

Mobile & Wireless Roundup #9

By Zahid Ghadialy

Welcome to the ninth edition of this newsletter. We know that technology can be a force for good or evil. Even when most people use it for evil, they intend it for good. Take for instance our sharing culture. We share things we are passionate about without much thinking. This may seem okay but sometimes it could be insulting, hurt someone's sentiments or may be completely fake. As someone in the technology industry, I always ensure to check the sources before sharing or forwarding anything. Please try and do the same. If you can be bothered to check, don't send. It's better safe than sorry!

For those of you who don't know me, I am a technologist with over 23 years' experience in mobile wireless technology, currently working as an independent analyst, consultant and a trainer. This newsletter is a summary of my posts and others news that caught my attention since the last newsletter.

Sponsor This Newsletter
Get in touch over LinkedIn

© 6G

- Free 6G Training: Summary of 6G Activities from China ([link](#))
- Good Twitter thread by Dean Bubley on NGMN Industry Conference & Exhibition (IC&E) discussing: Mastering the Route to Disaggregation, Green Future Networks and 6G ([link](#))
- Dean Bubley: Geopolitics & Harmonisation debate from NGMN Industry Conference & Exhibition's 6G session ([link](#))

© 5G

- Couple of short tutorials on 5G Basics by Nokia veterans Harri Holma and Antti Toskala ([link](#))
- This collection of 5G Evolution whitepapers from Nokia is a fantastic resource on 5G Advanced ([link](#))
- Camille Mendler, Omdia on 5G Mixology ([link](#))
- GSA: 5G-Standalone August 2022 Summary Report ([link](#)) - *At least 29 operators in 18 countries and territories are now understood to have launched public 5G SA networks.*
- Operator Watch Blog: Sri Lanka Mobile Operators struggling in face of Rising Operational Costs and Inflation ([link](#))

© 4G/LTE

- The 3G4G Blog: CUPS for Flexible U-Plane Processing Based on Traffic Characteristics ([link](#))
- 3GPP SON Series: Energy Savings (ES) ([link](#))

🕒 2G/3G

- TechCentral: SA may say goodbye to 2G and 3G networks by 2025 ([link](#)). Connecting Africa has a detailed summary [here](#).
- Analyst James Crawshaw reporting from BT's industry analyst and journalist presentation: *"The most surprising data point for me was that the 3G network (responsible for just 1% of downlink traffic) consumed 30% of the RAN electricity (the remaining 70% of energy being consumed by the #5G, 4G and 2G RANs which generate 99% of downlink traffic). 3G will be decommissioned in 2024."* ([link](#))

🕒 Open RAN

- I chaired a panel discussion at Fierce Wireless Open RAN Summit 2022 ([link](#))
- Light Reading: Asian tech giants are in the open RAN ascendancy ([link](#))

🕒 Private Networks

- Fierce Wireless: Private networks gradually get to know open RAN ([link](#))
- Mobile Experts Whitepaper: Industrial Private Cellular Business Case ([link](#))

🕒 IoT / M2M

- Vodafone tests new tech that can track vehicles, drones and precious cargo remotely within centimetres ([link](#))

🕒 Security & Privacy

- 5G and Cyber Security ([link](#))
- 4G Identity Security Vs. 5G Identity Security ([link](#))
- BBC: How is a thief taking thousands from London gym-goers? ([link](#))

🕒 Connected And Autonomous Vehicles (CAVs)

- The Guardian: Why self-driving cars have stalled – video ([link](#))

🕒 Satellite Connectivity

- Connectivity Technology Blog: Challenges and Opportunities in Delivering Satellite 5G ([link](#))
- CommsUpdate: International voice carrier BICS, Lynk Global team up for remote coverage ([link](#))
- Via Satellite: Apple to Debut iPhone With Emergency Messaging Enabled by Globalstar Satellites ([link](#))
- The Mobile Network: Apple, iPhone 14, direct to satellite, and the others ([link](#))
- MWL: Bullitt targets satellite phone space ([link](#))

