FirstNet: Our Nation's Public Safety Network

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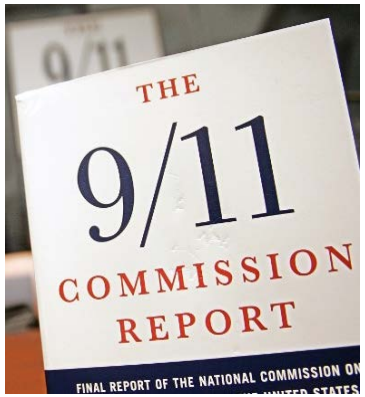
2001
9/11 attacks

Radio communication challenges affect first responders



2004
9/11 Commission

- Recommends national radio spectrum for public safety purposes
- Public safety unites to advocate for nationwide broadband network

2012
The First Responder Network Authority

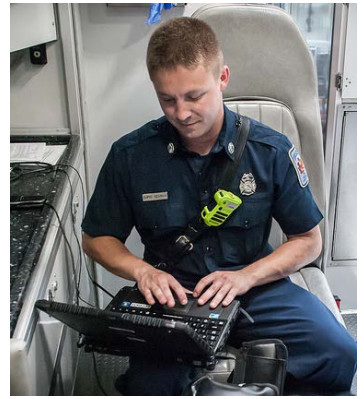
Independent agency to deploy Nationwide Public Safety Broadband Network

2012-16
Outreach and Consultation

- Governors identify FirstNet single points of contact
- Consultation in all 56 states/territories
- FirstNet works with states to collect and validate users and coverage data

2016-17
Partnership and State Plans

- Network RFP released
- Award to AT&T
- Delivery of 56 state/territory plans
- 56 Governors Opt-In decisions



2018-beyond
Advancing the FirstNet Experience

- Engage and collaborate with public safety and industry
- Develop and promote Public Safety Communications roadmap
- Invest in the network

FirstNet

First Responder Network Authority

- Partner oversight and support
- Public safety advocate
- Technical expertise
- Innovation strategy and investment

AT&T

- Nationwide core
- RAN build-out
- Adoption and customer care (24x7x365)
- Security operations center
- Mission-critical services
- App and device ecosystems

FirstNet

The FirstNet Authority is in the position to be a catalyst across its stakeholder groups to effect positive change for the public safety community

