

Mobile & Wireless Roundup No. 151 (see original on <u>Web!</u>) By Zahid Ghadialy

Welcome to the 151st edition of this newsletter. A while ago someone I know reasonably well online asked me not to include their LinkedIn posts in future editions. It was a simple request to respect. On the other hand, I stopped featuring posts from someone I had regularly included, and this upset them enough to disconnect with me. Finding the right balance is never straightforward.

About 15 to 20 years ago, my father-in-law gave me a set of camcorder cassettes from the 1960s and 70s. These recordings could not be played directly on a TV or even through a CD or DVD player, which at that time felt like the height of technology. I eventually found someone who could transfer them onto DVDs, which felt like a step into the modern world.

Fast forward to today, and we no longer have any CD or DVD players at home. None of my laptops has a drive either, so I had to dig out an external one, connect it, and copy the files. That left me with .vob files, which then had to be converted into .mp4 format. Thankfully there are many free tools online to make this possible.

This makes me wonder what the next format will be in another twenty years. Videos that once looked vibrant on older televisions now seem small and unimpressive on today's high-resolution displays. I find myself curious about how soon AI tools will become mainstream for restoring old recordings, improving resolution, and fixing issues such as poor lighting or shaky hands. Preserving these family memories for future generations feels more important than ever.

For those who may be reading this for the first time, I am a technologist with over 25 years of experience in mobile wireless technology, currently working as an independent advisor, analyst, consultant and trainer. This newsletter is a collection of my posts alongside other updates and stories from the industry that caught my attention over the past week.



6G

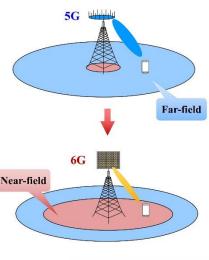
- TMN: 6G meeting settles on same old air interface (<u>link</u>) LinkedIn post by Alva Kosasih (<u>link</u>)
- Free 6G Training: Understanding 6G Near-Field Technologies (link)

Background

全球版技术大会 GLOBAL GG CONFERENCE

- Traditional 1G-5G wireless communications are designed by assuming far-field propagation of electromagnetic signals, where near-field region is negligible.
- For future 6G, the near-field region will extend to dozens/hundreds of meters
 - higher frequency (f): new mid-band, mmWave and terahertz
 - larger antennal aperture (D): RIS, ELAA and Cell-free
 - · Paradigm shift of signal transmission from far-field to near-field
- In 3GPP Rel-19, channel modeling studies for the new 7-24 GHz spectrum were established, which includes near-field measurement and modeling.
- Near-field technology is poised to become a key air interface technology for 6G.
- Led by Dr. Yajun Zhao from ZTE, Prof. Linglong Dai from Tsinghua University and Prof. Jianhua Zhang from Beijing University of Posts and Telecommunications.

Near-field region	D f	2.6 GHz (Low band)	7 GHz (Mid band)	28 GHz (mmWave band)	220 GHz (THz band)
	0.5 m	4 m	12 m	48 m	372 m
	1.6 m	60 m	119 m	476 m	1
	3.0 m	210 m	420 m	1	1



创新预见 Better Together **GG**未来 Better Future

- Nokia Blog: Protecting every carriage of the 6G train (link)
- FCC Technology Advisory Council: 6G Working Group Report, August 5, 2025 (PDF)
- Rakuten Symphony: Al-native by design: Building the foundations for 6G (link)
- Free 6G Training: Spectral Efficiency Considerations for 6G (link)

• 5G

- Light Reading: Ericsson CEO's cajoling won't make telcos warm to 'real' 5G (link)
- Operator Watch Blog: Bermuda's Mobile Landscape and 5G Adoption (link)
- Nick vs Networking: Authentication in 5GC Nausf-auth (link)
- 3GPP: Running towards Rel-19 freeze (link)
- L4S and the Future of Real-Time Performance in 5G and Beyond (link)
- Huawei's brochure "5G-A Leads in Mobile Al Era" highlights nine cases of 5G-A deployments and the benefits delivered (link)

● 4G/LTE

Nick vs Networking: Tales from the Trenches – Samsung mystery packet on IMS Call (link)

② 2G/3G

• Ghana Broadcasting Corporation: MTN Ghana outlines plan to shut down 2G and 3G services (link) – no firm dates provided.

