



Alabama First Responder Wireless Commission

Initial Commission Meeting

October 23, 2012



AGENDA

- Consideration of Resolutions
 - By-Laws
 - Appointment of a Secretary
- Overview of Commission Objectives as set forth in Executive Order 34
- Overview of FirstNet Legislation and Structure
- Overview of Project 25 700MHz Systems
- Creation of Sub-Committees
- Closing





Resolutions

- By-Laws
 - Resolution to approve the draft by-laws as presented to the members.
- Secretary
 - Resolution to appoint a Secretary for the Alabama First Responders Wireless Commission





Executive Order 34



- Before Executive Order 34, no one body was tasked to work toward a resolution to the state's first responders communication problems.
- State and Local communications infrastructure is limited and in most cases will not facilitate additional equipment to provide public safety grade communications.
- Federal, State, Local & Tribal jurisdictions currently operate numerous disparate communications system.
- This executive order will create the commission that will focus on how to best meet the communications needs of all our first responders across the state.

Office of the Governor

ROBERT BENTLEY
Governor



Press Office

August 16, 2012

EXECUTIVE ORDER NUMBER 34 Amendment Number 1

Under and by virtue of the authority vested in me by law and pursuant thereto, I do hereby amend Executive Order Number 34, executed on August 7, 2012, by deleting the same in its entirety and inserting in lieu thereof the following:

WHEREAS, since the tragic events of April 27, 2011, interoperability of voice and data communications among our first responders is of paramount importance;

WHEREAS, current state and local public safety communication systems infrastructure is limited and in most cases does not facilitate interoperable communications;

WHEREAS, federal, state, local, and tribal jurisdictions presently operate numerous disparate analog and digital radio communication systems for first responder operations with Public Safety, Public Health, Public Works and others;

WHEREAS, Congress has passed legislation which has been signed into law allocating 10 MHz of radio spectrum in the 700 MHz Band (commonly referred to as the "D Block") to public safety for the purpose of building a nationwide broadband communications network;

WHEREAS, the bill creates an independent authority known as the First Responder Network Authority within the National Telecommunications and Information Administration and provides funding to use the D Block and adjacent public safety spectrum to build the network;

WHEREAS, the D Block and other 700 MHz Spectrum will provide frequencies for exclusive use by first responders to communicate with other first responders and support personnel in areas subject to emergency incidents or disaster;

WHEREAS, there is a need for direction and coordination in implementing the First Responder Network in Alabama and this administration is committed to taking all actions deemed necessary to provide for preparation of the establishment and the coordination of these state efforts to insure the use of this spectrum for first responders responding to emergencies; and,

WHEREAS, the necessity of reliable communications and interoperability among our first responders has been demonstrated in the aftermath of numerous natural disasters affecting our state.

NOW, THEREFORE, based upon these considerations, and for other good and valid reasons related thereto, I, Robert Bentley, Governor of the State of Alabama, by virtue of the authority vested in me by the Constitution and Laws of the State of Alabama, do hereby order and direct as follows:



Objective 1

Section 4.

The Commission shall be responsible for strategic planning for the utilization of the D Block and other 700MHz Spectrum and shall serve as the intergovernmental bridge between federal, state, local, tribal and private entities to foster and promote collaboration and information sharing regarding the use of the frequencies and infrastructure for the radio access network;





Objective 2

Section 5.

The Commission shall be responsible for promoting the efficient use of public resources to ensure that essential public safety personnel have effective communications services available in emergency situations. The Commission shall identify, plan, and implement the most efficient and effective way to utilize and integrate the infrastructure, equipment, and other architecture associated with the radio access network to satisfy the wireless communications and data services needs of Alabama's first responders;





Objective 3

Section 6.

The Commission shall be the primary entity within this state charged with the functional responsibility for planning, building, implementing and maintaining a radio access network and its application to first responders in Public Safety, Public Health and Public Works;





