

# FirstNet Local Control

## PSAC Local Control Task Team

“The purpose of the Local Control Task Team is to further define and refine the operational requirements of the local control application that FirstNet will provide and to assemble the materials needed to better define the processes that support operations that are not expected to be supported by the local control application directly.”\*

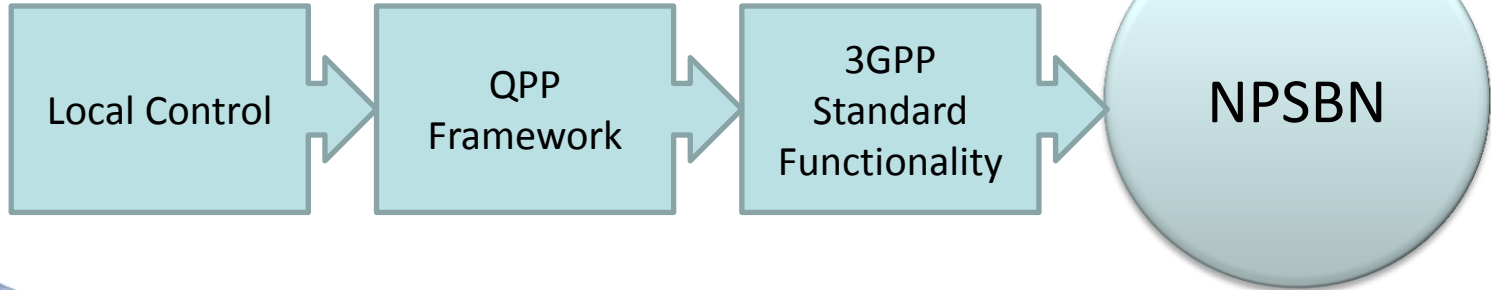
\*PSAC Local Control Task Team, Kickoff, January 28, 2016

## How Does this Work Together

Public Safety may use Local Control to influence the QPP Framework which uses 3GPP Standard Functionality to provide Quality of Service, Priority and Preemption on the NPSBN



Public Safety



## Local Control Components

A collection of capabilities that allow a PSE to influence and control its relationship with the NPSBN\*

**Quality of Service,  
Priority, and  
Preemption (QPP)**

**Users & Groups**

**Roles & Profiles**

**Devices & Provisioning**

**Applications & Services**

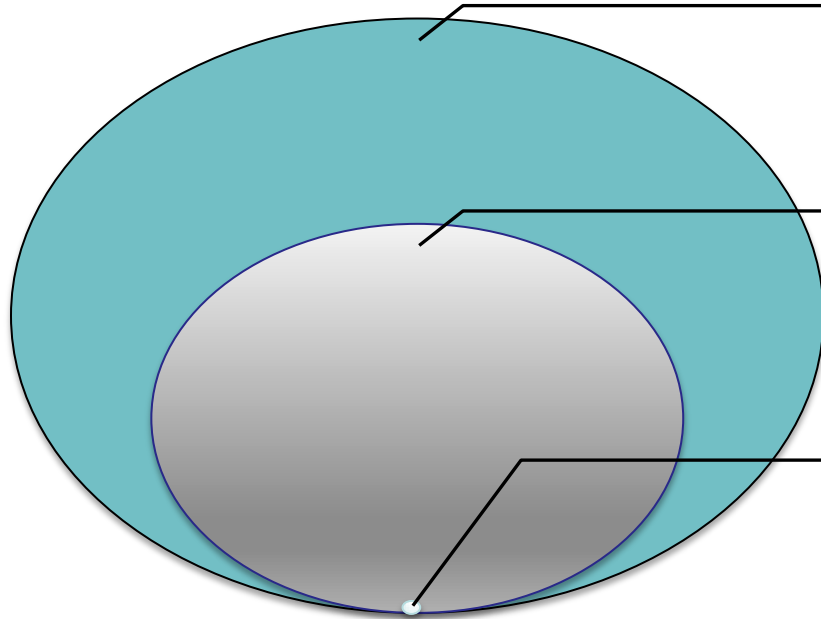
**Planned & Unplanned  
Events**

**Reusable Assets**

**Onboarding & Support**

\* FirstNet RFP, Solicitation No. D15PS00295 – Section J, Attachment J-14, Terms of Reference

