Executive Branch Information Technology Office of Information Technology Services 2800 SW Topeka Blvd., Building 100 Topeka, KS 66611



Phone: (785) 296-3463 Fax: (785) 296-1168 oits.info@ks.gov

DeAngela Burns-Wallace, Chief Information Technology Officer

Laura Kelly, Governor

September 6, 2022

Richard Beattie, Director Procurement and Contracts

Dear Mr. Beattie:

The high-level project plan for the Department of Transportation US-169 Dense Wavelength-Division Multiplexing (DWDM) project is enclosed. Shawn Brown is the primary contact for the project and can be reached at (785) 296-1382. This letter constitutes approval of the project pursuant to K.S.A. 75-7209.

K.S.A. 75-7209 states all specifications for any competitive acquisition related to an approved information technology project shall be <u>reviewed</u> by the chief information technology officer for the branch of state government of which the agency or agencies are a part. The requirement that agencies obtain CITO approval of proposed IT projects has been adjusted to be in agreement with JCIT suggestions. As a result, all specifications for any competitive acquisition related to an approved IT project shall now be <u>approved</u> by the CITO before release.

If a variance of 10% or more in time or cost to the approved high-level project plan would occur with vendor selection, a revised high-level project plan must be submitted for CITO approval and the CITO's approval shall be received, *prior* to contract award. The CITO will notify JCIT of such events as per their request.

Once the final contracts are awarded, the high-level project plan will need to be updated with detailed information and receive final CITO approval. As required by statute and reinforced by the JCIT, the detailed project plan must receive CITO approval *prior* to project execution. This detailed project plan should include information found at the following link: https://ebit.ks.gov/kito/epmo/proposed-information-technology-project-plans.

As of July 1, 2013, new CITO-reportable projects are assessed a fee to support KITO operations. The fee will be assessed against the total project cost identified in the agency's detailed project plan. The fee will be billed quarterly until the project's Post Implementation Evaluation Report (PIER) is received. Fees will be based on the following rate structure:

- Projects valued between \$250,000 and \$10,000,000 .0035 of the Project cost
- Projects valued greater than \$10,000,001 .0005 of the Project cost
- Infrastructure projects .00035 of the Project cost

Richard Beattie 9/6/2022 Page 2 of 2

If there is any further assistance I may provide, please contact me.

Respectfully,

DocuSigned by:

-AAB118DFC3A14C6... Julie L. Lorenz, Secretary

Department of Transportation

Delingela Burns-Wallace —1DAB26281F9B47E... DeAngela Burns-Wallace

Executive Branch CITO

Kelly O'Brien, CITO, Judicial Branch cc:

Alan Weis, CITO, Legislative Branch

Adam Proffitt, Director of the Budget

Aaron Klaassen, JCIT

JCIT Membership

Linda Norris, OPC

Kelly Johnson, OPC

Brian Reiter, OITS

Shawn Brown, KDOT

Allan Haverkamp, KDOT

Megan Burton, KSHS

Cole Robison, OITS

Alex Wong, CITA

Sara Spinks, KITO



Phone: 785-296-3461

kdot#publicinfo@ks.gov

Fax: 785-368-7415

http://www.ksdot.org

Laura Kelly, Governor

Dwight D. Eisenhower State Office Building 700 S.W. Harrison Street Topeka, KS 66603-3745

Julie L. Lorenz, Secretary

July 1, 2022

DeAngela Burns-Wallace, Chief Information Technology Officer Executive Branch Information Technology Office of Information Technology Services 2800 SW Topeka Boulevard Building 100 Topeka, KS 66611

Secretary Burns-Wallace:

The Kansas Department of Transportation (KDOT) respectfully submits the High Level IT Project Plan documents for the US-169 Dense Wavelength-Division Multiplexing (DWDM) project.

The High Level Project Plan documents enclosed are provided in accordance with the Information Technology Executive Council (ITEC) Policies 2400 and 2510, and they follow the guidelines established by the Kansas Enterprise Project Management Office (EPMO). The documents include:

- This Cover Letter
- State Entity Checklist for High Level IT Project Plan
- DA518 Information Technology Request Explanation
- DA519 Information Technology Cost-Benefit Statement
- Work Breakdown Structure (WBS)
- Architectural Statement
- Ownership of Software Code and Related Intellectual Property
- Accessibility Statement and approval letter from the State Director of IT Accessibility
- Electronic Record Retention Statement and approval letter from the State Archivist
- Risk Identification Summary
- Risk Assessment Model

Upon receipt of a formal written approval letter from CITO, this project will move forward with project planning activities.

Thank you for reviewing the High-Level IT Project Plan documentation that support this important project.

