



Mobile & Wireless Roundup No. 123 (see original on [LinkedIn!](#))

By Zahid Ghadialy

Welcome to the 123rd edition of this newsletter. This week, I came across some fascinating paradoxes—perhaps you did too, as one of them was in the news.

The first is [Jevons' Paradox](#), which states that increasing the efficiency of resource use often leads to greater overall consumption rather than a reduction. For example, as energy-efficient technologies lower costs, the demand for energy tends to rise instead of decline.

The second is [Moravec's Paradox](#), an observation in artificial intelligence and robotics that tasks requiring high-level reasoning (such as playing chess) are relatively easy for AI, while basic sensory-motor skills (such as walking or grasping objects) remain challenging. In other words, what is hard for humans is often easy for machines, and vice versa.


Both paradoxes reveal how technological progress does not always lead to expected outcomes. Jevons' Paradox suggests that efficiency gains do not necessarily reduce total resource use, just as Moravec's Paradox suggests that AI's advancements do not always align with our assumptions about difficulty. Together, they highlight how innovation can produce counterintuitive or even paradoxical effects.

Another relevant concept is the [Productivity Paradox](#), which highlights how advances in computing and automation do not always lead to immediate productivity gains—just as AI has yet to replace human workers as quickly as once predicted.

Finally, there is [Amara's Law](#), named after Roy Amara, which states: *"We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run."* This principle ties into both Jevons' and Moravec's paradoxes— showing that while efficiency improvements and AI breakthroughs may not deliver the expected results immediately, they can lead to unforeseen long-term consequences.

As always, technology continues to evolve in surprising ways. I hope you find these paradoxes as thought-provoking as I did!

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.




Börje Ekholm


President and CEO (since January 16, 2017)

“6G, if you think about it as a technology, probably going to get introduced 2030. It's something on that time frame. But what's more important is 6G is actually an evolution of 5G. So, we should think of 6G not as a new kind -- type of a generation where you upgraded from 3G to 4G or 4G to 5G, it was kind of a -- you needed also to upgrade the whole network.” – Ericsson Q4 2024 Earnings Call, 24 Jan 2025

#CWTechTrain




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6G

- Light Reading: For Ericsson boss, 'evolutionary' 6G puts end to Gs cycle ([link](#))
- Integrating Sensing And Communications (#ISAC) for Enhanced System Efficiencies and New User Experiences ([link](#))
- 5G Technology World: ETSI Standards group to address 6G multiple access ([link](#)) – PR [here](#).
- Free 6G Training: The Long Road to 6G Spectrum ([link](#))

Setting the stage for WRC-27




4G/5G		2G/3G/4G/5G		4G/5G		5G		5G		5G		5G/6G		6G		5G/6G	
510 MHz	700 MHz	800 MHz	900 MHz	1000 MHz	2000 MHz	2.3 GHz	2.5 GHz	3.4-3.8 GHz	3.4-3.8 GHz	4.4-4.8 GHz	4.8 GHz	6425-7025 MHz (R1/R2*/R3*)	7025-7125 MHz	7125-8400 MHz portions thereof	10-10.5 GHz (R2*)	14.8-15.35 GHz	mmWave 26 GHz, 40 GHz, 47 GHz, 66 GHz

■ Existing IMT
■ IMT spectrum identified at WRC-23
■ IMT spectrum to be studied towards WRC-27
* By footnote, limited countries

ITU-R will study new candidate bands for IMT-2030/6G usage with decisions to be made at WRC-27


Region	Band 1	Band 2	Band 3
Region 1	4.4-4.8 GHz	7.125-7.250 GHz	7.250-7.750 GHz
Region 2	4.4-4.8 GHz	7.125-7.250 GHz	7.250-7.750 GHz
Region 3	4.4-4.8 GHz	7.125-7.250 GHz	7.250-7.750 GHz



To support the usage scenarios defined in the IMT-2030 framework, i.e., ITU-R M.2160 Recommendation, there is a need to study mid-band spectrum with more contiguous bandwidth

Region 1: Europe, Middle East and Africa; Region 2: Americas; Region 3: Asia Pacific

