



Building Survivable Networks for Voice, Video, Data and Mobility



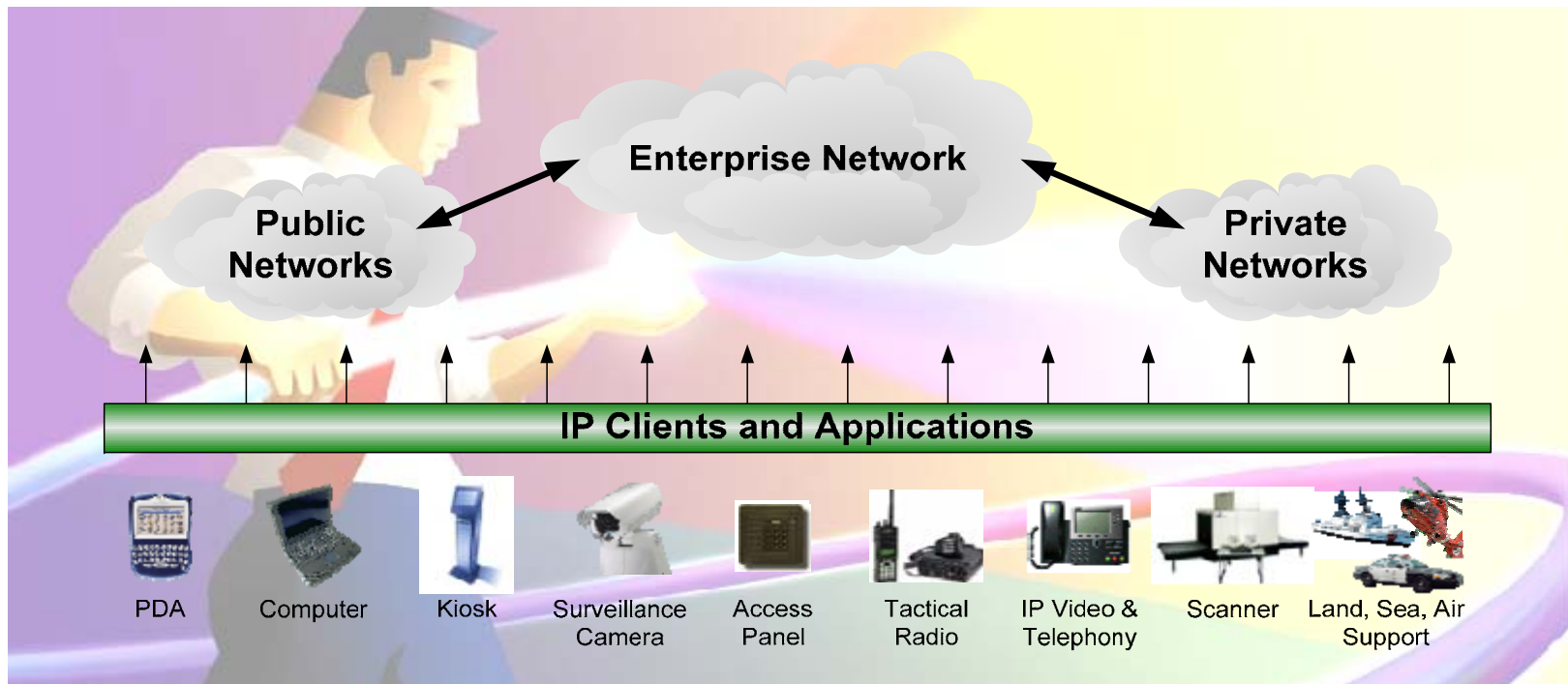
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S.W.A.T.
Cisco Solutions With Advanced Technology

Overview



Secure Converged IP Networks



- Enables Converged Voice, Video, and Data Applications
- Facilitates Network Integration, Information Sharing, and Collaboration
- Broad Spectrum of Capabilities and Solutions
- Enables Rich Media Content Distribution, Telephony, Video Conferencing, E-Learning, IP Encryption, Storage Networking, and more