Overview of FirstNet Legislation

Chuck Murph

Assistant Director, ALDHS

State Wide Interoperable Communications
Coordinator

ALABAMA FIRST RESPONDER WIRELESS COMMISSION

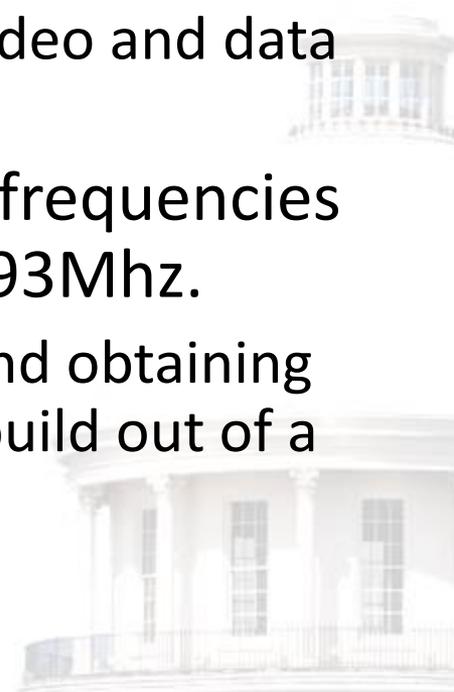




Public Safety Broadband



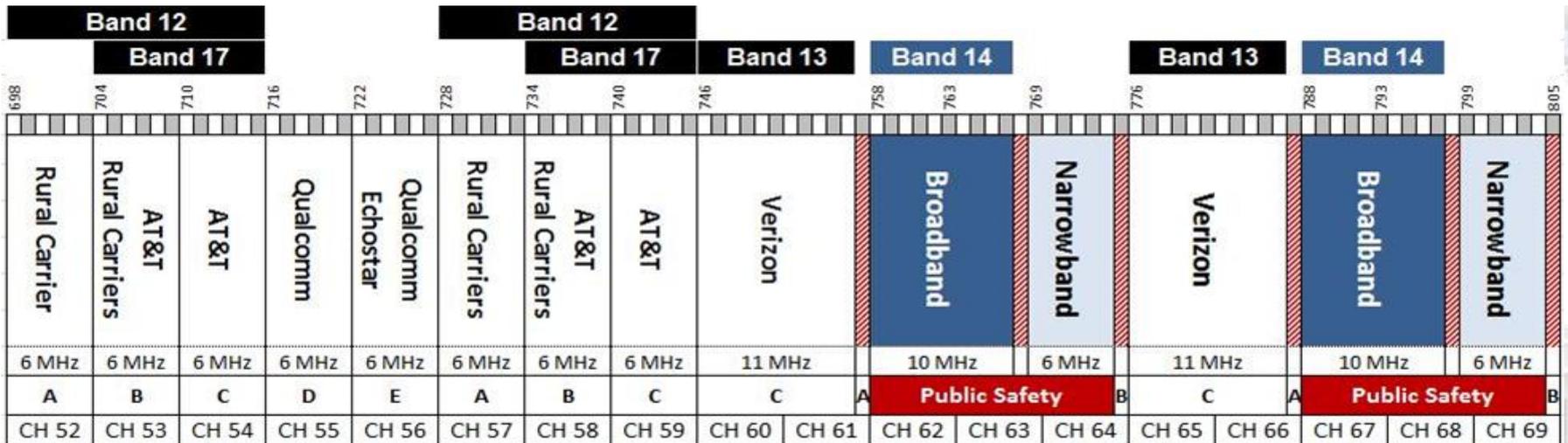
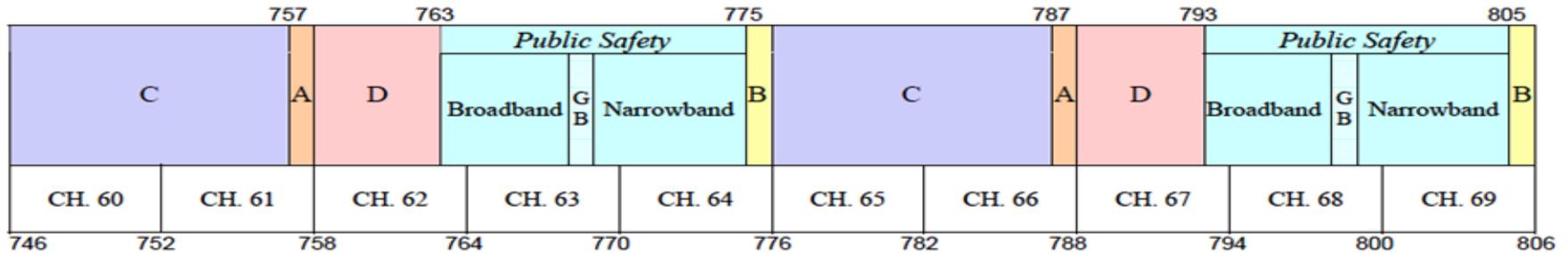
- The term "broadband" refers to advanced communications systems capable of providing high-speed transmission of services such as data, voice, and video over the Internet and other networks.
 - Through broadband use, public safety entities can access medical records, site information and other video and data information useful for emergency responses.
- The term "D Block", refers to two groups of frequencies (spectrum) located between 758Mhz and 793Mhz.
 - The D Block is very valuable to public safety and obtaining exclusive rights to it was vital to insuring the build out of a nationwide public safety broadband network.