Sincerely,

Julie L. Lorenz

Secretary of Transportation

Director of Kansas Turnpike Authority

plu lorent

State Entity: Kansas Dept of Transportation	
Project Name: KDOT US-169 Dense Wavelength-Division Multiplexing (DWDM) Project	
Greater than \$250,000/ less than \$1,000,000 (Y/N): Y	
Greater than \$1,000,000 (Y/N): N	
IT Project Plan Documents	Included (Y/N)
For forms and/or more detailed information on completion of plan: see https://ebit.ks.gov/kito/it-project-oversight/proposed-it-project-plans	
For ITEC Policy and/or more detailed information on approval of IT projects, see ITEC 2400 and 2400A	
https://ebit.ks.gov/itec/resources/policies	
Cover Letter Requesting Project Approval	Υ
IT Project Request ExplanationDA518	Υ
IT Cost Benefit StatementDA519	Υ
Work Breakdown Structure	
Task Name (tasks should be descriptive)	Υ
Start	Υ
Finish	Y
Milestone	Υ
Architectural Statement (ITEC Policy 4010 and 9500) https://ebit.ks.gov/itec/resources/policies	
Statement of products and standards compliance	Υ
If different, attach CITA waiver	N
Ownership of Software Code and Related Intellectual Property (ITEC Policy 1500)	
Statement of compliance	Υ
If different, attach CITO waiver	N
Accessibility Statement (ITEC Policy 1210) https://ebit.ks.gov/itec/resources/policies/policy-1210	
Statement indicating intent to use Voluntary Product Accessibility Template® (VPAT®) to assess compliance with ITEC 1210 as part of the procurement/development and testing process, or attach exception from State ADA Coordinator.	Y
For more information see: https://www.itic.org/policy/accessibility/vpat.	Y
Attach approval letter from State Director of IT Accessibility	
Electronic Records Retention Statement (K.S.A. 45-403 and K.S.A. 45-213 through 45-223)	
For more information see https://www.kshs.org/p/records-management-and-the-law/11348	
1. Identify replaced paper records	Υ
2. Identify new business functions	Y
3. Reasons for business functions	Y
4. Records requirements for business function	Υ
5. Documents in another system?	Υ
6. Public access requirements	Υ
7. Access control requirements	Υ
8. Identify all records with retention period of ten or more years	Υ
9. Estimate three year cost of addressing records identified in No. 8	Υ
Attach approval letter from State Archivist.	Υ
Risk Identification Summary (Form ITEC PM02-11a)	Υ
Risk Assessment Model (RAM) Summary - High Level Plans	Υ
Fiscal Note, if appropriate	
Electronic copy submitted four weeks prior to contract award and/or project execution	Υ

INFORMATION TECHNOLOGY PROJECT REQUEST EXPLANATION DA 518					
1. Project Title:	2. Project Priority	3. Estima	ted Dates		
KDOT US-169 Dense Wavelength-Division Multiplexing (DWDM)		Planning Start:	9/1/2021		
Agency:		Execution Start:	3/8/2024		
Kansas Department of Transportation		Close-Out End:	7/16/2024		
4. Project Description and Justification:	Date Submitted:	6/30/2	2022		

The Kansas Department of Transportation (KDOT) manages a Dense Wavelength-Division Multiplexing (DWDM) communication backbone that provides communication for a variety of current and future traffic information systems. This project is to expand the DWDM communication backbone along the US-169 corridor between Garnett and Lenexa. This project will install switches, routers and other related technical equipment located at Lenexa, Greeley and Garnett.

Installation of new DWDM switches will be taking place beginning in March 2024 and is expected to be completed in July 2024.

- 1. Installation of switches at both ends, Garnett and Lenexa
- 2. Installation of routers at both ends, Garnett and Lenexa
- 3. Configuration of this equipment for the whole of the US 169 corridor between Garnett and Lenexa.

Please see the US-169 DWDM Project SOW from ConvergeOne Attachment for more information.

ı	s this an Infrastructure Proj	ect? (Y/N)	Y		
ſ	Will Business Process Mode	eling be completed during the IT project and business design? (Y/N)	N		
I	Will national and/or industry data standards be used? (Y/N)				
I	If yes, please specify. The switches and rounters will utilize the NTCIP (National Transportation Communications for Intelligent Transportation System (ITS) Protocol) for communications with and				

If yes, please specify. The switches and rounters will utilize the NTCIP (National Transportation Communications for Intelligent Transportation System (ITS) Protocol) for communications with and control of ITS devices.

List any collaboration that has taken place in the planning of the IT Project, and/or will take place during execution of the project. Include tools, methods, and best practices used for providing collaboration, user input, and continued social networking.

During the planning stage of this project, the project team collaborated with the KDOT IT technical support unit and ConvergeOne to ensure the equipment would transverse the network efficiently.

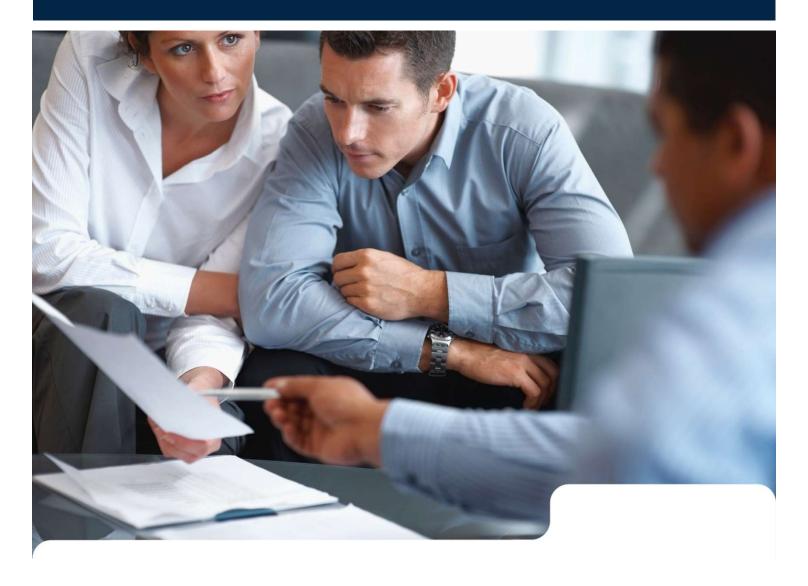
During the execution phase ConvergeOne will collaborate with KDOT contractor that is installing the Point of Presence (POP) building along the route.

