

Interoperability Solutions Compared

Attribute	<i>NetworkFirst</i>	Other IP Solutions	Patch based Solutions
Interop Paradigm	Talkgroups	Audio Patch	Audio Patch
Common Infrastructure	Part of unified VIDA network	Standalone solution	Standalone solution
DHS certified "QATT Qualified Anti-Terrorism Technology	Yes	No	No
Scalability	Local, Regional, State, National, Intl	Local, Regional, State, Nat, Intl	Local
Interop Activation	End user radio or central dispatcher	Central dispatcher	Central dispatcher
Pre-emption	Yes	No	No

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Priorities	Yes, 256 levels	?	None
Native P25	Yes	No	No
Encryption	End-end digital, AES, DES	End-end AES, DES	No digital encryption
Backhaul links	IP based, low bandwidth, 4-8 talkpaths / 64 Kbps DS0 w/IMBE	IP based, high bandwidth, 8 TPs / 284 Kbps	Analog lines or IP based with modems
Control, security	Switch control, system management terminal, VIDA network 'Defense in Depth'	Poor via peer-peer architecture	Good via central device

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Reliability	<p>HA redundant switch: co-located, or geographically split configurations. Connection within a card maintained even if link fails.</p> <p>Flexible topologies, ring or mesh.</p> <p>Reliable UNIX platform.</p>	<p>Distributed architecture.</p> <p><u>If SIP server fails, interop is 'frozen':</u></p> <p>Redundant SIP servers available.</p> <p>Windows not mission critical platform.</p>	<p>One device equates to single point of failure</p>

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Standards Basis	IP, P25	IP, VoIP, SIP, RTP	None
Solution Origins	Hardened IP network <i>designed specifically for public safety</i>	Enterprise IP telephony conference calling ('hoot & holler')	30 year old console patches
Technology	IP switch, Commercial "Off the Shelf" hardware, industry standard UNIX platform	Peer-peer software application with SIP server, Windows platform, proprietary components	Analog audio patch, some with PC interface driving audio switch

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Emergency Alarms	Yes, across multiple vendor systems (P25, EDACS, Open Sky)	Within same vendor system only	No
# Concurrent Interop Talkgroup Connections	> 200	?	2-36
# Talkpaths / Gateway	3 or 12	8	Gateways not used
Keying Methods	E&M, VOX, CTCSS, tone remote control	E&M, tone remote control	PTT COR, E&M

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Telephone Interface	Yes	Yes	Yes
Vocoders	IMBE, AMBE, G.711, ADPCM	G.711	?