

# Critical infrastructures @ Ericsson

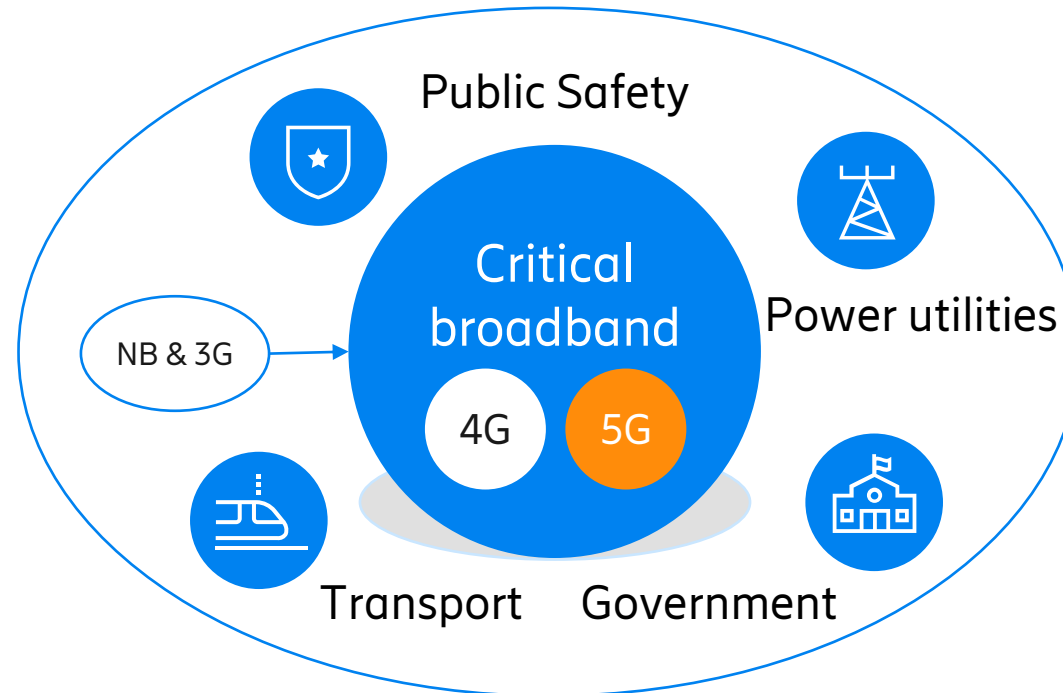


JRC  
Taunton, Mar 1st-2nd

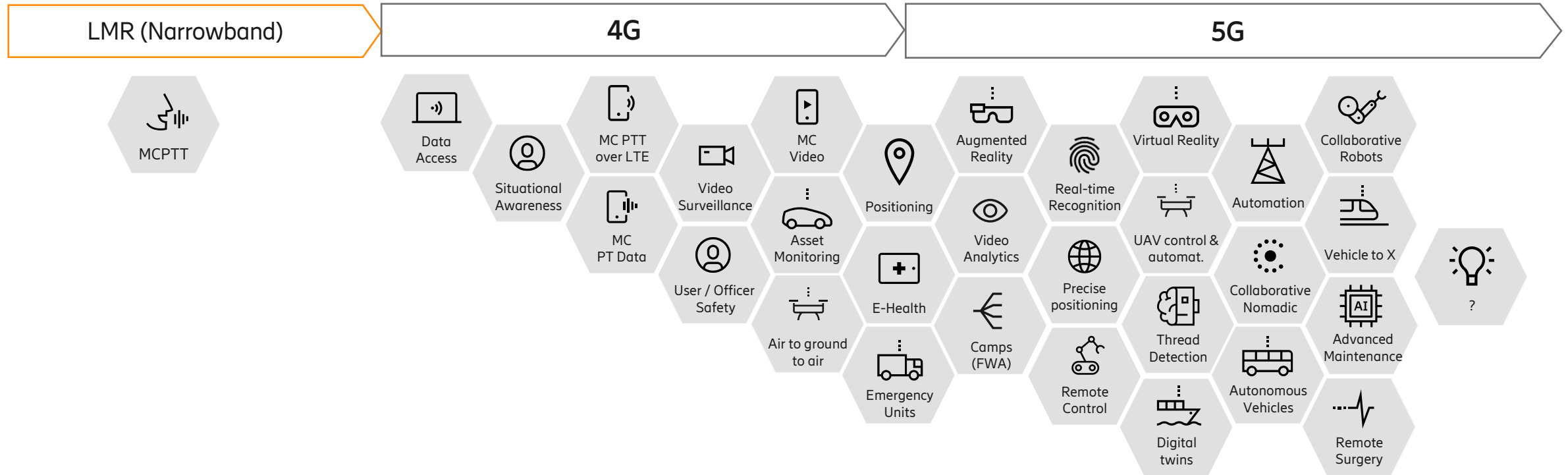
# Critical industries require critical communication



