

# IntelliLink™

## Interworking Solutions

**Standards based LMR - LTE Communications enables LMR Subscriber Radios to communicate with Mission Critical Push to Talk Devices on LTE Networks, including devices on the industry's leading LTE networks.**

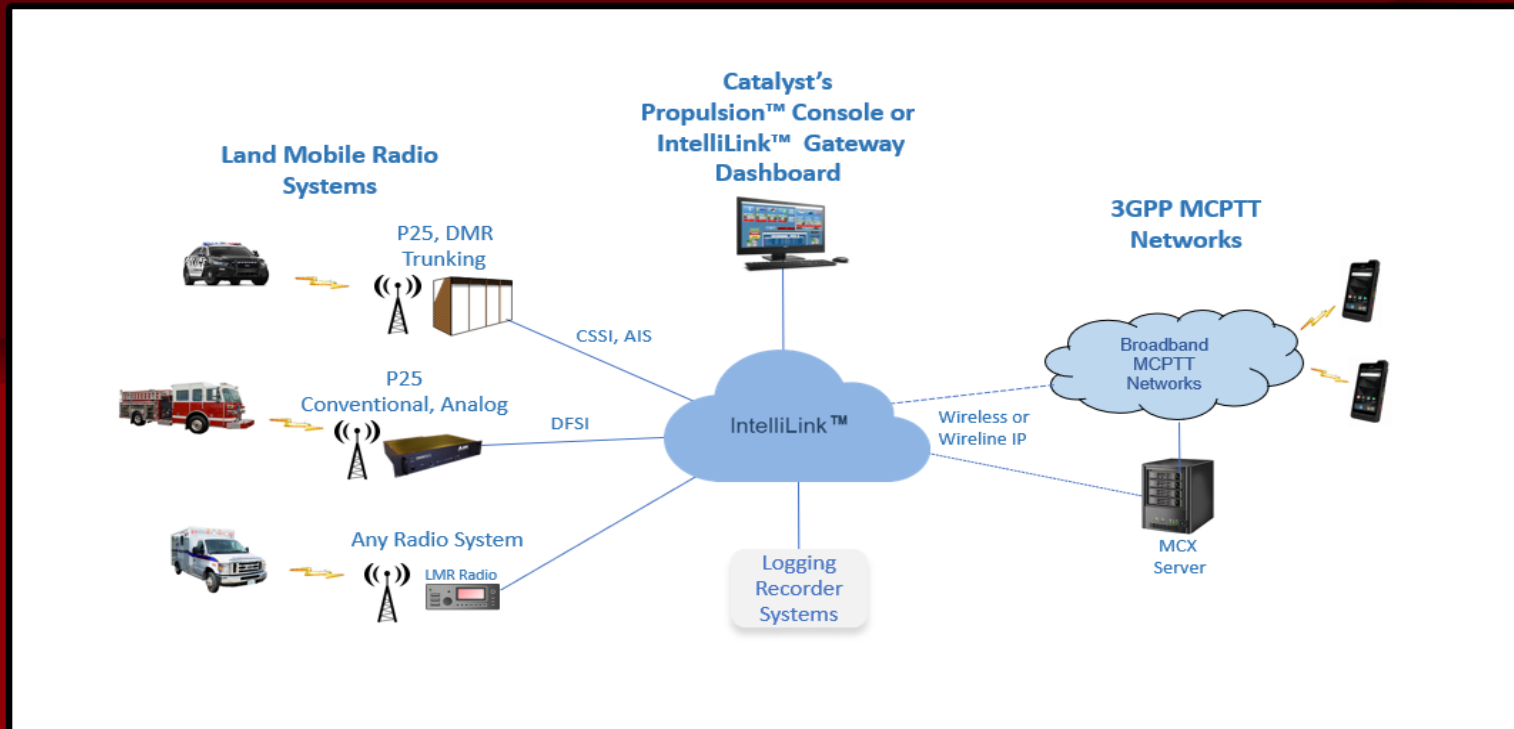
IntelliLink™ Interworking Solutions leverage Catalyst's 25 years' experience with sophisticated radio control and interface technology with new development based upon the 3GPP Standards to interface with leading LTE Networks. The result is the first interworking solution in the market based upon these standards and follows the industry trend toward standards-based solutions and away from today's profusion of incompatible PTT over cellular applications.



## Catalyst IntelliLink™

### Interworking System Advantages

- IntelliLink™ Interworking is a software solution running on commercial off the shelf Windows® computers. Provision as a micro pc, rackmount server, laptop or other commercially available computer that matches your environment.
- IntelliLink™ Interworking is highly scalable, supporting large and small public safety organizations. Start with a single LMR Control Station as the LMR interface and grow.
- IntelliLink™ Interworking connects virtually any LMR radio system to LTE MCPTT, including both standards based as well as proprietary radio protocols.
- An infinitely configurable user interface sets up group calls between LMR and MCPTT Subscriber Units. Optionally, Catalyst's line of Mission Critical Dispatch Console Solutions provides a seamless user interface for control of both LMR and LTE resources.



Interworking solutions that provide standards-based interfaces for both LMR and LTE networks are essential to enable communications between Mission Critical Push to Talk devices on these networks. Catalyst IntelliLink™ Interworking solutions are a complete departure from existing PTT over LTE, providing the performance that Public Safety needs (minimal delay, protecting against lost syllables and words, and meta data). PTT over cellular solutions currently on the market are not designed to deliver the mission critical voice communications traditionally transmitted via LMR systems.



Catalyst's IntelliLink™ Interworking solution is flexible and will support a wide variety of LMR radio networks. Catalyst solutions augment existing efforts to define a Project 25 (P25) Inter SubSystem Interface (ISSI) to LTE connection with a solution that also enables other LMR technologies.

- P25 ISSI
- P25 DFSI
- DMR AIS
- Tone Control
- Manufacturer Specific Protocols (EDACS™, Nexedge™, Smartnet™ etc.)
- dc Control
- LTE
- SIP/PSTN

## Technology Innovation

IntelliLink™ Interworking implements the LTE Client interface, in contrast to the "server to server" interface contemplated by the InterWorking Function of 3GPP Release 16. This LTE "Client" interface is a defined standard today, can be more easily implemented and managed than the IWF, is much less expensive than the IWF, and provides most of the capabilities needed by First Responders. Research and Development of Catalyst's IntelliLink Interworking Solutions was funded in part from a contract with the Department of Homeland of Security Science and Technology Directorate.



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