

What can 5G contribute to smart communities ?

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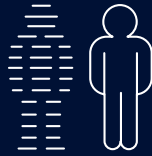
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Digital agenda of smart communities continue to expand



Pressure on the planet is increasing

Reducing carbon emissions and the use of scarce natural resources



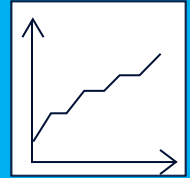
Inclusive access to opportunity remains stubbornly unequal

Providing more inclusive access to work, healthcare and education



Operations costs and complexity are increasing

Bringing digitalization to the physical activities it has not yet reached



How to Scale?

Shift from isolated use cases to scaled, strategic implementations with high public value

5G and connectivity fabric bring scalability to the smart community

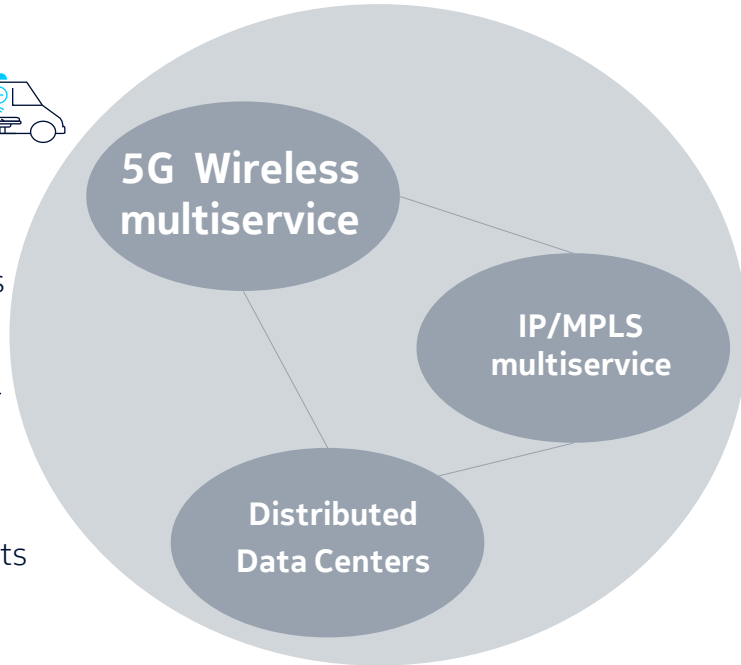
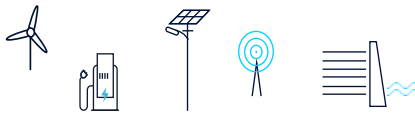
Manage QoS and prioritization for critical and emergency services



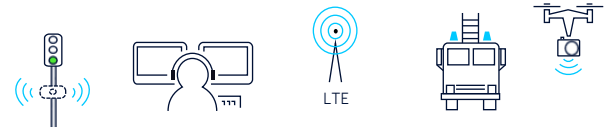
Bring localized and innovative applications to venues/hotspots



