



Mobile & Wireless Roundup No. 152 (see original on [Web!](#))

By Zahid Ghadialy

Welcome to the 152nd edition of this newsletter. As technology continues to move at a rapid pace, companies and the people within them are constantly adapting. Roles evolve quickly, responsibilities shift, and with that comes the need to learn new skills and technologies.

Many people can pick up these skills with only minimal guidance, and this has shaped how companies deliver training. Traditional instructor-led sessions have often been replaced with subscriptions to online platforms, where individuals are expected to learn at their own pace, whenever it suits them.

The trouble is that this model has clear limitations. Most of us tend to procrastinate, and without clear motivation or external pressure, a vast library of resources often goes unused. Dedicated in-person training, on the other hand, forces people to step away from day-to-day distractions, focus fully on the material, and engage with both the trainer and their peers. The ability to ask questions in real time and learn from others' perspectives makes the experience far more effective than working through online modules in isolation.

There is also a social and collaborative element that should not be underestimated. Being in a room with others facing similar challenges helps to build a sense of shared purpose. Conversations during breaks or informal discussions often spark new ideas that go well beyond the training material itself. These moments of connection are very hard to replicate in purely digital environments.

In-person sessions also create a sense of accountability. When you are physically present, you are more likely to pay attention, contribute to discussions, and retain information. The investment of time and focus makes the learning stick in a way that dipping in and out of online content rarely does.

Earlier this year, I ran a workshop for a team who had all been working with the same technology, but each group had a slightly different understanding. Developers, marketing, sales and even senior management were not fully aligned. The in-person session not only helped them reach a common understanding, it also gave people pointers on who to approach the next time they had a question or idea. For me, it was a fantastic learning experience too. I would strongly recommend running such workshops a couple of times a year, as not everyone can make it on a single date.

For those of you who don't know me, 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 summary of my posts and other news that caught my attention since the last edition.



🕒 Spectrum

- UK - Ofcom Statement and further consultation: Enabling satellite direct to device services in Mobile spectrum bands ([link](#))
- William Webb on LinkedIn: The move to MSS spectrum ([link](#))
- GSMA Public Policy Paper: Spectrum for D2D ([link](#))
- Spark partners with Tū Ātea to secure exclusive rights for 20MHz of 5G spectrum and explore joint Māori workforce development opportunities ([PR](#))
- Bnamericas: Viettel, Claro, Entel, and Integratel secure 5G spectrum in Peru ([link](#))
- Developing Telecoms: NBTC Thailand to allocate 4800-MHz spectrum to factories for private 5G ([link](#))

🕒 Private Networks

- Private Networks Technology Blog: Celona AerFlex Cloud Controlled Private 5G for Enterprises ([link](#))
- The University of Strathclyde: Private 5G takes off with airborne trials for live sport and entertainment ([link](#))

© Telecoms Infrastructure, Small Cells, Antennas & others

- Connectivity Technology Blog: Boosting 5G Coverage with Transparent Antennas and Shared Infrastructure ([link](#))

JTOWER and AGC Are Using Transparent Antennas to Advance Infrastructure Sharing



Connectivity. Technology

#3G4G5G

- Paul Rhodes on LinkedIn - Thursday School: On the Rails with Theresa Green ([link](#))
- Light Reading: Chinese operators get cracking on hollow-core fiber ([link](#))
- Paul Rhodes on LinkedIn: "Porto has many hills, with this spot near Sao Bento being pretty much the only one not built upon and therefore all the MNOs have been keen to access this rare lattice tower..." ([link](#))
- The 3G4G Blog: Dummy Loads in RF Testing for Dummies ([link](#))

About dummy loads

- Terminations that can dissipate **high power**
 - Low watts to many kilowatts or more
- Safely absorbs RF power, converts it to heat, and dissipates the heat
- Most often made of non-inductive resistors
 - And one or more cooling mechanisms
- Present a near-perfect impedance match to the RF source (transmitter)
- Ideally, does not radiate ("dummy antenna")
- Usually coaxially connectorized, but may also have a flange for terminating waveguides



