"Fixation is the way to death. Fluidity is the way to life." *Miyamoto Musashi*



Private 5G: a Game Changer for Enterprise Connectivity

5G Networking Solutions realizing the promise of multi-service private 5G, ready for exponential traffic growth and based on Liquid RAN – the latest state-of-the-art wave of Open RAN

<u>https://www.is-wireless.com/</u> https://www.linkedin.com/company/is-wireless/

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5G Private network based on Liquid RAN and EDGE





Private network users

- Outdoor / indoor O-RUs
- (not a small-cell eNB/gNB!)
- Existing COTS computing resources
 Or shared EDGE/Cloud
- Only if the above is unavailable we install local COTS server

Internet

Liquid RAN – all software network functionality



Liquid RAN enables all the three 5G use cases







By using intelligent algorithms, we can address all the three key use cases







Ultra-reliability

Massive MTC (IoT)

Low latency

Example deployments: Industry 4.0





Płock Orlen SA: 5G SA 800 MHz and 3.4 GHz RAN+Core



Kraków Astor company: 5G SA 3.6 GHz RAN (Core from T-Mobile), control of robots

Berlin CampusDynA consortium (OSRAM, T-Systems, Gestalt Robotics, Fraunhofer): 5G SA 3.6 GHz RAN+Core+xAPPs, control of robots





MC-NIB: a complete 4G or 5G network (RAN+Core) with MC applications (e.g., PTT)

Tests of MC-NIB with Polish first responders and territorial forces

MC-NIB in a vehicle on International Defence Industry Exhibition 2021

Example deployments: Education and R&D





5G SA 3.6 GHz RAN+Core deployed in Technical University of Bialystok



5G RAN including RIC tested under various interoperability conditions in Sonic Lab, London

Example deployments: Ports and harbours (in process)





Port of Rotterdam together with IS-Wireless (and other partners) is part of the Dutch consortium working on 6G Future Network Services (FNS) project Riga Freeport together with IS-Wireless, Riga Technical University (and other partners) works on MoU to deploy Private 5G



Malta Sea Port where IS-Wireless will deploy Private 5G to enable high-quality video from the cranes (ASSIST-IoT Project)









Final word

A good hockey player plays where the puck is. A great hockey player plays where the puck is going to be. Wayne Gretzky