Scale devices and sensors to control and monitor critical assets



Increase the transmission in real time for critical city services



Enable more comfortable and safe connected transportation

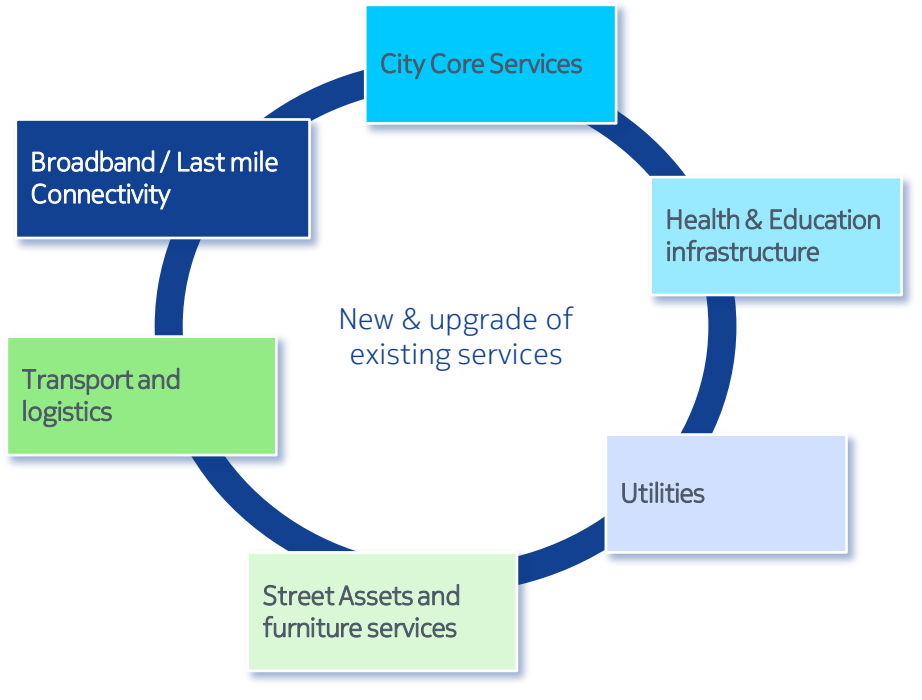


Support optimization and automation for city services



5G unlocks a range of value-creating use cases for the stakeholders

Business case: Savings & revenues



Societal value proposition for the smart community

New services/uses provided to City core directorates and affiliates, as such indirectly to citizens

Development of the city's attractiveness and competitiveness

Control of infrastructure and data

What can 5G contribute to sustainability ?

'No green without digital'

Maximize handprint

Enabling other industries and society to reduce their emissions by up to 10x more than the mobile industry's own footprint. (source GSMA Industry Research)

- Better management of natural resources
- Driving social benefits & increasing safety
- Increasing productivity & sustainability through digitalization
- Enabling climate adaptation through environmental monitoring



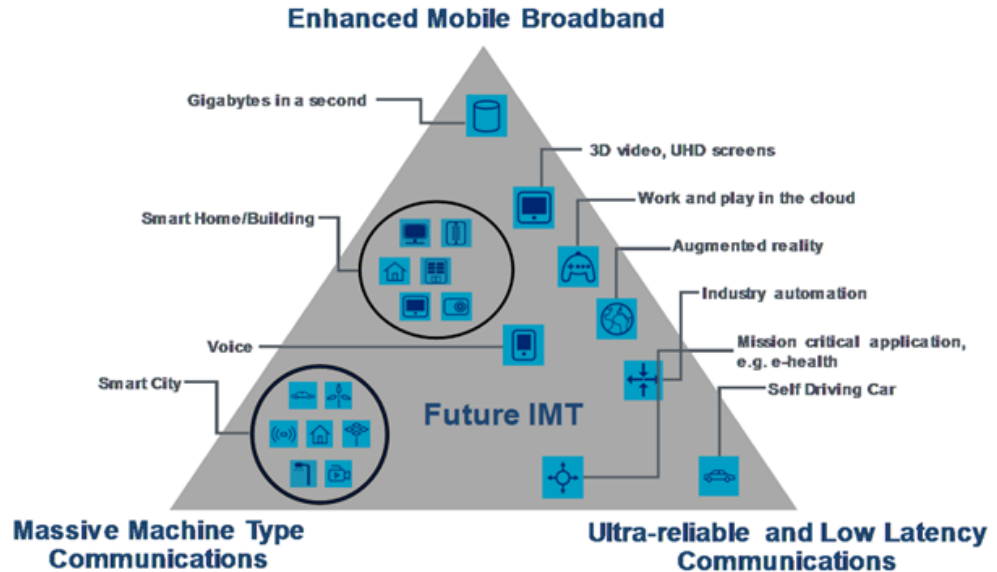
Minimize footprint

- Improve product energy efficiency
- Innovations in cooling
- Reduce supply chain emissions
- Apply circular practices, increase reuse and recycle, and refurbish for new use
- Drive transparency in the sourcing of minerals

