

It Runs in the Family

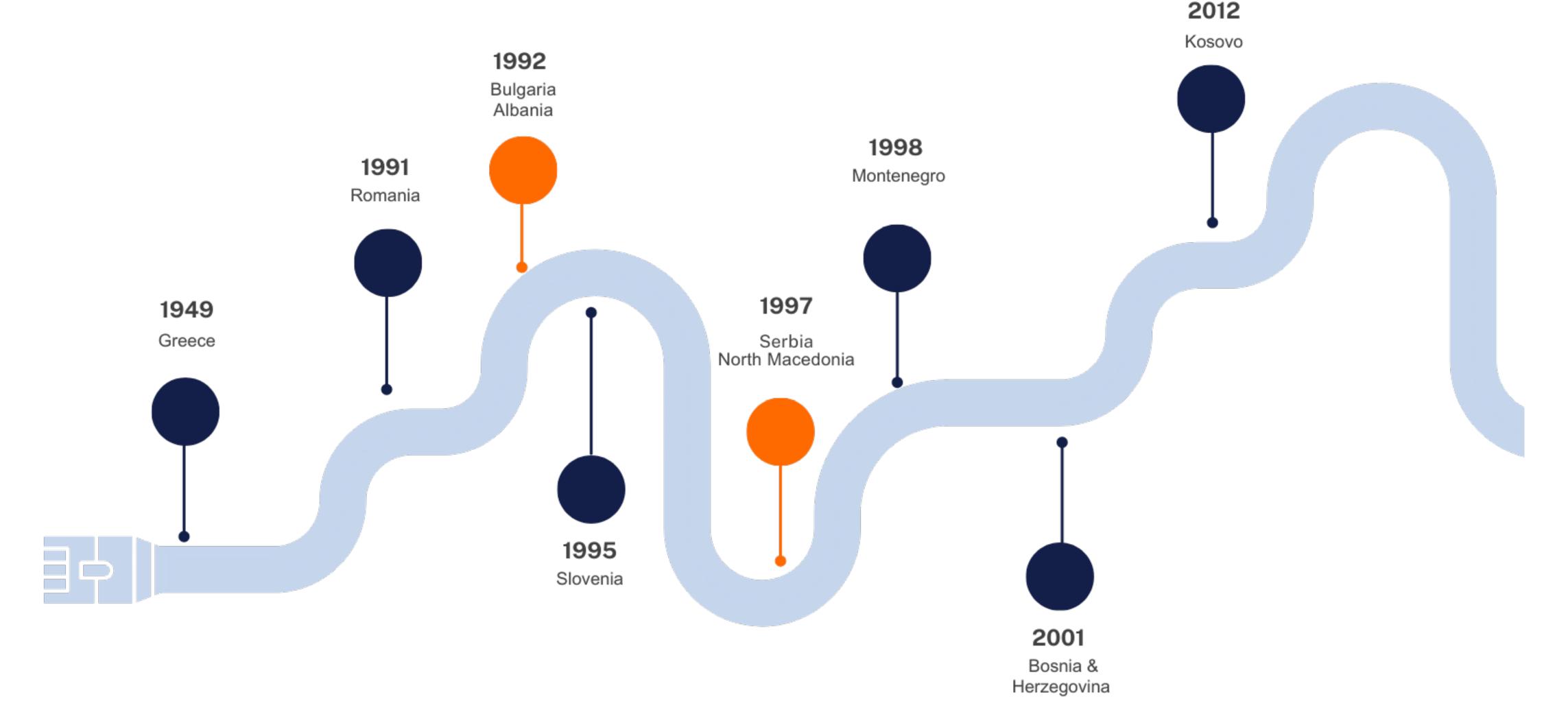
SEE Telco Market Evolution and Trends



A Regional View

Founding of National Telecoms





2000s: Liberalisation and Privatisation



- EU accession process played a key role
- New players entering the market
- Increased foreign investment
- Strengthening of independent regulatory authorities

2010s: Market Characteristics and Trends



- Increased competition (MVNOs and OTTs)
- Change in consumer behaviours and preferences (mobile data) as a key driver of growth)
- Growing demand for high-speed Internet
- Changes in regulatory environment (customer focused)

Market Response



 Restructuring of telecom companies (divestitures like spin-offs and carved-outs, outsourcing, mergers and acquisitions)

Convergence and vertical integration

Expansion of 5G and fibre optic network

Market consolidation



Telecom Serbia

HQ:

