

## Mobile & Wireless Roundup #12

By Zahid Ghadialy

Welcome to the 12th edition of this newsletter. This week India launched the much awaited 5G. I see many people who are ecstatic while many others are highly sceptical. Having been involved with 5G since 2014, I can tell you with confidence that 5G is a lot of hot air but it will change a lot of things in the future. Not just from the use cases point of view but also in terms of vendors, architectures, opportunities and evolution to 6G. Right now 6G is a lot of hot air too but we need to continue research into the area. Some of the 6G things might end up in 5G while others may move to 7G, 8G or beyond.

For those of you who don't know me, I am a technologist with over 23 years' experience in mobile wireless technology, currently working as an independent analyst, consultant and a trainer. This newsletter is a summary of my posts and others news that caught my attention since the last newsletter.



### 🕒 6G

- Free 6G Training: Video and Slides from Thinknet 6G Summit 2022 ([link](#))

### 🕒 5G

- The 3G4G Blog: Four Ways 5G Can Improve the Battery Life of User Equipment ([link](#))
- New GSMA Whitepaper - Advancing the 5G Era: Benefits and Opportunity of 5G-Advanced ([link](#))
- ICYMI - Good presentations by 3GPP on Release-17 & Rel-18 from CEATEC 2021 in Japan ([link](#))
- Signals Research Group (SRG) found MU-MIMO being tested by Verizon in the USA. Post and report by their President, Mike Thelander ([link](#))

- Capacity Media: du claims 5G record as it delivers 4.5Gbps to UAE customers in a project with Nokia and MediaTek. Carrier Aggregation (CA) of 300MHz of sub-6GHz TDD spectrum with 100MHz at 2.5GHz and 200MHz at 3.5GHz was used. ([link](#))
- NTT DOCOMO and NEC Reduce Power Consumption for 5G SA Core by an Average of 72% Using AWS Graviton2, followed by a Successful Onboarding of 5G SA Core on Hybrid Cloud ([link](#))
- Light Reading: FWA is a success. Now the hunt is on for the next big 5G use case ([link](#)) – Tom Rebbeck on Twitter: “FWA has something like 2% of the broadband market in the US. I'm not sure I'd quite call that a success just yet.” ([link](#))
- Deutsche Telekom trials 5G Wireless Wireline Convergence (WWC), achieves end-to-end data call on converged access with 5G residential gateway control from the 5G Core ([link](#))
- 5G Wireless Wireline Convergence (WWC) is in news this week so here is an old tutorial from Connectivity Technology Blog ([link](#))
- 5G Technology World: Creating massive MIMO, part 2 ([link](#))

#### 🕒 4G/LTE

- 4G/5G Campus Networks and their Challenges ([link](#))

#### 🕒 2G/3G

- TPG Telecom, Australia, confirms December 2023 switch off for 3G network ([link](#))

#### 🕒 Open RAN

- MWL: South Korean MNO LG Uplus steps up 5G open RAN research. Ciena, Airspan and Druid Software involved. ([link](#))
- TMN: Open RAN Updates from MWC LV 2022 ([link](#))
- Fierce Wireless: Rakuten’s Tareq Amin says Symphony has solved the DU problem ([link](#))
- RCR Wireless: NEC launches North American innovation hub for O-RAN ([link](#))
- Light Reading: Jio follows Rakuten into vendor role as telco sector grows older ([link](#))

#### 🕒 Private Networks

- Total Telecom: GSA has identified 66 MNO’s and 70 countries/territories where organisations are involved with private mobile network projects. This equates to 889 organisations deploying LTE or 5G Private Mobile Networks (PMN) in one or more locations – up from 794 reported in June 2022. ([link](#))
- Light Reading Video Interview: NTT and Las Vegas launch largest private 5G network in US ([link](#))

#### 🕒 Small Cells

- SCF: India’s 5G auction kickstarts rapid roll-out with strong small cell focus ([link](#))

#### 🕒 IoT / M2M

- Waseem Haider on Twitter: “Evolution of “G’s” in IoT Connectivity - Key highlights: 5G is growing slowly while 4G still remain the dominant technology until end of the decade. 5G IoT connections will not gain much significance until 2026” ([link](#))

#### VIDEO

## ☉ Cloud & Edge

- Microsoft Azure: Future of Mobile Networks and Cloud Computing report ([link](#))
- Light Reading: Public cloud holds perils, and don't expect an 'open' RAN with it ([link](#)) – John Baker from Mavenir disagrees ([link](#))

## ☉ Security & Privacy

- New whitepaper by NEC: Open RAN security examined - How open, interoperable network design facilitates security improvements ([link](#))
- MITRE and the Department of Defense (DoD) announced the launch of the FiGHT (5G Hierarchy of Threats) adversarial threat model for 5G systems. ([link](#))
- Al Jazeera: Australia tells Optus to pay cost of replacing hacked IDs ([link](#))

