

Mobile & Wireless Roundup #86 (see original on [LinkedIn!](#))

By Zahid Ghadialy

Welcome to the 86th edition of this newsletter. I [wrote briefly](#) about MWC after returning from the event. Most people spend two or three days there because, as I mentioned, even after doing four days I felt I hadn't seen much. Anyway, I generally manage to always meet people and companies in a much more relaxed mood on the last day and often I manage to find hidden gems on the last day as well.

This year, I managed to see one such product on the last day of the event. I [promised](#) to write about it and have finally written a post on The 3G4G Blog [here](#). While I actually read about the transparent antenna for the first time in [2019](#), there were at least four companies showing transparent antennae at MWC. They all had their own unique use cases but only the one I wrote about was an example of inside-out densification use case.

It can be really challenging in busy city centres and downtown areas to deploy cabinets, antennae, etc. While this approach may not work everywhere, it is very well suited in areas where there are shops, offices, restaurants, etc., where the equipment can be deployed indoors with reliable power and connectivity to provide outdoor connectivity.

We need other similar out-of-the-box ideas to help improve coverage as well as capacity. Except for a few countries that are able to mandate high-speed reliable coverage for large geographic areas, most countries suffer from poor connectivity in rural areas, transportation networks as well as indoors. In addition, being able to handle the high number of users as well as a huge volume of data traffic in urban areas would be an additional advantage to an uninterrupted communication experience.

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.



New White Paper

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- '6G Discussion in 3GPP' and '3GPP Rel-20 RAN Timeline' from a new presentation by Wanshi Chen, 3GPP TSG RAN Chair ([link](#))
- Free 6G Training: ETSI's Conference on "Non-Terrestrial Networks, a Native Component of 6G" ([link](#))



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- Olivier Genoud on LinkedIn: "The March 2024 delivery of the 3GPP SW implementation of UE protocol conformance tests has been released..." ([link](#))
- Silke Holtmanns on LinkedIn: "The finnish regulator Traficom is hosting a 5G Hackathon. Check out the challenges..." ([link](#))
- Developing Telecoms: Digicel assures Fiji and Samoa residents that 5G is perfectly safe ([link](#))
- The 3G4G Blog: A Different Approach for Mobile Network Densification ([link](#))

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- Light Reading: Asia's 3G shutdowns gather pace ([link](#))
- Total Telecom: KPN confirms 2G sunset by end of 2025 ([link](#))

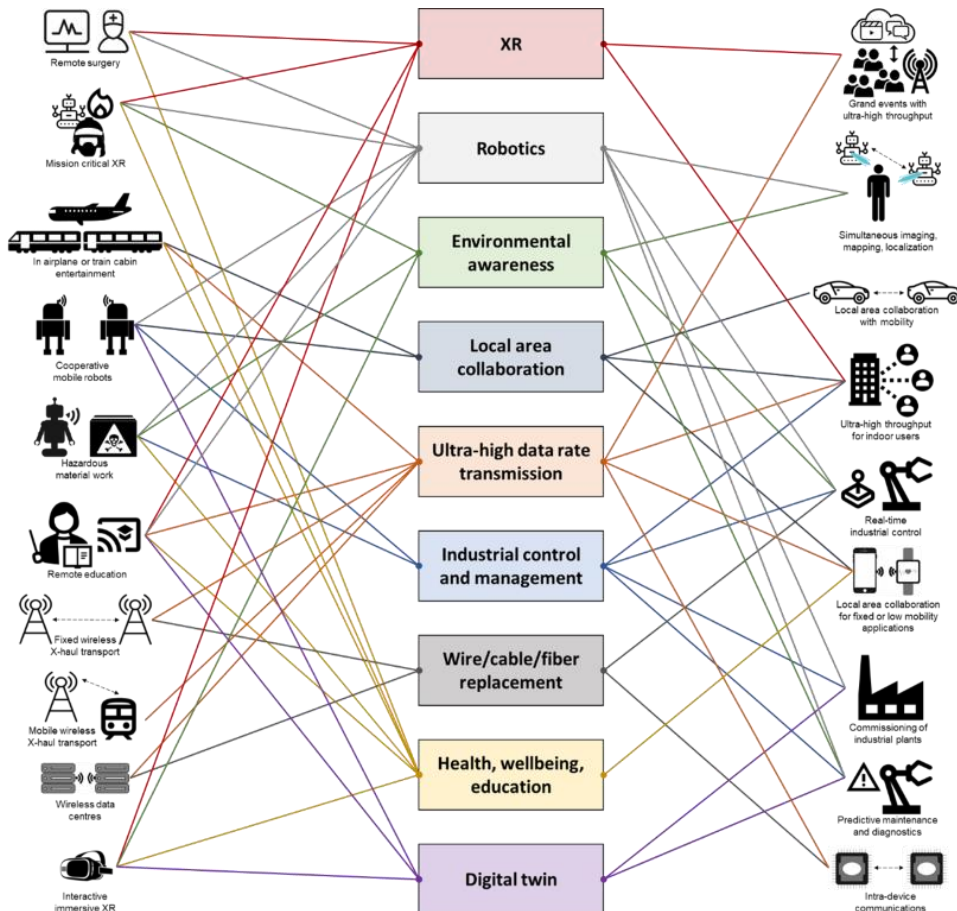
- MWL: One NZ reschedules 3G shutdown, plots 2G termination ([link](#))