5G technology enables smart communities (1/2)

Millimeter wave Frequencies

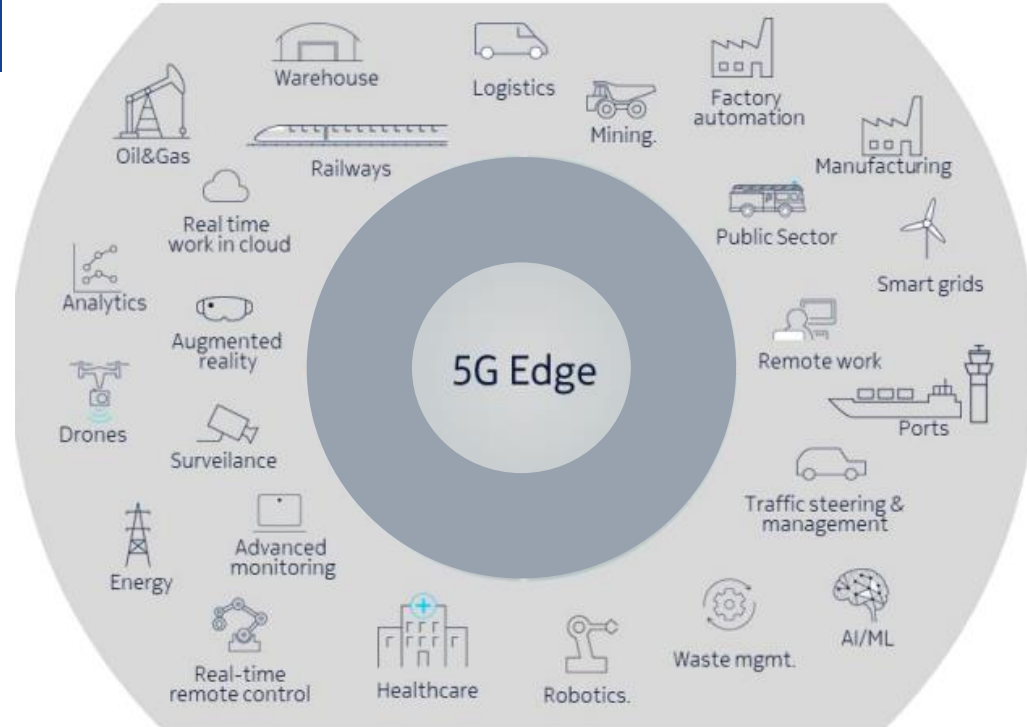
- 5G Coverage for temporary and hosting events, public venues, 5G hotspots
 - Possibility to offer private or public services related to the information and entertainment of the public (multimedia services) or to deliver the security of events and locations (video surveillance, ad-hoc emergency services)
 - Innovative public services: Remotely attendance of other events, Real-time gaming services, Augmented Reality / Virtual Reality platform
- Neutral host Capacity
 - Allows to limit and control the visual, energy and environmental impact of small cell deployments



5G technology enables smart communities (2/2)

5G Edge

- Latency dependent services
 - Remotely controlled robots, drones, AGV
 - AR/VR for workers, technical agents
 - Vehicle locations, sensing and visual data and 3D street positioning
- Data Sovereignty and security
 - Data localization, Data Market Place (*Notarisation, Data Security Exchange, Run algorithm from remote*)
 - App-to-app data isolation (ex. Video processing deployments)



5G strengthens attractiveness and competitiveness of smart communities

- 5G technology is essential for the emergence of new innovative uses of the territory.
- 5G is multiservice and simplifies current networks. It complements IP/MPLS multi-service networks.
- 5G opens the way to sustainable business models taking advantage of infrastructure sharing.

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