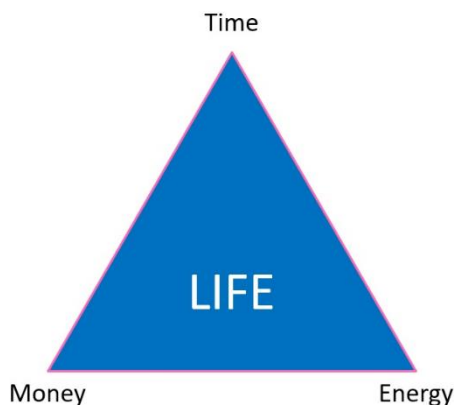




Mobile & Wireless Roundup #90 (see original on [LinkedIn!](#))

By Zahid Ghadialy

Welcome to the 90th edition of this newsletter. Some of you may know that I moderate quite a few LinkedIn groups, especially the ones that I have been contributing to for a very long time. Over the past many months, people have noticed that I am not moderating them as frequently as I used to.



Surely many of you have come across the Life Triangle. In short we have three variables with which we can play throughout our life. When we are young, we have time and energy but generally no money. When we reach our peak life, generally we have money and energy but no time. When we reach retirement, we generally have time and money but no energy. Hopefully you agree with this joke/analysis but you can also read a lot more detailed analysis [here](#).

I guess I have reached a point where I just don't have enough time but also the energy source is dwindling.

As a result my 'best effort' is slowly transitioning to 'very little effort'. As the global unemployment rates are [increasing](#), the amount of fraud and spam is increasing as well. I have realised that however hard I try, I can't always stop it and it's not the end of the world if people get exposed to some junk.

The real tricky posts are the ones that people are recycling from ten years ago, my favourite being, "Why VoLTE/VoNR is better than CSFB" or something like "Home routing vs Local Breakout". I guess LinkedIn credibility may matter for certain jobs 🤖.

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.



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- The 3G4G Blog: 6G and Other 3GPP Logos ([link](#))
- Prof. Emil Björnson on LinkedIn: "I have spent the last five years understanding how wireless technology would change in the future, when the user devices will be in the radiative near-field of large antenna arrays..." ([link](#))
- Jinsung (Alex) Choi on LinkedIn: A White paper on AI opportunities in 6G Layer 2 ([link](#))
- Mike Blanche on LinkedIn: "🚨 Alarm bells should be ringing with this study on 6G R&D from Analysys Mason..." ([link](#))
- DOCOMO, NTT, NEC and Fujitsu Develop Top-level Sub-terahertz 6G Device Capable of Ultra-high-speed 100 Gbps Transmission ([link](#))
- Free 6G Training: Summary of 3GPP Stage-1 Workshop on IMT2030 Use Cases ([link](#))

Some Potential Drivers for 6G:
A table view

	Security	AI	Immersive Com	Sustainability, Energy Efficiency	Ubiquitous and resilient coverage	Sensing	"Smart life"	Native V6G	FWA-FWC	LPWA	Northbound API	Healthcare	Autonomous Driving	Positioning	Backward Compatibility
GSMA	✓	✓	✓	✓				✓							
NGMN	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓
5GAA	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	
5G-ACIA	✓	✓	✓	✓		✓					✓				✓
5G-MAG	✓	✓	✓	✓	✓	✓	✓				✓				
GSOA	✓			✓									✓		
TCCA	✓	✓		✓											✓
WBA	✓	✓				✓									
B5GPC	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	
6GForum	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	
IMT-2030RG	✓	✓	✓	✓	✓	✓	✓						✓	✓	
B6GA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NextGA	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	
6GSNS-ICE	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	
ITU	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	

Note: Non-exhaustive list, showing the topics appearing in at least two presentations

#Free6Gtraining SWS-240025 6G

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- Fierce Network: Oh, the places FWA will go ([link](#))

- GlobalData, China Unicom and ZTE jointly release 5G New Calling whitepaper at MWC24 ([link](#))
- Mohamed ElAdawi Ashour on LinkedIn: Power Saving Mechanism provided in 5G ([link](#))
- GSMA whitepaper "5G-Advanced: Shaping the future of operator services" ([link](#))
- Tech Brew: 5G could literally change the game for this college football team ([link](#)) – you can see the AT&T video [here](#).
- O2 Telefónica sets new impulses in the core network together with Nokia and AWS ([link](#))
- Light Reading: The curious case of Three's dwindling 5G coverage ([link](#))
- Operator Watch Blog: Tunisia is Ready to Launch 5G in 2024 ([link](#))
- RCR Wireless - 5G-Advanced: Six tests in the lab and field ([link](#))
- Alok Tripathi on LinkedIn: Microsoft shares with Open vRAN vendors a #5G RAN Slicing solution that provides Application-Level Service Assurance ([link](#))
- Jinsung (Alex) Choi on LinkedIn - AI in Every Plane: Transforming 5G's User, Control, and Management Planes ([link](#))