5. Estimated Project Cost						
Category Internal Cost (Salaries)	Cost \$7,400		KITO Rate Structure Project Qual			
Contractual Services	\$43,133	Project Va	lue Range	Quarterly Rate		
Commodities	\$0	\$250,000	\$10,000,000	0.00350		
Capital Outlay	\$475,823	\$10,000,001	Greater	0.00050		
Sub-Total Project Costs	\$526,356	Infrastructu	re Projects	0.00035	\$184	
Total KITO Rate Fee	\$368					
Total Project Costs	\$526.724					

Total Project Costs	\$526,724					
6. Project Subprojects (include name, start and end dates, and cost of each	Subproject):					
Subproject Name		Start Date	End Date	Internal Cost	External Cost	Total Cost
Planning		9/1/2021	3/7/2024	\$1,000	\$0	\$1,000
Execution						
CISCO Equip Acquisition & Installation Contractor Awarded		3/8/2024	7/9/2024	\$6,000	\$518,956	\$524,956
KITO Rate Fee					\$368	\$368
						\$0
						\$0
						\$0
Execut	tion Sub-Total	3/8/2024	7/9/2024	\$6,000	\$519,324	\$525,324
Close-Out	I	7/10/2024	7/16/2024	\$400	\$0	\$400
Grand	d Internal, Exte	rnal, and Total Costs		\$7,400	\$519,324	\$526,724
7. Amount by Source of Financing:						
State Fiscal Years 1. State ITS Funds* 2. KDOT Internal 3.		4. 5		6.	7.	Total

7. Amount by Source of	7. Amount by Source of Financing:							
State Fiscal Years	 State ITS Funds* 	KDOT Internal	3.	4.	5.	6.	7.	Total
SFY 2022	\$518,956	\$7,400						\$526,356
SFY 2023	\$368	,						\$368
SFY 2024								\$0
SFY 2025								\$0
SFY 2026								\$0
SFY 2027								\$(
Total Project Costs	\$519,324	\$7,400	\$0	\$0	\$0	\$0	\$0	\$526,724

ConvergeOne Statement of Work



US-169 DWDM Project

PREPARED FOR: Kansas Department of Transportation

PREPARED BY: Jeremiah R. Nelson

National Account Manager JRNelson@convergeone.com

REFERENCE: Opportunity: OP-000630201

Solution: SO-000697988 Quote(s): QU-000402898

DATE: December 9, 2021

Patrick Tierce Solutions Architect

PTierce@convergeone.com





TABLE OF CONTENTS

1. Confidentiality Notice	3
2. Scope of Work - Terms and Conditions	3
3. Project Timeline Expectations	5
4. Project Overview	5
5. High-Level Architecture	6
6. Project Scope of Services	7
7. Project Management	23
8. Change Order Process	23
9. Milestone and/or Project Acceptance	24
10. Customer Responsibilities	24
11. Professional Services Assumptions	26
12. Professional Services Pricing and Billing Schedule	28
13. Customer Authorization to Proceed	29



1. CONFIDENTIALITY NOTICE

THE INFORMATION CONTAINED HEREIN IS CONSIDERED CONFIDENTIAL AND PROPRIETARY, PRODUCED SOLELY FOR THE CUSTOMER IDENTIFIED ABOVE.

This Statement of Work ("SOW") is proprietary to ConvergeOne, Inc. and contains ConvergeOne, Inc. Confidential Information. It may not be disclosed in whole or in part without the express written authorization of ConvergeOne. No portion of this SOW may be duplicated or used for any purpose other than to receive Services or deliverables from ConvergeOne described herein.

2. SCOPE OF WORK - TERMS AND CONDITIONS

This Statement of Work or Scope of Work ("SOW") and the applicable Solution Summary (and any documents attached thereto and incorporated therein by reference) (collectively, this "Order") is subject to the following terms and conditions (the "MSA" or the "Agreement"): (i) the Master Sales Agreement or other applicable master agreement in effect as of the date hereof between ConvergeOne, Inc. and/or its subsidiaries and affiliates (collectively, "ConvergeOne" or "Seller") and Kansas Department of Transportation ("Customer"); or (ii) if no such master agreement is currently in place between ConvergeOne and Customer, the Online General Terms and Conditions currently found on the internet at: https://www.convergeone.com/online-general-terms-and-conditions/. If Customer's Agreement is a master agreement entered into with one of ConvergeOne, Inc.'s predecessors, affiliates and/or subsidiaries, ("Legacy Master Agreement"), the terms and conditions of such Legacy Master Agreement shall apply to this Order, subject to any modifications located at https://www.convergeone.com/online-general-terms-and-conditions/. In the event of a conflict between the terms and conditions in the Agreement and this Order, the order of precedence shall be as follows: (i) this Order (with the most recent and specific document controlling if there are conflicts between the Solution Summary, this SOW and any other applicable supporting document(s) incorporated into this Order), (ii) Attachment A to the Agreement (if applicable), and (iii) the main body of the Agreement.

Customer's signature on this Order (or Customer's issuance of a purchase order in connection with this Order) shall represent Customer's agreement with each document in this Order.