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

- ATIS Initiative Brings Together Key Stakeholders to Agree on Open RAN Minimum Viable Profile ([link](#))
- Jinsung (Alex) Choi on LinkedIn: O-RAN Digital Twin Maturity Model ([link](#))
- Telecom TV: Mavenir takes Open RAN vendor crown ([link](#))
- Jinsung (Alex) Choi on LinkedIn: O-RAN Test Automation with O-RAN GPT ([link](#))
- Jinsung (Alex) Choi on LinkedIn: O-RAN AI Agent Team for O-RAN Traffic Management Task ([link](#))

🕒 Spectrum

- Dean Bublely on LinkedIn: "There are lots of comparisons of 5G network deployments, investments and spectrum between countries and regions. Unfortunately, many of the comparisons are made by policymakers and lobby groups more interested in making a political statement, than in actually helping end-users get access to better wireless..." ([link](#))
- RCR Wireless: Why AI holds major promise for spectrum sharing at scale ([link](#))
- Total Telecom: Austria allows telcos to turn off 5G frequencies at night ([link](#))
- Light Reading: 5G takes a big step toward lower 3GHz band - The US Department of Defense (DoD) released a redacted version of its 236-page EMBRSS report... ([link](#))
- ETSI releases its two first reports on THz communication systems ([link](#)) - Mike Dano on Twitter: "Here's the full list of 6G use cases in the ETSI document: -remote surgery -in-airplane or train cabin entertainment..." ([Tweet](#))



🕒 Private Networks

- Private Networks Technology Blog: Availability of Private 5G Spectrum in Switzerland ([link](#))
- STL Partners: Is there still a market for private LTE? ([link](#))
- RCR Wireless: Myths and legends – three lies the private 5G sector tells ([link](#))

🕒 Telecoms Infrastructure, Small Cells, Antennas & others

- Paul Rhodes on LinkedIn - Thursday School: Can We Keep Up? ([link](#))
- Everything RF: What is Beam Squint? ([link](#))

🕒 Virtualization, Cloud & Edge

- Hui Deng on LinkedIn: "I can't wait for sharing those youtube videos, these are top 6 world leading teleco operator's(Orange, Docomo, Deutsche Telecom, Telefonica, TIM and China Mobile) presentations for their telco cloud native journey hosted together by ETSI NFV and Orange..." ([link](#))
- Jinsung (Alex) Choi on LinkedIn - Language at the Speed of Light: The Impact of 5G Edge on AI Services ([link](#))