Belgrade, Serbia

Size:

12,000+ employees

Market share across SEE region:

Bosnia and Herzegovina - 26.5% North Macedonia - 0.05% Montenegro - 44%

Serbia - 48%



A1



HQ:

Vienna, Austria

Size:

17,000+ employees

Market share across SEE region:

Bulgaria - 22.5% Croatia - 32.5% North Macedonia - 36% Serbia - 9% Slovenia - 20%



HQ:

Amsterdam, The Netherlands

Size:

14,000+ employees

Slovenia - 30.5%



Bosnia and Herzegovina - 20%
Bulgaria - 33.5%
Croatia - 16%
Greece - 32%
Montenegro - 10.5%
Serbia - 21.5%



Deutsche Telecom

HQ:

Bonn, Germany

Size:

207,000+ employees

Market share across SEE region:

Bosnia and Herzegovina - 11% Croatia - 47% Greece - 51.5% Montenegro - 36% North Macedonia - 43% Romania - 4%



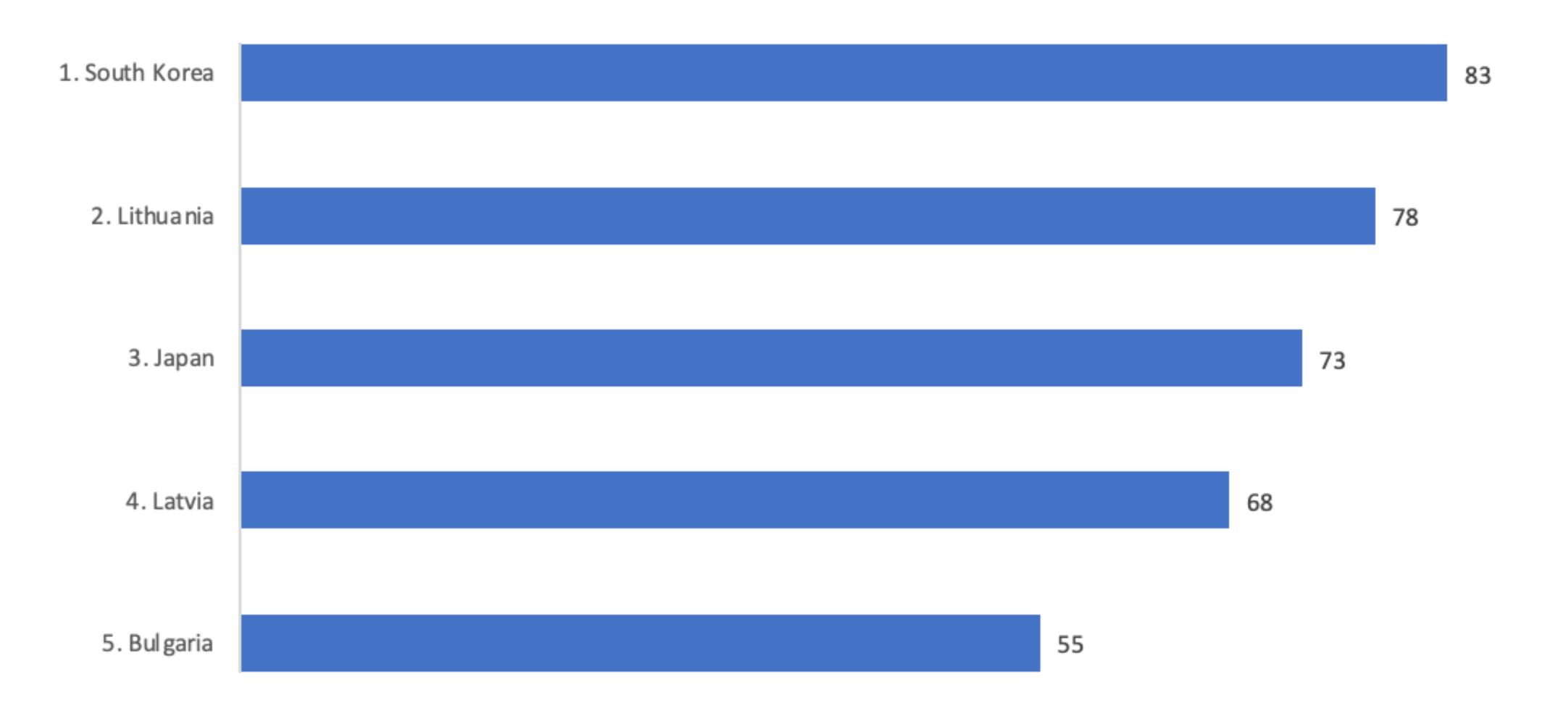


From WiFi to 5G

Examining Telecom Market Dynamics in Bulgaria

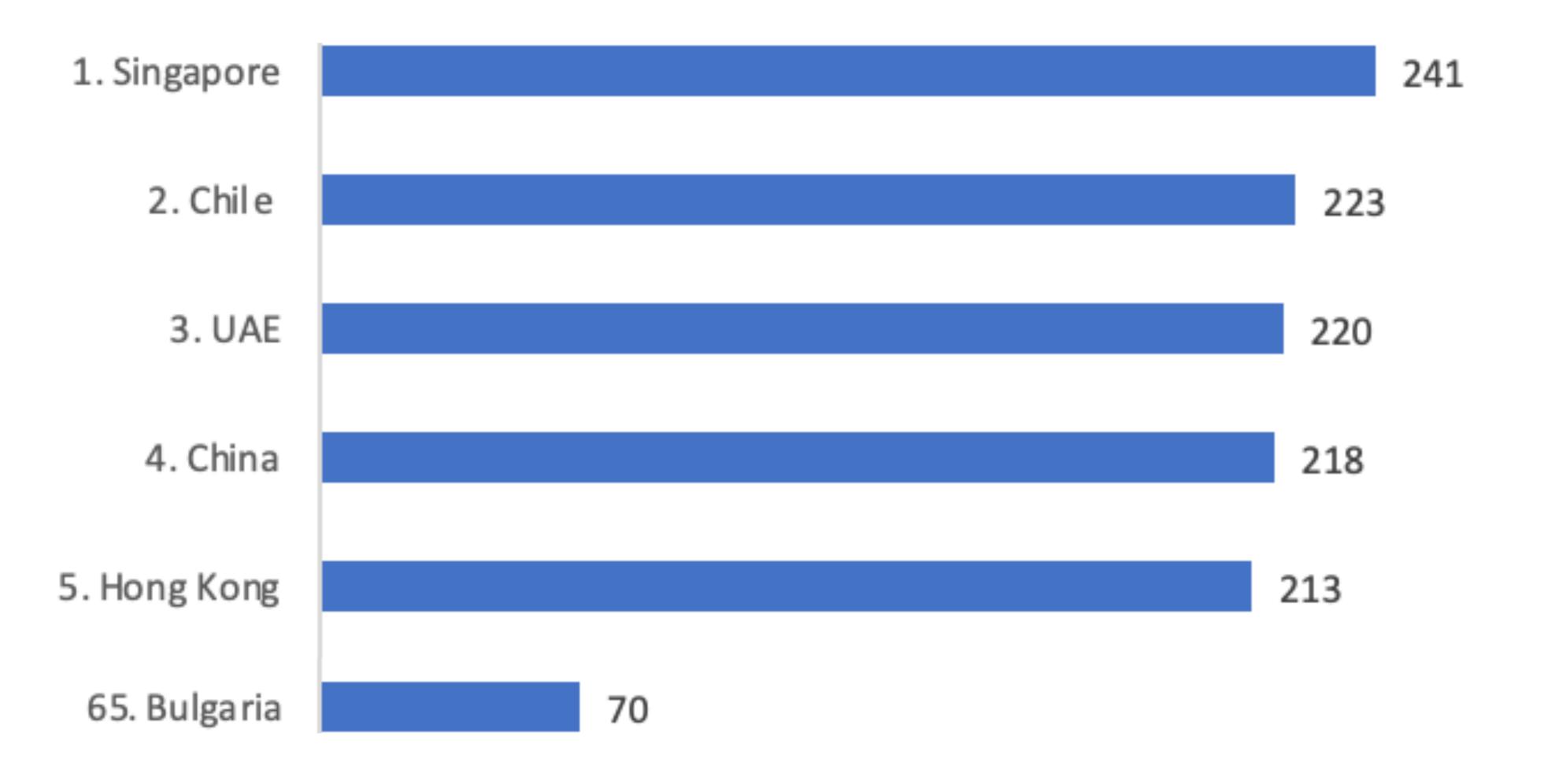












Customers

Operators



- Shift towards mobile devices
- Changes in Internet usage
- Low demand for ultra high speeds