It's no longer a question of 'if' critical broadband communication services are needed, but rather 'when' and 'how'



# Use cases enablement with mission-critical 4G/5G



**Narrow band technologies: Tetra, P25 ...**  
 Mission critical voice  
 Simple messaging

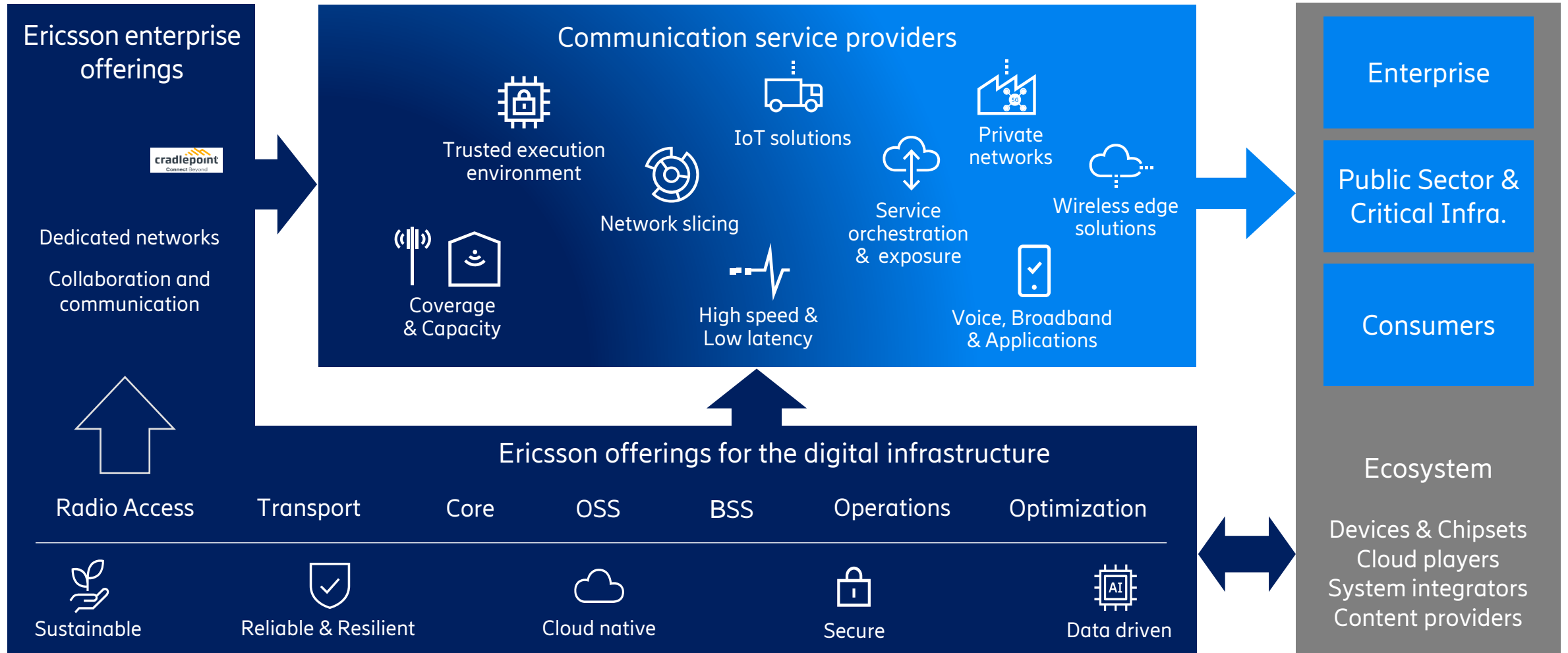
- 4G**
- Broadband
  - QoS, Priority, Preemption
  - Mission critical services
  - Multicast
  - Cat-M – NB IoT

