Mobile & Wireless Roundup #31 (see original on <u>LinkedIn!</u>) By Zahid Ghadialy

Welcome to the 31st edition of this newsletter. During a discussion on monetisation of 5G this week, I was reminded of my <u>initial 5G training</u> for Cambridge Wireless. My full day trainings are divided into four parts. End of part 1 leads nicely into tea/coffee break. End of part 2 into lunch and so on.

During the training, I noticed one attendee sitting in the front was increasingly upset and agitated. I wasn't sure what it was so I thought let me talk to him during the first break. Before I could ask him he came to me to ask if my 5G was different from the 5G everybody else was talking about.

You see their company had been following the 5G narrative very closely that kept on talking about very high data rates (20 Gbps ①), sub-millisecond latency, etc., without any caveats. People like me who are realists get drowned out by the noise from the vendors, researchers and idealists.

Coming back to the story, the guy was shocked to learn that they will not be getting Gbps+ data rates and sub-ms latency from day one. In fact I had to tell him that they will be lucky to get a consistent 1Gbps+ data rate before 2025. Then we will have to look at the spectrum allocation, deployment topology, etc. The sub-ms may never happen for end-to-end network ever, unless the application and the application server are in close proximity.

The guy left still agitated and I never heard from him again. I am slightly worried that a similar narrative is playing out in 6G at the moment. Just yesterday I heard that the organizing committee of Hangzhou 2022 Asian Games (that will be held in Sep/Oct 2023) wants to use 6G during sports. While the realists like me will point out that there are no specifications and standards at the moment, it won't stop the promoters and the noise. Sooner or later we will have more disappointed people burnt by the hype.

For those of you who don't know me, I am a technologist with over 24 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.



● 6G

- Dean Bubley's summary of IET's 'Why 6G' event. (link)
- Free 6G Training Summary of ITU Kaleidoscope 2022: XR How to boost QoE and Interoperability (<u>link</u>)

• 5G

- Disaster Roaming in 3GPP Release-17 (link)
- CommsUpdate: Orange Espana lights up 5G SA network in Madrid, Barcelona, Valencia and Seville (<u>link</u>)

Open & Disaggregated Networks (including Open RAN, vRAN, etc.)

- The 3G4G Blog: Accelerating O-RAN Adoption Through Open Source (link)
- Alex Jinsung Choi, Chairman of O-RAN Alliance, discusses SW/HW decoupling and Acceleration Adaptation Layer (AAL) High Level Architecture on LinkedIn (link)
- TelecomTV: Vodafone unveils Open RAN 5G network-in-a-box (<u>link</u>)



- Telecoms.com: TIP discusses its mission to open up the telecoms industry (link)
- The Mobile Network: So what is "The Truth About Open RAN"? (link)
- TelecomTV: Mavenir unveils its RIC, boasts Open RAN sales growth (link)
- Kyodo news: 2 Japan firms to join hands with Britain in new network technology (link)

Spectrum

- ITU News Magazine: Countdown to World Radiocommunication Conference, WRC-23 (link)
- ITU: Why WRC-23 will be pivotal for terrestrial services (<u>link</u>)

Private Networks

 An old but still relevant quote by Analyst Camille Mendler on LinkedIn: "Key learnings from my fantastic panel at #Privatenetworks in a #5G World where we tackled the topic of #innovation..." (link)

O IoT / M2M / Smart Homes

• UK: BT launches IoT national roaming in a major boost for businesses, keeping smart devices connected wherever they are (link)

Security & Privacy

• Cheatsheets for Authentication and Key Agreements in 2G, 3G, 4G, and 5G (link)

Connected And Autonomous Vehicles (CAVs)

 Telefónica makes 5G communication between drones and Smart City by combining 5G, C-V2X communications, RTK technology and mobile location. (link)

AI, ML & Automation

• Forbes: The Role Of Autonomous Networks For Edge And Distributed Deployments (link)

Satellites, HAPS, Drones, UAVs & Space

- Report ITU-R M.2514 defines visions on the satellite component of IMT-2020 for an efficient IMT service delivery with respect to application scenarios, services, system, radio and network interface aspects (link)
- Starlink internet to be piloted in 500 schools in Rwanda (link)

Metaverse

- Radio Free Mobile: Microsoft Metaverse End of life (<u>link</u>)
- 5G for XR (Extended Reality) by Yu Xiao from 5G Hack the Mall 2022 (link)

Other News and Technology Stuff

- Bluetooth® Core Specification Version 5.4 Technical Overview. This technical overview summarizes and explains the updates introduced in the latest version of the Bluetooth® Core Specification (link)
- Light Reading: Here's why Indian telcos are rethinking their rural strategy (link)
- Nokia report reveals three-fold increase in mobile data usage in India over the last five years (link)
- Ookla: Speedtest Global Index (<u>link</u>)

Speedtest Global Index January 2023 Median Data Ranking mobile and fixed broadband speeds from around the world on a monthly basis.	37.98 1. United Arab Emirate 2. Qatar 3. Norway 4. South Korea 5. Denmark 6. Netherlands 7. Kuwait 8. China 9. Saudi Arabia	Dipload Mbps 0.75 es 161.15 155.51 136.08 124.84 117.83 115.10 109.93 99.48 97.90	Fixed Global Performance Fixed Global Perfo	234.55 224.84 211.34 207.41 206.71 201.81 200.70 195.31 195.26
	10. Bahrain	95.83	10. Spain	172.67 OOKLA

© Picture of the week: The Tower Subway near Tower Bridge in London was built-in 1869. It was the first underground railway tunnel to run under the Thames. It was closed to the public in 1898 and converted to house hydraulic power lines. Following a near miss from a German bomb during the Second World War, it now serves the capital as a home for Vodafone's telecommunication lines. You can read the story here.



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!

I am hoping to be in Barcelona next week for <u>Mobile World Congress 2023</u> (#MWC23). Looking forward to catching-up with everyone.

PDF version of this and previous newsletters are available <u>here</u>.