This Order may include the sales of any of the following to Customer: (a) any hardware, third party software, and/or Seller software (collectively, "Products"); any installation services, professional services, and/or third party provided support services that are generally associated with the Products and sold to customers by Seller ("Professional Services"); any Seller-provided vendor management services, software release management services, remote monitoring services and/or, troubleshooting services (collectively, "Managed Services"); and/or any Seller-provided maintenance services ordered by Customer to maintain and service Supported Products or Supported Systems at Supported Sites to ensure that they operate in conformance with their respective documentation and specifications



("Maintenance Services"). For ease of reference only, Professional Services, Managed Services and Maintenance Services may be referred to collectively as "Services." Unless otherwise defined herein, capitalized terms used herein will have the same meanings as set forth in the Agreement.

Any dates and/or time intervals listed in this Order are approximate and for planning purposes only. ConvergeOne will use commercially reasonable efforts to accommodate any requested dates; provided however, projects milestones will be fully discussed and mutually agreed upon between ConvergeOne and Customer after project kickoff.

Products and/or Services not specifically itemized are not provided herein. Any additional applications, technologies, integrations, or other Products and/or Services not specified herein, are not included in this SOW, and may result in additional charges at any time during the project.

Unless signed, this Order will be valid for a period of thirty (30) days following the date hereof. Thereafter, this Order will no longer be of any force and effect.

The outline of deliverables for this Order follows below.



3. PROJECT TIMELINE EXPECTATIONS

Approximately 5 business days after signed acceptance of this SOW, ConvergeOne will assign a project manager that will make contact and start planning a project kick-off meeting. The project kick-off may not take place immediately. Project start times depend on the availability of ConvergeOne and Customer resources.

The expected duration of this project has been budgeted at four (4) weeks from the time of kick-off to completion. If the project exceeds this timeframe, a project change order may be required to extend the engagement, resulting in additional fees.

4. PROJECT OVERVIEW

Thank you for the opportunity to work with you on the US-169 DWDM Project. This document describes the work to be performed during this engagement and covers the assumptions as the basis for this agreement, the responsibilities of ConvergeOne personnel, and the responsibilities of the Customer.

The Kansas Department of Transportation has engaged ConvergeOne to perform the following installation services for the US-169 DWDM project:

- Add a line card and connections to the existing ASR903 router at the Lenexa POP building
- Install a new ASR903 at the new location north of Garnett and configure identically to the other ASR903 routers on the Kansas Department of Transportation DWDM system
- Install a new Catalyst 9500 switch at the new location north of Garnett. The equipment configuration will be similar to the other existing Catalyst 3850 switches that are currently installed at other POP locations
- Kore-Tek will perform installation and configuration services for the existing and new NCS2000 systems located at the Lenexa POP and the new POP location north of Garnett, Kansas

4.1. Project Location(s)

Below is a list of the location(s) that should be included in this project.

Table 4-1

Site Name	Site Address
Lenexa POP building	Lenexa, Kansas
Greeley POP building	Greeley, Kansas



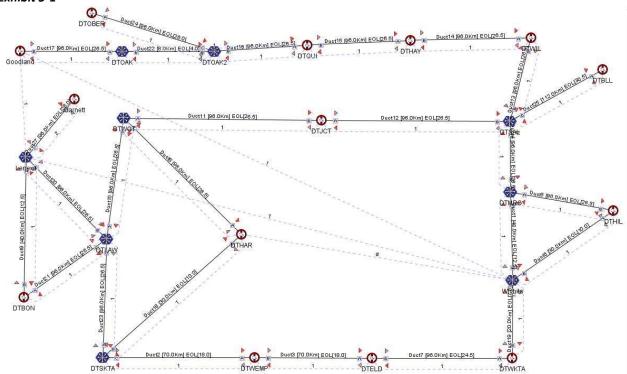
5. HIGH-LEVEL ARCHITECTURE

5.1. Proposed Architecture

New locations are denoted on the following diagrams as:

- Garnett (actual location is north)
- Lenexa (existing site)

Exhibit 5-1





6. PROJECT SCOPE OF SERVICES

This section identifies the work that will be performed as part of this project. Below is an initial, high-level list of tasks and assumptions for the project. This schedule may change depending on the Customer's business requirements and other factors. Also, depending on the schedule finally agreed upon at the kickoff meeting, the days worked may not be contiguous. ConvergeOne will conduct a meeting with the Customer to review and finalize the technical approach, constraints and project schedule. This meeting is intended to ensure that all parties are working with consistent expectations for the project.

6.1. Enterprise Networking

Switching

Table 6-1

Switches	
Number of switch sites	2
Number of switch closets included in this project	2
Running a dynamic routing protocol?	Υ
Number of non-core layer 3 Switches	1
C1 installing switches	Υ
Number of non-chassis switches	1
Move cabling connections (vs recabling)	Υ

Planning and Design Tasks

ConvergeOne Responsibilities

- Review current switch deployment, including hardware, firmware, and general configuration, if readily available through Customer's reporting mechanisms or a recent network assessment.
- Work in collaboration with the Customer to verify the solution requirements for the wired LAN solution.
- Review and provide a document that outlines all of the information needed to implement the solution.
- Consult with the Customer to determine the following requirements and document these requirements:
 - System wide settings and features
 - Redundancy and failover
 - Network settings
 - Sites



- Security
- Others as applicable
- Validate quantities of switches to be part of wired system and their locations.
 - This does not include visual verification of locations.
- Develop implementation/migration plan.
- Develop test plan.