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

- Light Reading: EchoStar rout leaves its open RAN vendors high and dry (link)
- Ian Goetz on LinkedIn ORAN: Some Thoughts... (link)

Spectrum

- MWL: AT&T acquires EchoStar spectrum assets for \$23B (link)
- RCR Wireless: Argentina opens 2.3-2.4 GHz band to enterprises for private 4G/5G (link)
- MWL: Turkey poised for 5G auction (link)
- Mobile Europe: Serbia kicks off landmark 5G spectrum auction (link)

Private Networks

- Nokia: How utilities are securing private 5G (<u>link</u>)
- Private Networks Technology Blog: HAROPA Le Havre France Leading with Private 5G for Smarter Port Operations (link)



- RCR Wireless: More high-seas private 5G with Tampnet first 5G semi-sub drilling rig; first 5G FPSO (link)
- Private Networks Technology Blog: Private Mobile Networks for Warehouses and Logistics (link)
- RCR Wireless: GSMA tells India to reinforce carried-led private 5G model (link)
- ISP Preview: Ofcom to Open UK 5G Mobile Auction of 26GHz and 40GHz Bands on 17th Sept (link) Ofcom PR here.

Telecoms Infrastructure, Small Cells, Antennas & others

- Paul Rhodes on LinkedIn Wednesday Wonderings: Off The Rails with Theresa Green (link)
- Telecoms Infrastructure Blog: Conical Antennas Boost Vodafone Germany's Tunnel Coverage (<u>link</u>)



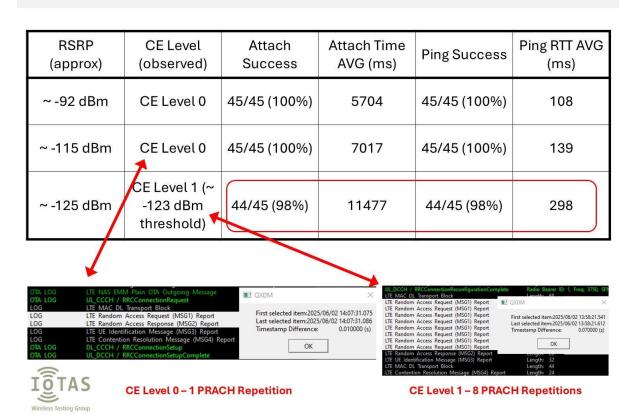
- Paul Rhodes on LinkedIn Thursday School: Product Packaging (link)
- Peter Clarke on LinkedIn: "Simultaneous Success: VodafoneThree MOCN delivers excellence for Three UK customers in a previously poor service area while also maintaining gigabit throughput for existing Vodafone users..." (link)
- Paul Rhodes on LinkedIn Wednesday Wonderings: Off The Rails without Theresa Green (link)

O IoT / M2M / Smart Homes

- Eseye: Lessons from Volvo's Global IoT Rollout (link)
- Chris Cockings on LinkedIn: "Field Testing: LTE CAT-M Coverage Extension Levels Real PRACH Behaviour. LTE CAT-M (Category M1) includes Coverage Extension (CE) mechanisms, allowing devices to operate reliably at the edge of coverage or in challenging radio conditions..." (link)
- Matt Hatton on LinkedIn: "Vodafone IoT has struck a deal with Simetric to act as a single-pane-of-glass (SPOG) platform. We've been talking about the need in part driven by remote

