

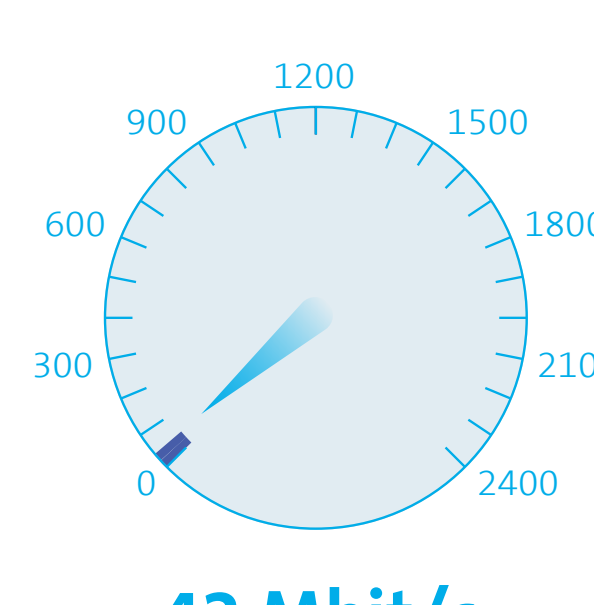
# Swisscom's mobile network

Technical innovations are constantly evolving, and so is Swisscom's network. It is geared to the needs of customers and is ready for the future with the advanced, climate-friendly and efficient new technologies 4G and 5G.

## 3G

2004 – the Internet goes mobile

3G Voice, SMS, e-mail, photos, apps, websites, videos

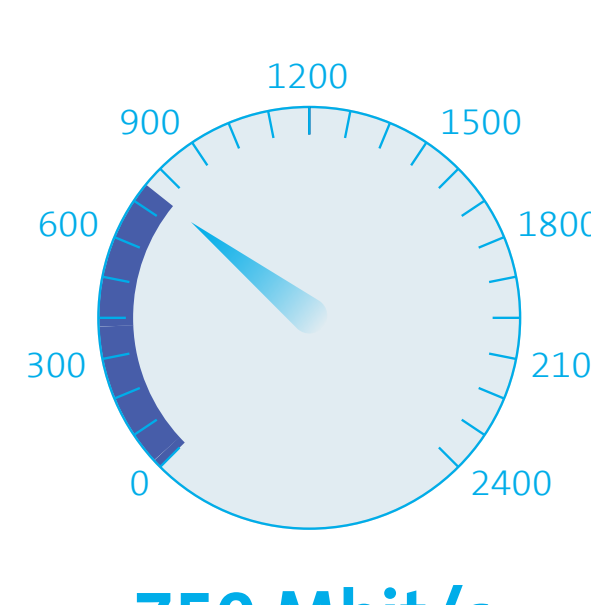


42 Mbit/s

## 4G

2012 – new applications for all situations

4G Voice, SMS, e-mail, photos, apps, websites, videos, large data volumes

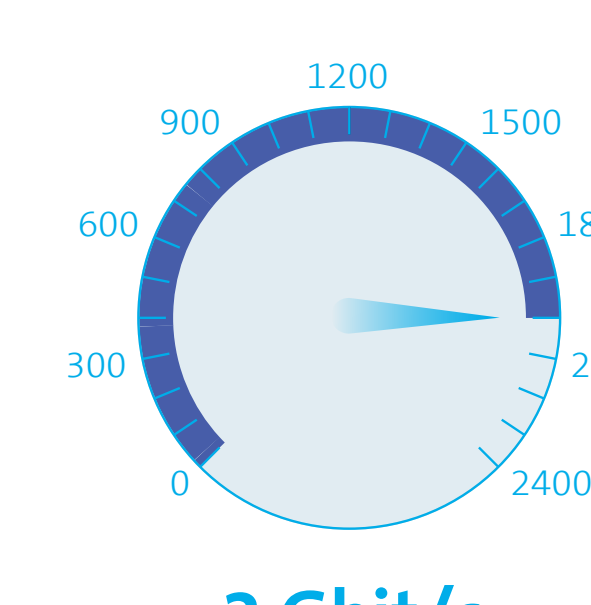


750 Mbit/s

## 5G

2019 – enormous data volumes transmitted in the shortest possible time

5G real-time applications, high-resolution videos, Internet of Things, Virtual Reality, huge data volumes



2 Gbit/s

### Efficiency increase from 3G to 5G

A current 5G mobile network consumes around 30 times less energy than a 3G installation to transmit the same volume of data. Future optimisations of 5G will increase this factor even further.