🕒 4G/LTE

- RCR Wireless: German carriers deploy 4G/LTE network for Berlin subway ([link](#))

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

- Jinsung (Alex) Choi on LinkedIn - SMO: Chapter 2 in the O-RAN Journey ([link](#))
- Vodafone and Nokia take Open RAN to new heights in Italy ([link](#))
- Jinsung (Alex) Choi on LinkedIn: Multi-Vendor O-RAN RIC xApps/rApps Coordination ([link](#))
- Jinsung (Alex) Choi on LinkedIn - dApps: Real-Time O-RAN RIC Apps ([link](#))

dApp Standardization

12 Approval of RID on dApps from RS-02

1 min

@Lopamudra Kundu

• Email thread for review feedback: <https://groups.o-ran.org/g/nGRG/message/503>

>> **Status:** The email thread was closed on Jan 15th with no pending comment. Therefore, the RID is **approved** by nGRG.

- dApp research item **approved** by RS-02 and by nGRG TOC (on 01/16)

- Interested parties:
 - NVIDIA
 - Mavenir
 - Dell
 - VTT
- Next-steps:
 - Writing Research Report (RR)
 - Requirements/Use cases/Architecture study
 - Coordinate industry engagement

ORAN-WGx.W1.0-v01.00

1 **RS02-2023-RI06** Research Item Description

2 Research Item Title: dApps: distributed applications for real-time inference and control in O-RAN

3

4 Research Item Short reference: RS02-dapps

5 This research item focuses on the architecture for the integration of dApps in next-generation RAN, thus the parent research stream is RS-02 Architecture. This RI can also inform activities around requirements (RS-01), AI/ML capabilities (RS-03), security (RS-04), and eventually research platforms to test real-time control loops (RS-08), without however being dependent on their input.

6

7

8

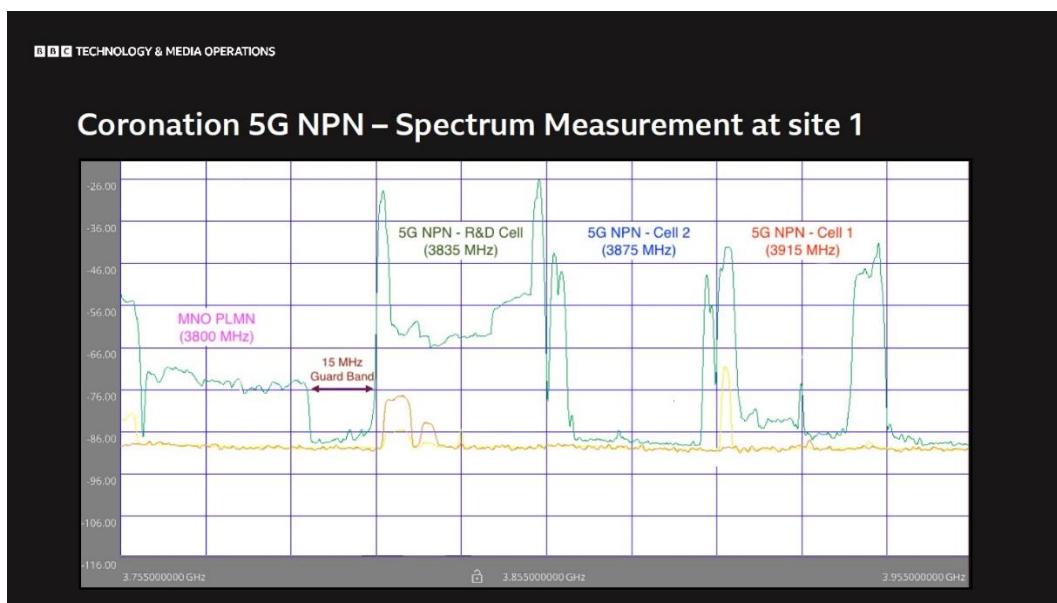
- Jinsung (Alex) Choi on LinkedIn: Application-Aware O-RAN ([link](#))
- Jinsung (Alex) Choi on LinkedIn - The R1 Interface Advantage: Enabling Dynamic O-RAN AI Solutions Development ([link](#))

📡 Spectrum

- Jinsung (Alex) Choi on LinkedIn - Spectrum Harmony: Multi-RAT Sharing Strategies toward 6G ([link](#))
- Scoop, NZ: Commission Grants Clearance For One NZ To Acquire Dense Air ([link](#))

