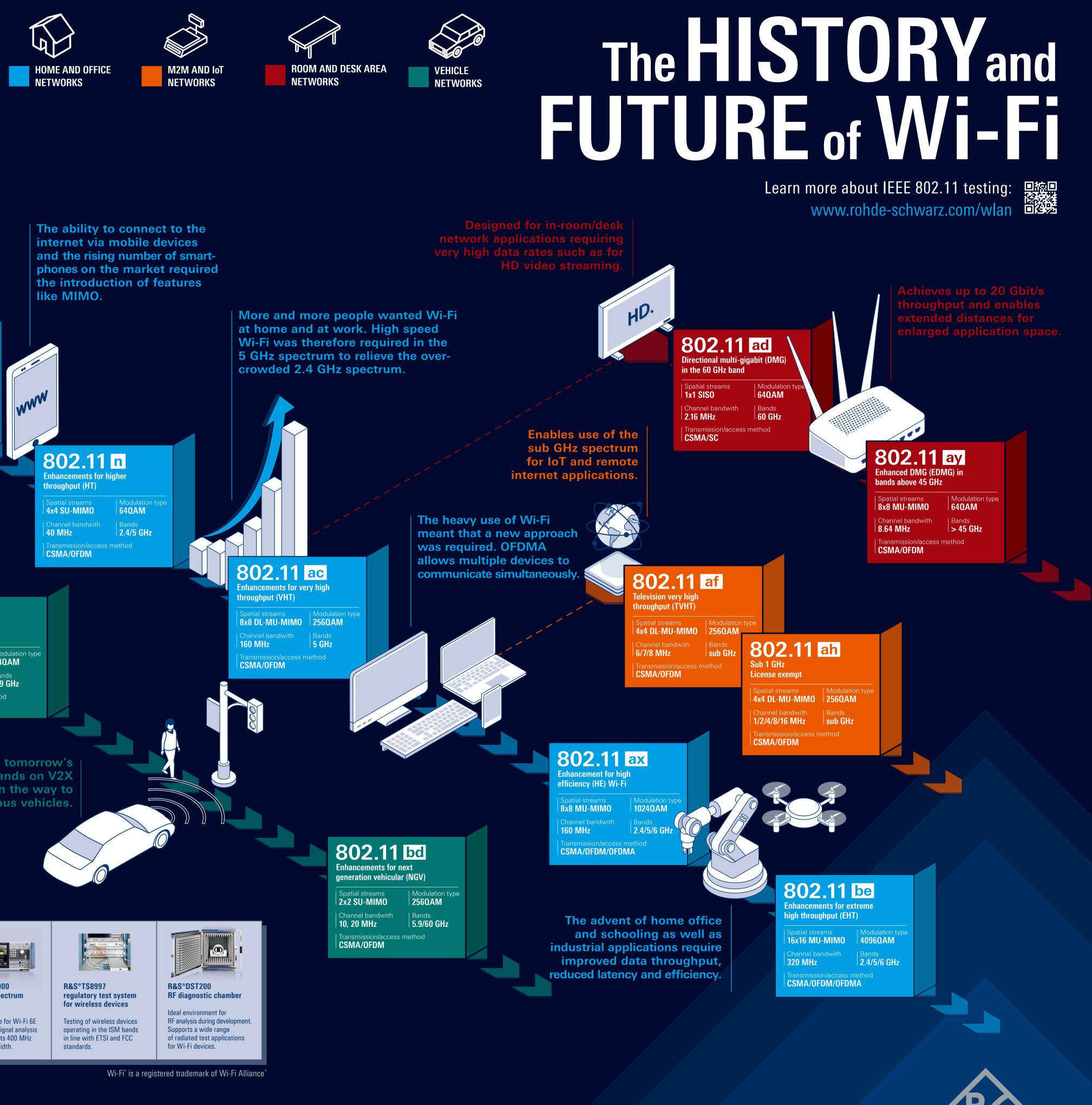
WaveLAN, the starting point for Wi-Fi development, was used for wirelessly connecting cashing machines.





802.11

Higher speed physical layer extension in the 2.4 GHz band l Modulati 1x1 SISO CCK Bands 2.4 GHz 22 MHz CSMA/DSSS

802.11 a

High speed physical layer in the 5 GHz band		
Spatial streams 1x1 SIS0	Modulation 640AM	
Channel bandwith 20 MHz	Bands 5 GHz	
Transmission/access method CSMA/OFDM		

Need for faster speed and better distance coverage.

802.11 Further higher data rate extension	g
Spatial streams 1x1 SIS0	Modul 640 A
Channel bandwith 20 MHz	Bands
I Transmission/access	method

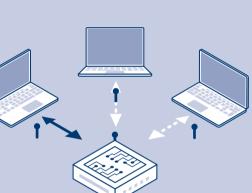
CSMA/OFDM

Multi-antenna transceiver methods

The evolution from SISO to single-user and multi-user MIMO was essential to meet data throughput demands.

Single input single output (SISO)

Use of a single antenna on access points and devices for sequential communications of the access point with connected devices, applying a carrier sense multiple access (CSMA) scheme to control spectrum access.

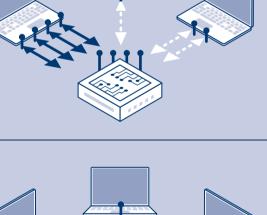


Single-user multiple input multiple output (SU-MIMO)

Use of multiple antennas to improve data throughput, applying a carrier sense multiple access (CSMA) scheme to control spectrum access.

