

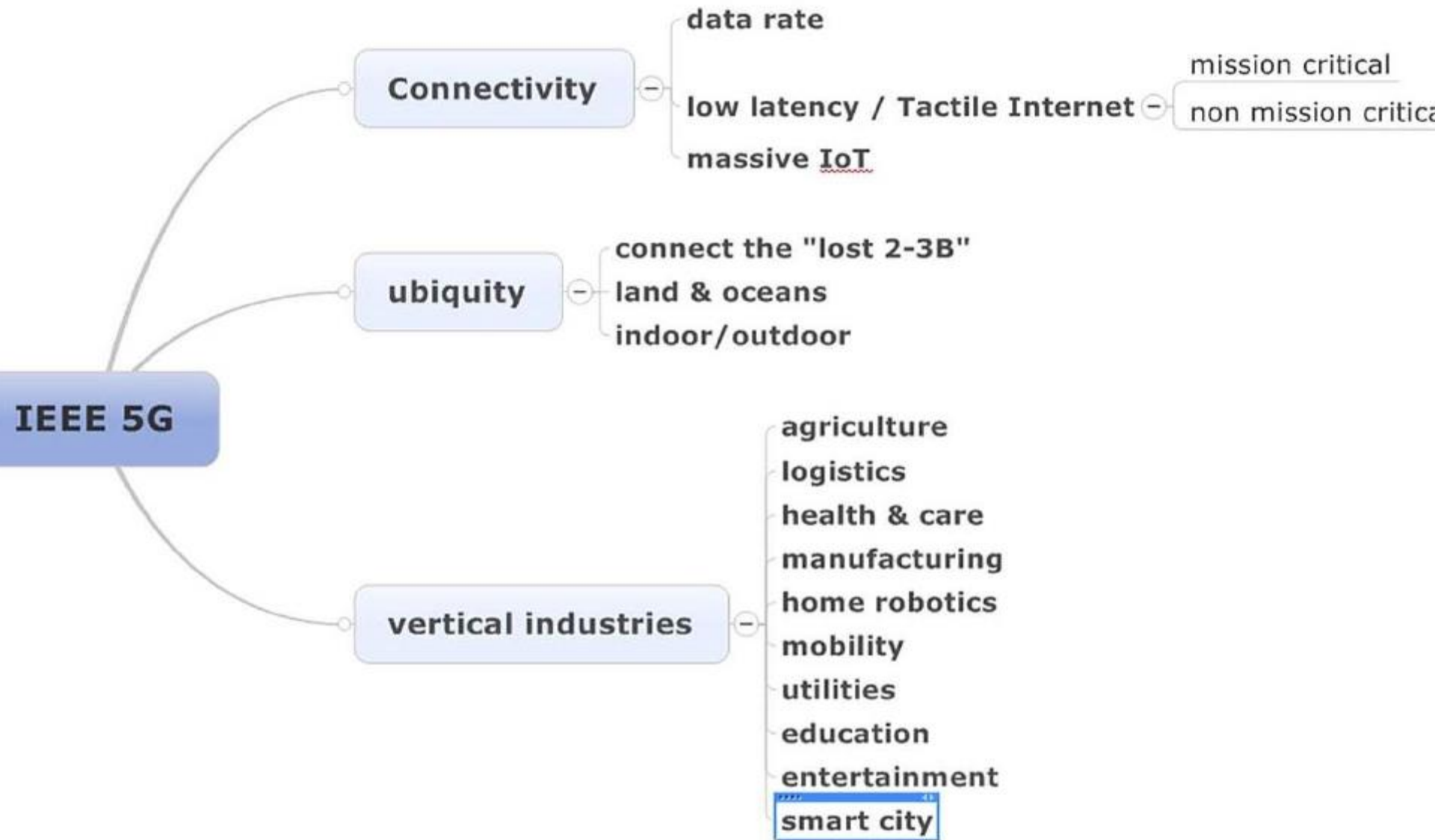


# 5G Roadmap Discussion– Flip Chart Points

Washington DC Hilton, Globecom 2016

8 December 2016





# Brainstorming Slides (from Flip Charts)

## Verticals

- Education
- Manufacturing
- Health Industry
- Smart Grid
- Agriculture
- Robotics (Home)
- Medical Treatment
- Levels of Granularity
- Virtual Reality
- Entertainment
- Advertisement
- Prioritize over prior wireless
- Template for use cases
- Latency, Automation

# Brainstorming Slides (from Flip Charts)

- Reference to ITRS
- Not only Air Interface but Core
- Software
- End-to-End
- Slicing (V2X)
- Security
- Collaboration with other Society
- Virtualization
- Vertical Integration
- Hierarchy of Networks
- Types of IOT for 5G
- What is in next 10 years and beyond
- Massive Connectivity
- Cognitive
- H/W, S/W, Design
- Systems
- Spectrum Sharing
- Advanced Control System
- Softwarization (P4)
- IT related Issues
- Content/Context
- Densification/Micro Operators

# Brainstorming Slides (from Flip Charts)

- Services
- Applications
- Business Models
- Computing Power at the Edge
- System Complexity
- Network Technology
- Wireless Technology
- Service Enablement
- 5G making it meaningful for all environment
- Logistics
- Reliability
- Interoperability
- Ubiquity
- How to measure complexity
- Include other physical layer in addition to mmwave
- Verticals
- Applications
- Requirements for applications
- Barriers/ Hurdles

# Brainstorming Slides (from Flip Charts)

- Automotive
- Smart City
- Security for M2M/D2D
- Cross Layer Feedback
- Use cases from NGMN and 3GPP
- Applications/Drones
- Satellites
- Carrier Aggregation
- Taxonomy
- Gap Analysis
- Requirement for Killer apps
- Technology Driven
- Open Source Platform
- End-to-End Control/Management
- Protocols
- Pillars
- Scope of each pillar

# Roadmap Document

- Potential consumers of roadmap
  - Industry Strategists, who else?

## High level Outline

1. 5G (Massive Data, Massive IOT, Tactile)
2. Application Areas ( 3-4 examples per area)
  - Spec for those
3. Tech Hurdles for those applications
4. Identification of Groups/pillars based on hurdles
5. Standards
6. Protocols
7. Pillar and scope for each pillar
8. Risk Factors
9. Open Source, Verification, Testbed
10. How 5G will work with the Legacy network