Enabled by

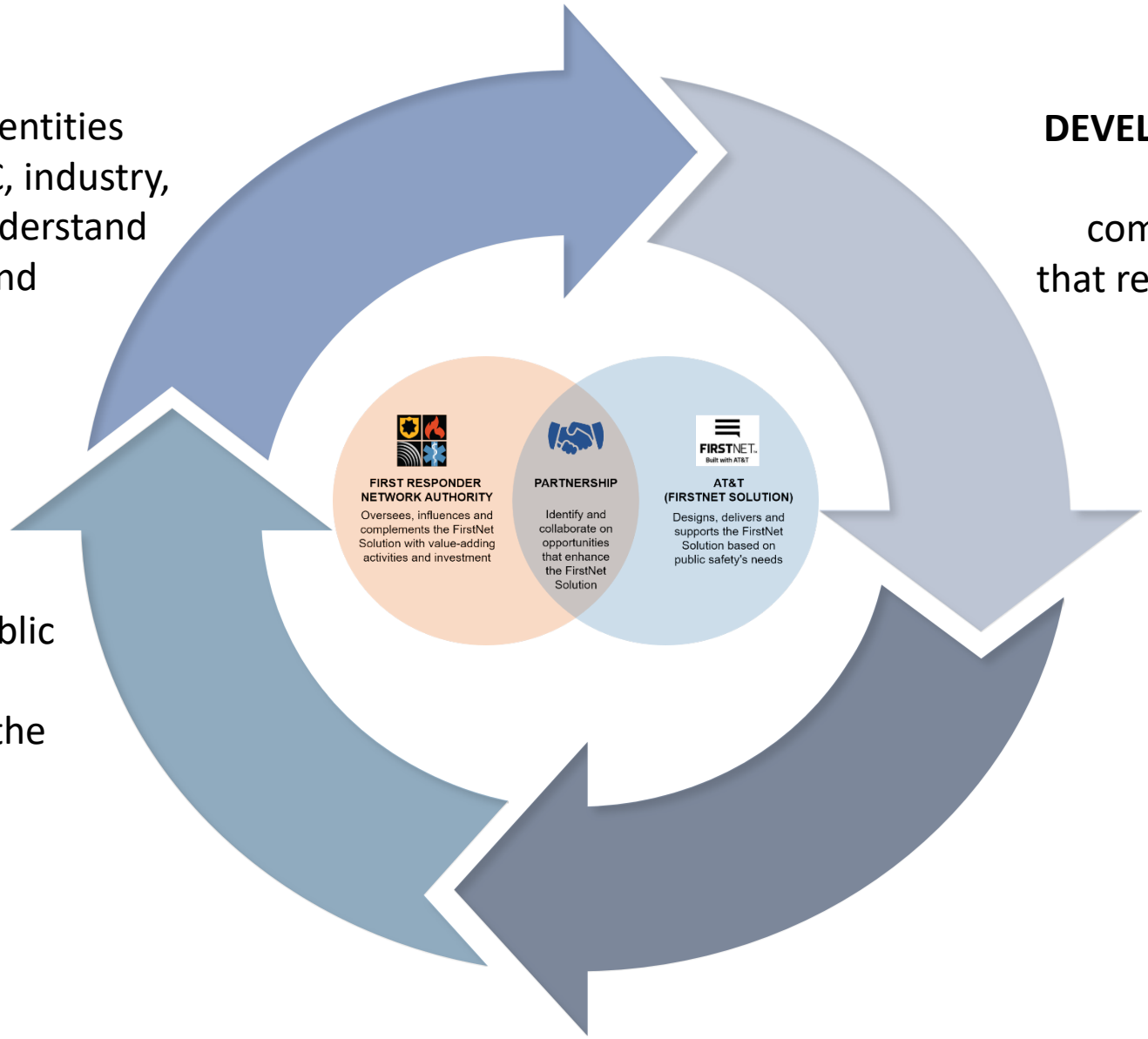
FirstNet

- The only network dedicated to public safety
- $18 billion reinvestment capability
- A committed organization with deep expertise

FirstNet

ENGAGE public safety entities and associations, PSAC, industry, and government to understand their trends, drivers, and priorities

DEVELOP and promote public safety broadband communications roadmaps that reflect the voice of public safety

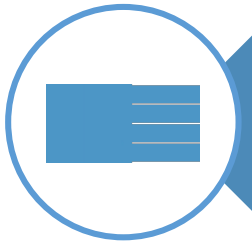


COLLABORATE with public safety to realize the operational benefit of the FirstNet Experience

INVEST in the network to further a differentiated FirstNet Experience

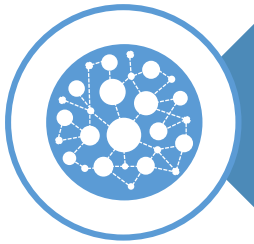
FirstNet

The Roadmap expresses how the FirstNet Authority will work to advance the FirstNet network over a multiyear horizon.



Provides a ***technology framework*** to understand all of the components and capabilities of the FirstNet Experience

Reflects ***public safety's feedback*** and needs based on a multitude of Roadmap engagements with the public safety community



Incorporates ***analysis*** of industry trends and drivers as well as AT&T's roadmap for the Network

Identifies the ***priorities that will guide investments*** and other opportunities based on FirstNet Authority analysis

FirstNet®

Core

- EPC
- IMS Core
- Services Platforms
- App Servers
- Service Enablers

Coverage & Capacity

- Macro Coverage
- Capacity
- In-building Solutions
- Temporary/On-Demand Coverage
- Range Extension
- Device-to-Device
- Air-to-Ground
- Maritime Operations
- Availability/Reliability/ Resiliency/Hardening

Situational Awareness

- Location Services
- Sensors
- Wearables
- Cameras/Video
- Mapping/Geographic Information System (GIS)
- Data Analytics/Artificial Intelligence

Voice Communications

- Mission Critical Push-to-talk (MCPTT)
- PTT Interconnection

Secure Information Exchange

- Data Access
- Data Sharing
- Cybersecurity
- Identity, Credential and Access Management (ICAM)/Single Sign-On

