# 802 Next Gen Coordination/Brainstorm Workshop Vertical Applications TAG

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*802.24 Chair*

# 802.24 Vertical Applications TAG

Smart Grid TAG | TG24.1 Smart Grid Task Group / TG24.2 IoT Task Group | Vertical Applications TAG

▸ *"A vertical market is a market in which vendors offer goods and services specific to an industry, trade, profession, or other group of customers with specialized needs.*

▸ *A horizontal market is a market in which a product or service meets a need of a wide range of buyers across different sectors of an economy".* ---Wikipedia

▸ Related to IEEE 802 Local and Metropolitan Area networking standards – Connectivity for Verticals

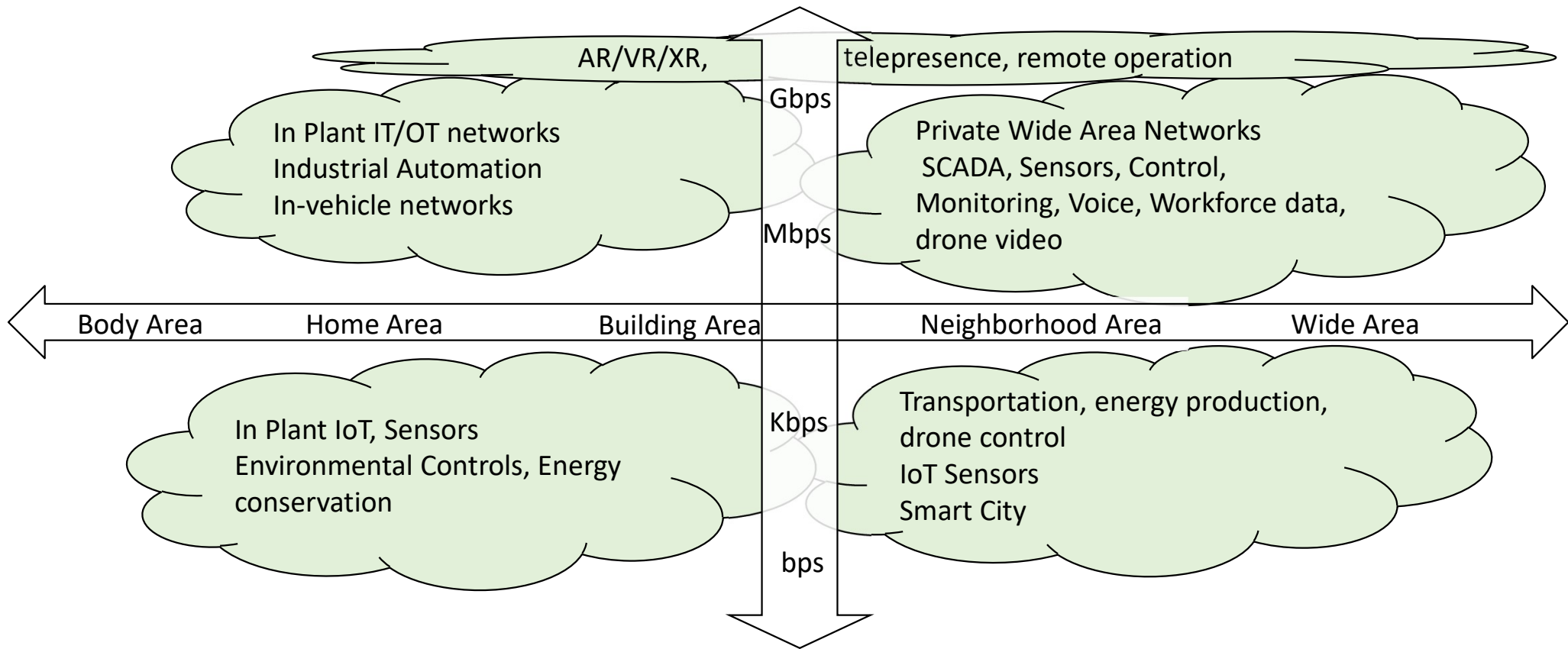## Horizontal                                                                 Vertical