🕒 Wi-Fi

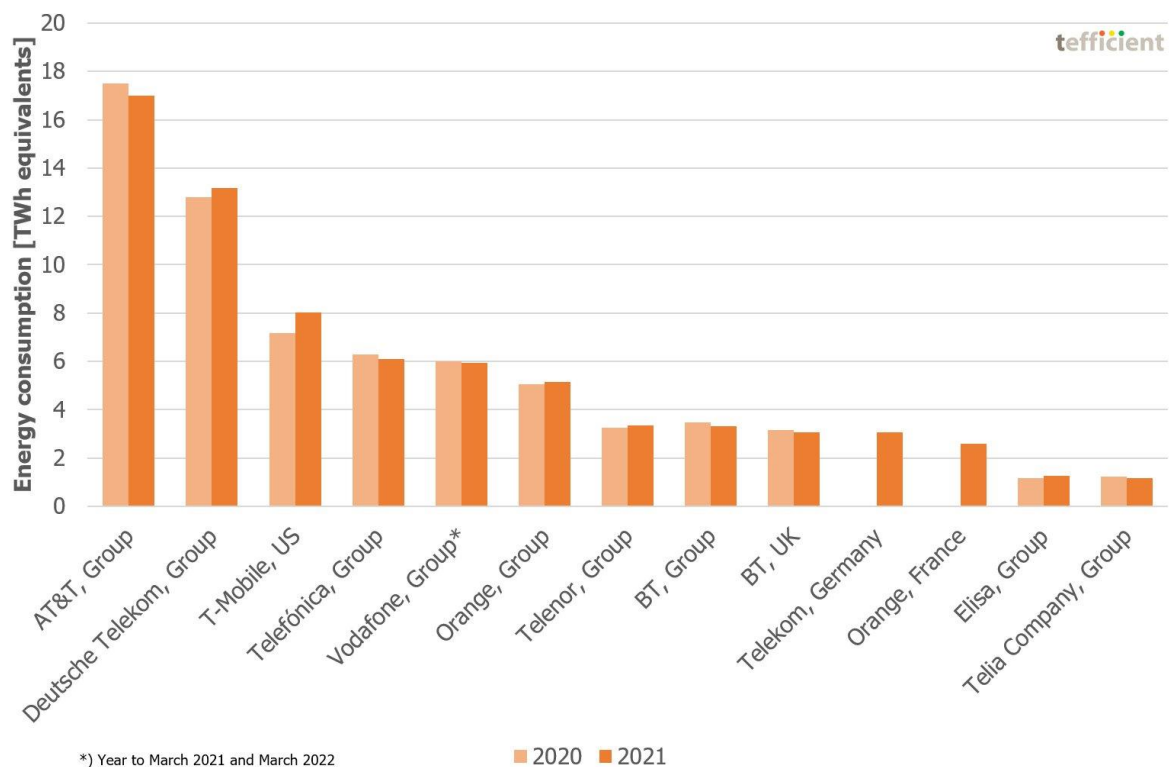
- Wi-Fi Now: New solution for Wi-Fi in remote locations: GoZone WiFi with Starlink backhaul ([link](#))

🕒 Other News and Technology Stuff

- Deutsche Telekom announces that they are ready to launch the trial operation of Cell Broadcast disaster warning system ([link](#))

- NTT Corporation claims new signal processing circuit and optical device increase the capacity of a transmission system 12-fold (1.2Tbit/s per wavelength) and reduce power consumption per bit to 10% of the widely-used commercial system (100Gb/s per channel) ([link](#)) – HT Joseph Waring
- MWL: Brazil orders suspension of chargerless iPhone sales for selling incomplete products by not including the charger ([link](#))
- Light Reading: India seeks to regulate OTTs ([link](#))
- Apple iPhone 14 highlights from MWL ([link](#))
- With eSIM dominating the news this week, here is our old tutorial explaining the difference between eSIM, iSIM & other form factors ([link](#))
- Tefficient's 34th public analysis on the development and drivers of mobile data ranks 99 operators based on average data usage per SIM, total data traffic and revenue per gigabyte in the full year of 2021 and in the first half of 2022. ([link](#))
- Long read by Srinivasa Addepalli: Network-as-a-Service (NaaS) with 5G, SASE, MCN and role of Kubernetes and Project EMCO ([link](#))

🕒 **Picture(s) of the week:** The global mobile data traffic grew ~37% in 2021 and the fixed data traffic perhaps ~20-30%. For most reporting operators, the energy consumption was flat. A few operators report MWh/GB and it's (thus) always decreasing. A larger data volume doesn't consume more energy. ([Tweet](#) by Tefficient)



In a [Tweet](#), Dean Bublely shared a picture of Ericsson Slide. Mobile Networks consume about 12x the energy of datacentres.

The ICT sector energy and climate evolution

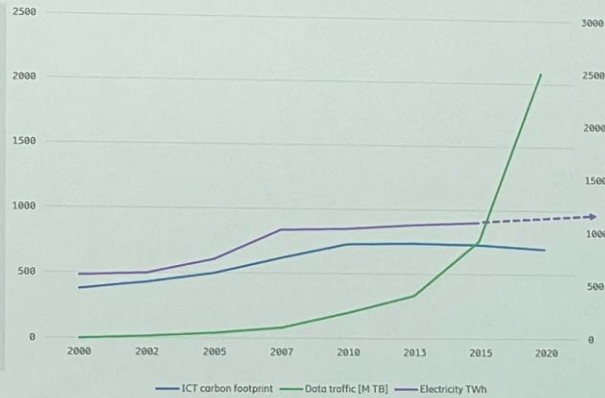
Global
 Networks: 250 TWh, 150 Mt CO2e
 Data centers: 20 TWh, 12 Mt CO2e
 Renewable energy 12 %

US
 Energy 50 TWh (+2%)
 Renewable energy 10%

China
 Energy 75 TWh (+25%)
 Renewable energy % not reported

EU+
 Energy 25 TWh (-3%)
 Renewable energy 61% (+49%)
 Subscribers +3%
 Data traffic +75%

Source: Ericsson, ICT sector 2020 data and percentual changes since 2018



1.4%
 of global carbon emissions and shrinking

3.6%
 of global electricity usage with slow growth

Happy to hear your thoughts. Feel free let me know what worked, what didn't, how I can make this better, etc. Get in touch over LinkedIn!