

Network rationalisation: making way for 4G and 5G

Global Trends - Network sunsets in Europe

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Era of multigenerational networking

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After the 2G and 3G era

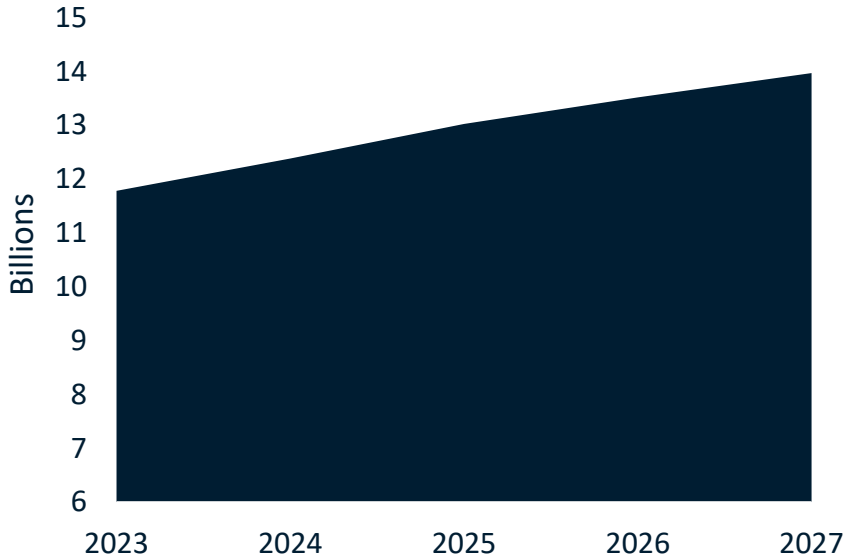
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Prerequisites to shutdown 2G/3G

