

# Mobile & Wireless Roundup No. 135 (see original on <u>LinkedIn!</u>) By Zahid Ghadialy

Welcome to the 135th edition of this newsletter. This week, which for me starts on a Monday, I attended three events. It was a pleasure to meet so many people, and encouraging to have some discussions that may lead to business opportunities in the future.

A recurring theme across all the events was AI and automation. Interestingly, much of what was described as AI was essentially traditional machine learning. It feels like almost everything is being labelled AI at the moment. One of the panel sessions focused on 5G Standalone, yet none of the participating operators had significant experience of large-scale 5G deployment or meaningful service differentiation.

I remember back in 2019 how every vendor had a network slicing solution and commercial deployment seemed just around the corner. Today, we are still facing the same barriers. In addition to the disruption caused by the pandemic, 5G Standalone requires a 5G Core, which in many parts of the world has yet to be deployed or scaled to support a large number of subscribers.

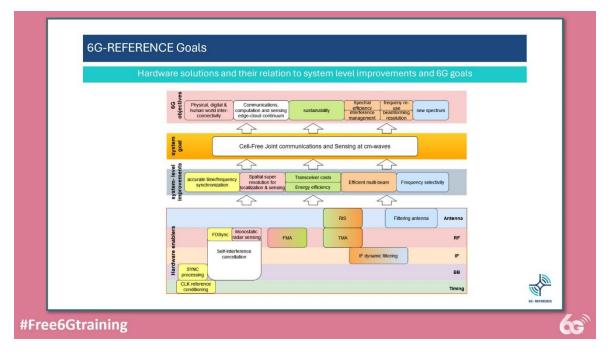
Another discussion centred on the 6G Core. We are now in 2025. Although the first commercial 5G networks were launched in 2019, or 2020 if we go by the IMT-2020 definition, five years on we still have not seen widespread 5G Core adoption. The cost and complexity have significantly reduced the urgency for operators to roll out Standalone 5G unless there is a specific need.

While the current 5G Core architecture does have limitations, there appears to be very little appetite for introducing a completely new core in 6G. Unless a compromise can be reached, where the 6G Core is treated as an optional component, the chances of broad adoption of whatever form 6G eventually takes may remain limited.

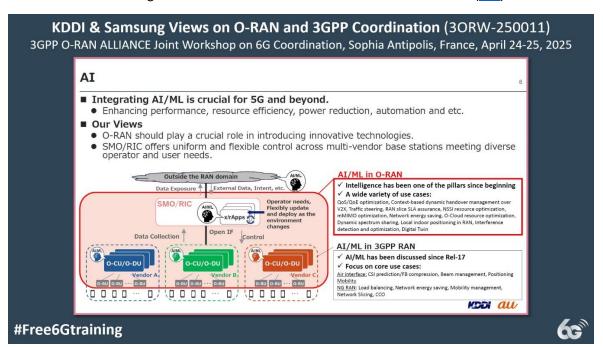
For those of you who don't know me, I am a technologist with over 25 years' experience in mobile wireless technology, currently working as an independent advisor, analyst, consultant and a trainer. This newsletter is a summary of my posts and other news that caught my attention since the last newsletter.

#### 6G

- ZTE Communications: Special Topic on Integrated Sensing and Communication (ISAC)
   Technologies for Future Wireless Communication (link)
- Telco Forge 6G: The 'Al-Native' Network? (link)
- 6G-REFERENCE: Building Hardware Foundations for Distributed 6G Systems (link)



- EverythingRF: Stanford and UCSB Researchers Develop First Post-Process of Diamond on GaN HEMTs for RF Applications (link)
- 6G Spectrum Terminology (YouTube shorts)
- Digital Catapult joins consortia shaping 6G innovation (PR)
- Light Reading: The 6G 'golden band' is probably worthless in mobile (link)
- Free 6G Training: 3GPP and O-RAN ALLIANCE Discuss 6G Coordination (link)