- On the road to 5G**
- Enhanced mobile broadband
  - End to end trustworthiness: Security, Reliability, Privacy

- 5G**
- URLLC: Extreme low latency, ultra reliability
  - MTC: Ubiquitous machine type communications
  - Network Slicing, Edge comp. & distributed cloud

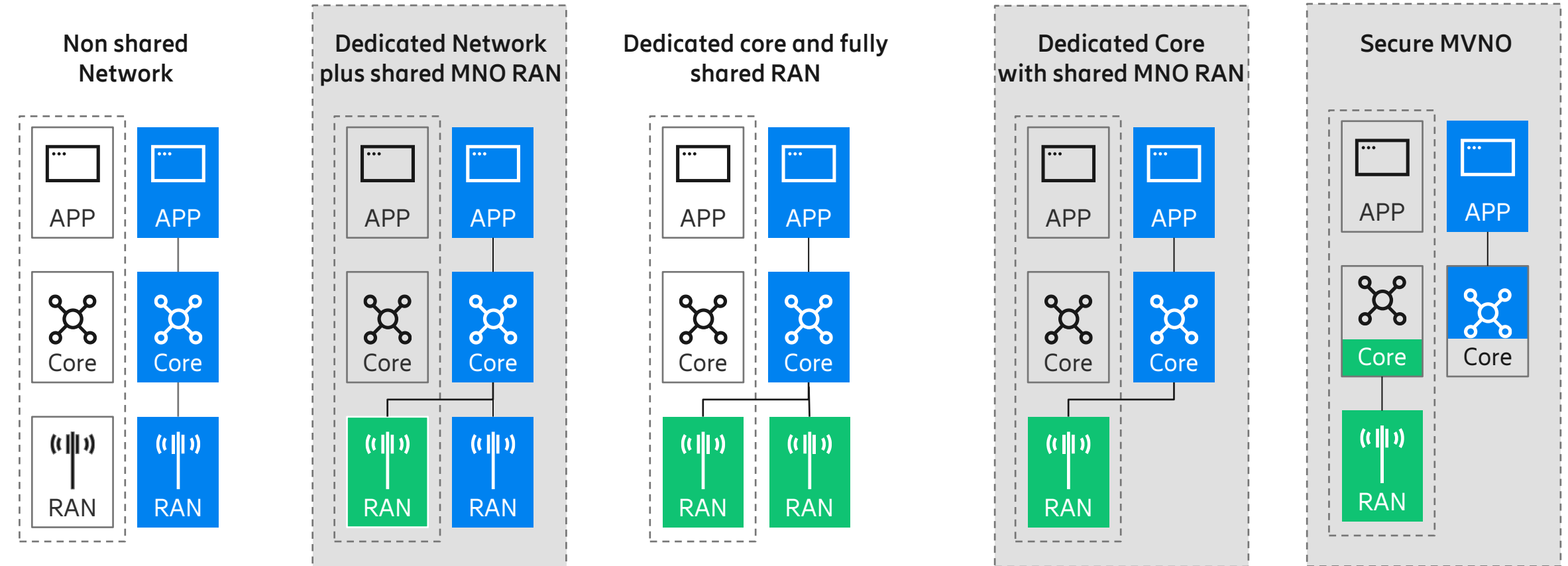
# 5G driven digital infrastructure

Key enabler for digital transformation



# Common commercial deployment options

## Mission critical 4G/5G networks



— Spectrum is allocated to MCN Public Sector or critical infrastructure owner — • — Uses only spectrum of commercial operators — •