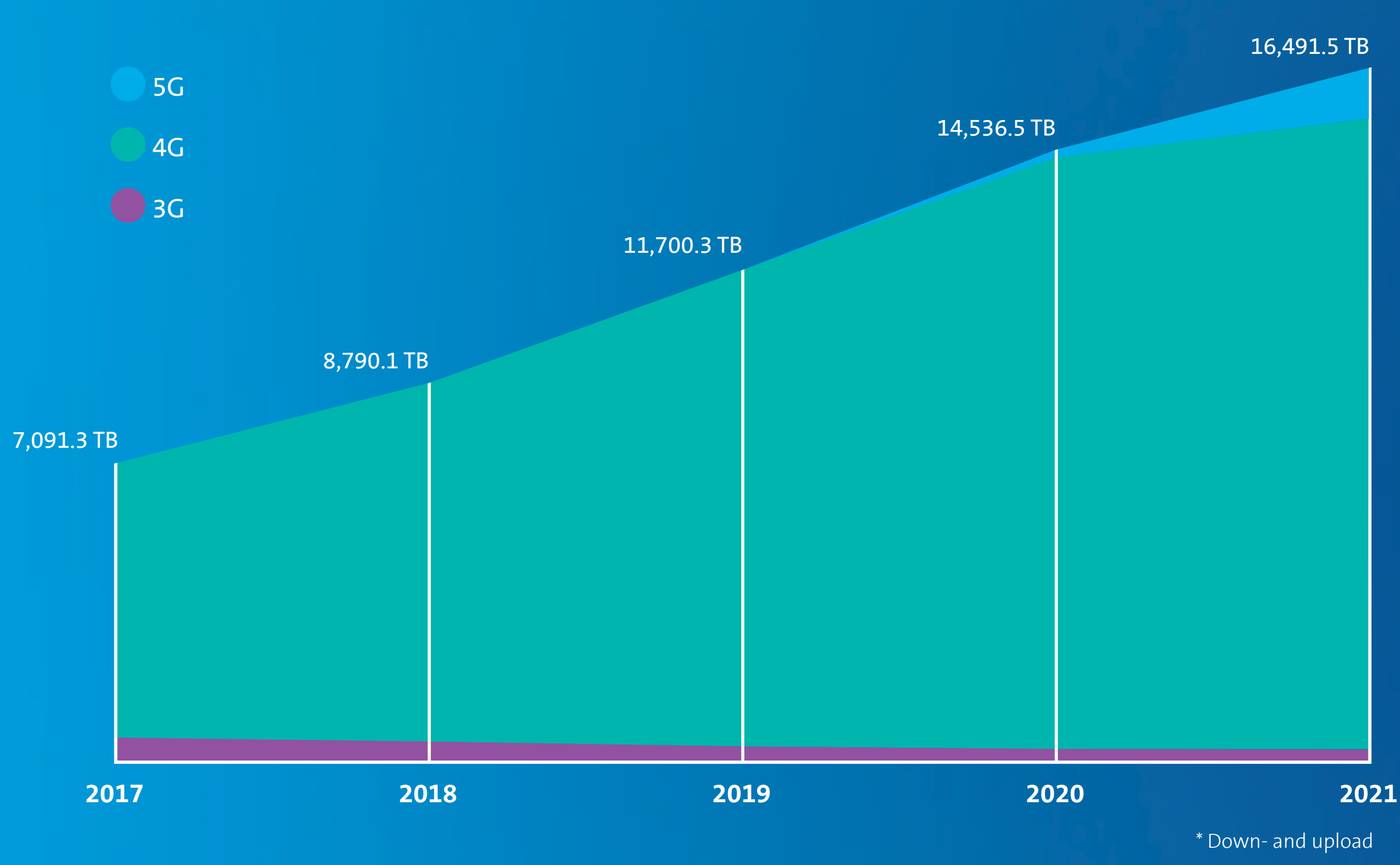
## 3G

The energy required to transmit 1 GB of data is around 25 watt-hours (Wh) for a 3G mobile communications installation.