- Diverting to mobile investment:
 - Adapting to customers preferences
 - Revenue opportunities
 - High costs of investment outside of urban areas
- Bundled services
- Market consolidation



Acquisitions boost United Group figures



APRIL 25, 2022 13.02 EUROPE/LONDON BY CHRIS DZIADUL

Bulgarian telco Vivacom acquires local Telnet

Bulgarian telco Vivacom acquires local Telnet

SHAILAJA PAI 09 DECEMBER 2021 3156 view

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Bulgarian Telecommunications Company completes acquisition of Net1, ComNet Sofia, N3

United Group snaps up two local operators in Bulgaria

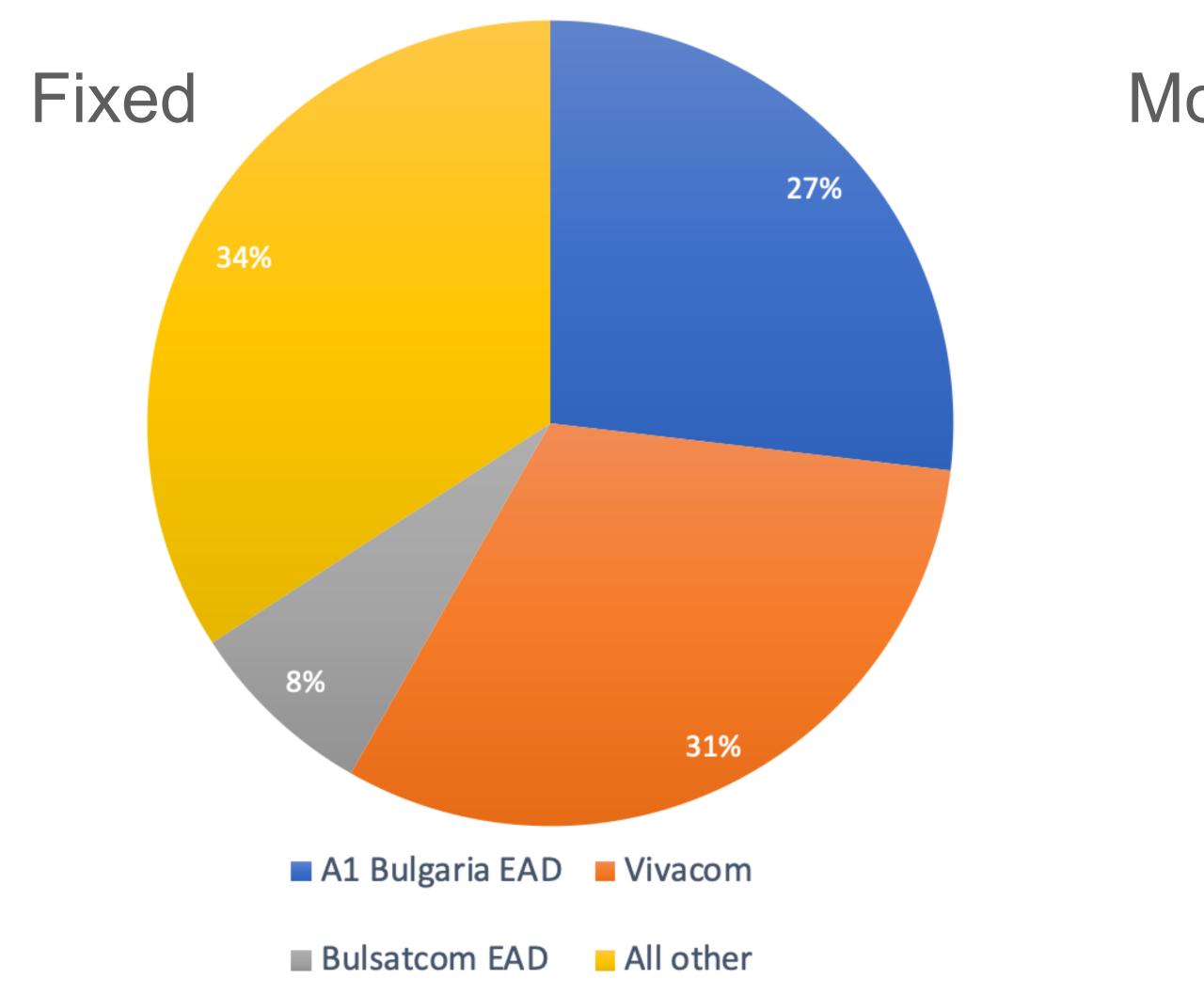
JAMES BARTON 16 FEBRUARY 2021 6183 views