700 MHz Band

Upper 700 MHz Band Plan





Legislation

- Title VI of the Middle Class Tax Relief and Job Creation Act of 2012 allocated the D Block spectrum for the creation of a nationwide broadband network dedicated to public safety communications.
- Provides \$7 billion federal funding for the network.
- Establishes a nationwide governance structure, the First Responder Network Authority (FirstNet).





NTIA's Statutory Requirements



- NTIA will establish the State and Local Implementation Grant Program
- Authorized as part of the Middle Class Tax Relief and Job Creation Act of 2012 (Pub. L. No. 112-96)
- Up to \$135 million is available to establish a NPSBN planning grant program
- Program will assist regional, state, tribal, and local governments:
 - To plan for a single, nationwide interoperable public safety broadband network (PSBN)
 - To identify and plan the most effective way to utilize and integrate the infrastructure, equipment, and other architecture associated with the nationwide PSBN
- Not later than 6 months after the Act's enactment (1st quarter of 2013), and in consultation with First Responder Network Authority (FirstNet), NTIA must establish grant program requirements, including:
 - Defining eligible costs
 - Determining scope of eligible activities
 - Prioritizing grants for activities that ensure coverage in rural as well as urban areas





FirstNet Board

- FirstNet held it's initial meeting September 25, 2012.
- FirstNet is an independent authority within NTIA.
- Headed by a 15-member Board.
 - Multi-jurisdictional, Multi-discipline backgrounds, but mostly retired commercial wireless professionals.
- Will hold the license to the entire 20 MHz of public safety broadband spectrum.
- The Act requires FirstNet to consult with regional, state, tribal, and local jurisdictions on a number of different issues associated with the system's design and build out.





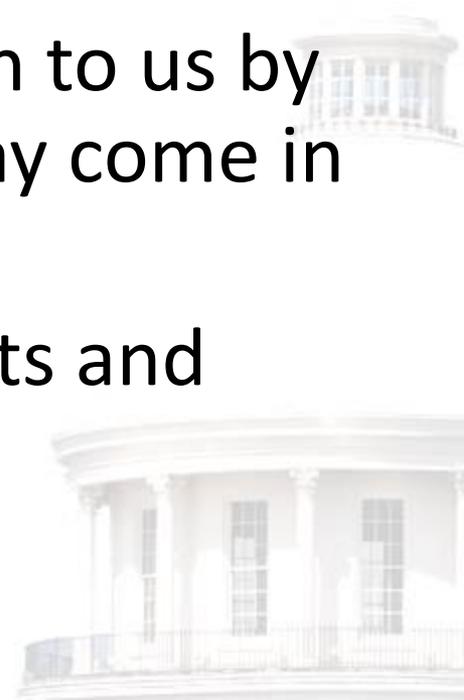
FirstNet (cont.)

- FirstNet must develop a Request for Proposal (RFP) for the construction, operations, maintenance, and improvements of the NPSBN.
- When the RFP process is complete, FirstNet will notify the Governor of each state (or his/her designee) the details of the proposed plan for build out of the NPSBN in the state and funding levels for the state as determined by NTIA.
- No later than 90 days after being notified by FirstNet, each Governor must choose whether his/her state will participate in the deployment of the NPSBN as proposed by FirstNet or conduct its own deployment of the radio access network (RAN) in the state.
 - This is referred to as the Governor’s “Opt-In” or “Opt-Out” decision.



“Opt-In” or “Opt-Out”?

- We should not concern ourselves with this decision at this time.
- This decision will be made once the conditions of the RFP are presented to the Governor.
- No specific timeframe has been given to us by FirstNet, but speculation is that it may come in 2014 or 2015.
- We must focus on our planning efforts and setting our objectives for the state.





What about voice?