🕒 Security & Privacy

- Deedy on Twitter: "This is shocking. Facebook gave Netflix all your private messages on Messenger in exchange for all your watch history, while Netflix paid them \$100M+ for ads. Meta will sell your data at a heartbeat for profit." ([Tweet](#) with image)
- The Guardian: Google to destroy billions of private browsing records to settle lawsuit ([link](#))
- The OneLayer Blog - Secure and Manage Private Cellular Networks / Cybersecurity Attacks in Private Cellular Networks – Watch Out the Bad Sparrow! ([link](#))
- NCSC - SCADA 'in the cloud': new guidance for OT organisations ([link](#))
- The Hacker News: New HTTP/2 Vulnerability Exposes Web Servers to DoS Attacks ([link](#))
- Silke Holtmanns on LinkedIn: "This is an important story written by Michal Wachowiak and an important lesson. I took away two key things..." ([link](#))
- The Register: Hotel check-in terminal bug spews out access codes for guest rooms ([link](#))

🕒 Smartphones, Devices, Wearables & Gadgets

- Light Reading: The dramatic return of RCS ([link](#))

🕒 AI, ML & Automation

- MWC 2024: The Anatomy of Autonomous Networks ([link](#))
- Jinsung (Alex) Choi on LinkedIn - From Chat to O-RAN Control: The AI Evolution with RANGPT-equipped O-RAN RIC Server ([link](#))
- Eugina Jordan on LinkedIn: "I am excited to share Part 4 of my series on AI for telecom with The Fast Mode, "AI Implementation in Transport for Wireless Networks." This installment delves into the technical aspects of AI and its impact on our communication infrastructure..." ([link](#))
- Jinsung (Alex) Choi on LinkedIn - Autonomous Telco Edge AI: Unleashing the Power of Large Action Models ([link](#))
- Ruth Brown on LinkedIn: "Evolving into AI-native networks...My latest blog discusses the path to AI-native networks and the potential role that predictive and GenAI will play in the

future. Embedding AI to enhance processes will initially require guardrails and support. A number of sophisticated developments and trials of AI use cases are underway..." ([link](#))

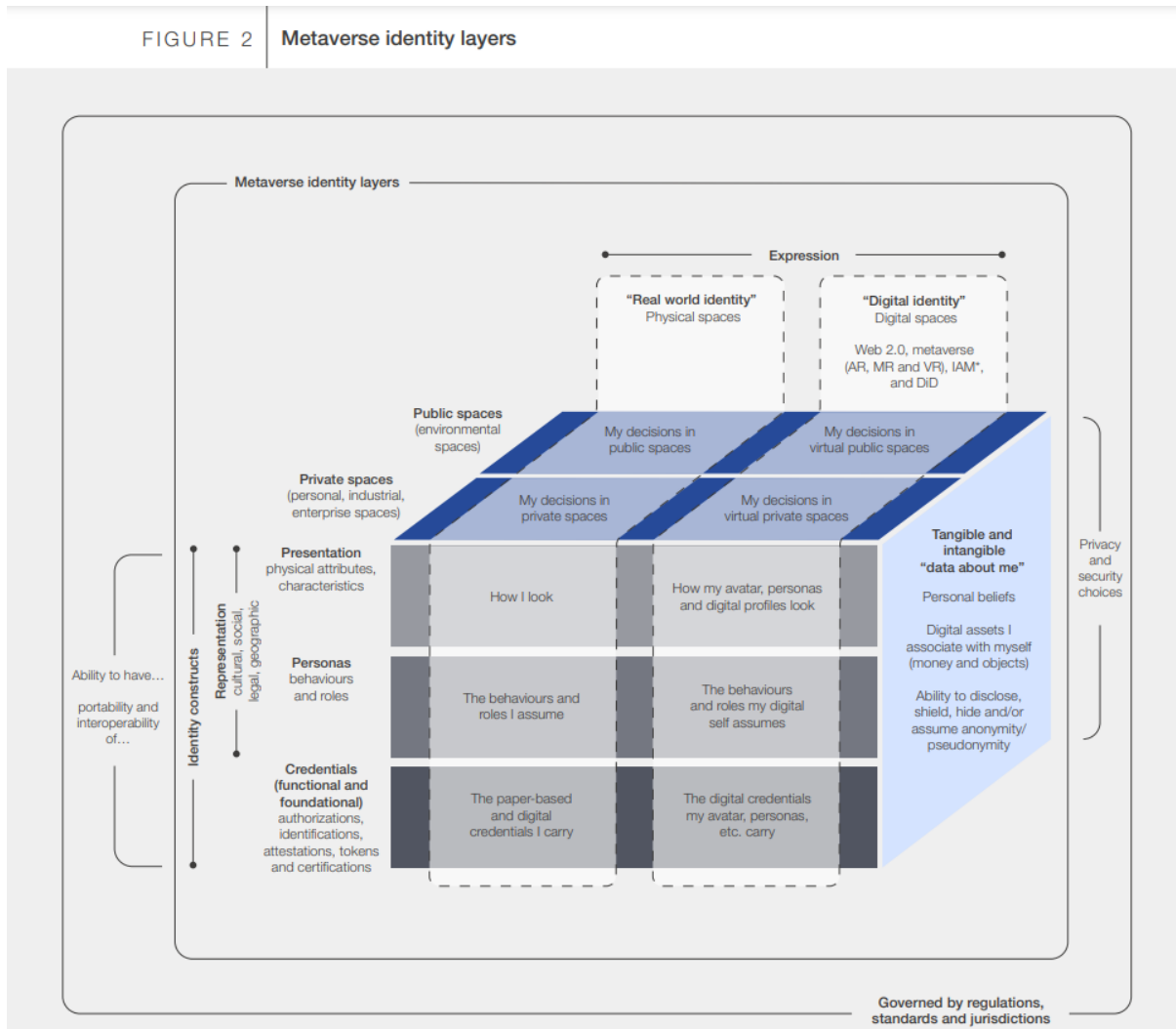
- Jinsung (Alex) Choi on LinkedIn - Mixture of ChatBots: Cross-Department Chatbot Framework for Telco ([link](#))

