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C o n s u l t i n g

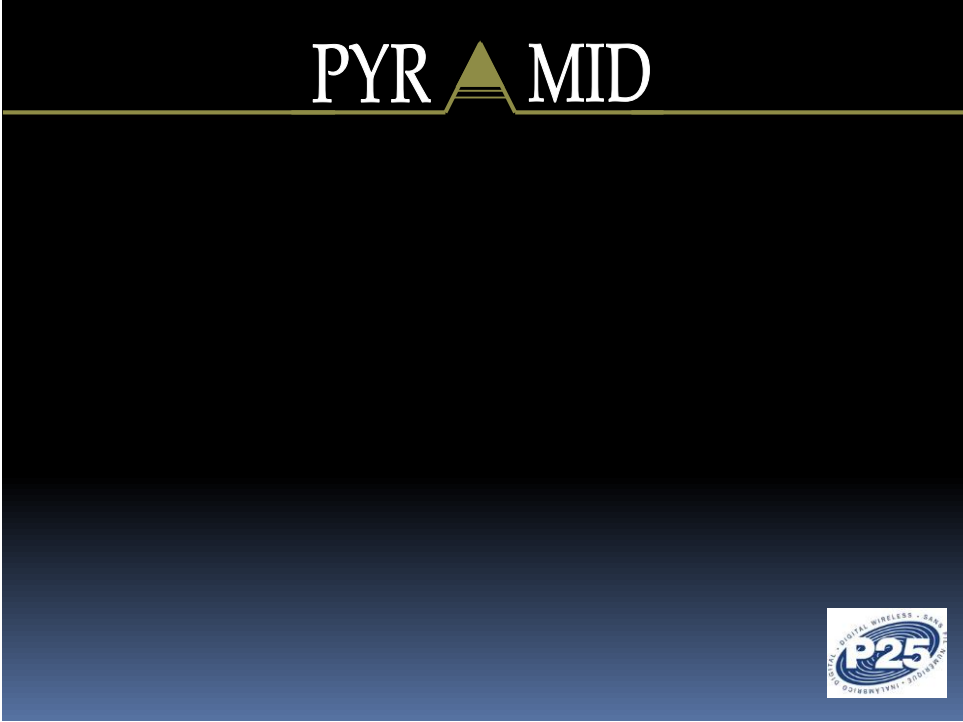
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Briefing to:

IACIR concerning *P25 Radio Systems Upgrades & Replacements*

August 29, 2014





P25 Radio Systems Upgrades & Replacements

What is P25 and Why do Anything?

Project 25 (P25) is a set 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.

The focus is INTEROPERABILITY!

The use for PUBLIC SAFETY!



P25 Radio Systems Upgrades & Replacements

Steps to P25 System

- I. Identify the stakeholders
- II. Define project scope-Consultant
- III. Secure Funding
- IV. Project Implementation & Delivery



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I. Identify the stakeholders

1. Setup a “Radio Committee” and/or;
2. Setup a “public safety board” and;
3. Adopt an ordinance, resolution, simple vote to work toward P25 implementation and;
4. Include both first responders, administrators, technicians, dispatchers, public services, politicians, and possibly taxpayers

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II. Define project scope-Consultant

1. Suggested to use a consultant for this work – requires a team to be dedicated to the project implementation.
2. P25 has “opened up” the market for the end-users devices
3. Upgrade, phasing, or one-time replacement?
4. Remember that P25 brings the communications completely into the digital network systems
5. Inventory existing systems; what is upgradable and what must be replaced?

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II. Define project scope-Consultant

6. Define specifications for system.
7. Projections for the next 10-15 years (channels, talk groups, devices, maintenance issues)
8. Site development; propagation studies, use of existing sites, use of WT's, greenfield locations, leases, MOU's, transmitters?
9. Review the coverage requirements; DAQ, BER, dB. What is acceptable coverage (95%)?
10. Additional narrow-banding requirements in the future?

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II. Define project scope-Consultant

11. Define system to meet Phase 1 requirements with upgradable to Phase 2?
12. What is the future traffic capacity needs?
13. What are the current and future data transmission needs?
14. Sizing the network for major events (3x factor for events)?
15. Backhaul options for system (copper, fiber, microwave)?
16. Number of end users, 1st responders, dispatchers, DPW's, administration personal (this correlates to # of devices)?

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II. Define project scope-Consultant

11. Connectivity to emergency alert system?
12. How does NG911 fit in the system (videos, VoIP)?
13. How is paging to be completed (now and in the future)?
14. Over-the-air programming requirements?
15. Is there an end user device preference (Motorola, Harris, EF Johnson, Tait, Kenwood)?
16. Is there a preference for the dispatch console system (Motorola, Zetron, Cassidian)
17. The focus is INTEROPERABILITY!

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III. Secure Funding

1. Will it be part of a larger system?
2. Lease options?
3. Purchase options?
4. Bonding options?
5. User fees, MOU's, Interlocal agreements, special tax?
6. Budget projections and needs – future funding for repairs/upgrades/maintenance of system?
7. Public input for funding – let the public know why this needs to be completed – include estimated values?
8. Infrastructure systems versus field devices?

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IV. Project Implementation & Delivery

1. Develop of “hard bid” versus RFP for the project?
2. RFP requires a scoring system to be approved as well as the scoring committee to be approved.
3. Project implementation timetable?
4. Detail out the migration plan for the upgrades or replacements.
5. MOU’s & Interlocal agreements for the project?
6. Greenfield site developments; zoning, MOU’s land development?
7. Simulcast/multicast/hybrid technologies for system?



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IV. Project Implementation & Delivery

8. Stakeholders involvement – dedicated team members with the consultant heading the team.
9. Training time period and requirements for 1st responders, dispatchers, system administrators, technicians?
10. Integration with existing equipment – logging recorder systems, locution systems, CAD?
11. Testing and acceptance program – Factory and Field testing. Must define the parameters of the program!





Questions?

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