"Dry" dummy loads

- Cooled by means of convection (movement of air)
- Generally use heat sinks or "fins" connected to load resistor(s)
 - Maximizes the surface area for more efficient heat dissipation
- Inexpensive, easy setup, low maintenance
- Good choice for low wattages
 - Up to a few kilowatts
- Higher wattage dry loads will often have fans or blowers



"Wet" dummy loads

- Resistor (bank) is cooled by proximity to or immersion in a liquid
- Can dissipate more heat than a dry load
 - Can be smaller for a given wattage
 - But greater cost and complexity
- Common liquids are water and oil
 - Liquid type may affect the power-handling capability of the load
- Sometimes liquid-cooling is supplemented by air-cooling
 - Cooling fins / fans attached to container
 - Radiator or heat exchanger



Summary

- Dummy loads are RF terminations designed to dissipate "large" amounts of power (> 1 watt)
 - Rated for continuous and / or intermittent load
- Ideally, a dummy load is a purely resistive matched load over a wide frequency range
- Two types of dummy loads
 - Dry loads: low cost, simple, lower power
 - Wet loads: high cost / complexity, higher power
- Dummy loads can be measured using
 - Vector network analyzers (VNA)
 - Spectrum analyzers and tracking generators
 - Directional or terminating RF power sensors



#3G4G5G



6G

- Free 6G Training: The Role of the All-Photonics Network (APN) in IOWN and Future 6G ([link](#))



Prospective Use Cases leveraging IOWN

Cyber Physical Systems
Beyond Human Cognition, Prediction, Automation

Area Management	Mobility Management	Industry Management	Health Management	Smart Grid Management	NW Infrastructure Management
City wide surveillance City wide autonomy	Energy Aware Navigation	Remote Manufacturing Inspection Automation	Disaster outbreak prevention	Renewable energy Supply-demand control	Maintenance automation "Fiber-Sensing"

AI Integrated Communications
Human-Centric Application enhancing remote Communication & Operation

Entertainment	Remote Learning	Navigation	Human Argumentation
Immersive Live Music Immersive Live Sport Cloud Gaming	Professional Training	Immersive XR	Enhancing smooth communication

#Free6Gtraining

5G

- Andy Sutton on LinkedIn: "The increasing need for fibre based transmission for mobile backhaul and more broadly, xhaul, is highlighted by the world's first implementation of Ericsson's Advanced RAN Coordination (ARC) feature. This enables inter-site carrier aggregation to provide a capacity and performance uplift across the EE network..." ([link](#)) – BT PR [here](#), Ericsson PR [here](#).
- Chris Cockings on LinkedIn - Field Testing: Why Good RSRP Doesn't Always Mean a Good Cell ([link](#))

4G/LTE

- Chris Cockings on LinkedIn - Field Testing: LTE Attach Type - Combined Attach ([link](#))

IoT / M2M / Smart Homes

- Matt Hatton on LinkedIn: SGP.32 looms large over the cellular IoT landscape ([link](#))
- Denis Laskov on LinkedIn: Catch IoT malware and rootkits using electromagnetic side-channel communication from the microchip ([link](#))