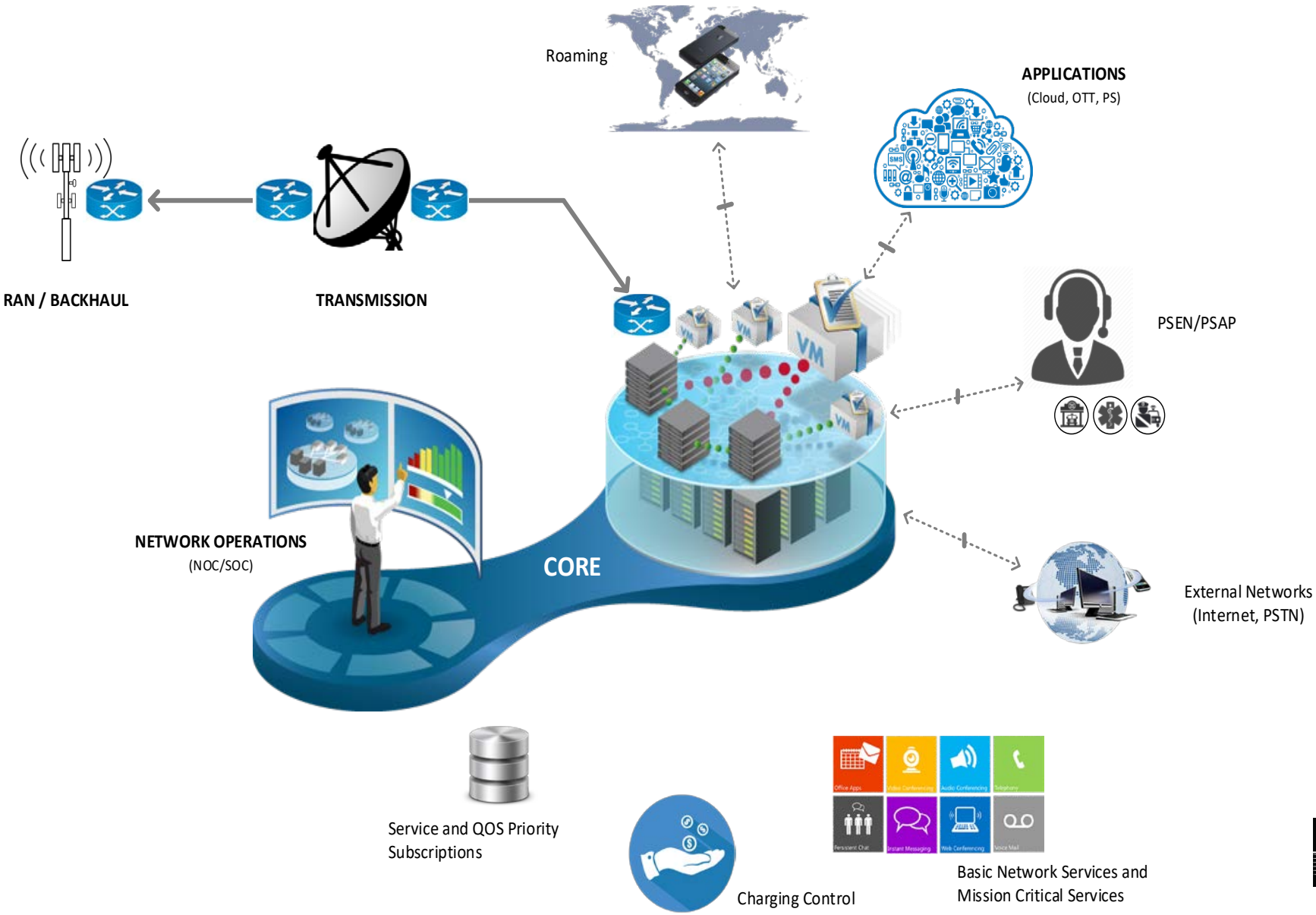
User Experience

- Priority Services
- Applications
- Devices
- Accessories
- Hands Free Operations
- Augmented Virtual Reality
- Heads-Up Display

FirstNet®

- Launched **FirstNet Core**
- 75 **FirstNet-dedicated deployable assets** nationwide
- Expedited buildout of state **Radio Access Networks/Band 14**
- **Dedicated** Security Operations Center (SOC) for FirstNet subscribers
- Launched **Applications** and **Devices Ecosystem** for public safety

7,250 public safety agencies with 600,000+ connections


Roaming
APPLICATIONS
(Cloud, OTT, PS)
RAN / BACKHAUL
TRANSMISSION
PSEN/PSAP
NETWORK OPERATIONS
(NOC/SOC)
CORE
External Networks
(Internet, PSTN)
Service and QOS Priority
Subscriptions
Charging Control
Basic Network Services and
Mission Critical Services

- **Quality of Service (QoS):** Minimum/maximum service quality parameters
- **Priority**: Gives preferred access to network resources
- **True Preemption**: Terminates/relocates non-primary/commercial users so high-priority users have access

FirstNet®

Q&A

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