

Mobile & Wireless Roundup No. 143 (see original on <u>Web!</u>) By Zahid Ghadialy

Welcome to the 143rd edition of this newsletter. The highlight of my week was our <u>robotics event</u>, which gave me a lot to reflect on. It offered a fascinating glimpse into how robotics is evolving beyond traditional automation into deeper forms of collaboration. Machines are learning to interpret human intent, adapt to dynamic environments, and support complex and critical tasks.

One of the key takeaways for me was just how difficult it is to build systems that can function reliably in the real world, where unpredictability is the norm. From surgical robots dealing with the variability of soft tissue to industrial systems adjusting to changing workflows, the challenges go far beyond technology. They involve thoughtful design, intuitive interaction and an understanding of how people and machines work best together. The intersection of AI, connectivity and human factors is where some of the most exciting and difficult work is happening.

There has also been a noticeable increase in robotics news over the past few weeks. Amazon recently announced the deployment of its millionth robot and unveiled a new generative AI foundation model that is expected to improve the travel efficiency of its robot fleet by 10 percent. At MWC Shanghai, robots were everywhere. ZTE highlighted its Infinity Wireless Lab's collaboration with robot manufacturers including DroidUp, AgiBot and TLIBOT, showcasing the industry's first cross-brand robot group intelligence collaboration scenario.

Closer to home, a partnership between Heriot-Watt University's National <u>Robotarium</u>, the James Hutton Institute, the Scotland 5G Centre, Boston Dynamics and Freshwave is developing 5G-connected robotics for precision agriculture. These systems are designed to carry out tasks such as crop health monitoring, targeted fertiliser application and soil condition assessment, powered by portable 5G private networks.

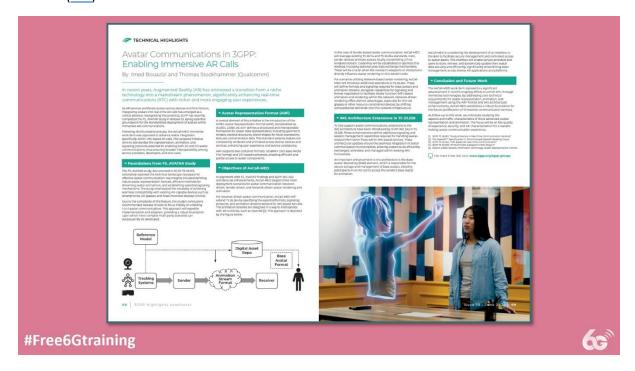
As the technology continues to advance, we are likely to see more intelligent robots supporting us in new and unexpected ways. What remains to be seen is how deeply they will impact our lives, and how we choose to shape that future.

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

 Free 6G Training: 3GPP Highlights Issue 10 showcases the momentum building toward 6G (link)



- Hakima Chaouchi on LinkedIn: "Key Value Indicators KVIs in 6G is a strong point adressed by the keynote Jean Schwoerer, from Orange France at the Berlin 6G conference..." (link)
- Free 6G Training: WIoT Industry Day 25 Toward Open 6G Networks Driving Innovation in AI and Wireless (<u>link</u>)

● 5G

- Belfast Telegraph: 5G mast destroyed as arson rampage spreads outside Belfast with 17 now torched in two years (link)
- ZTE and partners demonstrate industry's first 5G-A empowered cross-brand robot collaboration at ZTE's Infinite Wireless Lab (PR)
- The National Robotarium: 5G connected robotics set to revolutionise the farming sector (link)
- Ookla: UK Mobile Operators Throw Spectrum and Sites at Glastonbury 2025, Chasing 5G Performance Leadership (link)
- The 3G4G Blog: The Evolution of 3GPP 5G Network Slice and Service Types (SSTs) (link)

3GPP Standardised Slice/Service Type (SST) Values

SST	3GPP Release	Slice/Service Type	Characteristics
1	Rel-15	eMBB (Enhanced Mobile Broadband)	Slice suitable for the handling of 5G enhanced Mobile Broadband.
2	Rel-15	URLLC (Ultra Reliable and Low Latency Communications)	Slice suitable for the handling of ultra- reliable low latency communications.
3	Rel-15	MIOT (Massive Internet of Things)	Slice suitable for the handling of massive IoT.
4	Rel-16	V2X (Vehicle to Everything)	Slice suitable for the handling of V2X services.
5	Rel-17	HMTC (High-Performance Machine-Type Communications)	Slice suitable for the handling of High-Performance Machine-Type Communications.
6	Rel-18	HDLLC (High Data rate and Low Latency Communications)	Slice suitable for the handling of High Data rate and Low Latency Communications.
7	Rel-19	GBRSS (Guaranteed Bit Rate Streaming Service)	Slice suitable for the handling of Guaranteed Bit Rate Streaming Service.