📡 Private Networks

- Private Networks Technology Blog: Private Cellular in Offshore Wind Farms ([link](#))
- Jinsung (Alex) Choi on LinkedIn - Dynamic dApps in Private 5G O-RAN: Microsoft Janus Project and LLMs ([link](#))
- -Dean Bublely on LinkedIn - Private networks in close proximity: a future challenge ([link](#))
- Jinsung (Alex) Choi on LinkedIn: Synergy in Private 5G and AI Cloud ([link](#))
- EBU Webinar: 5G Private Networks at the BBC ([link](#))



- Private Networks Technology Blog: 450 MHz Private LTE for Utilities ([link](#))

📡 Telecoms Infrastructure, Small Cells, Antennas & others

- Paul Rhodes on LinkedIn - Tuesday School: Change is the Only Constant! ([link](#))
- Paul Rhodes on LinkedIn - Thursday School: Change is the Only Constant : RRU! ([link](#))
- TPG Telecom and Optus sign regional Multi-Operator Core Network (MOCN) network sharing agreement marking new era of mobile services for regional Australia ([link](#))
- In Australia, Operators TPG Telecom and Optus are doing MOCN based Network Sharing. Do you know the difference between MOCN, MORAN & GWCN? ([link](#))
- Paul Rhodes on LinkedIn - Monday Musings: Pubs, great for Mobile Coverage! ([link](#))
- Paul Rhodes on LinkedIn - Thursday School: Best use of Smart Street Furniture? ([link](#))
- Paul Rhodes on LinkedIn - Saturday School: Multipurpose Infrastructure Part 2 ([link](#))

📡 IoT / M2M / Smart Homes

- Characteristics of IoT standards via Qualcomm whitepaper: Understanding the benefits of LTE Cat 1bis technology ([link](#))

- RCR Wireless: Sigfox gets ‘18-times’ battery boost – with faster data rates, fewer data transmissions ([link](#))

🕒 Virtualization, Cloud & Edge

- The Guardian: Google Cloud accidentally deletes UniSuper’s online account due to ‘unprecedented misconfiguration’ ([link](#))

🕒 Security & Privacy

- Michal Wachowiak on LinkedIn: Man On The Side (MOTS) Attack in 4G/5G/MPN ([link](#))
- The Guardian - No more 12345: devices with weak passwords to be banned in UK ([link](#))

🕒 Smartphones, Devices, Wearables & Gadgets

- MWL: Apple revamps iPad lineup, adds M4 chip to Pro model ([link](#))
- The Register: Ten years ago Microsoft bought Nokia's phone unit – then killed it as a tax write-off ([link](#))

🕒 AI, ML & Automation

- Jinsung (Alex) Choi on LinkedIn - Navigating the AI Wave: Opportunities in AI for RAN Markets ([link](#))
- Google Cloud: 101 real-world gen AI use cases from the world's leading organizations ([link](#))
- Jinsung (Alex) Choi on LinkedIn - AI as a Service in Telco Networks ([link](#))
- Analysys Mason - GenAI winners and losers: the technology could upset the established order in the telecoms industry ([link](#))
- Jinsung (Alex) Choi on LinkedIn - AI at Scale in O-RAN Networks: Inside the Technical Blueprint of O-RAN Open Source AI/ML Framework Project ([link](#))
- Sagar Nangare on LinkedIn: Exploring AI’s Role in Telecom Networks - Recent Developments ([link](#))
- Jinsung (Alex) Choi on LinkedIn: The Impact of AI on O-RAN Carrier Aggregation and Spectrum Utilization ([link](#))
- Alok Tripathi on LinkedIn: SoftBank's subsidiary UK-based Arm to develop #AI chips, with mass production to start in fall 2025 ! ([link](#))