- The NPSBN, will not satisfy our ever mounting need for public safety wireless voice interoperable communications.
- The future goal for broadband networks is to satisfy both data and voice needs. However, this technology is still years away from development.
 - Keep in mind, commercial VoIP is not public safety grade communications.
 - Vendors are currently working on a solution for the marketplace.
- Our efforts to establish a Project 25 700MHz unified system must continue.





QUESTIONS ABOUT FIRSTNET





Project 25 700MHz Systems

- Project 25 (P25 or APCO-25) is a suite of standards for digital radio communications for use by federal, state and local public safety agencies to enable them to communicate with other agencies and mutual aid response teams in emergencies.
- In a nutshell, P-25 is meant to facilitate various vendor units operating on a specific vendor's communications infrastructure.
- Vendors submit their equipment for testing and certification to the Public Safety Communications Research (PSCR) program.





PSCR Program

- Housed within the Department of Commerce Labs in Boulder, Colorado, the Public Safety Communications Research (PSCR) program is a joint effort between the National Institute of Standards and Technology/Office of Law Enforcement Standards (NIST/OLES) and the National Telecommunications and Information Administration/Institute for Telecommunication Sciences (NTIA/ITS).
- The PSCR program provides research, development, testing, and evaluation to foster nationwide communications interoperability.
- We look to the PSCR as an “honest” broker when certifying a vendor has met the required P-25 standards.





P-25 in Alabama



- City of Montgomery (currently transitioning)
- Baldwin County and multiple internal jurisdictions
- Mobile County (future transition, but has P-25 switch and 4 sites)
- Madison County and multiple internal jurisdictions
- Etowah County
- Talladega County and multiple internal jurisdictions
- Calhoun County and multiple internal jurisdictions
- City of Opelika
- City of Dothan



Harris
P-25 700MHz and VHF
Coverage In Blue.