Based on: 3GPP TS 23.501 V19.4.0 (2025-06)

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4G/LTE

• Mohamed Abbas on LinkedIn: What is the difference between VoWiFi and VoLTE? (link)

2G/3G

• Teltonika: The global 3G sunset and its effect on IoT connectivity (link)

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

- RCR Wireless: 1&1 reaches 10 million users on its O-RAN 5G network (link)
- Orange France and Samsung Establish a Strategic Partnership Focused on vRAN and Open RAN with a First Pilot in the Field (PR)

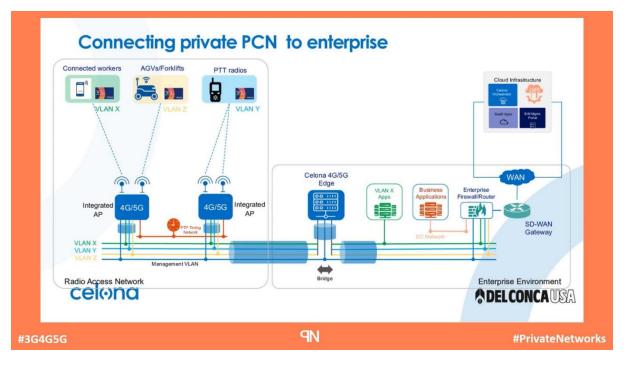
Spectrum

Space Australia: Starlink - An Emerging Risk to Radio Astronomy (<u>link</u>)

- Mint: DoT begins fresh demand study for direct spectrum for private 5G networks (link)
- Opensignal More frequencies, higher impact: How spectrum band usage for 5G is expanding across Europe (link)
- Telecoms.com: Ofcom workshop a balancing act for 6 GHz spectrum sharing by mobile and Wi-Fi (link)
- Bnamericas: Paraguay plans to award 5G spectrum in August (link)

Private Networks

- Fierce Network: Top 5 reasons enterprises don't deploy private networks (link)
- L'Embarqué: Launch of the 5G Industrial Alliance to push for the adoption of 5G in French industry (link in French)
- RCR Wireless: Tampnet deploys private 5G on seven oil rigs for Aker BP, migrates 350 sites to Mavenir (link)
- Light Reading: LG's big US home appliance factory is switching to private 5G (link)
- Private Networks Technology Blog: How Del Conca USA Automated Its Tile Manufacturing Plant with Celona's Private CBRS Network (<u>link</u>)



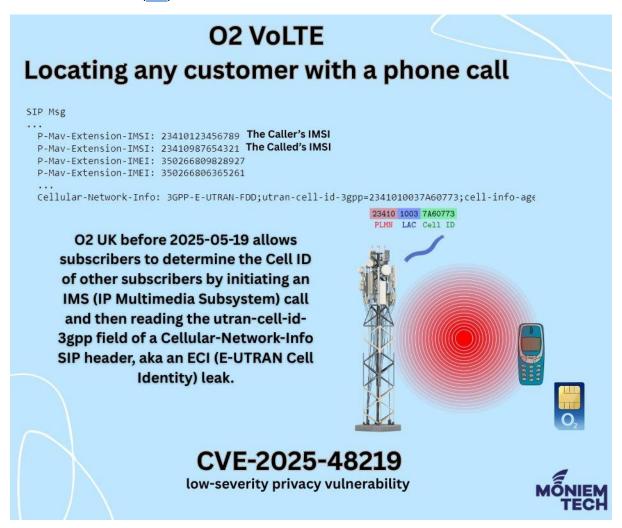
● Telecoms Infrastructure, Small Cells, Antennas & others

- Sam Jackman on LinkedIn: "This is a pretty amazing innovation Vodafone are inserting sensors inside their antenna's (macro or mast antenna's not inside buildings!) to ensure 4G and 5G antennas are precisely positioned to consistently provide customers with the best mobile signal..." (link)
- Paul Rhodes on LinkedIn Sunday School: The Two Towers! (link)
- Paul Rhodes on LinkedIn Monday Musings: Coverage Doesn't grow on Trees! (link)
- Paul Rhodes on LinkedIn Tuesday Thoughts: Mellow Yellow! (link)
- Paul Rhodes on LinkedIn Thursday School: Urban Densification! (link)
- Peter Clarke on LinkedIn Gigabit 5G: On Virgin Media O2's latest C-Band widening delivers results with Ericsson (link)