Operators require a new approaches that reduces network operating costs

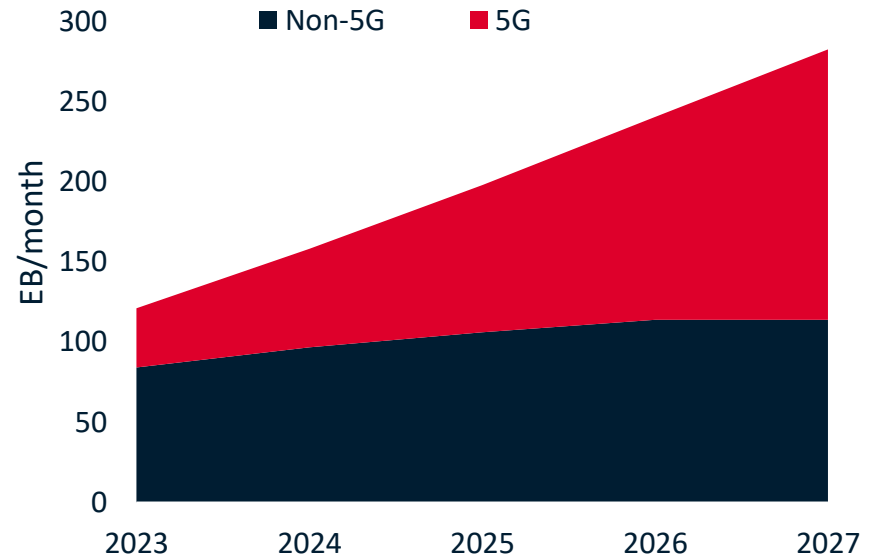
Increasing demand for connectivity

Cellular Connection
2023 - 2027



Source: GSMA Intelligence

Mobile Data Traffic
2023 - 2027

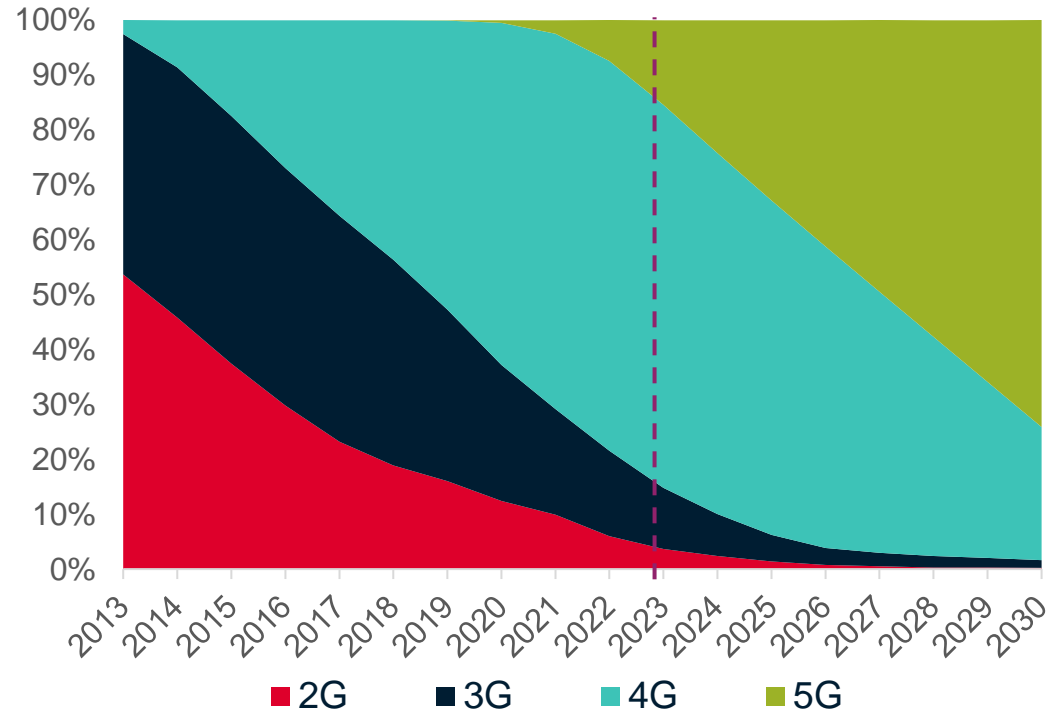


Source: Ericsson

Coexistence of different technologies

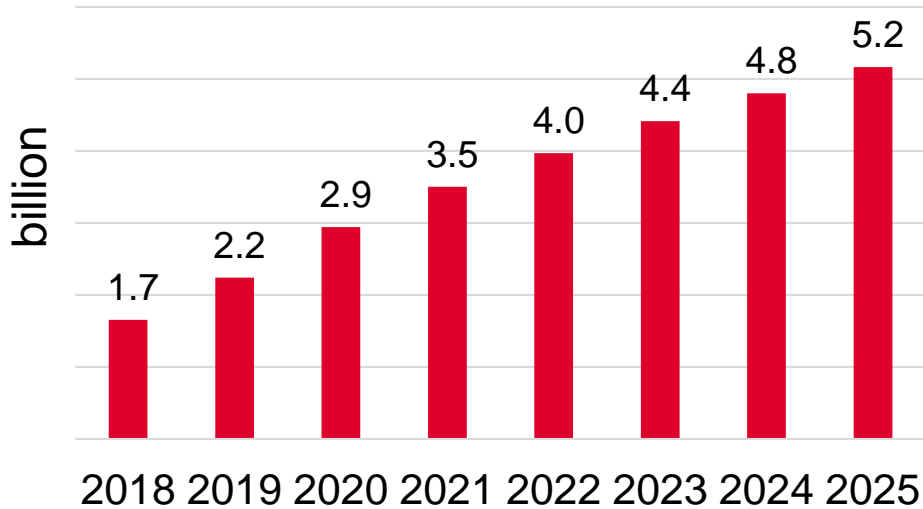
- Telecommunication ecosystem are rolling out a new technological generation in every 10 years
- Network operators will find it harder to maintain these different technologies at the same time, efficiently
- Spectrum is a finite and scarce resource, thus operators are urged to use it efficiently
- The ecosystem needs to balance, and avoid harming existing costumers with older user equipment but also aim to use recent technologies