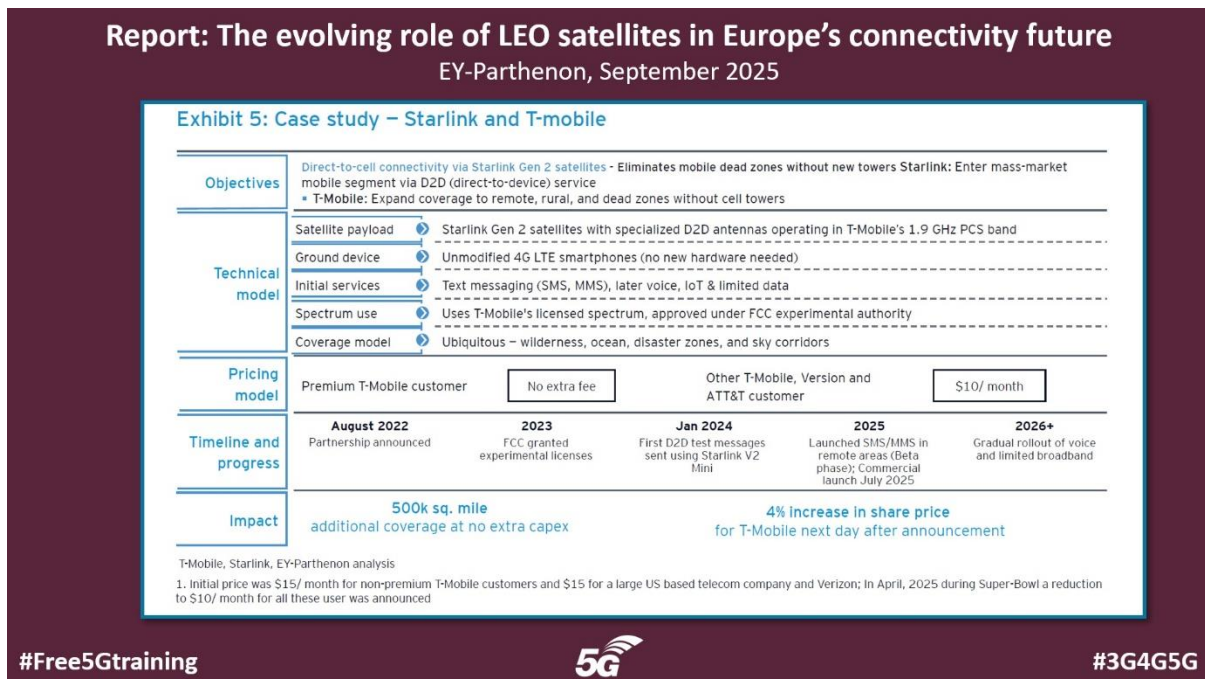
Security & Privacy

- Denis Laskov on LinkedIn - Identify a Bluetooth chip without physical interaction: research and tools for Bluetooth device recon for future attacks ([link](#))
- Light Reading: KT mobile payment breach may have leaked personal data of more than 5,500 users ([link](#))
- Commsrisk: Malaysian Regulator Shares Video of Raid That Seized SMS Blaster Gear Worth \$24,000 ([link](#))

- Denis Laskov on LinkedIn: Hacking headphones to unlock your phone: vulnerabilities in Bluetooth chips and what hackers can do with them ([link](#))
- Commsrisk: UK Telco Warns of 'Significant Rise' in Scam SMS ([link](#))
- Silke Holtmanns on LinkedIn: "Lawful interception tools are tricky. Every government expects them (else you can not run a network), but they are powerful tools. If the government or individuals in it "turn dark", then they are a dangerous thing to the society..." ([link](#))

☉ Satellites, HAPS, Drones, UAVs & Space

- EY-Parthenon: The evolving role of LEO satellites in Europe's connectivity future ([link](#))



- Michael Thelander on LinkedIn: "...We tested the gamut of new T-Satellite functionality, including RCS group chat and RCS group chat with picture / video attachments. Message delivery times with all these NTN/TN connected phones may be interesting..." ([link](#))

☉ Connected And Autonomous Vehicles (CAVs)

- Denis Laskov on LinkedIn - 189 Bluetooth vulnerabilities were found in cars: an academic study of in-vehicle Bluetooth security challenges ([link](#))

☉ Smartphones, Devices, Wearables & Gadgets

- Dean Bubley on LinkedIn: "Very quick note on the iPhone17. It's got the new Apple wireless silicon, including the C1X and N1 chips..." ([link](#))
- Leo Gebbie on LinkedIn: "I attended the iPhone launch event at Apple Park today and while lots of attention will be on the ultra-thin iPhone Air, I'm more focused on two other topics: durability (tied to residual value) and pricing..." ([link](#))
- CNET: All the 'Awe Dropping' Announcements You Missed at Apple's Event ([link](#))