Customer Responsibilities

- Provide current switch network information as requested.
- Work in collaboration with ConvergeOne to verify the solution requirements for the wired LAN solution.
- Work with ConvergeOne to determine the specified requirements for implementation.
- Work with ConvergeOne to validate switch quantities and locations.
- Work with ConvergeOne to develop implementation/migration plan.
- Work with ConvergeOne to develop test plan.

Execution Tasks

ConvergeOne Responsibilities

- If specified in the table above, switches will be staged off-site.
- Verify and/or install latest recommended code version(s) on switches.
- Configure the system per the agreed upon system requirements documentation.
- Configure the system to support the number of sites listed in the table above.
- Configure the number of core layer 3 switches specified in the table above (if any).
- Configure the number of non-core layer 3 switches specified in the table above (if any).
- Configure the number of core layer 2 switches specified in the table above (if any).
- System will be configured to support dynamic routing protocol if specified in the table above.
- System will be configured to support multicast if specified in the table above.
- System will be configured to support wired 802.1X if specified in the table above.
- Install the number of chassis switches specified in the table above (if any), including the specified supervisors, switch modules and power supplies if ConvergeOne is installing switches.



- Install the number of non-chassis switches specified in the table above (if any,) if ConvergeOne is installing switches.
- Connect switches together per agreed upon design, if ConvergeOne is installing switches.
- Migrate patch cables to new switches, if specified in table above.
- Redo patch cables for switches per agreed upon design, if specified in table above.
- Test switch network for proper connectivity.

Customer Responsibilities

- Ensure access to all locations where switches will be installed.
- Coordinate outage times (if any) with Customer's users.

Assumptions

- Any patch cables needed for installation that are not specifically included in the bill of materials (BOM) are the responsibility of the Customer.
- Configuration of switches for 802.1X does not include configuration of endpoints to support 802.1X, nor does it include configuration of the AAA system to support 802.1X unless otherwise indicated in this SOW.
- Does not include testing of switchports.

Post-Install Tasks

ConvergeOne Responsibilities

- ConvergeOne engineer(s) will be scheduled for the number of hours of post-install support listed in the table above.
- Perform number system administrator training hours listed in the table above.
- Provide documentation for the switch system.

Customer Responsibilities

• Coordinate users for system administrator training, if hours listed in table above.

Deliverables

- Configurations for implemented components
- Username and passwords of devices/systems installed
- Network diagram showing switch connectivity



Routing

Table 6-2

Routers	
Number of router sites	2
Number of routers (not used as voice gateways or for SD-WAN)	2
Number of router modules	2
Who is installing routers	C1

Planning and Design Tasks

ConvergeOne Responsibilities

- Review current router deployment, including hardware, firmware, and general configuration.
- Work in collaboration with the Customer to verify the solution requirements for the router solution.
- Review and provide a document that outlines all of the information needed to implement the solution.
- Consult with the Customer to determine the following requirements and document these requirements:
 - System wide settings and features
 - Redundancy and failover
 - Network settings
 - Sites
 - Security
 - Others as applicable
- Validate quantities of routers to be part of system and their locations.
 - o This does not include visual verification of locations.
- Develop implementation/migration plan.
- Develop test plan.



Customer Responsibilities

- Provide current router information as requested.
- Work in collaboration with ConvergeOne to verify the solution requirements for the router solution.
- Work with ConvergeOne to determine the specified requirements for implementation.
- Work with ConvergeOne to validate router quantities and locations.
- Work with ConvergeOne to develop implementation/migration plan.
- Work with ConvergeOne to develop test plan.

Execution Tasks

ConvergeOne Responsibilities

- If specified in the table above, routers will be staged off-site. If not specified, routers will be staged on site.
- Verify and/or install latest recommended code version(s) on routers.
- Configure the system per the agreed upon system requirements documentation.
- Configure the system to support the number of sites listed in the table above.
- Configure the number of routers specified in the table above.
- Configure the number of network modules specified in the table above (if any).
- If ConvergeOne is installing the routers
 - o Install the number of routers specified in the table above.
 - o Connect routers per specified design to other network components.
 - Verify router operation.

Customer Responsibilities

- Ensure access to all locations where switches will be installed.
- Coordinate outage times (if any) with Customer's users.
- Install and test routers if ConvergeOne is not installing.

Assumptions

- Any patch cables needed for installation that are not specifically included in the bill of materials (BOM) are the responsibility of the Customer.
- Unless specified elsewhere in this SOW, ConvergeOne will not be responsible for the extension of demarcation points to the router(s).



Post-Install Tasks

ConvergeOne Responsibilities

- ConvergeOne engineer(s) will be scheduled for the number of hours of post-install support listed in the table above.
- Perform number system administrator training hours listed in the table above.
- Provide documentation for the system.

Customer Responsibilities

• Coordinate users for system administrator training, if hours listed in table above.

Deliverables

- Configurations for implemented components
- Username and passwords of devices/systems installed



6.2. Kore-Tek NCS Installation & Configuration Services

<u>Introduction</u>

This Statement of Work (hereinafter "SOW") is presented and entered into as of August 12, 2021 (the "Effective Date") by and between ConvergeOne (hereinafter referred to as "Customer"), having an office and place of business at TBD and Kore Technologies LLC (hereinafter referred to as "Kore-Tek") having an office at 134 N. 4th Street, 2nd Floor, Brooklyn, NY 11249.

Kore-Tek will provide expert technical resources to deploy the designed network on behalf of ConvergeOne for their customer Kansas Department of Transportation.