 Telecoms Infrastructure Blog: Transforming Poles into 5G Sites with Alpha Fusion Streetworks Solutions (link)

Security & Privacy

- EU Action Plan on Cable Security: mapping and risk assessment approach agreed by Group of Member States and Commission experts (link)
- MSIT, Korea: SK Telecom Intrusion Incident Final Investigation Results Announced (<u>link</u> in Korean)
- Android Authority: Android 16 can warn you that you might be connected to a fake cell tower (link)
- CommsRisk: SMS Blaster Smishing Arrests in the UK, Qatar and Indonesia (link)
- Mohamed Abbas on LinkedIn: O2 UK Fixed VoLTE Flaw that Exposed User Mobile Location Data UPDATE (link)



• Dmitry Kurbatov on LinkedIn - SMS 2FA: The Open Secret (link)

AI, ML & Automation

• FutureNet World Insights: Getting automation right can drive top level growth (link)

Satellites, HAPS, Drones, UAVs & Space

Recording and Slides from Satellite and NTN Summit at MWC Shanghai 2025 (link)

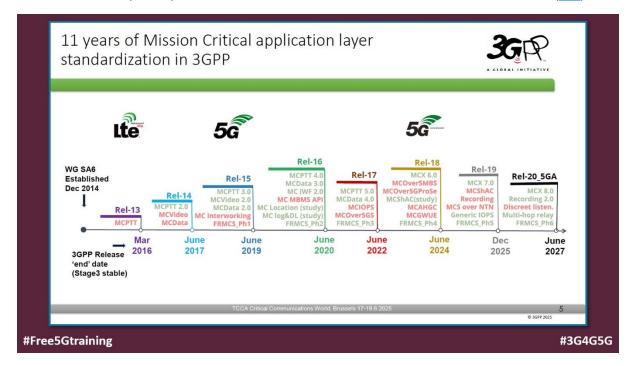
• Dean Bubley on LinkedIn: We're starting to get some real-world data and observations on #satellite #directtodevice services (link)

Wi-Fi

• Ookla: Starlink Elevates In-Flight Wi-Fi Performance (link)

Public Safety Networks

3GPP Mission Critical Standards – Past, Present and the Future by Jukka Vialen, 3GPP SA6
 Vice Chair (Airbus) at TCCA Critical Communications World, Brussels 17-19.6.2025 (link)



- Nokia: How tactical private wireless is powering mission readiness for U.S. Government agencies (link)
- Roslyn Layton on LinkedIn: "#Norway's 5G military success isn't about size or budget; it's
 about vision and execution. By 2026 #5G will be standard in the Norwegian army and cyber
 defense, while the Pentagon risks the continued downward spiral of bureaucratic logjams
 over spectrum rights. Collaboration with industry isn't a compromise it's a force
 multiplier..." (link)

Quantum Networks & Technology

- Turkcell Collaborates with Juniper Networks and ID Quantique to Pioneer Quantum-Safe Network Security (PR)
- Juniper Networks Blog: Turkcell assesses mobile network readiness to resist attacks by quantum computers (link)

Other News and Technology Stuff

- Telecoms Infrastructure Blog: Understanding the Internet's Hidden Infrastructure (link)
- Amazon launches a new AI foundation model to power its robotic fleet and deploys its 1 millionth robot (PR)

- Dean Bubley on LinkedIn: "Another noteworthy piece of evidence for falling growth of mobile data traffic volumes. The latest stats from Telecom Regulatory Authority of India (TRAI) for Q1 2025 shows a year-on-year growth rate down to 12.9%, compared with a figure of 26.0% for the year to Q1 2024..." (link)
- Ryan Jeffery on LinkedIn: "There are two prevailing schools of thought when it comes to OSS transformation: 1) Some believe that choosing an off-the-shelf OSS platform means the deployment will follow a predictable path..." (link)

© Picture of the week: The Japan Broadcasting Corporation (a.k.a. Nippon Hōsō Kyōkai or NHK) is a Japanese public broadcaster. This NHK transmission station was shared by <u>@denpa893 on X</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 <u>here</u>.