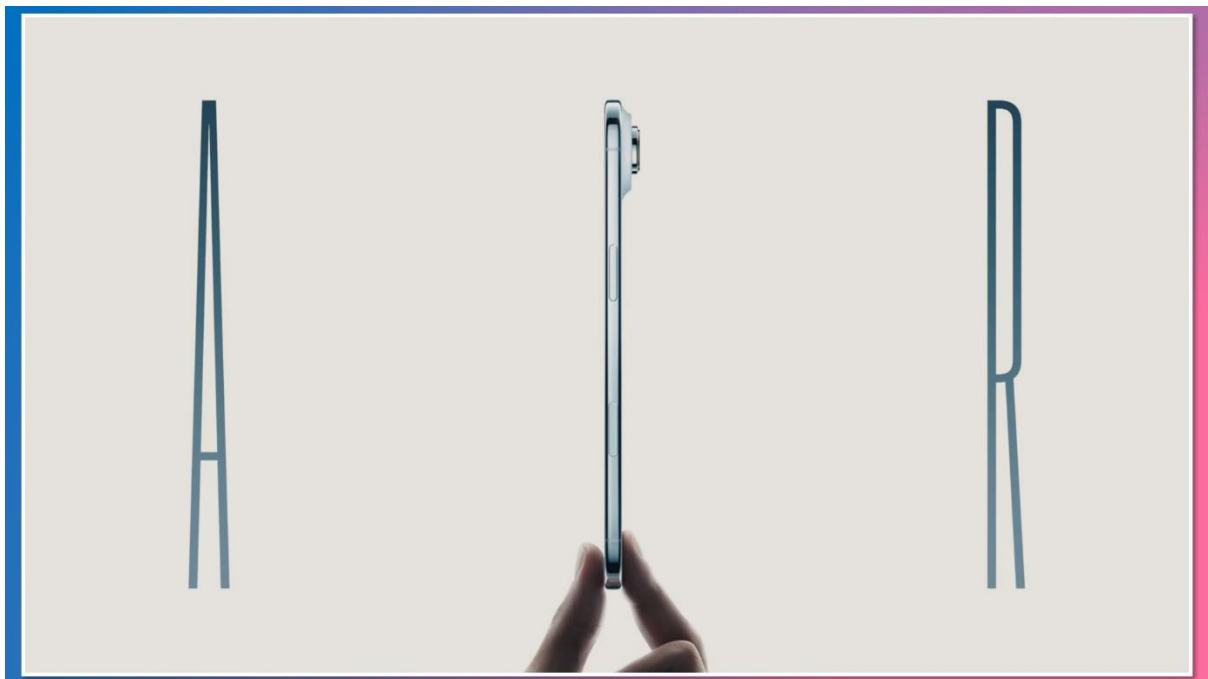
☉ AI, ML & Automation

- Communications Today: Agents? Telecom knows them as SON ([link](#))
- The Next Frontier: Samsung's Journey to AI-Powered Networks Beyond AI-RAN ([link](#))

🕒 Other News and Technology Stuff

- News Beep: Chinese robotics firms target 'silver economy' with elderly-care robots ([link](#))
- PwC Global semiconductor industry outlook 2026: Semiconductor and beyond ([link](#))
- ETSI Open Source MANO Announces Release EIGHTEEN, Continuing to Advance Declarative Infrastructure and Application Management ([PR](#))
- MEF: Is ChatGPT Killing GSMA Open Gateway? ([link](#))

🕒 **Picture of the week:** Apple's big announcement was the new [iPhone Air](#), just 5.6 mm thick with a polished titanium frame and Ceramic Shield on both sides. It comes with a 6.5 inch Super Retina XDR display offering ProMotion up to 120 Hz and peak brightness of 3,000 nits. The main camera is 48 megapixels, paired with an 18 megapixel front camera. Powered by the A19 Pro chip with support for WiFi 7, Bluetooth 6 and Thread, it is designed to deliver all day battery life. Apple's launch video has already been viewed more than 6.5 million times [here](#).



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](#).