Attachment 1 - MPLS Comparison Matrix

	OPTION 0	OPTION 1	OPTION 4A	OPTION 4B	OPTION 4C	OPTION 4D
Description	Take no action. Configuration in the original contract. Maintains Layer 2 architecture. Non-LMR services are not permitted on network.	Motorola implements MPLS now as part of current design of Next Gen System.	Motorola implements MPLS now as part of current design of Next Gen System, paid for by reduction in Layer 2 SUAII services.	Motorola implements MPLS now as part of current design of Next Gen System, paid for by reduction in Layer 2 SUAII services.	Motorola implements MPLS now as part of current design of Next Gen System, paid for by reduction in Layer 2 SUAII services.	Motorola implements MPLS now as part of current design of Next Gen System, paid for by reduction in Layer 2 SUAII services.
Data Transfer	Layer 2 - used predominantly in single-use networks.	MPLS - commonly used in high performance networks.	MPLS - commonly used in high performance networks.	MPLS - commonly used in high performance networks.	MPLS - commonly used in high performance networks.	MPLS - commonly used in high performance networks.
Traffic	Conventional voice channels, interoperability voice channels, 700 MHz trunked voice channels, and basic system management data.	Conventional voice channels, interoperability voice channels, 700 MHz trunked voice channels, and system management data, plus data traffic from other applications (cameras, site security, radio system diagnostics, etc.)	Conventional voice channels, interoperability voice channels, 700 MHz trunked voice channels, and system management data, plus data traffic from other applications (cameras, site security, radio system diagnostics, etc.)	Conventional voice channels, interoperability voice channels, 700 MHz trunked voice channels, and system management data, plus data traffic from other applications (cameras, site security, radio system diagnostics, etc.)	Conventional voice channels, interoperability voice channels, 700 MHz trunked voice channels, and system management data, plus data traffic from other applications (cameras, site security, radio system diagnostics, etc.)	Conventional voice channels, interoperability voice channels, 700 MHz trunked voice channels, and system management data, plus data traffic from other applications (cameras, site security, radio system diagnostics, etc.)
Pros	- According to Motorola, it can robustly and reliably support single-use traffic at no additional cost to current project.	- MPLS is specifically designed to carry many kinds of traffic simultaneously. - More reliable network. - More flexible and more future oriented. - Motorola alone is responsible for correcting all implementation issues. - Various diagnostic and security tools for the P25 radio system can be added.	- MPLS is specifically designed to carry many kinds of traffic simultaneously. - More reliable network. - More flexible and more future oriented. - Motorola alone is responsible for correcting all implementation issues. - Various diagnostic and security tools for the P25 radio system can be added.	- MPLS is specifically designed to carry many kinds of traffic simultaneously. - More reliable network. - More flexible and more future oriented. - Motorola alone is responsible for correcting all implementation issues. - Various diagnostic and security tools for the P25 radio system can be added.	- MPLS is specifically designed to carry many kinds of traffic simultaneously. - More reliable network. - More flexible and more future oriented. - Motorola alone is responsible for correcting all implementation issues. - Various diagnostic and security tools for the P25 radio system can be added.	- MPLS is specifically designed to carry many kinds of traffic simultaneously. - More reliable network. - More flexible and more future oriented. - Motorola alone is responsible for correcting all implementation issues. - Various diagnostic and security tools for the P25 radio system can be added.
Cons	- Low-level protocols may not have the logic built in that would be required to compensate for a broadcast storm or other sudden network event. - May not support future upgrades to the P25 radio system. - Uses only a fraction of the available bandwidth of the Next Gen microwave network. - Existing troubleshooting services will be removed. - Current non-MERA users (CHP, FBI) will be required to find another path. - Provides less functionality than today's microwave system. - Not industry best practice.	- Significant additional cost to project. - Requires additional hardware. - Adds some complexity to the network. - Hardware refresh is only for hardware that is not compatible with updated Motorola software. - Reduces contingency funds in current project.	- Additional cost to project. - Requires additional hardware. - Adds some complexity to the network. - Hardware refresh is only for hardware that is not compatible with updated Motorola software. - Reduces contingency funds in current project. - Reduces Layer 2 network hardware refresh from two instances to one. - SUA II services for microwave network reduced from existing contract.	- Additional cost to project. - Requires additional hardware. - Adds some complexity to the network. - Hardware refresh is only for hardware that is not compatible with updated Motorola software. - Reduces contingency funds in current project. - Reduces Layer 2 network hardware refresh from two instances to one. - SUA II services for microwave network reduced from existing contract.	- Additional cost to project. - Requires additional hardware. - Adds some complexity to the network. - Hardware refresh is only for hardware that is not compatible with updated Motorola software. - Reduces contingency funds in current project. - Reduces Layer 2 network hardware refresh from two instances to one. - SUA II services for microwave network reduced from existing contract.	- Additional cost to project. - Requires additional hardware. - Adds some complexity to the network. - Hardware refresh is only for hardware that is not compatible with updated Motorola software. - Reduces contingency funds in current project. - Reduces Layer 2 network hardware refresh from two instances to one. - SUA II services for microwave network reduced from existing contract.
MPLS Hardware Cost - No SUA, no Refresh	$0	$640,562.86	$502,009.08	$502,009.08	$502,009.08	$502,009.08
Add'l Cost - 15-Yr SUAII, Yr-6 MPLS Hdwr Rfsh	$0	$1,104,930	N/A	N/A	N/A	N/A
Estimate - manufacturer's support for 12 yrs purchased in year three - 24 hour telephone support	N/A	Included	N/A	$1,223,194.36 - Nokia via NASPO	$1,223,194.36 - Nokia via NASPO	$1,223,194.36 - Nokia via NASPO
Estimate - software subscription plan for 12 yrs purchased in year three	N/A	Included	N/A	$124,095.75 - Nokia via NASPO	$124,095.75 - Nokia via NASPO	$124,095.75 - Nokia via NASPO
				$1.35M for 12 YEARS - MINIMUM LEVEL OF SUPPORT RECOMMENDED		
Estimate - Part repair/replacement for 12 yrs purchased in year three	N/A	Included	N/A	$1,223,194.36 - Nokia via NASPO (Advanced Replacement)	$733,965.96 - Nokia via NASPO (no Advanced Replacement) plus $43,257 - spares	?? - Repair via time and materials plus $43,257 - spares
Estimate - one hardware refresh in year six	N/A	Included	N/A	$362,789 - Nokia via NASPO	$362,789 - Nokia via NASPO	$362,789 - Nokia via NASPO
	Subtotal	$1,781,092.86	$502,009.08	$3,022,029.55	$2,576,058.15	$2,212,088.00 + repairs
	Apply Layer 2 Network Refresh Credit	$413,253.00	$413,253.00	$413,253.00	$413,253.00	$413,253.00
	Total	$1,367,839.86	$88,756.08	$2,608,776.55	$2,162,805.15	$1,798,835.19