Kore-Tek will deliver the industry's best professional services on a fixed price basis. Timeframes in this document are representative but may vary depending on the complexity and availability of Kansas Department of Transportation's Cleared Security personnel.

This document aims to specify the requirements, the tasks required to satisfy the requirements, project milestones, deliverables, assumptions, and responsibilities.

Main Product Lines Included in this Statement of Work

This SOW includes network assessment and network deployment. Lenexa-Garnett new span adding:

- Add a new degree on existing 2-degree ROADM site: Lenexa
- Install a new site (1 shelf with 1 degree): Garnett
- Turn up the new span: Lenexa-Garnett
- Test 1x10G new circuit: Lenexa-Garnett

Timeline

- Tentative Start Date: TBD
- Tentative Completion Date: TBD

Services will not start until the statement of work (SOW) has been fully executed; Kore-Tek has accepted a valid Purchase Order (PO) and Kore-Tek has scheduled the start of services.

Kore-Tek has a lead-time of three weeks, 15 business days, from the time of P.O. acceptance, to schedule the start of services. Kore-Tek will notify the customer in writing of the actual start date of services. Special cases can be made but require the approval of the Integration Manager prior to statement of work execution.



Overview

Kore-Tek is your Key Optical Resources and Engineering partner for the major enterprise, service provider, federal and state government, financial, healthcare and utilities customers over the last nine years.

Kore-Tek was founded by network specialists who wanted to work on a faster, more efficient way to move information. People who knew they could do more to connect people, businesses and industries together than what was being done through copper. So, we created Kore-Tek, an optical networking company, to offer the best possible optical network architecture, integration, engineering, and managed services.

Kore-Tek works exclusively with Cisco optical networks, we're able to provide a quality of engineering field expertise that's unmatched in the industry and we know how to fulfill the most demanding and complex projects, so they go off without a hitch.

Kore-Tek is channel and vendor-neutral, our optical engineers are trained and experienced in all the top Cisco Networking Technologies and understand the synergies plus challenges with both single-vendor and multi-vendor systems deployments.

Kore-Tek is focused solely on professional services which allow us to provide advanced engineering expertise for the most demanding and complex initiatives to ensure the success of your project.

Project Responsibilities

Site Survey

These service tasks on the customer's infrastructure have to be performed onsite by Kore-Tek's engineers. The results will be a good reference for the upcoming implementation.

Kore-Tek Responsibilities

Lenexa and Garnett Sites

On site survey is to be performed, following info is to be collected:

- Site basics: type/address/access/loading dock/internet, etc.
- Site Layout
- Site power solution (AC/DC, UPS, breaker/fuse limit, etc.)
- Site equipment inventory
- Rack space allocation, including new equipment's space planning
- OSP fiber patch panel assignment
- Fiber type/distance/connectors, etc.



- Equipment Physical connection diagrams
- Comprehensive photos
- Generate list of miscellaneous materials required for installation not included in BOM

Customer Responsibilities

- Provide appropriate escorts, if needed, to gain access into the sites. Escorts should be available at each site on planned dates and times per the project plan.
- Provide site walk thru to locate the equipment and connections to be surveyed.
- Communicate on site requirements, site operations, and plans on changes.
- Help to identify the assigned Fiber Patch Panel port.

Installation and Test Turn-up Installation

Once equipment is delivered and received, Kore-Tek is to perform installation.

Kore-Tek Responsibilities

Lenexa Site

- Unbox, inventory and batch. Verify the equipment received matches with design and order.
- Physically install the equipment:
 - Shelves installation
 - Chassis installation
 - Panels installation
 - Cards installation
 - Passive Modules installation
 - Optics insertion
 - Attenuators adding
- Physically connect cables:
 - Ethernet cables for node management
 - Inter shelves Ethernet cables connection
 - USB cables for passive units inventory management
 - Power cables and grounding cables if any



- Physically connect fibers:
 - Node internal fibers among cards and modules per CTP design
 - Line fibers from Cisco equipment to OSP fiber patch panel towards remote sites
 - o Trunk side fibers from transponders and/or muxponders to Mux/DeMux unit
 - Client fibers from transponders and/or muxponders router interfaces directly, or to fiber patch panel in between
- Node configuration:
 - o Node name, IP address, Date/Time, Shelf ID, etc.
 - Load and launch ANS file, provision ANS parameter if needed
 - Verify patch cords and passive units inventory, provision them as needed
 - Create and enable OSC channel
 - Run routers configuration script
- Label all fibers, cables, shelves, chassis and modules if required.
- Report issues if any.
- Report outstanding works if any.
- Export inventory and alarms via CTC tool after installation completed.
- Take photos on the installation outlook.
- Hand over the extra cards and optics to customer if any.
- Clean the site, take away trash.
- Verify the site installation completion checklist, leave the site.

Garnett Site

- Unbox, inventory and batch. Verify the equipment received matches with design and order.
- Physically install the equipment:
 - Cards installation
 - Passive Modules installation
 - Optics insertion
 - Attenuators adding



- Physically connect cables:
 - Inter shelves Ethernet cables connection (not connected before Maintenance window)
 - USB cables for passive units inventory management
 - Power cables and grounding cables if any
- Physically connect fibers:
 - Node internal fibers among cards and modules per CTP design
 - o Line fibers from Cisco equipment to OSP fiber patch panel towards remote sites
 - Trunk side fibers from transponders and/or muxponders to Mux/DeMux unit
 - Client fibers from transponders and/or muxponders router interfaces directly, or to fiber patch panel in between
- Label all fibers, cables, shelves, chassis and modules if required.
- Report issues if any.
- Report outstanding works if any.
- Export inventory and alarms via CTC tool after installation completed.
- Take photos on the installation outlook.
- Hand over the extra cards and optics to customer if any.
- Clean the site, take away trash.
- Verify the site installation completion checklist, leave the site.