Existing assets of commercial mobile network operator (MNO) ■ Dedicated assets for MCN ■ Shared assets ■ Most common cases

# Utilities Innovation Center

Supporting customers & ecosystem growth



We created an environment to solve real-world challenges of utilities



We built a physical representation of the Smart Grid demonstrating Private LTE and 5G ecosystem



A fully functional lab to demonstrate interoperability of a growing ecosystem of devices from power generation, transmission, distribution to substations, end-users



At each point you can see the benefits of the 3GPP Network enhancing security, resilience and increased efficiency



# Active information sharing & collaboration

## European Projects



## Associations



## Reports

[Utilities Digital Transformation](#)

[Bring 5G to power](#)

[Power Grid Modernization](#)

[Wind Energy](#)

## Blogs & Collaboration announcements

[Securing the power grid](#)

[The smart grid smarter](#)

[Anterix & Ericsson collaboration](#)

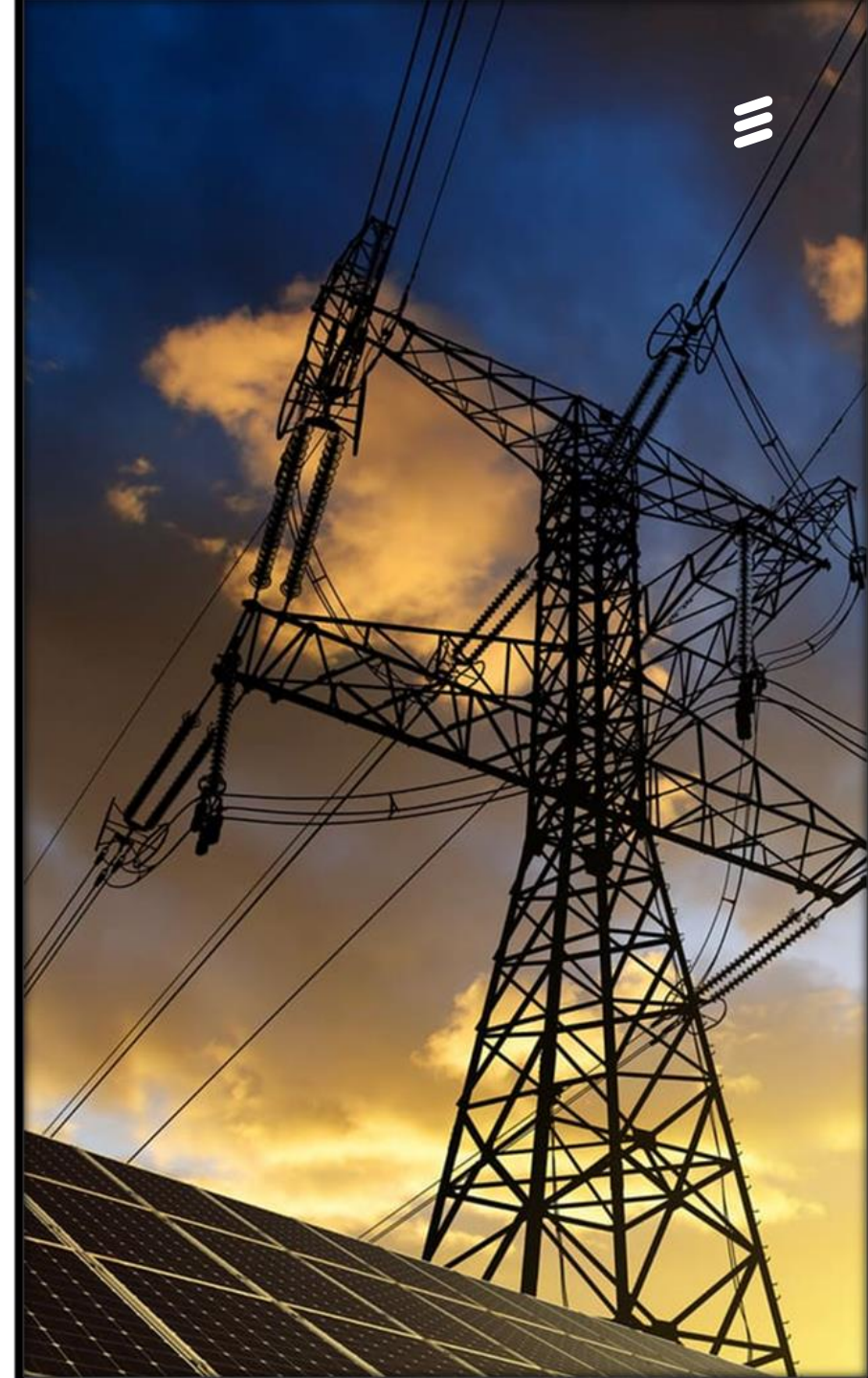
[Other blogs](#)

