



## Mobile & Wireless Roundup No. 149 (see original on [Web!](#))

By Zahid Ghadialy

Welcome to the 149th edition of this newsletter. Someone I know, who is not in technology, works in a large law firm. A long time ago, he realised that most people are not very good at finding hidden gems using search engines. Nothing was wrong with the search engines themselves, but many people simply could not be bothered to learn advanced search techniques. Over time, his role became dedicated to doing searches on behalf of partners and other senior people in the organisation.

Fast forward to 2025, his organisation had been using Microsoft Copilot for over a year. As a result, his job and the jobs of many others were at risk because information was now so easily available through Copilot. When the cost-cutting exercise began, he too received his redundancy notice.

After more than ten years in the same firm, he was content with the package offered and ready to move on. During his notice period, he discovered how colleagues were now relying on Copilot and how there was little need for him to continue doing what he had once done for them.

In his final week, he wrote a detailed email to his manager and directors, outlining the issues caused by GenAI and its hallucinations. He explained that while he was happy to leave, he would be available after a month-long family holiday, provided they hired him back at one and a half times his current package, with a welcome bonus.

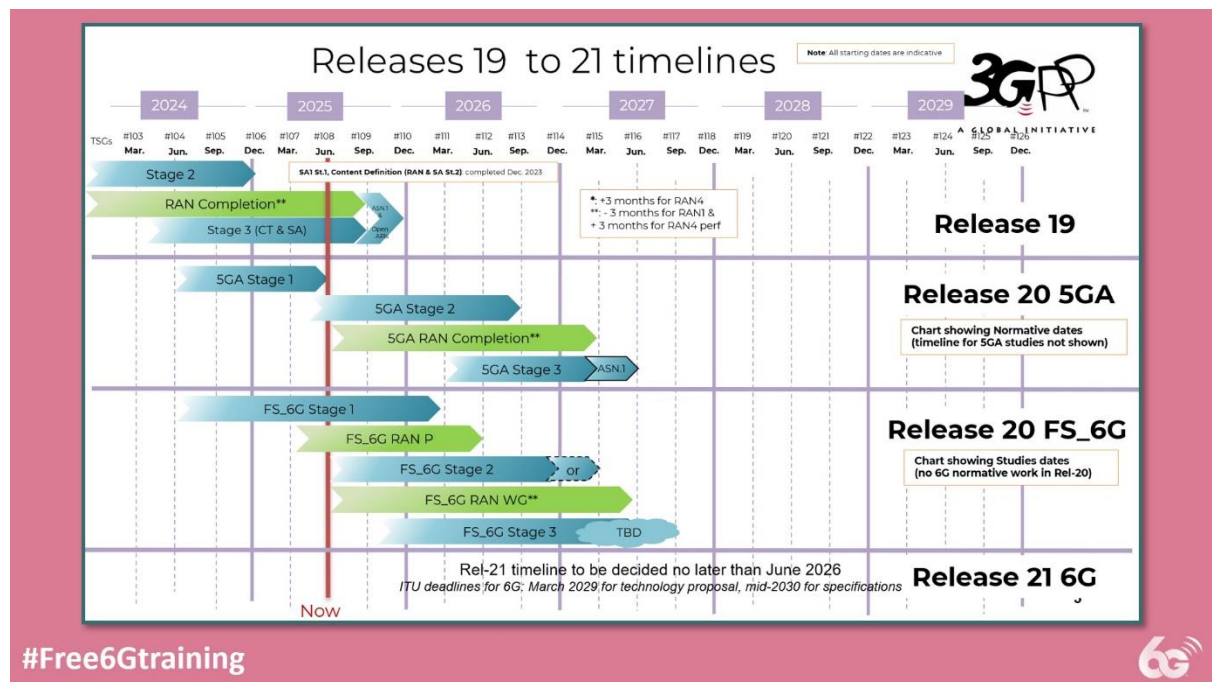
He heard nothing until the final week of his holiday and assumed the company had dismissed his concerns. Then, just before his return, a senior director contacted him, not only accepting his proposal but also offering him a promotion.

The lesson here is that, in a world where tools and platforms can make tasks look deceptively simple, the real value lies in demonstrating expertise and judgement. Technology can enhance productivity, but it does not replace the insight, experience and critical thinking that professionals bring.

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

- Samsung Research Blog - 6G Vertical: New Start Point of Vertical Integration ([link](#))
- Free 6G Training: 3GPP Release 20 Sets the Stage for 6G ([link](#))



## 🕒 5G

- The Evolution of 3GPP 5G Network Slice and Service Types (SSTs) ([link](#))
- Infographic: Improving FWA Performance with Advanced Congestion Avoidance Techniques ([link](#))
- Gabriel Brown on LinkedIn: This is a good example of 5G standalone (SA) starting to scale... ([link](#))

## 🕒 4G/LTE

- Rudolf van der Berg on LinkedIn: "Fixed Wireless Access may not be as ideal as some think it could be. 4G and 5G were never designed with FWA in mind and it is showing..." ([link](#))

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

- Light Reading: Researchers recap some security downsides to open RAN ([link](#))
- RCR Wireless: AI RAN, Cloud RAN, and Open RAN — one network, three transformations ([link](#))
- Vietnam Pictorial: Viettel to deploy over 2,000 5G Open RAN stations in 2025 ([link](#))

## 🕒 Spectrum

- GSA: National Spectrum Positions – August 2025 ([link](#))

- Mohamed Abbas on LinkedIn: The most important Equation for any Telecom Engineer :) ([link](#))
- Extensia: Tanzania Awards 3.6–3.8 GHz Licences to Boost 5G Rollout and Broadband Expansion ([link](#))
- Parag Kar - Jio's UBR Explained: Can It Really Scale Better Than 5G FWA? ([video](#))