Customer Responsibilities

- Manage the delivery, installation, and configuration of equipment not provided by Kore-Tek, which is required to work with, or function as, any part of the provided equipment
- Make available any personnel and/or access to customer Site as necessary for Kore-Tek to perform installation
- Provide Kore-Tek with physical access to facilities and access to the ordered Cisco devices
- Provide label and install cabling to the Cisco equipment shelf location for DCN network connectivity at all designated Gateway nodes
- Access to trash and recycling facilities as required to support installation of equipment



Test & Turn-up

After single site installation is completed, the next step is to connect the sites with each other in order to form a network and then turn up the network.

Kore-Tek Responsibilities

Lenexa and Garnett Sites

- Verify OSP fibers are in place by checking the assigned patch panel ports' connectivity status.
- Verify the line fibers connectivity status between Cisco equipment and OSP fibers patch panel ports.
- (Lenexa site only): Add a new degree via CTC operation, connect internal Ethernet cables for shelves subtending. Create the OSC channel and enable it.
- Confirm the nodes visibility from one to the other.
- Confirm the OSC optics transmit and receiving optical power.
- Check the span loss is within the range or not, perform troubleshooting if there is unexpected over loss.
- Create circuits, verify the circuits optical performance such as transmit and receiving optical power levels, verify the circuits electrical performance such as pre-FEC & post-FEC Bit Error Rate (BER).
- Perform 15min-BERT by Kore-Tek provided test set on these new circuits, daisy chain and loopback is to be used at client side if there are many client side circuits to be tested. Save the test result along with the test plan, as proof that the tested circuits are ready for use.
- After circuits' tests completed, remove all test materials including daisy chain fibers and loopback fibers and attenuators, delete all test circuits if more than CTP design, clear network alarms, perform troubleshooting as needed.
- Backup database, perform data collection including inventory, circuits table, alarms and conditions, network nodes software, etc.
- Verify connectivity and operationally from customer's management tool, such as CTC and EPNM if have.
- Report issues if have.
- Take photos on the site completion.
- Hand over the extra cards and optics to customer if have.
- Clean the site, take away trash.



Customer Responsibilities

- Provide for escorts and/or site access as required to allow Kore-Tek to perform its duties at each site and the ability to be on site at multiple sites simultaneously.
- Provide Kore-Tek access to the equipment locations on the day of equipment turn-up and test. If access is denied the project schedule may be impacted and change orders may be requested.
- Provide management IP information for each node prior to Kore-Tek coming onsite.
- Provide network access via CTC tool.

Documentation Deliverables

Kore-Tek will provide the following deliverables to the customer throughout the project.

Kore-Tek Responsibilities

- MOP for existing node's change
- As-Built Document



General Assumptions

- All work will be performed during normal business hours 8:00 AM to 5:00 PM Monday through Friday unless after hours maintenance window is agreed upon.
- All Necessary racks and power to be provided and installed by customer.
- Customer will provide access to all locations as scheduled by Kore-Tek, including nights and weekends, if necessary.
- The customer will designate refuse disposal facilities at each site. If no facilities are available, refuse will be neatly stacked at the site for the Customer to dispose of. Kore-Tek will not transport.
- Equipment failures, unprepared sites, scope of work changes, or other circumstances outside of Kore-Tek control during the project may cause delays or additional costs.
 Any resulting change orders will be handled as outlined in the "Comments and Conditions" section of this document.
- The customer has the option to be an apprentice and view Kore-Tek's processes (Installation, Test & Turn-up). Kore-Tek will be moving quickly but will answer as many questions as possible.
- All cables and fibers within the site will be run and terminated by the customer. Cable will be left hanging at each equipment rack location.
- AC or DC power to be provided by the customer and located in the same rack as equipment.
- AC power to be provided by the customer and located in the same rack as equipment.

Kickoff and PMO are billed at the signing of the SOW and initial scheduling call with the customer. Kore bills the remainder of our projects when milestones are completed throughout the project.

Staffing Resource

Kore-Tek works in a team model. We assign staff resources to best fit the total project requirements and, therefore, we are not specifically promising any individual employee to this project.

That said, there will be a primary Architect assigned to the project that will be responsible for all technical content. That architect will pull from his or her technical team of engineers and other architects as needed to meet technical deliverables. There will also be a PM or an engineer acting in an over-site role assigned. Likewise, this PM may bring in resources as conditions on the ground warrant. We assign all staff resources as to best-fit total requirements and no individual employee is being specifically promised.



Architecture & Engineering

Kore-Tek Consulting Engineering Team

- Architect owns the technical deliverable to ConvergeOne for Kansas Department of Transportation.
 - o Responsible for Cisco design review
 - Responsible for content and quality of all written deliverables
 - o Responsible for all on-site and off-site technical milestones
 - All delivery team members report to Architect
- In the project services lifestyle, the Architect owns:
 - Analysis/Discovery
 - Design
 - Develop
 - Test
 - Implementation
 - Deliverables
- Technical Delivery Team includes Architects and Engineers.
 - o Ensures adequate staff and skill sets for each project phase.
 - o Allows for maximum parallelism in project delivery.