Multi-user MIMO

Based on OFDMA, MU-MIMO allows simultaneous communications of stations in parallel. Beamforming enables multiple users to apply individual MIMO schemes at the same time to ensure efficient communications.



based car-to-car communications to enable emerging intelligent traffic services.

802.11 Wireless access in

venicular environments		
Spatial streams	Modulation	
1x1 SISO	640AM	
Channel bandwith	Bands	
10 MHz	5.9 GHz	
Transmission/access CSMA/OFDM	method	

Meet today's and tomorrow's rising demands on V2X communications on the way to fully autonomous vehicles.

Test and measurement solutions from Rohde & Schwarz



R&S[®]CMW270 wireless connectivity tester

The non-cellular expert designed for testing Wi-Fi access points (AP) and stations (STA) in signaling and non-signaling mode



manufacturing test set Ultra-compact, non-signaling tester optimized for production line testing including 4G, 5G and Wi-Fi 6 wireless technologies.

communications



R&S[®]SMW200A vector signal generator

The fine art of signal generation supports Wi-Fi modulation at full bandwidth and enables MIMO testing with real-time fading.



R&S®SMBV100B vector signal generator

The new benchmark in its class with up to 500 MHz modulation bandwidth and perfect accuracy even at high output power levels.



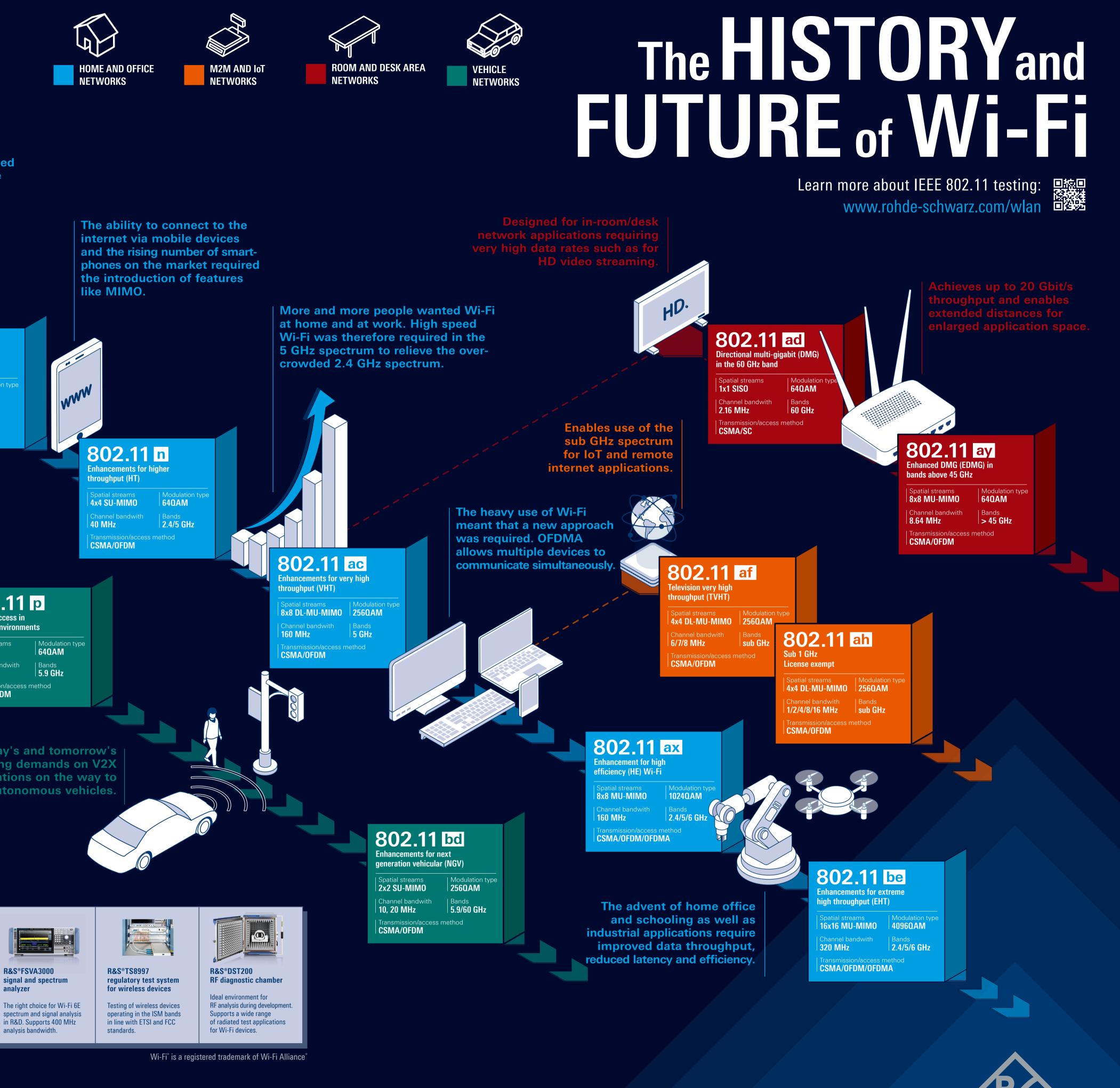


Setting standards in innovation

and usability for testing

Wi-Fi devices with 800 MHz

real-time analysis bandwidth.

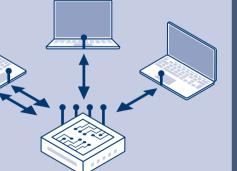


R&S®FSVA3000 signal and spectrum analyzer

spectrum and signal analysis in R&D. Supports 400 MHz analysis bandwidth.

ROHDE&SCHWARZ

Make ideas real



Provide Wi-Fi