🕒 Satellites, HAPS, Drones, UAVs & Space

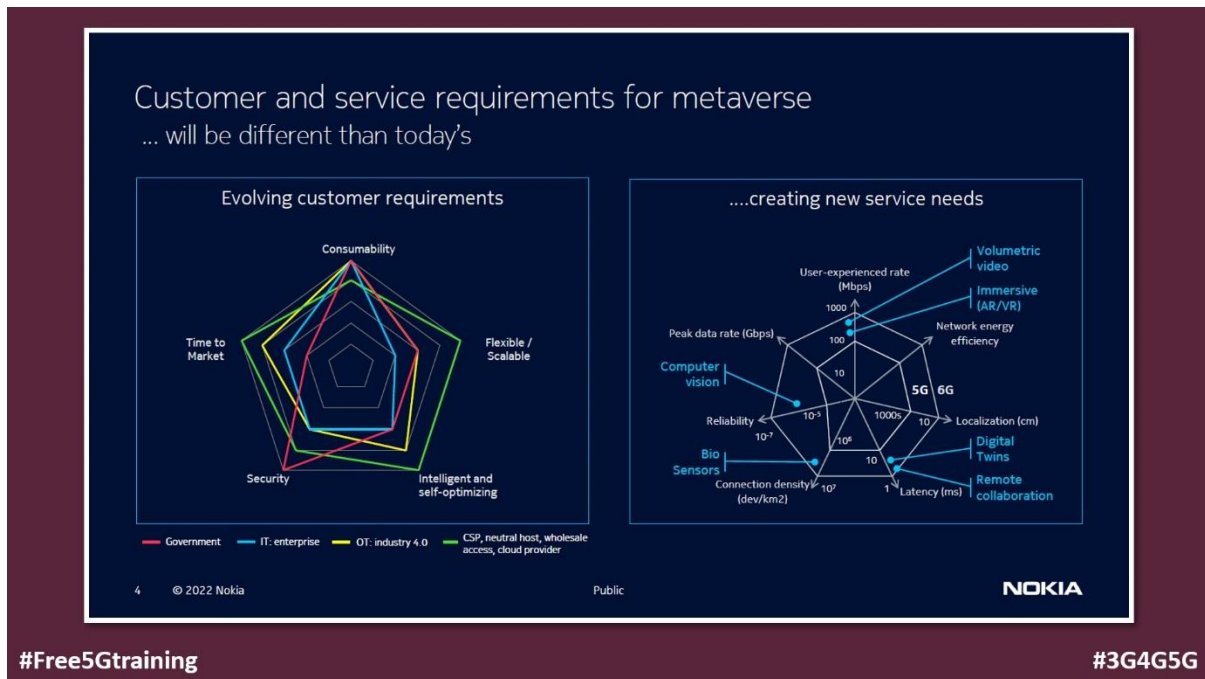
- Analysys Mason: MNOs must choose satellite D2D partners based on their constellation strategies and level of development ([link](#))
- Thuraya has advised Pivotal that they have suffered a sustained Force Majeure Event which prevents services being delivered in Australia. Services are no longer available and are unable to be recovered in the foreseeable future. ([link](#))
- OECD Science, Technology and Industry Policy Papers: Space economy investment trends ([link](#))
- SES to acquire Intelsat in compelling transaction focused on the future ([link](#))
- Ars Technica - Analyst on Starlink’s rapid rise: “Nothing short of mind-blowing” ([link](#)) – some analysts on Twitter disagree ([link](#))

🕒 Wi-Fi

- Dean Bubley on LinkedIn: "Last week I attended Wi-Fi NOW's conference in the US. It had the normal mix of familiar faces / companies, as well as some cool startups and local service providers. We were warmly welcomed by the Mayor of Sarasota, who declared a citywide "Wi-Fi Day" ... " ([link](#))
- Dean Bubley on LinkedIn: "While I'm often critical of the 5G mobile industry, there are some things I think 3GPP / IMT does well, which WiFi should emulate..." ([link](#))

🕒 Metaverse & Extended Reality (XR)

- Preparing for Metaverse-Ready Networks ([link](#))



🕒 Sustainability

- UNITAR - Global e-Waste Monitor 2024: Electronic Waste Rising Five Times Faster than Documented E-waste Recycling ([link](#))
- Rudolf van der Berg's comment on LinkedIn: "There is no correlation between file size and energy consumption in devices and networks. The metric used; KWh/GB and therefore also CO₂/GB is utterly unscientific and nonsense..." (Good discussion but [here is the post](#))
- Total Telecom: Deutsche Telekom launches energy saving AI RAN trial ([link](#))
- Mike Dano on LinkedIn: "It's no secret that data centers – including those running new AI programs – consume lots and lots of electricity. But according to the CEO of digital infrastructure company DigitalBridge, the situation is much more dire than most in the industry believe..." ([link](#))

🕒 Other News and Technology Stuff

- Stanford University HAI - AI Index: State of AI in 13 Charts ([link](#))
- A Celebration of the 150th Anniversary of the Birth of Guglielmo Marconi by the Wireless Innovation Forum and the Marconi Society ([video](#))
- Jinsung (Alex) Choi on LinkedIn - Revolutionizing Telecom: Navigating the Shift to Cloud-Native OSS ([link](#))

- Fierce Network - Industry Voices: What mobile operators are telling me about network APIs ([link](#))
- Jinsung (Alex) Choi on LinkedIn - Cost Dynamics in Telecom Network: Driving Innovation While Cutting Costs ([link](#))

📷 **Picture of the week:** Recently Mohamed Idrissi shared this strange deployment on [LinkedIn](#) where antennas are mounted horizontally, rather than vertically. Apparently this is used to increase the capacity of the sector as the horizontal beamwidth is small. Lots of discussions on the post.



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](#).