Mobile IP Communications

- “Mobile IP provides an IP node the ability to retain the same IP address, security posture and application connectivity while traveling across disparate networks.”
- Transformational Impact to ConOps and Field Capabilities
 - A Single IP Connection Can Support
 - Multiple Applications
 - Multiple Missions and Levels of Sensitivity
 - Differentiated Quality of Service
 - Real-time Management and Administration
 - Voice and Low-Speed Data Are Legacy Concepts
 - Broadband Robust Applications: Records Access, Instant Messaging, Still and Motion Imagery, Biometrics, Telemetry, Sensors
 - Secure Seamless In-Motion and In-Field Connectivity w/ Persistency and High Availability



Key Technologies and Scenarios



Key Technologies

- TCP/IP

- Secure Converged IP Networks
- Converged IP Applications

- Wireless

- IP Mobility
- Integrated Wired and Wireless Broadband IP Networks
- Anywhere, Anytime Satellite



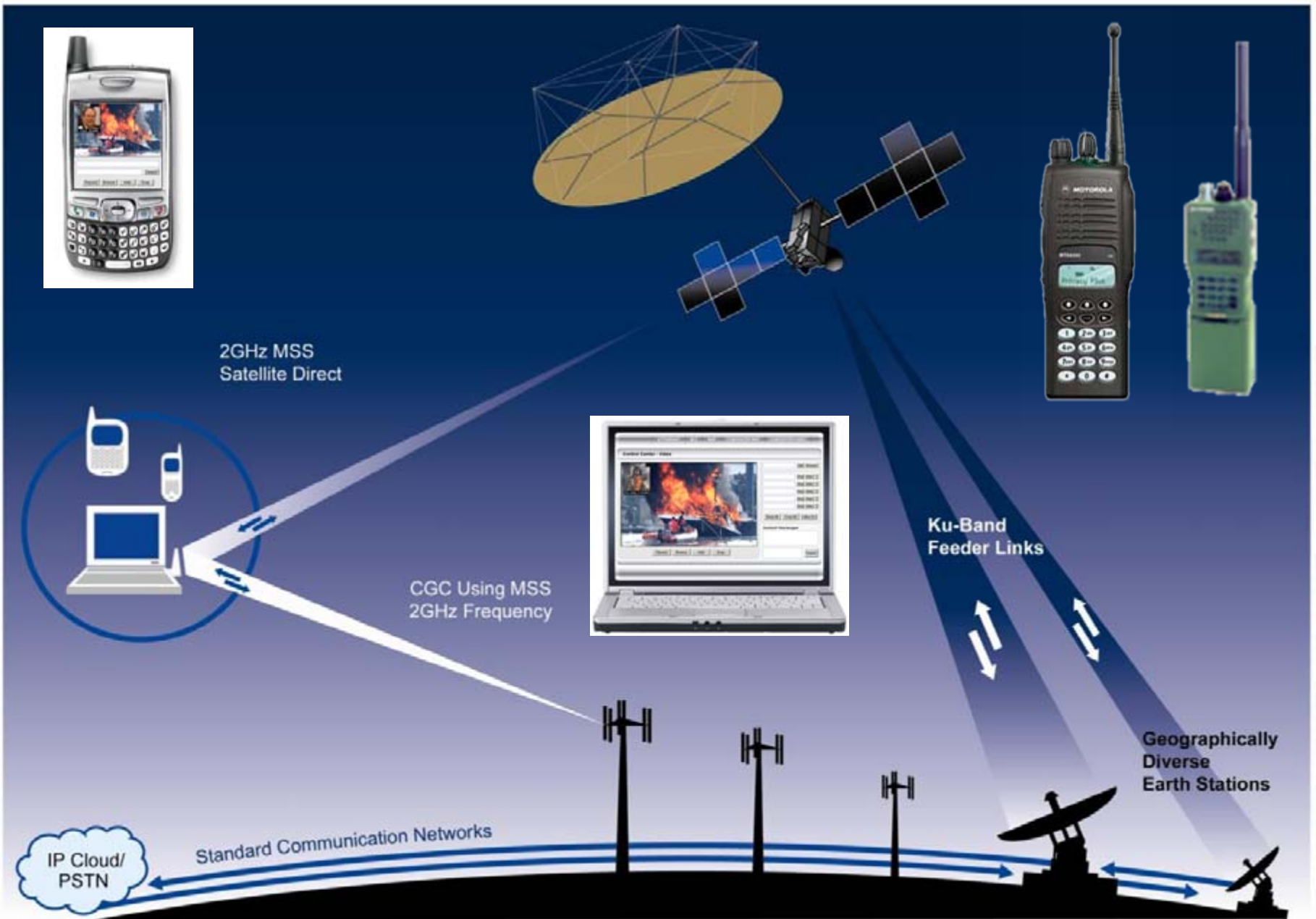
Mobile Communications

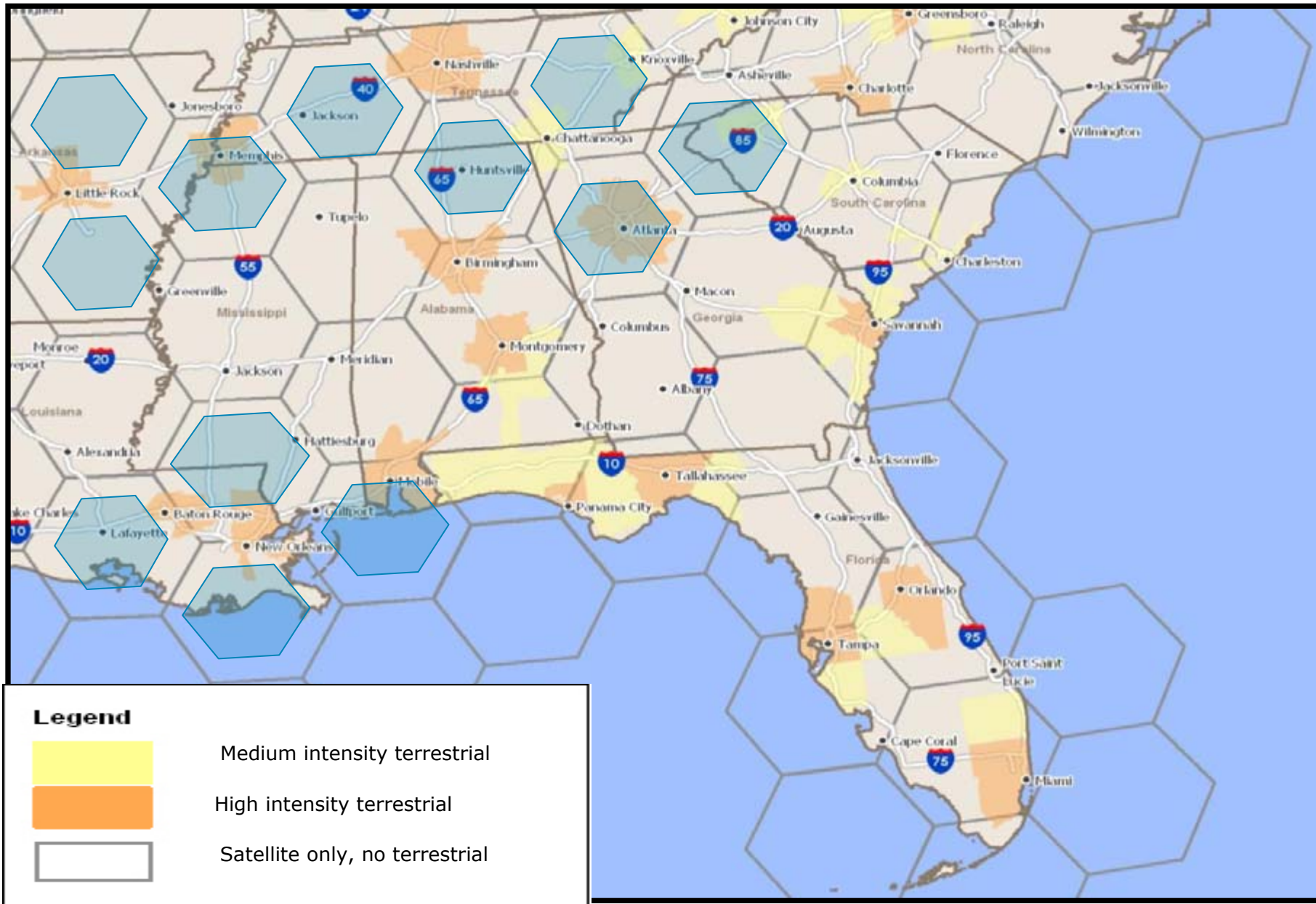
- General Requirements for Success
 - Critical to Mission Objectives
 - Uninhibited by Fixed Infrastructure
 - Capable of Rapid Deployment
 - Flexible and Adaptive
 - Inherently Simple to Operate
- Scenarios
 - Field Units Executing on Day-to-Day Mission Objectives
 - Atypical situations
 - No Existing Infrastructure
 - Existing Infrastructure Degraded
 - Existing Infrastructure Exceeded
- Application Models
 - Field Operations
 - Continuance of Operations and Infrastructure Reconstitution
 - Mutual Assistance



