3GPP MRP Workshop on RAN Rel-18 for Industry Verticals 23 June 2021

Julian Stafford European Utility Telecoms Council www.eutc.org

EUTC

Julian.Stafford@eutc.org

What is EUTC?













- Representing the specific technical and regulatory interests of Electric, Gas and Water Utilities all of which are considered critical national infrastructure.
- Membership driven with major utility participation from large and small utility operators including those in Spain, France, Netherlands, Germany, Portugal, Ireland and the UK.
- Engaging globally with stakeholders including vendor and operator communities to ensure alignment of new products, standards & spectrum allocation with utility requirements.
- Proactively responding to consultations from the European Commission and European energy and telecom regulators and government regarding the digitalisation of the energy sector.





















Netbeheer Nederland

nationalgrid

Relationships with other representative bodies

• Other UTC regions, namely











Utilities Technology Council representing USA and Canada UTCAL who lead representation in ITU AUTC common standards with Europe in many areas.

 The Critical Communications Association (TCCA), formerly the Tetra and Critical Communications Association; in particular the: Critical Communications Broadband Group (CCBG) and SCADA Group

- The 450 Alliance particularly the Standards and Regulatory Group
- Third Generation Public / Private Partnership Group (3GPP) via ETSI especially RAN and SA1
 - ETSI, CEPT, ECO....A wide range of EU standardisation and regulation











Cellular Networks and Smart Grids

• Some facts:

Ambitious target dates for the achievement of policies and legal mandates require an increase in communications delivered by **Wireless technologies**.

Public Cellular networks allow for quick and cost-effective deployments; however, they are not fully adapted to utilities evolving Smart Grid's needs.

Integration Gap

PUBLIC CELLULAR NETWORKS

- Lack of resilience: Power Autonomy of RAN sites
- Lack of resources in congestion situations Lack of coverage in remote rural End to end QoS not implemented for SG

SMART GRIDS NEEDS

Cybersecurity Enhanced resilience High availability and performance Enhanced coverage Future Proof technologies



EUTC Interest in 3GPP

- EUTC officially became a member of 3GPP (via ETSI) in Autumn 2020
- Main activity has been within SA1 especially in connection with management and monitoring of networks.
- Gained support from several major players for proposals in this area including Samsung, Telefonica, Nokia, Vodafone & Novamint
- EUTC members also have interest in RAN (e.g. Band 87, 88 and possibility of higher power UE devices)
- EUTC members have interest in a range of future functionality which is being developed by other 'Verticals'
 - Any URLLC developments (i.e. Automotive, Rail and Manufacturing)
 - 'Stand alone' or direct mode as developed by TCCA / blue light
 - Low power / sleep mode as being explored in areas such as broadcast
 - Space sector and Satellite connectivity potentially very useful in deep rural locations where terrestrial networks are not cost effective

EUTC Interest in 3GPP

- Positives for industry and 3GPP partners
 - Utility sector is a huge largely untapped market for 3GPP
 - The changes being demanded of the utility sector are being mandated by United Nations, EU and national governments around the globe. All driven by climate change objectives
 - Utilities have huge potential as facilitators of 5G & 6G networks due to massive number of underground and overground assets
- Challenges for the utility sector
 - Telecoms and telecoms standardisation is <u>not</u> core activity
 - Extremely heavily regulated sector which creates additional challenges when attempting to drive changes in 3GPP
- EUTC currently reviewing the optimum methods for driving change and functionality enhancement within 3GPP in the most cost effective manner **EUTC**

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Julian Stafford Thanks for Listening ! www.eutc.org

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