## 🕒 Private Networks

- Private Networks Technology Blog: Singtel's 5G Powers the Transformation of Singapore's Tuas Mega Port ([link](#))

**Singtel transforms port operations with 5G precision**

	<b>Automated Guided Vehicles (AGVs)</b>	<b>Automated Rubber Tire Gantries (aRTGs)</b>
<b>What they are</b>	Driverless vehicles transporting containers between quayside and container yard	Crane systems that stack containers with precision and minimal manpower
<b>Impact of 5G trials</b>	<ul style="list-style-type: none"> <li>5G 3.5GHz midband frequency enabled minimum network latency of 10ms</li> <li>50% reduction in latency compared to the previous 4G network</li> </ul>	<ul style="list-style-type: none"> <li>5G mmWave (26GHz/28GHz frequencies) enabled 140 Mbps data uplink and an even lower network latency</li> <li>Surpassed baseline targets of &gt;105 Mbps data uplink and &lt;50ms network latency*</li> </ul>
<b>Outcomes for Tuas Mega Port</b>	<ul style="list-style-type: none"> <li>AGVs can operate within a much more confined space – improving yard optimisation at Tuas Mega Port</li> <li>Increased number of AGVs in operation, resulting in improved productivity – targeting 2,000 AGVs in Tuas Mega Port</li> </ul>	<ul style="list-style-type: none"> <li>Increased manpower efficiency: Operators can operate 6 aRTGs at one time, up from 3</li> <li>Completely automated RTG operations can further drive efficiencies in Tuas Mega Port</li> </ul>

**How 5G drives automation at Tuas**

5G network alone will provide the high speeds, high bandwidth, and ultra-low latency needed for mission-critical applications around the Tuas Mega Port. It will also create secure private networks tailored to the port's specific security needs, to help mitigate the risk of data breaches and unauthorised access.

By delivering high-throughput, high-density connectivity across thousands of devices and control points, 5G will lay the groundwork for scalable, precise, and secure port automation in the Tuas Mega Port. These capabilities will be critical to advancing Singapore's position in global maritime logistics.

**Massive automation at scale**  
5G scalability to support higher numbers of AGVs will drive higher container throughput across the Tuas Mega Port.

**Remote-controlled precision**  
Cranes and aRTGs will be operated from a central control tower, simplifying the legacy 50-line. Operators can work from air-conditioned offices, instead of compartments, both at great heights.

**Safer working conditions**  
5G-enabled remote operations minimise human presence on the yard, reducing the risk of accidents.

**Secure operations**  
Secure private networks will be tailored to the MegaPort's specific security needs, mitigating risks of data breaches and unauthorised access.

**Predictive maintenance**  
5G will support drone-based surveillance and extended reality applications to help detect faults earlier, reducing costly downtime.

#3G4G5G #PrivateNetworks

## 🕒 Telecoms Infrastructure, Small Cells, Antennas & others

- Paul Rhodes on LinkedIn - Thursday School: Mr Sandeman, Bring me some Coverage ([link](#))
- Telecoms Infrastructure Blog: Transforming Stadium Connectivity with SOLiD's GENESIS DAS at Dortmund's Signal Iduna Park ([link](#))
- Paul Rhodes on LinkedIn - Wednesday Wonderings: You've Been Framed! ([link](#))

## 🕒 Security & Privacy

- Midnight Blue: Sepura's TETRA device vulnerabilities ([link](#))
- PaperJam: Huawei, at the heart of the Post outage in Luxembourg ([link](#))
- Midnight Blue - 2TETRA:2BURST ([link](#))
- Denis Laskov on LinkedIn - Securing the Internet of Medical Things (IoMT): One-stop shop for healthcare cybersecurity professionals ([link](#))
- Altaf Shaik on LinkedIn - New Security Research: Defending 5G Networks from Protocol Tunneling and Boundary Bridging Attacks ([link](#))
- The Record: Orange, France's largest telecoms company, hit by cyberattack ([link](#))
- Eric Priezkalns on LinkedIn: Data Breach at Bouygues Telecom Affects 6.4mn Customers ([link](#))
- Dmitry Kurbatov on LinkedIn: When the Edge Becomes the Shortcut to the Core ([link](#))

## 🕒 Smartphones, Devices, Wearables & Gadgets

- MWL: Deutsche Telekom debuts low-cost AI phone ([link](#)) – DT PR [here](#).

## 🕒 Satellites, HAPS, Drones, UAVs & Space

- TMF Associates Blog - AST SpaceMobile: Delays, delays... ([link](#))
- Connectivity Technology Blog: Amazon's Project Kuiper Advances Towards Global Satellite Broadband Deployment ([link](#))
- Huawei Central: Heavy rain increased Huawei satellite smartphone users by 10 times ([link](#))
- Frank Rayal - The NTN Spectrum Wars: Is MSS Becoming the Only Viable Path Forward? ([link](#))

## 🌱 Sustainability

- Tom's Hardware: AI's soaring energy consumption is causing skyrocketing power bills for households across the US — States reporting spikes in energy costs of up to 36% ([link](#))

## 📰 Other News and Technology Stuff

- TechBrew: How this nonprofit is using AI to clean up ocean plastics ([link](#))
- The Guardian: Can't pay, won't pay: impoverished streaming services are driving viewers back to piracy ([link](#))
- Ryan Jeffery on LinkedIn: In telcos, everyone's working toward the same goal right? ([link](#))

📸 **Picture of the week:** Afzal Mangal [reported from his trip to Spain](#) that he came across an NB-IoT device in an Aldi supermarket. A comment on his post noted that from January 2026, when a new law comes into effect in Spain, every car will be required to have one, which could result in as many as 26 million devices being sold.



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](#).