### ● 5G

- Developing Telecoms: Du and TikTok set Guiness world record with 48-hour 5G livestream (link)
- GSA's 5G Standalone Global Status Update, April 2025 (link)

# ● 4G/LTE

• Mohamed Abbas on LinkedIn: "Interworking security between 5G and EPC involves managing security contexts during mobility between the two systems..." (link)

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

- ODIN: UK Chipmaker RANsemi Accelerates Open RAN Plans with New Chairman at the Helm (link)
- Data Centre Dynamics: Do the incumbents have a stranglehold over Open RAN? (link)
- ODIN: How Microamp Is Deploying Private 5G Using mmWave and Open RAN (link)

# Spectrum

GSMA: The upper 6 GHz band | Essential Action for Europe's Mobile Future (PR)

### Private Networks

Private Networks Technology Blog: Inside France's First Industrial 5G Private Network:
 Orange and Schneider Electric at Le Vaudreuil (<u>link</u>)



- Industry Giants Launch 5G-OT Alliance, Empowering Network Owners to Drive Private 5G Revolution in Operational Technology (PR)
- RCR Wireless: Private LTE at sea Maersk builds private LTE on 450 vessels to track shipping cargo (<u>link</u>)

# Telecoms Infrastructure, Small Cells, Antennas & others

- Telecoms Infrastructure Blog FDD Tri-Band Massive MIMO: Unlocking Sub-3 GHz Potential for 5G Evolution (link)
- Telecoms Infrastructure Blog: How Vodafone UK Prepares its Network for Storms and Heatwaves (link)

# O IoT / M2M / Smart Homes

 The 3G4G Blog: 3GPP Release 18 Signal level Enhanced Network Selection (SENSE) for Smarter Network Selection in Stationary IoT (link)

### Security & Privacy

• Private Networks Technology Blog: Understanding the Realities of OT Cybersecurity (link)



- Denis Laskov on LinkedIn Security of contactless payment systems by Europay, Mastercard, and Visa (EMV): flaws and attacks (link)
- Silke Holtmanns on LinkedIn: "SS7 problems are still around and exploited. A dear friend of mine pointed this article out to me (THANKS!). Here is a nice example of a full-commercialization of SMS interception attack..." (link)
- Alnvest: Telefónica's Movistar Suffers Massive Data Breach in Venezuela, Exposing Millions of Customers (link) – Bloomberg story behind the paywall (link)
- Nokia Open RAN Security Whitepaper (<u>link</u>) Salim S I comments on this on LinkedIn <u>here</u>.
- TechCrunch: NSO Group must pay more than \$167 million in damages to WhatsApp for spyware campaign (<u>link</u>)

#### Connected And Autonomous Vehicles (CAVs)

Denis Laskov on LinkedIn: Bye-bye, Skype. On this last day of Skype, here's a brief summary
of its journey in cars (link)

### AI, ML & Automation

- Ian Fogg on LinkedIn: "Fascinating discussion in the "Decoding the AI Value Chain for Telcos" panel. Unlike other sessions, this tackled AI head-on, rather than AI-washing unrelated and semi-related topics..." (link)
- RCR Wireless: The critical value gap AI, 5G, and the long road to reinvent telcos (link)
- Dean Bubley's summary posts on FutureNet World conference (LI <u>Day 1</u>, X <u>Day 1</u>, LI <u>Day 2</u>, X <u>Day 2</u>)

# Quantum Networks & Technology

 Cisco Blogs, Executive Platform - Quantum Networking: How Cisco is Accelerating Practical Quantum Computing (link)

# Other News and Technology Stuff

- TelecomTV: Telcos are, at last, tuning in to users' needs Orange CTIO (link)
- Cloudflare CEO: AI is killing the business model of the web (link)
- **© Picture of the week:** Equinix collaborated with visionary designer Maximilian Raynor to craft datacentre inspired dresses. You can read more about this on their website <u>here</u>. Thanks to Jim Luoma for bringing it to our <u>attention</u>.



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!

PDF version of this and previous newsletters are available here.