- SIM provisioning for an abstraction layer across multiple networks/connectivity management platforms..." (link)
- Chris Cockings on LinkedIn: "Field Testing: LTE CAT-M CE Levels vs Coverage Real-World Behaviour. LTE CAT-M uses Coverage Extension (CE) Levels to adapt to low coverage conditions by adjusting PRACH repetitions and RRC connection establishment parameters (such as MSG4 PUCCH repetitions)..." (link)

Field Testing: LTE CAT-M CE Levels vs Coverage, Real-World Behaviour



• Afzal Mangal on LinkedIn: This is still the best comparison I've ever seen... (link)

Security & Privacy

- Denis Laskov on LinkedIn Hardware Hacking 101: A series of great hands-on articles about JTAG, UART, SPI, and hardware glitching (<u>link</u>)
- Alex Leadbeater on LinkedIn: "A moment of reflection this morning. How many manufacturers or sellers of critical products with digital elements are there as defined by the EU Cyber Resilience Act, who want to sell products in EU single market after 1st Jan 2027, without a large compliance headache? ..." (link)
- Denis Laskov on LinkedIn RFID Cybersecurity: Everything you always wanted to know about it but were afraid to ask (<u>link</u>)
- TechRadar: Got no signal? This devious cyberattack can downgrade your phone from 5G to 4G without you knowing (link)
- CommsRisk: French Government Switches to Secure National Instant Messaging Platform (link)

• Dmitry Kurbatov on LinkedIn: "SS7 Bypasses and Efficient Protection. Why do some defenses fail while others succeed? What do successful defenders do differently? ..." (link)

Connected And Autonomous Vehicles (CAVs)

- Slashgear: What Would Happen If You Pressed The SOS Button In Your Car (link)
- Denis Laskov on LinkedIn: Hacktivism or Vandalism? The new and technical way to "blind" robotaxis is already on the streets (<u>link</u>)



AI, ML & Automation

- Light Reading: Al looks increasingly useless in telecom and anywhere else (link)
- RCR Wireless: KT tests AI-RAN tech on 5G network (link)
- The Knowledge Project Podcast: Why Everyone Is Wrong About AI (Including You) | Benedict Evans (video)

Satellites, HAPS, Drones, UAVs & Space

- TMF Associates Blog: What's next for EchoStar? (link)
- Ookla: Starlink Slows Down during Burning Man (<u>link</u>)
- Denis Laskov on LinkedIn Space hacking is here: Researchers built a satellite honeypot and caught 4 real and meaningful attacks (!!!) (link)

Public Safety Networks

- Government.no: The government will use modern 5G technology for Norway's new emergency network (<u>link</u> in Norwegian)
- NTT Docomo: Supporting disaster-resistant communications through regional collaboration -DOCOMO Group Kyushu Comprehensive Disaster Prevention Drill in Beppu (<u>link</u>, <u>video</u> in Japanese)

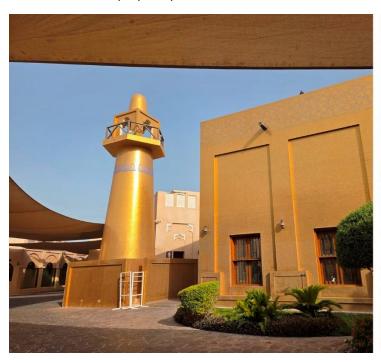
Sustainability

 Ethio Telecom and Huawei Launch Solar-on-Tower Sites to Drive Green Transformation of ICT Energy (PR)

Other News and Technology Stuff

- MWL: SK Hynix starts producing 2Tb NAND flash (<u>link</u>)
- Fox News: Al drone finds missing hiker's remains in mountains after 10 months (link)
- Light Reading: Rakuten Mobile and a tale of failed telecom disruption (link)
- iPhone in Canada: New Rogers 5G+ Ad Has Families Dancing...Whether You Like It or Not (link)

© Picture of the week: This week we feature pictures of the Golden Mosque in Doha, Qatar, shared by Paopao0128 on X (see here and here), showcasing passive antennas alongside Ericsson's Massive MIMO deployed by Ooredoo and Vodafone Qatar.







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 <u>here</u>.