## 5G

The energy required to transmit 1 GB of data in a 5G mobile communications installation is around 0.8 watt-hours (Wh).

### Transmitted data volume\* per week



\* Down- and upload

### Most used applications



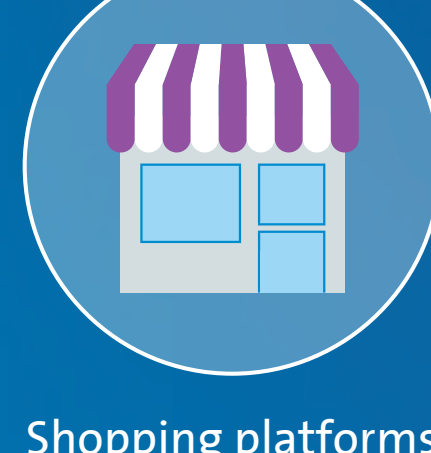
Video



Social networks

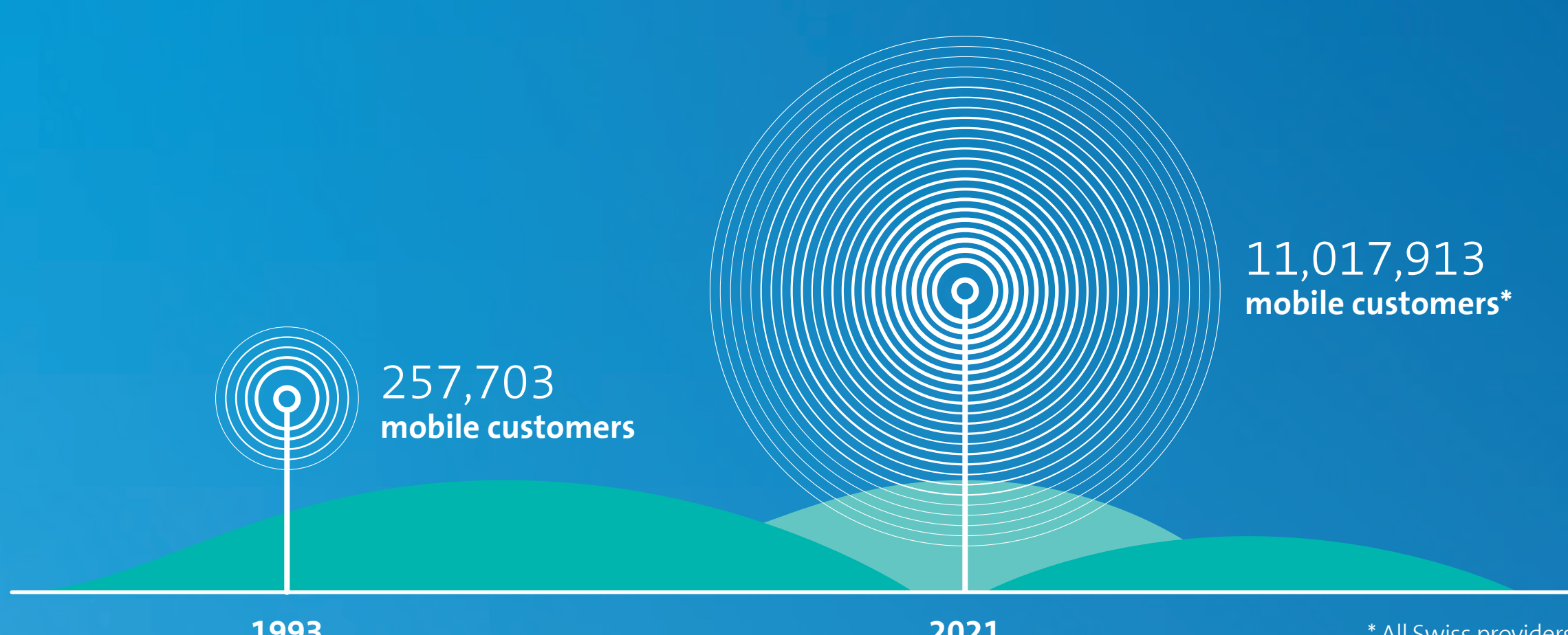


Communication



Shopping platforms

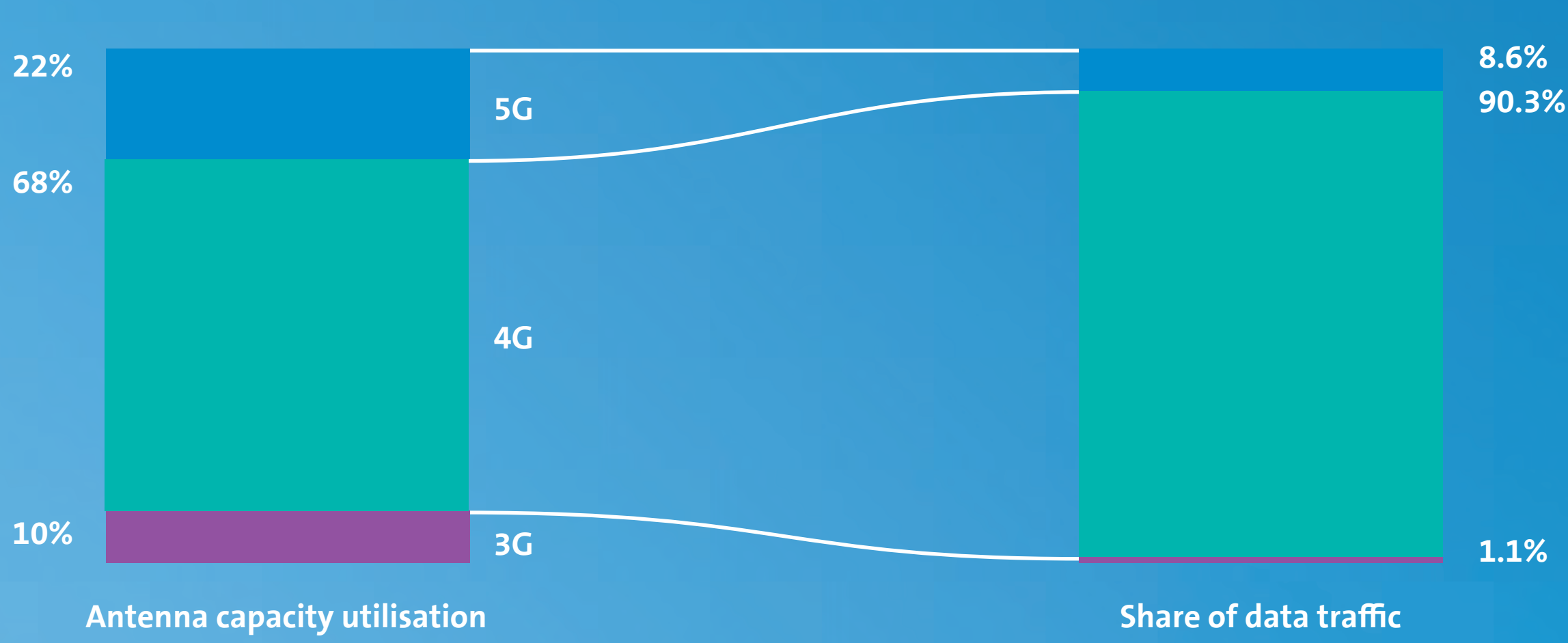
### The rapid development of mobile telecommunications