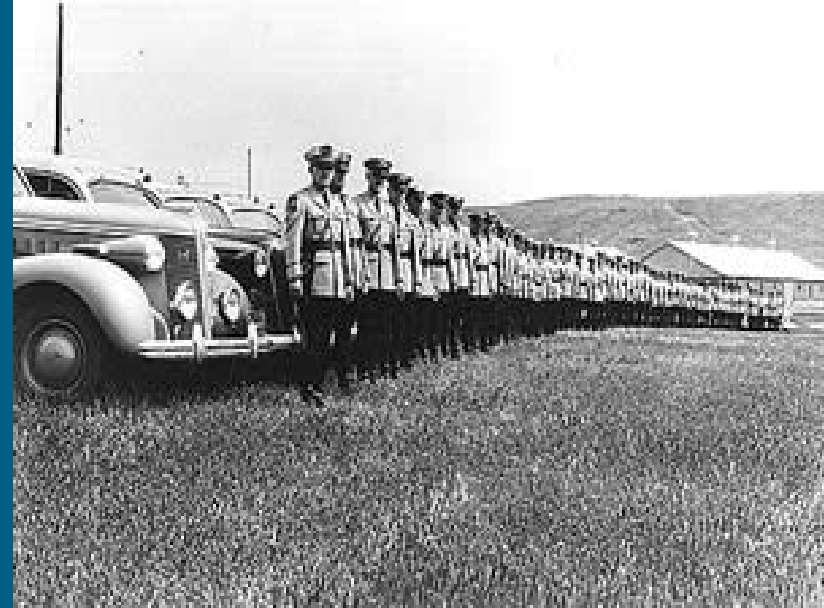
Satellite Communications and IRIS





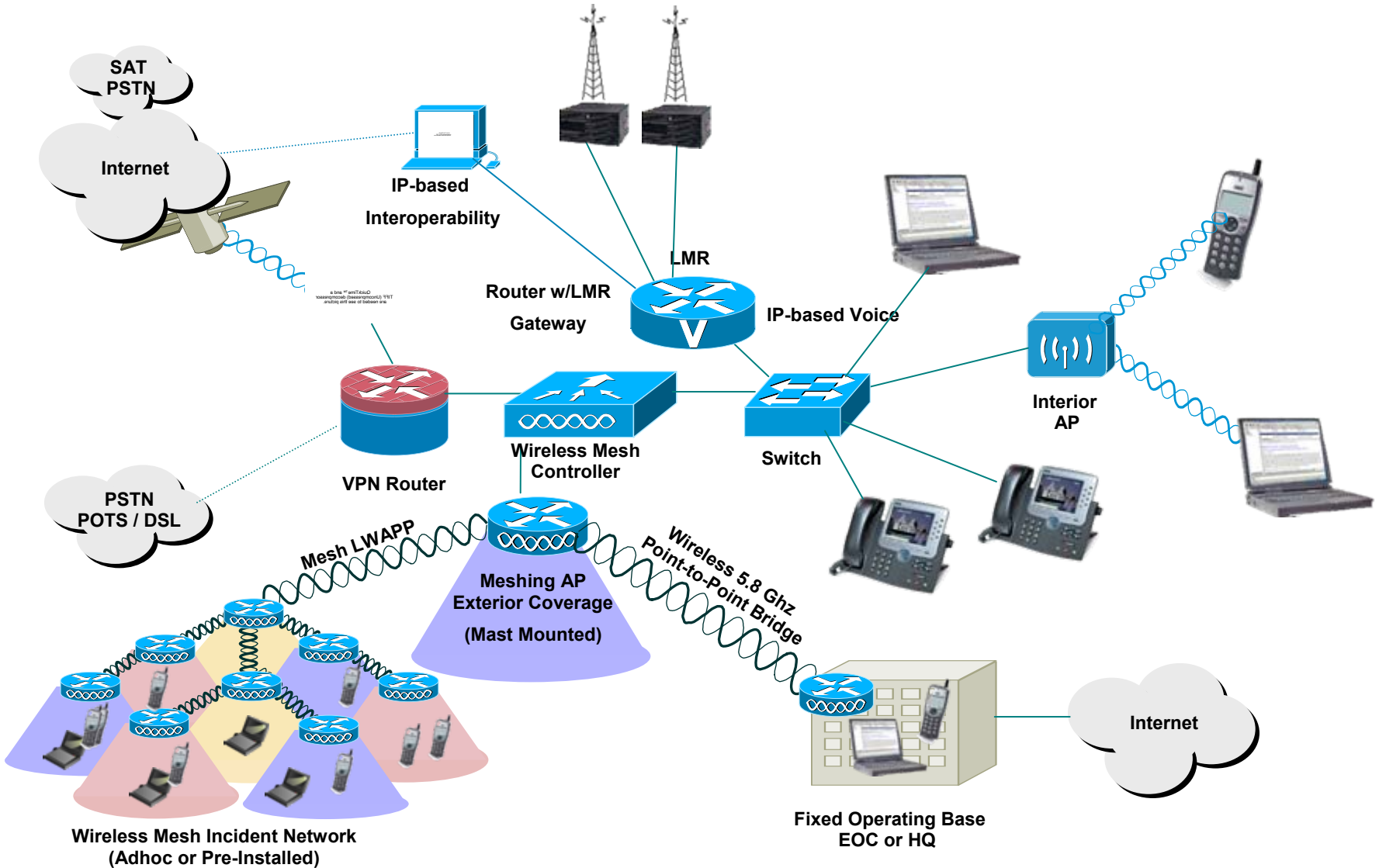


Mobility and Mobile Command and Control





IP-based Mobile Command Architecture

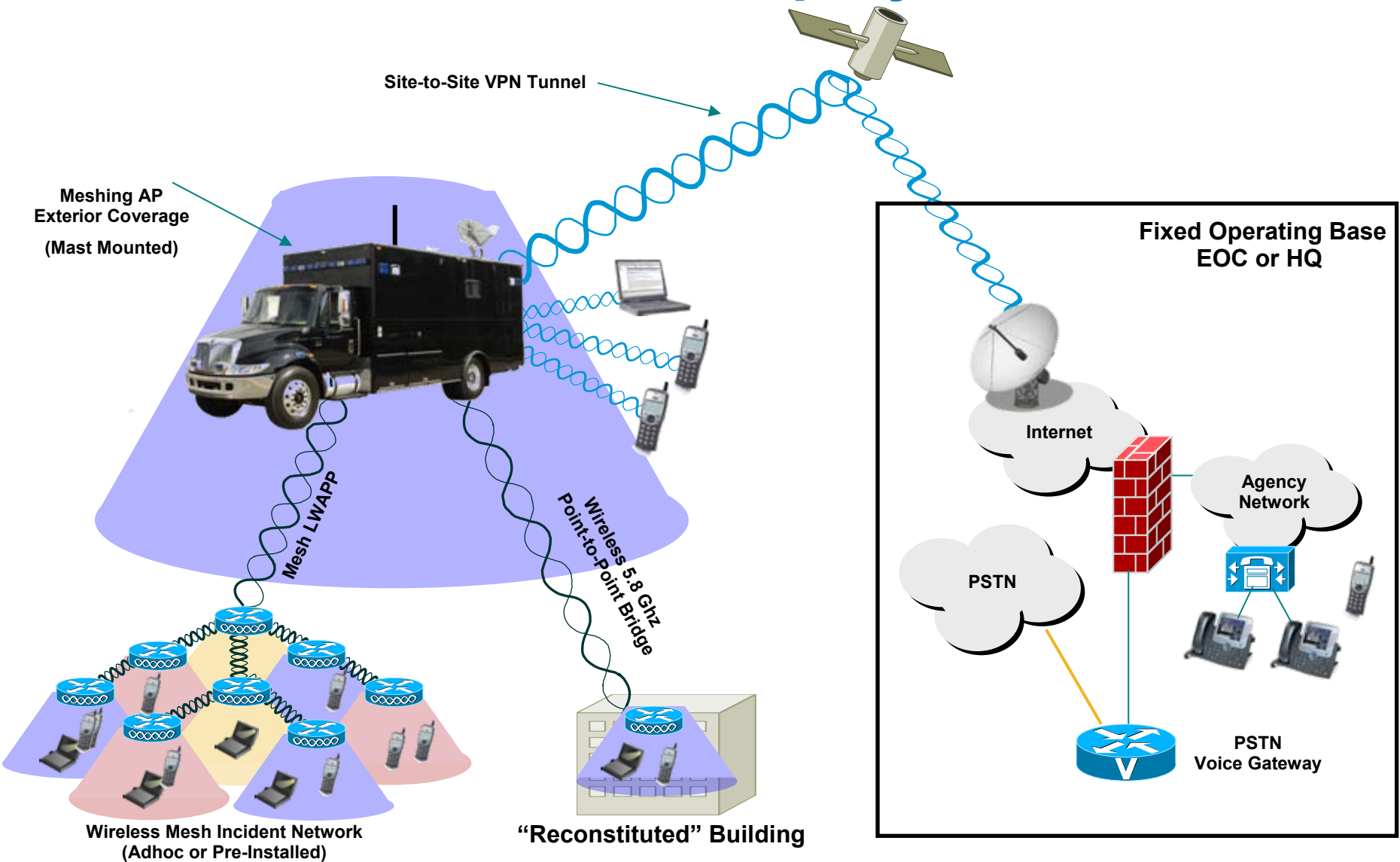


Access Point Remote Power System



- Power System Components
 - 12 V @ 75 Ah Deep Cycle Battery
 - Plastic Battery Case
 - Amp meter
 - 400 Watt DC to AC Inverter
 - 110 VAC Power Cable w/ 3-prong AC plug to mil-spec connector
- Rated Power Draw
 - 36 W / -48 VDC @ .75 mA
- Observed Power Draw
 - 12 W / 12 VDC @ 1 A
- Estimated Duty Cycle is 24 to 48 Hours for Given Battery

Tactical Mesh Field Deployment



Closing



Responsive & Resilient Environment

Challenge:

- Nlets, the International Justice and Public Safety Information Sharing Network, carries 90+ million messages to 30,000 member agencies
- Nlets wanted network reliability and flexibility to connect new agencies and services

Solution:

- Nlets chose an IP network solution because of its security, resilience, and flexibility