#Free6Gtraining

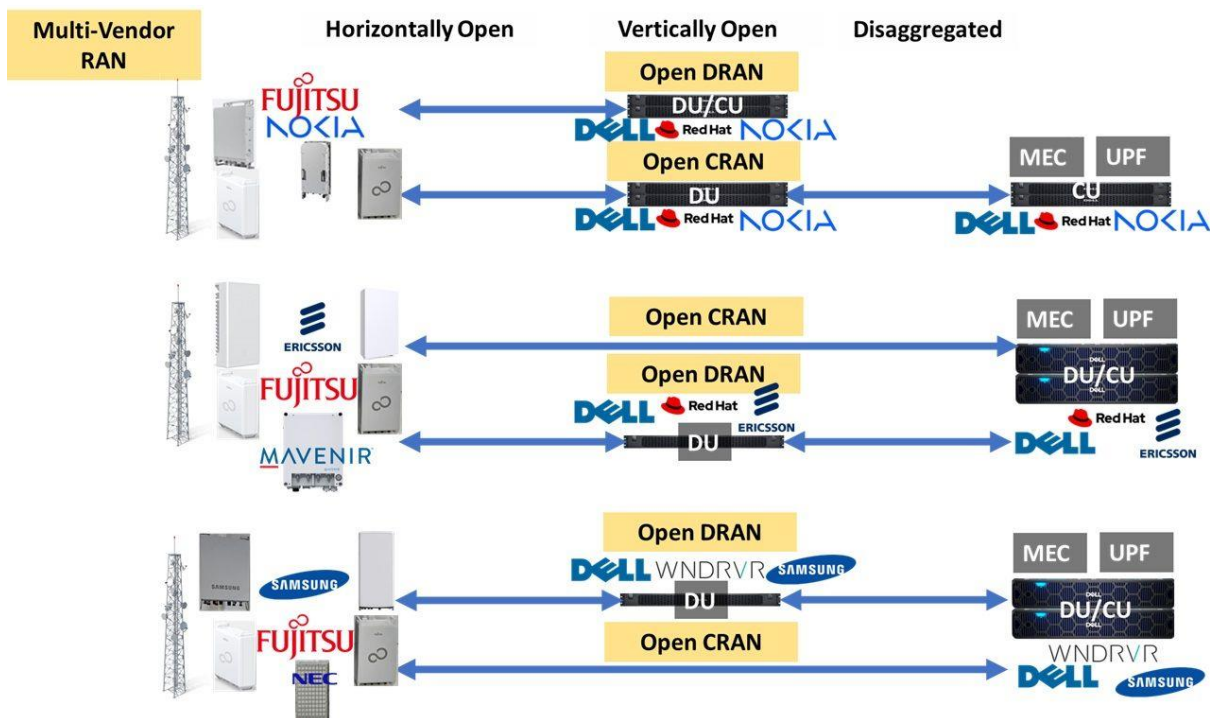


5G

- Dean Bublely on LinkedIn: "I can't believe we're still hearing and reading the original #5G hype and nonsense about use-cases like remote (or robotic) surgery, autonomous vehicles & AR / VR..." ([link](#))
- 5G Technology World: What is a scheduler and what does it do in a 5G network? ([link](#))
- Mohamed Abbas on LinkedIn: 5G Security Enhancements ([link](#))

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

- ODIN: Ericsson & AT&T Collaborate On New SMO Integrations ([link](#))
- Fierce Network — Boost CTO: Open RAN really works - just look at NYC ([link](#))
- Paul Rhodes on LinkedIn - Thursday School: Open RAN is Delivered by Open Networks! ([link](#))



Spectrum

- Developing Telecoms: Liberty Costa Rica, Claro invest \$32.5m in 5G spectrum ([link](#))

Private Networks

- MWL: Japan group targets regional revival with private 5G ([link](#))
- RCR Wireless: Plainer than fiction – five years at the sharp-end of private 5G with LHIND ([link](#))
- MWL: Vodafone Spain bags mining private 5G deal ([link](#))

Telecoms Infrastructure, Small Cells, Antennas & others

- Paul Rhodes on LinkedIn - Tuesday Thoughts: Making Infrastructure Intelligent ([link](#))
- Peter Clarke on LinkedIn: Standout Small Cell excellence meets a new era of In Building Solution delivery - relying on incremental macro capacity upgrades is no longer an option ([link](#))

- Nathan Todd on LinkedIn: "VMO2 upgrade this week 15 meter PHOSCO removed and new 20 meter PHOSCO installed tirfor winched together on site, Join visit today with the commissioner. Site alarm free and back on air..." ([link](#))

📍 IoT / M2M / Smart Homes

- Afzal Mangal on LinkedIn: This is the most important graph you'll ever see as someone in IoT ([link](#))

📍 Virtualization, Cloud & Edge

- Revolutionizing Security and Privacy at the Connected Intelligent Edge Using 5G ([link](#))

📍 Security & Privacy

- Operator Watch Blog: China Mobile's Fine-Granularity Segmentation Solution for 5G Network ([link](#))

Built-in micro-segmentation plus protects intranet security of 5G 中国移动 China Mobile

- micro-segmentation can be deployed independently or together with NF
- intranet traffic are visible
- segmentation at VM/ container/service level
- unauthorized traffic is isolated
- intranet attacks are monitored and prevented

#3G4G5G

- Denis Laskov on LinkedIn: Using SMS to exploit six (!!!) vulnerabilities in Cinterion chips – and how it's all connected to security of your smart home and connected car. 📱 🚗 💣 ([link](#))
- ExecutiveGov: NIST Calls for Public Input on New 5G Cybersecurity Paper ([link](#)) – NIST page [here](#).

📍 Smartphones, Devices, Wearables & Gadgets

- Digital Trends: Apple in hot water over adoption of new connectivity tech ([link](#))

📍 AI, ML & Automation

- NTT Technical Review: TM Forum Latest Trends ([link](#))
- MWL: Zuckerberg readies huge Meta AI investment ([link](#))
- TelecomTV: How AI is helping O2 Telefónica ([link](#))
- Light Reading: Here's why AT&T's CEO quietly cheered DeepSeek ([link](#))

🕒 Satellites, HAPS, Drones, UAVs & Space

- Vodafone makes world's first space video call from an area of no coverage using a standard mobile phone and commercial satellites built to offer a full mobile broadband experience ([PR](#), [News](#)) – some good discussions on Dean Bubley's post [here](#).
- PC Mag: Mass Retirement? SpaceX Spotted Deorbiting Dozens of Starlink Satellites ([link](#))

🕒 Other News and Technology Stuff

- Light Reading: AT&T and Verizon cut another 15.3K jobs in 2024 as AI advanced ([link](#))

🕒 **Picture of the week:** [Cinnamoroll](#) is a small, chubby dog with white fur, blue eyes, pink cheeks, a plump, curly tail resembling a [cinnamon roll](#) (hence his name), and long, thick ears that enable him to fly. He is a [Sanrio](#) character and the main protagonist of the Cinnamoroll universe. Not only does the [CTM SIM card](#) in Macau feature a Cinnamoroll design, but even the included [SIM pin](#) is Cinnamoroll-themed.



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](#).