

### **Eitan Idelson**

**Co-Founder and managing partner** 



### ComGu Our Expertise at Your Service

# Agenda

- $\circ$  About us
- Our Sphere of activity in private networks
- $\circ$  Use cases
  - o Robotic logistic center
  - Fire-rescue; federated system
- $\circ$  Way forward

### About us



- Boutique telecom integration house
- Founded in 2013 by ex-Nokia Israel executives
- Providing mobile telecommunication engineering services
- Delivering mobile communication projects
- Established atricom subsidiary positioned as a private-networks integrator



# Our sphere of activity

#### Materializing on our main assets

- Expertise in Mobile network technologies
- o Established partnership with mobile operators and international homeland security companies
- Strong relationship with the ecosystem players (e.g., xPTT, backhauling, end-devices, NMS etc.)

### Our role as integrator in the private network space

- Network Planning & Design Assess coverage and capacity needs => Design network architecture
- Network Deployment and integration Installation, configuration and integration
- Network Security: Implement robust security measures (firewalls, encryption and access controls)
- Network Management and Monitoring Remote multi-tenant NOC
- Maintenance and support Troubleshooting and optimization

### Use case I – Robotic logistic center



#### Goal - Improve latency

- <u>Customer</u> Robotic technology company operating retail logistic centers around the world
- □ *Existing situation* Operational sites based on Wi-Fi 6 and leaky cables, 100-300 robots per site
- □ <u>Challenges</u> Latency picks which cause bottlenecks in robots' operations => reduced efficiency

#### Solution - Implement an LTE private network

- □ Core Athonet's EPC
- □ Radio E///'s indoor site + spread indoor antennas
- MOCN architecture (Due to local regulation of network neutrality)
- □ Integration activities Robots management system, firewalls , switches and operator's NOC

**Result** : ~100 robots running 24/7 with significant latency improvement (Less than 50ms for round trip with 100kb transfer of data every 150ms).

Logistic Center efficiency improved by 7%



### Use case II – Fire-rescue federated systems



#### o Goal - Improved data communication

- Customer Israeli fire-rescue
- Existing situation Communication based on narrow-band Motorola devices.
- Challenges Lack of integrated data communication

#### o <u>Solution</u>

- Implement 5G federated private networks
  - $\circ$  Core Athonet's 5G-SA core
  - Radio BTI wireless (N78)
  - Backhauls RADWIN MW (potential adding satellite communication)
  - Used applications Elbit's xPTT application and video steam from drowns
- <u>Result</u> Improved converged voice and data communication





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# Way forward

- Experiencing significant market interest
- Numerous activities in various domains:
  - > 5G-SA for a VR based first responders training center (replacing Wi-Fi)
  - > Municipality implementation Drown and camera video streaming + PTT service
  - > Expansion in additional robotic logistic centers
  - Border control system (PTT, cameras etc.)

### Next year will be able to present additional exiting use cases

# Thank you



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