Home networks
Enterprise networks
Internet Service Providers

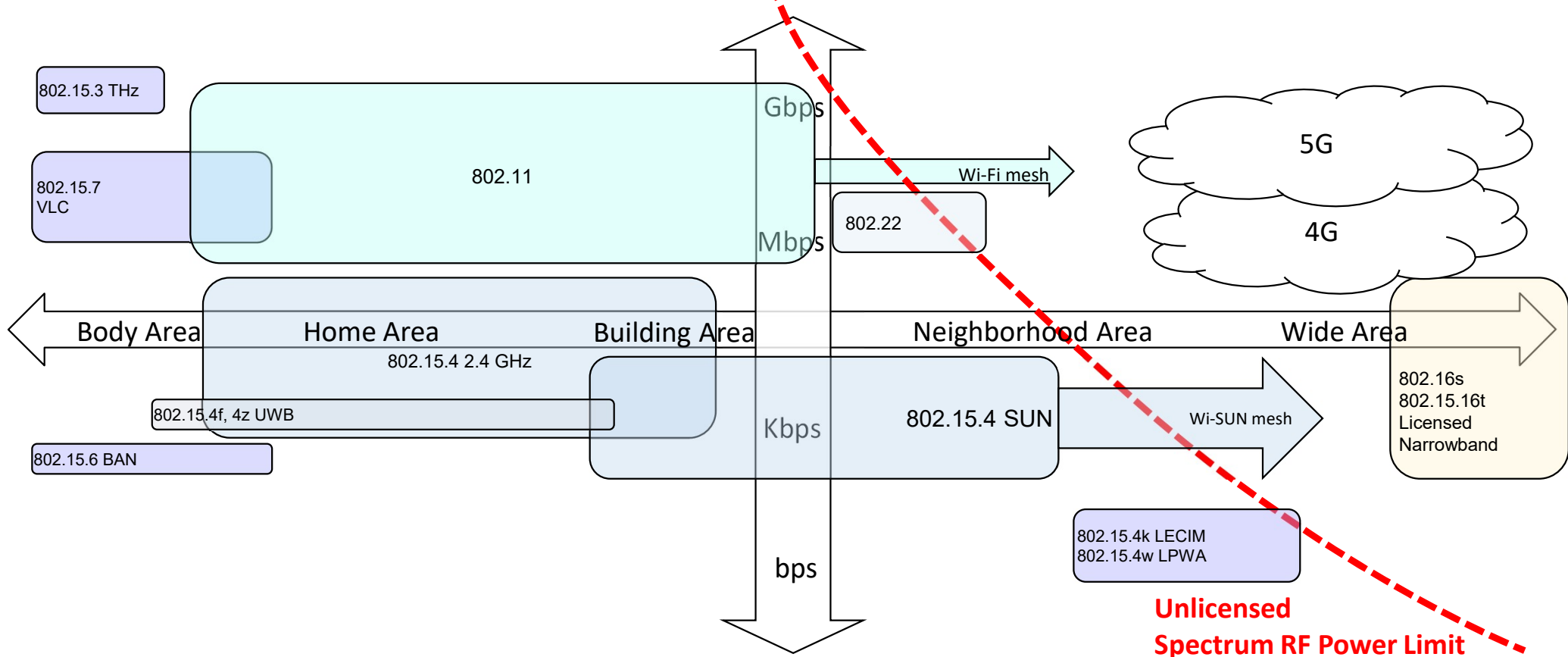Smart City
Private Field Area Networks
Private Fiber Networks

SCADA (water, gas, electric)
Factory Automation
Smart Metering
Rail – positive train control
Distributed Energy Resources

◆IEEE

# Connectivity for Verticals: Rate vs Range

AR/VR/XR, telepresence, remote operation

Gbps

In Plant IT/OT networks
Industrial Automation
In-vehicle networks

Private Wide Area Networks
SCADA, Sensors, Control,
Monitoring, Voice, Workforce data,
drone video

Mbps

Body Area — Home Area — Building Area — Neighborhood Area — Wide Area

In Plant IoT, Sensors
Environmental Controls, Energy
conservation

Kbps

Transportation, energy production,
drone control
IoT Sensors
Smart City

bps

**Vertical Application Spaces**

# Connectivity for Verticals: Rate vs Range

# Ongoing Activities

▸ White Paper Development

- Highlighting Vertical Applications that integrate IEEE 802 standards from more than one Working Group
- Goal is to communicate how the suite of IEEE 802 standards provides solutions for vertical industry connectivity requirements.

▸ Vertical Industry Standardization Outreach

- Which vertical industries have "standards gaps" appropriate to the scope of IEEE 802?
- Are representatives of these groups already involved in IEEE 802, or is some form of outreach needed?
- Make it public that 802.24 is a venue for stakeholders to initiate standardization – through other IEEE conferences and activities.

▸ "Success story" – launch of 802.15 TG16t project from outside group of stakeholders

- 802.24 provided a forum to develop PAR that was assigned to 802.15 WG approved in November 2019

## Get involved in 802.24 to define new networking capabilities