Number of connections in Europe

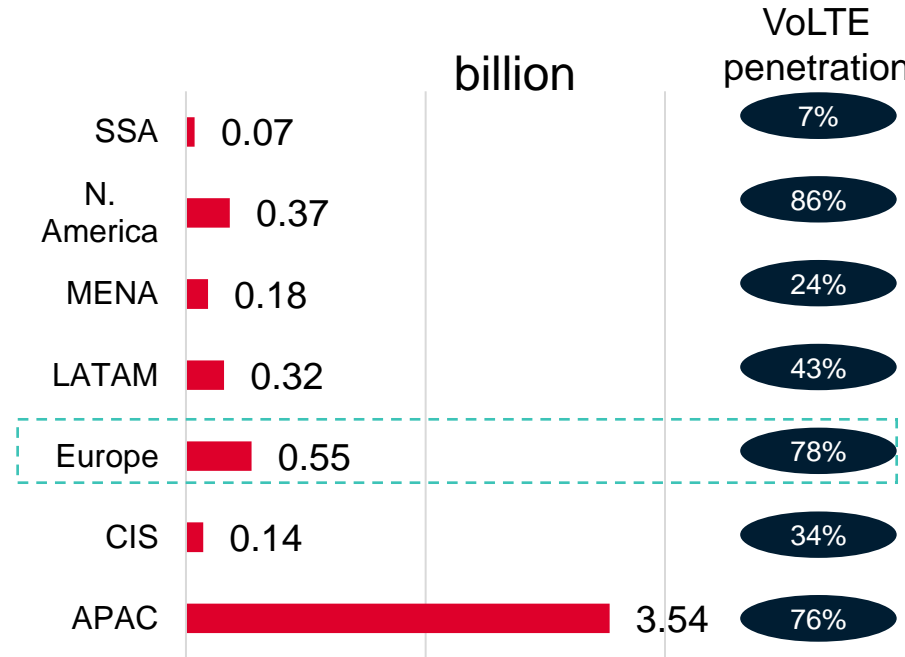


Voice after the 2G and 3G era

VoLTE connections globally

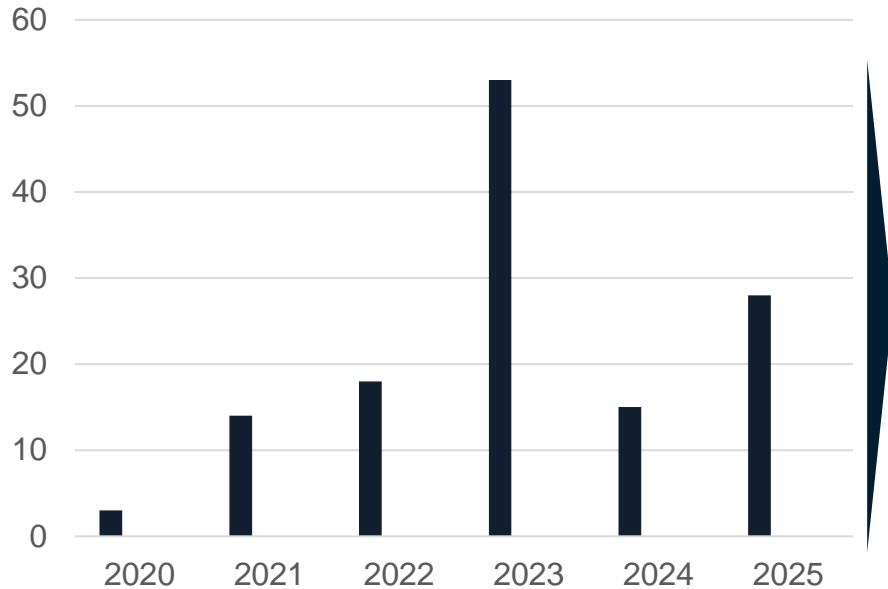


Number of VoLTE connections – 2025



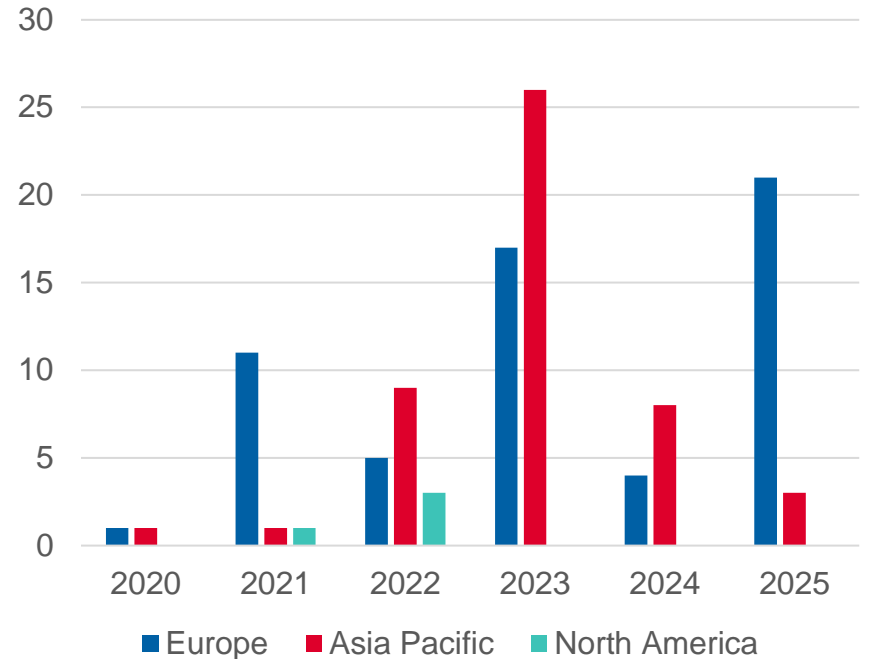
Network shutdowns

Number of completed and planned 2G and 3G network sunsets, 2020–2025



Source: GSMA Intelligence

Regional breakdown:
Completed and planned 2G and 3G network sunsets, 2020–2025



Prerequisites to shutdown 2G/3G



Terminal support

After Apple's decision in 2019, most mobile phones and wearable terminals support VoLTE voice. Globally, smartphone penetration is reaching 78% at Q1 2023, in Europe it is over 82%.



Optimization

Network operators optimize their 4G and 5G networks so their voice network KPIs improve. Network should be optimized also for voice, not just for best effort.



Coverage

4G and 5G becomes the new base wireless network as the network coverage is mature enough. In Europe, 4G network coverage by population is over 98% as of today.



Thank you

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