## External webinars

[Transformation of energy systems](#)

[Creating the smart grid of the future](#)

[Utilities opportunities for 5G rollout](#)

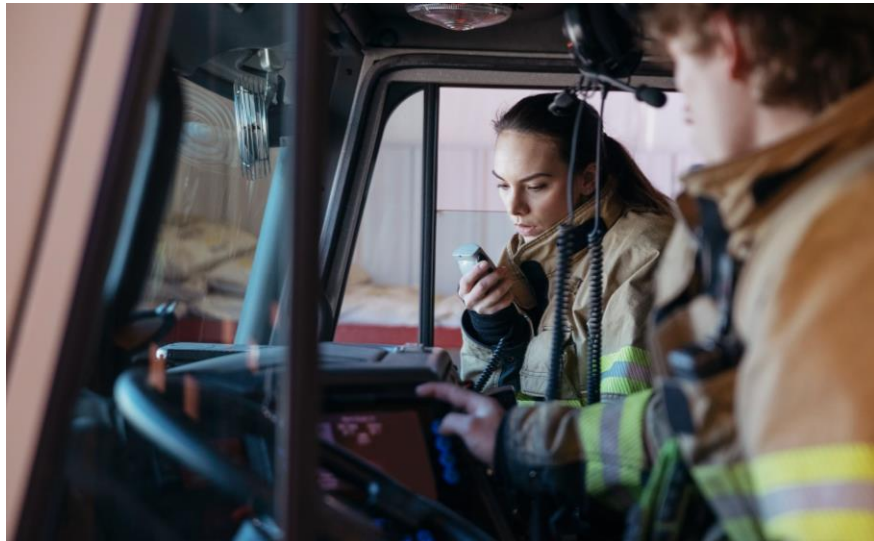


# Ericsson @ dedicated commercial Critical Networks



Ericsson has moved from PoC space to critical commercial deployments

Spectrum allocation has been an enabler, but S-MVNO networks have also been deployed extensively in US and Europe



## US open announcements (utilities)

- [Ameren](#)
- [Eversource](#)
- [Southern Linc](#)
- [Newport](#)
- [Illinois Electric Cooperative](#)

## US open announcements (public safety): [FirstNet](#)

## Europe open announcements (utilities)

- [EDF](#)
- [Net 1 - Teracom](#)

## Europe open announcements (public safety):

- [Erillisverkot \(Finland\)](#)
- [RRF \(France\)](#)





<https://www.ericsson.com/en/mission-critical-communications>