## QPP States: Relative Frequency



### STATIC QPP

- User Roles & Profiles
- Application Profiles
- Network Status

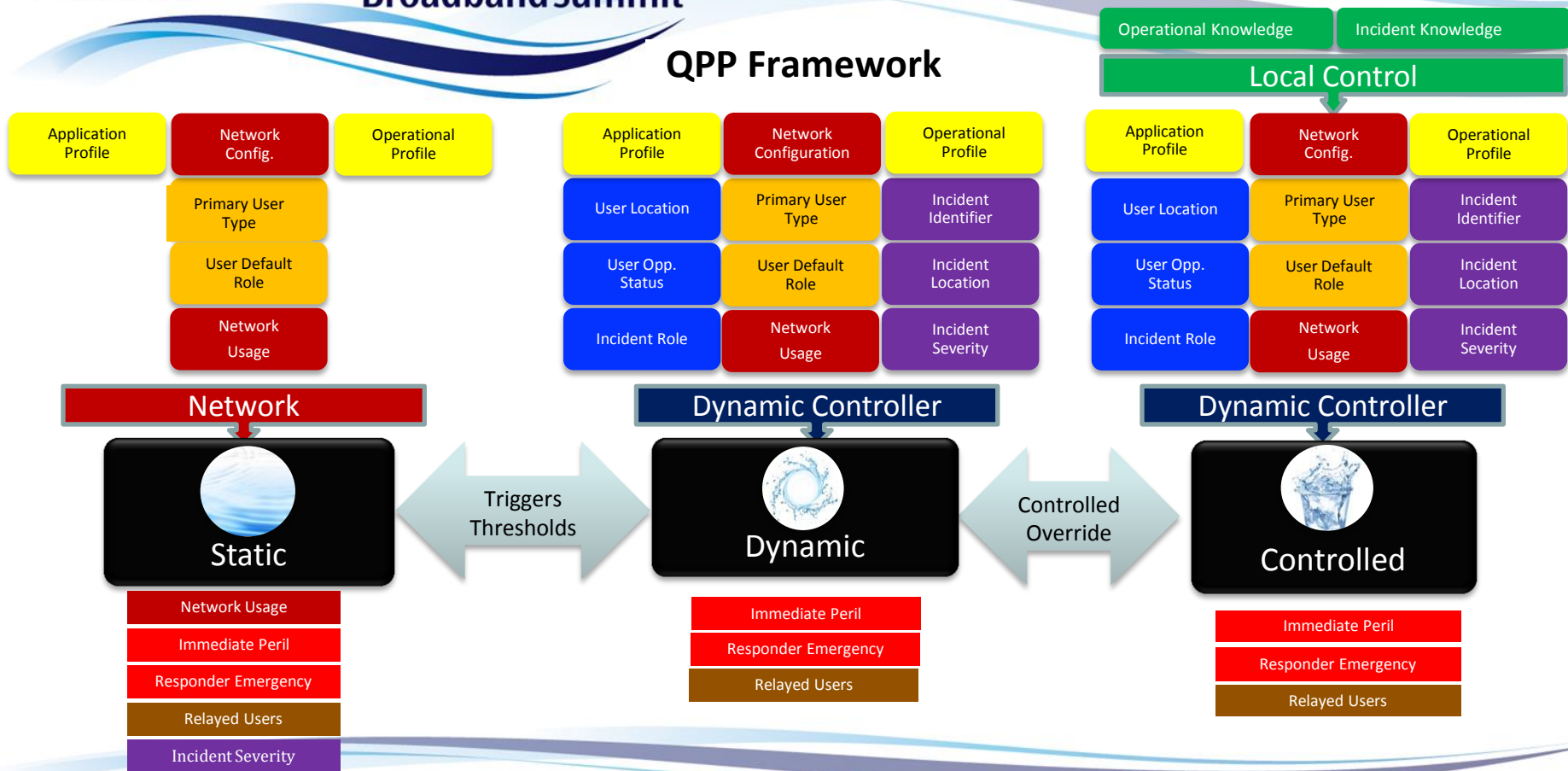
### DYNAMIC QPP

- **Additional Situational Data (Geographic Information System (GIS), Automatic Vehicle Location (AVL), Device Sensors)**
- User Roles & Profiles
- Application Profiles
- Network Status

### CONTROLLED QPP

- **Human Input**
- **Agency Directed Changes**
- Additional Situational Data
- User Roles & Profiles
- Application Profiles
- Network Status

# QPP Framework



## Local Control Governance

### Nationwide Governance

- ✓ Relationships between agencies and other constituents of the NPSBN
- ✓ Boundaries may cross any number of jurisdictional lines or distances

### Local Governance

- ✓ Adjoining or overlapping jurisdictions
- ✓ Adjoining or overlapping types of disciplines

### Agency Governance

- ✓ Relationships among all users and devices within an agency

## Connecting Public Safety Users

**\*Level 1. Public Safety Primary**

10 subcategories including: EMS, Fire, Law Enforcement, PS Communications

1a. Paid  
1b. Volunteer

**\*Level 2. Public Safety Secondary**

15 subcategories including: LE Civilian, Courts, Highway, Medical, Other Governmental

**\*Level 3. Public Safety Support**

6 subcategories of secondary public safety users including: Utilities, Transportation, Non-Governmental Organization (NGO)

Non-Public Safety Users

Covered Leasing Agreement (CLA) Users

\*Public Safety Advisory Committee: Potential Users - Nationwide Public Safety Broadband Network, July 22, 2014

**FirstNet User Profiles**



**Carrier Profiles**



## Key Terminology

- ❖ **Static QPP State** – the network is in static state when it can handle all requested activity based on the default settings without exhausting resources.
  - While the network is in the Static State, public safety personnel are engaged in their normal everyday mission activities.
  
- ❖ **Dynamic QPP State** – the network enters dynamic state when it must make tradeoffs and prioritize traffic to optimally handle requested activity.
  
- ❖ **Controlled QPP State** – the network is in controlled state when a human intervenes.
  
- ❖ **Administrative control** – provides local agencies the ability to configure devices, users, roles, profiles and applications for optimal performance on the network.

## Preliminary PSAC Recommendations

1. Local Control is critical to the success of the NPSBN. FirstNet is engaging the PSAC through a Local Control Task Team to solicit advice and guidance.
2. Local Control influences network behavior during normal activities and escalated incidents primarily by allowing public safety agencies to configure or temporarily change the default settings that automatically manage Quality of Service Priority and Preemption (QPP). These default settings help the network maintain service levels under a variety of conditions and loads.
3. Local Control input drives network behavior through configuration of profiles/priority levels of users, devices, services, and apps during normal activities and escalated incidents.
4. Manual control of QPP should rarely, if ever, be necessary.
5. Manual control of QPP may require a limited number of highly trained communications liaisons who will be authorized to direct manual control of QPP. In these rare situations, it is envisioned to be coordinated with FirstNet.

Thank You!