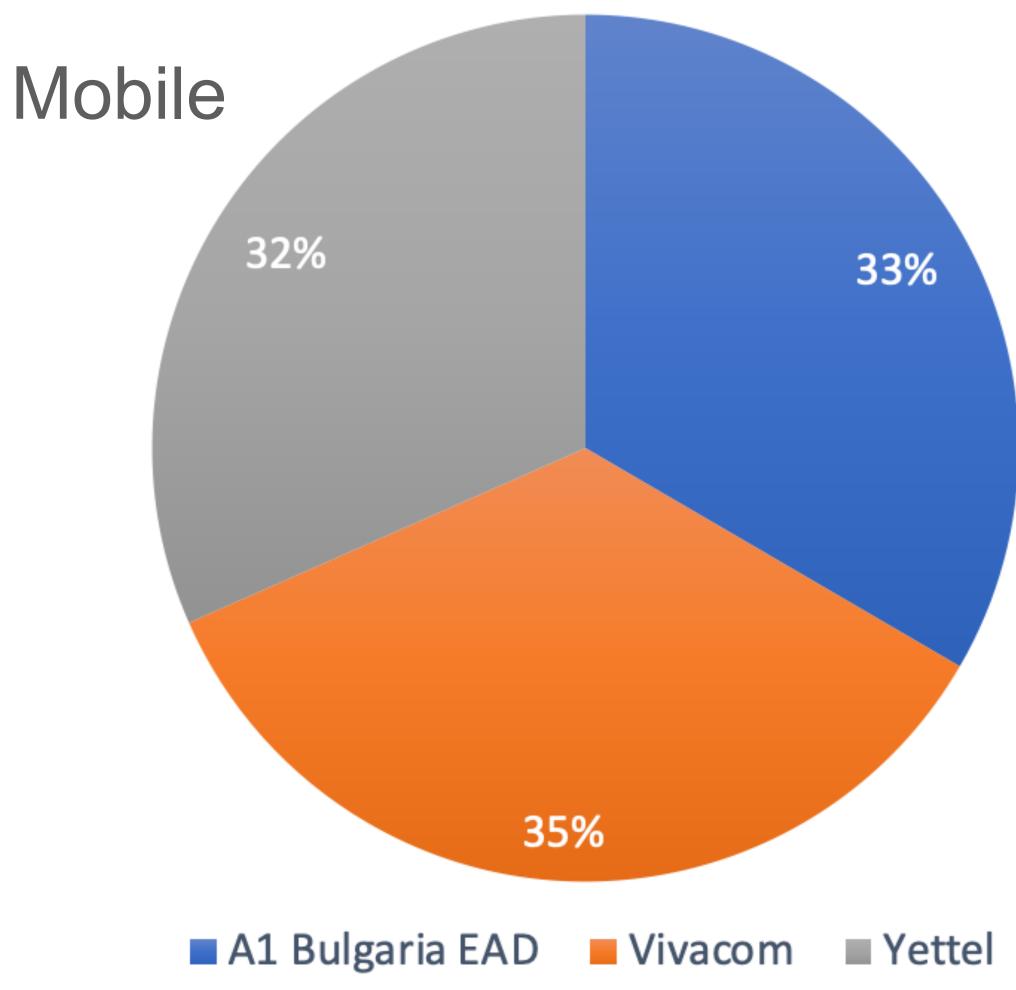
Bulgarian Watchdog Probes Vivacom's Plan To Buy Multiple Rivals