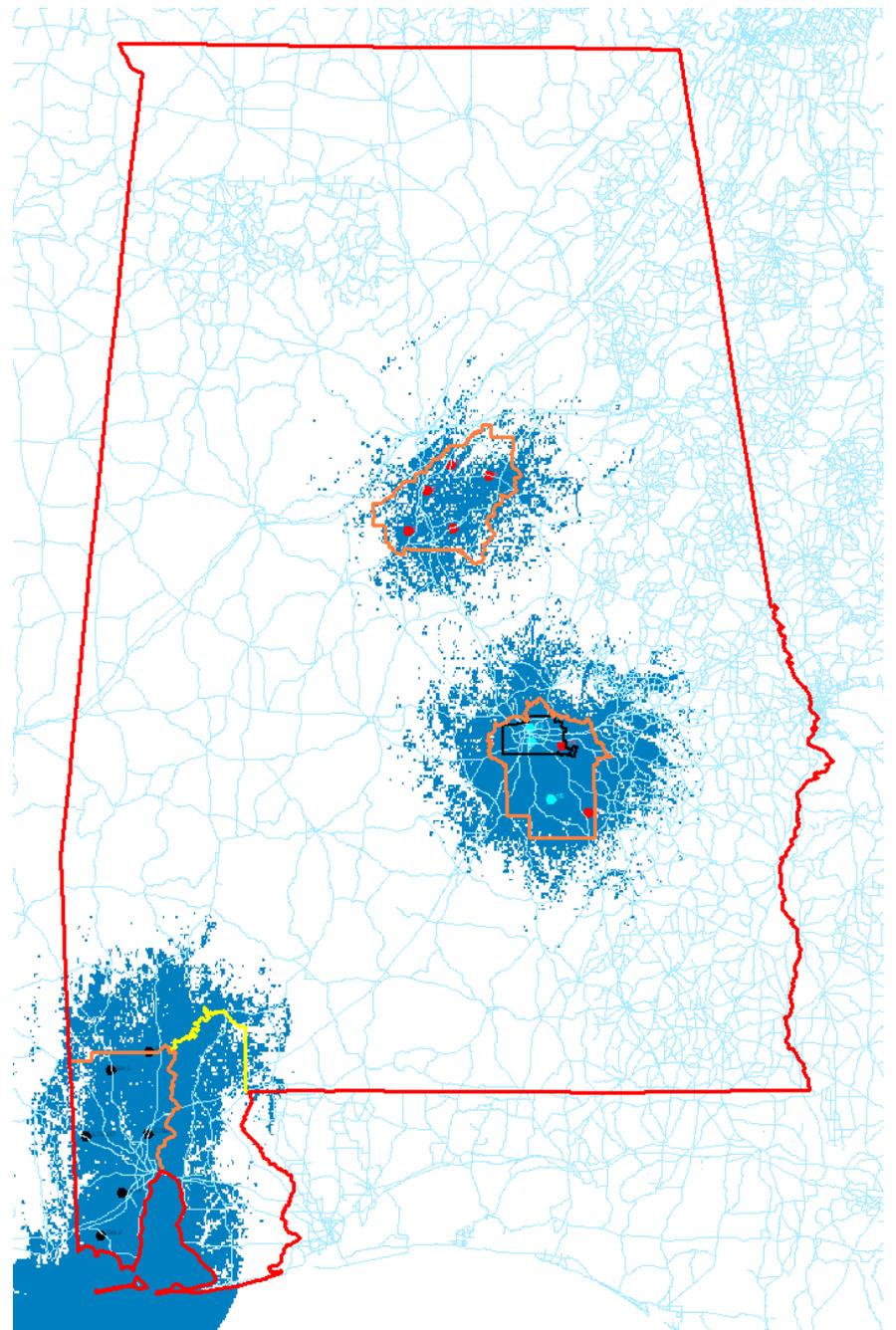
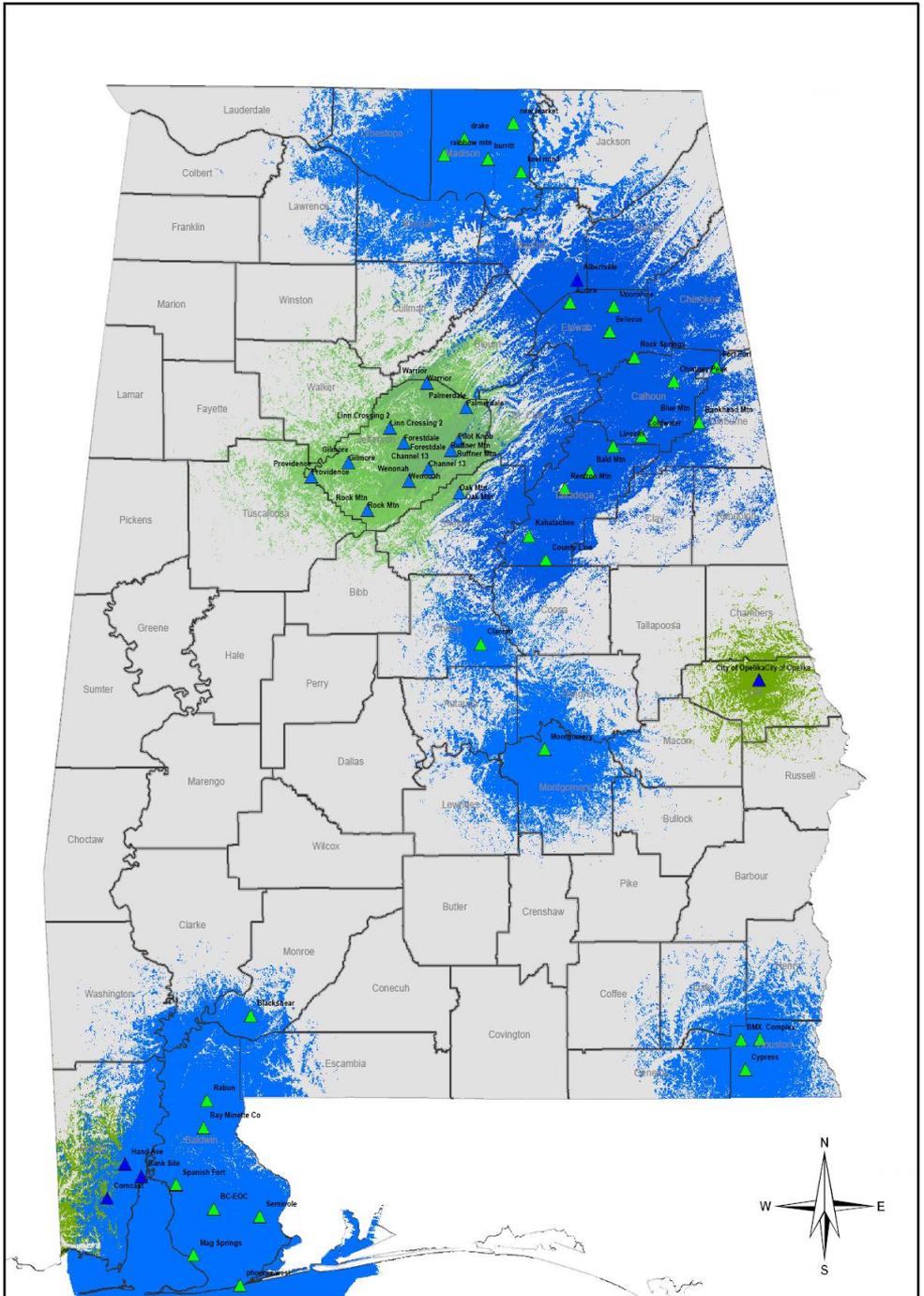