📍 Wi-Fi

- No lag gaming - Vodafone and Nokia test new technology to eliminate gaming and video lag ([link](#))

📍 Metaverse & Extended Reality (XR)

- WEF - Metaverse Identity: Defining the Self in a Blended Reality ([link](#)) – Mansoor Hanif on LinkedIn on this [here](#).



📍 Public Safety Networks

- The NATO Communications and Information Agency (NCI Agency) released the 10th edition of the NATO Innovation and Technology (NITECH) magazine ([link](#))

📍 Sustainability

- Telecom TV: NGMN tackles vRAN energy usage measurement ([link](#))

- Mansoor Hanif on LinkedIn: "Data Center electricity usage in Ireland came of age in 2022, hitting 18% of the total. Ireland is an outlier - far ahead of other countries such as the Netherlands which is in 2nd place at 5% ..." ([link](#))

© Other News and Technology Stuff

- The Guardian: Institute bans use of Playboy test image in engineering journals ([link](#)) – if you ever did any image processing or computer vision course, you would have used Lena’s image.
- Jinsung (Alex) Choi on LinkedIn: LLM Benchmarking for Telecom Network Domain and NetOps ([link](#))
- Futurium: NVIDIA Unveils New GPUs, Networking, Enterprise tools ([link](#))
- +972 Magazine - ‘Lavender’: The AI machine directing Israel’s bombing spree in Gaza ([link](#)) – report by The Guardian ([link](#))
- TMN: Nvidia’s telecoms goals ([link](#)) - Moor Insights & Strategy Research Note on NVIDIA GTC Networking and Mobile Telecom Announcements ([link](#))

© **Picture of the week:** RF Combiners are devices that allow multiple RF signals to share the same antenna thereby reducing the number of antennas and cables in a wireless network and at the same time improving performance and efficiency. Here is a [combiner from Radio Design](#) that can combine the RF signals from all four MNOs in UK to deploy their low and mid-band radio modules, trackside, on common infrastructure.



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](#).