\* All Swiss providers

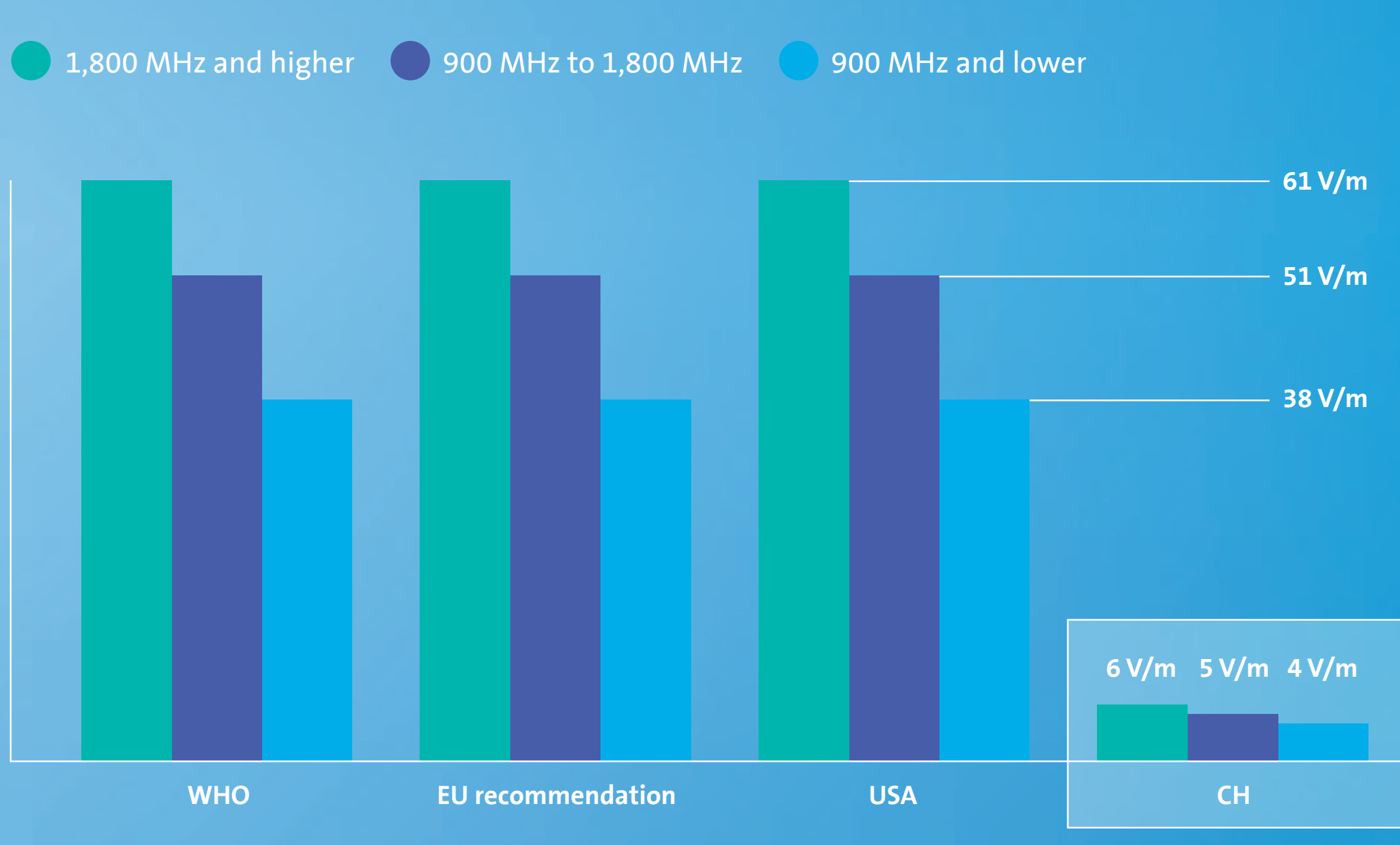
### Data volume compared to network usage

Today, only 1.1% of mobile data traffic runs on the 3G network, but the technology occupies 10% of the antenna capacity.



### Limit values that are ten times stricter\* compared to other countries make the expansion of mobile telecommunications more difficult and more expensive

The legal framework and the topography pose major challenges, but we still manage to achieve excellent network coverage.



\* In addition to the general limit values for mobile communication installations, Switzerland has introduced a further precautionary level with its installation limit values. These are only between 4 to 6 V/m and are thus characteristically strict.

### Swisscom shapes mobile communications nationally and internationally