Figure 1 - Mobile Talk-Out Coverage – Current Harris P25 Trunked Systems (For Information Only)

Motorola P-25 700MHz Coverage In Blue.





Goals for P-25

- A independent unified state owned system providing 95% mobile coverage, built from the ground up, would cost in the neighborhood of \$250 million.
- ALDHS has promoted a system-of-systems approach capitalizing on investments by local, state, and federal dollars.
- P-25 switches can be tied together and P-25 subscriber units (handhelds and mobiles) can operate on other P-25 (same frequency band) systems.
- ALDHS promotes the use of 700MHz due to the accessibility to frequencies versus other bands (VHF & UHF).
- We have already seen this collaboration take place between multiple jurisdictions with even more taking advantage in the near future.





Questions on P-25





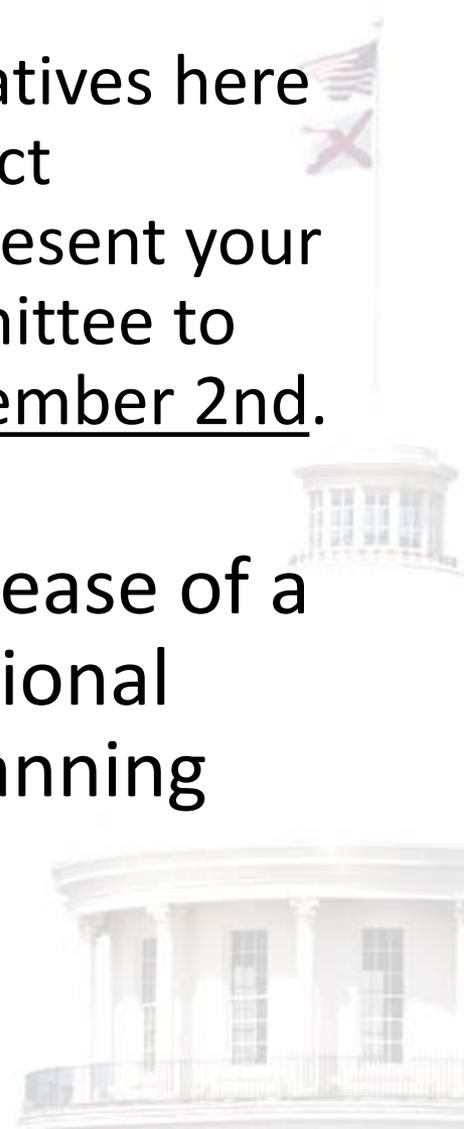
AFRWC Goals

- Per the Executive Order, the Chair creates the following sub-committees:
 - Project 25 Sub-Committee
 - Work Group will be made up of P-25 system administrators from around the state.
 - Objectives:
 - To work within the group to provide to the AFRWC strategic guidance on P-25 systems collaboration and connectivity.
 - State Agencies Sub-Committee
 - Work Group will be made up of existing state agency communications professionals.
 - Objectives:
 - To work within the group to inventory and map all current state owned infrastructure that can be used for voice/data communications and to develop for the AFRWC's review a migration path to a fully unified P-25 700MHz voice system.



AFRWC Goals (cont.)

- For the State Agency Heads/Representatives here today, please send the name and contact information of the person that will represent your agency on the State Agencies Subcommittee to Chuck Murph by close of business November 2nd.
Email: chuck.murph@dhs.alabama.gov
- I ask the commission approve the release of a Request for Proposal seeking professional services to assist the AFRWC with planning moving forward.





Open Discussion New Business





Questions?





Appendix A

Executive Order 34 as amended & Draft By-Laws