## ☉ Connected And Autonomous Vehicles (CAVs)

- Connectivity Technology Blog: Can C-V2X Bring A New Era of Smart Transportation in the United States? ([link](#))
- Emerging Tech Brew: Cars are now computers—and the auto industry's cyber defenses may not be ready ([link](#))
- Disruptive Asia: Lidar could become a lot cheaper, thanks to Volvo ([link](#))

## ☉ Smartphones, Devices, Wearables & Gadgets

- CCS Insight: Testing the Apple Watch Ultra's GPS ([link](#))
- 5G for every pocket: Deutsche Telekom launches the T Phone ([link](#))

## ☉ Artificial intelligence & Machine Learning

- MWL: SK Telecom, Saption take AI research to Toronto ([link](#))
- TMN: Accelerated analytics for telco? It's in the hardware ([link](#))

## ☉ Satellite Connectivity

- Wayne Lam on Twitter: *"my back-of-envelope estimate of the cost to add emergency SOS satcomm to #iPhone14; ~\$3.50/device --- less than \$1 for components & roughly \$2.50 for service (spreading existing contract over next 3 to 4 years of capable iPhones). All to attract and retain users."* ([link](#))
- MWL Blog: Are we running out of space? ([link](#))
- Charles Miller, President and CEO at Lynk Global on LinkedIn: *"In December, Lynk will launch the world's first cellular #5g payload into space. This will be another first of its kind demonstration by Lynk ... sending a 5G signal from space to connect to standard 5G mobile phone devices on Earth. Guess what ... Lynk's patents cover using the 5G protocol in satellite-direct-to-standard-mobile handsets."* ([link](#))

## ☉ Wi-Fi

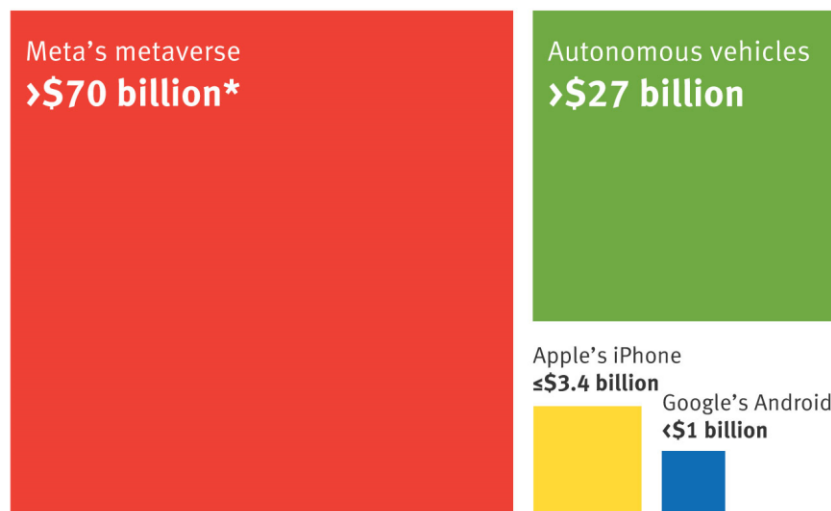
- Twitter Thread from Wi-Fi World Congress Europe 2022 by Dean Bubleby ([Day 1](#), [Day 2](#))
- IEEE Standards Association (SA) Announces Decision on Its Standards-related Patent Policy ([link](#)) – FOSS patents says, *"IEEE rejoins mainstream of standard-setting world as it undoes key elements of 2015 patent policy that encouraged hold-out by unwilling licensees: major defeat for Apple and its allies"* ([link](#))

## 🕒 Other News and Technology Stuff

- Telecom TV: Telecom has a “talent problem”, warns Colt CEO Keri Gilder ([link](#))
- Paolo Pescatore: Key Takeaways and Observations from Digital Transformation World 2022 ([link](#))
- Tim Cook on Twitter: “We can’t wait to open our new offices in the iconic Battersea Power Station for so many of our team members in London early next year. It’s a tribute to this incredible city and a reflection of our commitment to Apple’s future in the UK.” ([link](#))
- Dean Bubley on Twitter: “Huge (& rising) data consumption from smart TVs - up to 80GB/mo average. Oddly, telcos don’t seem to blame TVs for data traffic as much as the Netflix or YouTube streams displayed on them” ([link](#))
- Light Reading: Ericsson gets closer to banning Apple’s 5G iPhones in the US ([link](#))
- The cost of running fiber in rural America: \$200,000 per passing ([link](#))
- The Atlantic: Would You Be Okay Getting a Doctorless Surgery? ([link](#))
- ArsTechnica: Deepfake Bruce Willis may be the next Hollywood star, and he’s OK with that ([link](#))
- Jessica Lessin on Twitter: “How much is Meta spending to jumpstart the metaverse? 20X the original investment in the iPhone.”

## It Takes Real Money to Build a Virtual World

Potential total investments by tech companies into various technologies



\*Projected through 2026  
Source: The Information reporting

🕒 **Picture of the week:** Starlink satellites create dazzling light display in Rhode Island, USA ([link](#))



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!