By **CPI** - February 2, 2023

Market Share by Number of Subscribers



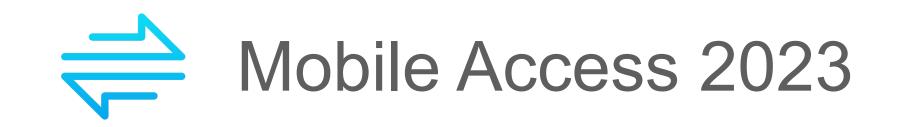




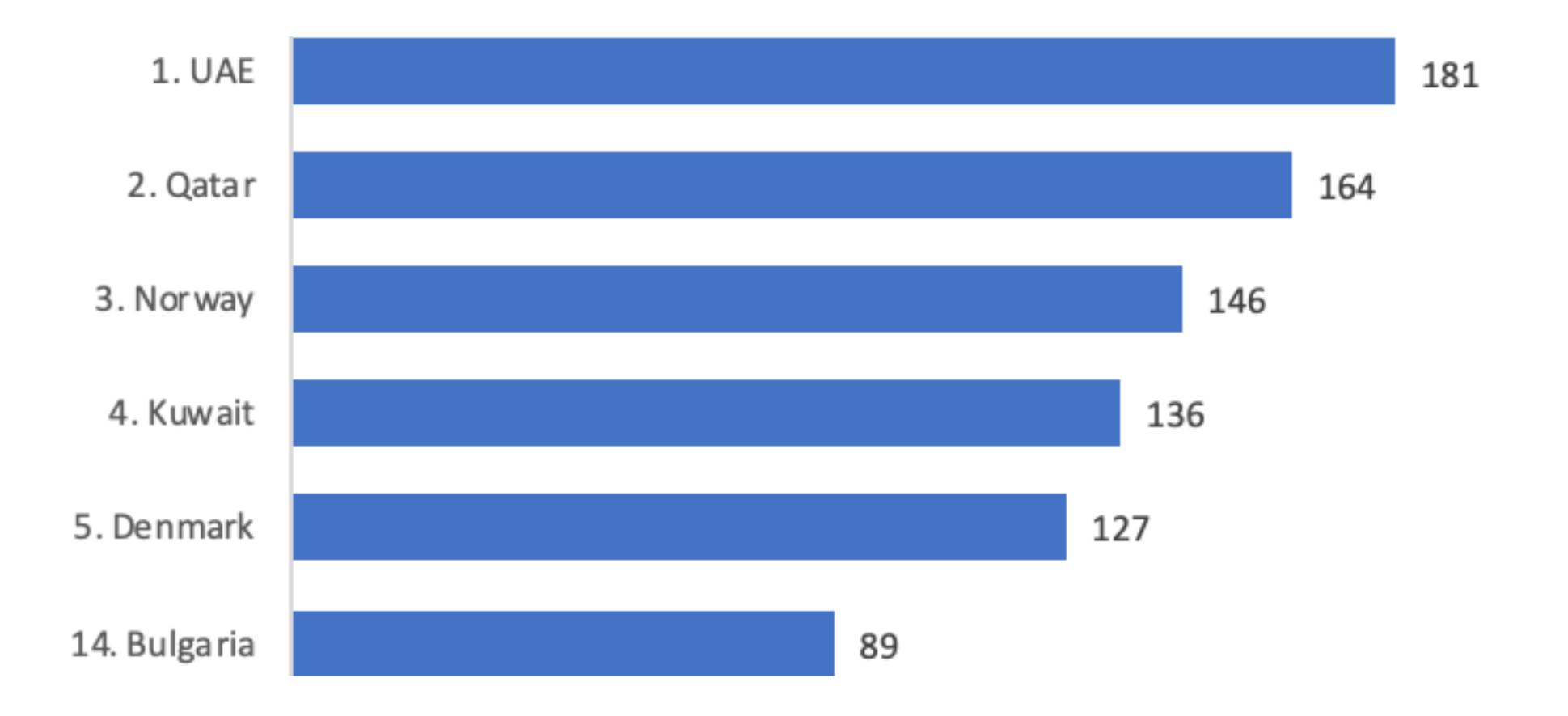
5G Frequency Allocation



- Auction held in 2021: Vivacom, Telenor Bulgaria, and A1 Bulgaria secure licences
- Complaint stating unlawfully terminated auction to Bulgarian Supreme Administrative Court (SAC) filed by Mobile Alternative Communications (MAC) in 2023
- MAC seeks to create an alternative mobile operator, proposing opening of current operators networks
- Court rules in MAC's favour, public consultations must be resumed







Telecom Sector - A Natural Monopoly?



Infrastructure Costs

Economies of Scale

Network Effect

EU "single telecoms market"





Questions

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Sources



- APNIC statistics: https://stats.labs.apnic.net/aspop
- United Group: https://united.group/about/
- Deutsche Telecom: https://www.telekom.com/en/company/ companyprofile/company-profile-625808
- Telekom Srbija (via wikipedia): https://en.wikipedia.org/wiki/Telekom_Srbija
- https://www.speedtest.net/global-index
- Vivacom (via wikipedia): https://en.wikipedia.org/wiki/Vivacom
- https://crc.bg/en/rubrics/712/annual-report-of-the-communications-regulation-commission-2021
- A1: https://www.a1.group/en/home