Kore-Tek Project Management Team

- Lead PM owns the communication cycle with ConvergeOne for Kansas Department of Transportation.
 - Weekly written or verbal status reports
 - o Responsible for weekly review of actions, issues, and risks
 - Initial kick-off meeting
 - o Scheduled meetings to discuss critical deliverables and milestone
 - Ensure succinct and orderly communication between the involved parties
 - Responsible for change control process
 - Responsible for the sign-off process for each completed deliverable
 - Will leverage and utilize PMI best practices
 - Project summary meeting to discuss lessons learned, status and sign- off



- In the project services lifestyle, Project Management owns:
 - Initiation
 - Transition
 - Closeout

Standard Terms and Conditions

All work to be performed during normal working hours. Access without delay is the responsibility of the customer. Delays attributable to the customer, other trades, etc. may have an impact on project schedule and pricing. All material is guaranteed to be as specified. All work to be completed in a workmanlike manner. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders and will become an extra charge over and above the estimate. All agreements are contingent upon strikes, accidents or delays beyond our control. Standard payment terms are net

30 days from invoice date; materials will be invoiced at start of project, and progress payments for labor will be invoiced commensurate to work accomplished at the end of each month or negotiated period. The customer will carry fire and other necessary insurance. Kore Technologies workers are fully covered by Worker's Compensation Insurance. Kore Technologies makes no warranty and shall look exclusively to the manufacturer's limited warranty delivered in connection with the Product, if any. Customer shall indemnify, hold harmless and defend Kore Technologies from and against, and will reimburse Kore Technologies with respect to, any and all claims, proceedings, losses, expenses, liabilities, fines, judgments or costs, including reasonable attorney fees, amounts paid in settlement and costs and expenses of investigations, at any time asserted against or incurred by any of those indemnified parties arising out of, in connection with, resulting from or by reason of any breach of this agreement, or any negligent or willful act or omission of customer in connection with this agreement or the performance of the services. There is a 25% fee on order cancellations. The customer is responsible for all applicable sales tax, freight and insurance charges. Kore Technologies reserves the right to add an interest charge of 1-1/2% compounded per month on any past due balance.

Kore Technologies Statement of Work will have pricing and service descriptions authority over this quote if applicable. Requested deviations to terms and specifications are subject to revised pricing and delivery.



7. PROJECT MANAGEMENT

ConvergeOne will provide Project Management Services to help you effectively manage the project and control risks in the deployment. ConvergeOne will designate a Project Manager who will act as the single point of accountability for all ConvergeOne contract deliverables for the duration of the Project. ConvergeOne follows the Project Management Body of Knowledge (PMBOK) for project delivery. The PMBOK is an adaptable approach that enables technology project success by aligning business and technology goals. Key elements include an iterative delivery process, clear project metrics, proactive risk management, and effective response to change.

7.1. Project Manager

ConvergeOne will designate a Project Manager (PM) responsible for overseeing the project. Once the contract is signed and accepted by ConvergeOne, this individual will act as the Customer's single point of contact for all planning and issues related to solution delivery. The ConvergeOne PM will work closely with the Customer to guide the implementation and work on a mutually agreed-upon schedule. The ConvergeOne Project Manager is responsible for the following:

- Conduct internal (ConvergeOne) and joint ConvergeOne/Customer meetings.
- Develop a project plan, including activities, milestones, roles, and responsibilities.
- Schedule and manage required ConvergeOne resources and partners.
- Conduct Issue and Risk Management.
- Provide agenda and meeting notes.
- Track Customer and ConvergeOne project deliverables.
- Manage change orders and any associated billing with the Customer.
- Manage project closeout process, punch list, and Customer acceptance.

8. CHANGE ORDER PROCESS

Despite good project planning, design, and review, project plans often require some degree of change at some point. These changes are handled using change order requests, which must be agreed upon by all parties to the contract before such work can be performed.

Either ConvergeOne or the Customer may initiate a change order for any deliverable, work requirement, assumption, or dependency that is part of the project. All requests must be in writing and handled by the ConvergeOne Project Manager. ConvergeOne will review the change and provide pricing as applicable before proceeding. The ConvergeOne Project Manager may also engage project team members to assess the impact of the change. Agreed changes must be approved in writing by an authorized representative of the Customer, via email, or modified purchase order.



9. MILESTONE AND/OR PROJECT ACCEPTANCE

Upon completion of the services described in this SOW, ConvergeOne shall provide Customer with an Acceptance Form. Upon delivery of the Acceptance Form, Customer has five (5) working days to review and accept. Failure to respond within the designated five (5) day period, signifies the completion of the milestone or project. To refuse acceptance, Customer must both indicate non-acceptance with written notification to ConvergeOne within the five (5) day period noted above and describe why it was not accepted. ConvergeOne shall have up to ten (10) days after the receipt of such notice to correct the error given it is within ConvergeOne scope and control to do so. The period to correct the error may be extended by mutual consent.

10. CUSTOMER RESPONSIBILITIES

10.1. Provide a single point of contact that will be responsible for:

- Understanding the business process impact and technical requirements and who has the authority to make binding decisions on Customer's behalf.
- Working with ConvergeOne Project Manager to develop mutually agreed project schedule, including outside of Normal Business Hours test and cutover windows (if applicable).
- Ensuring all Customer responsibilities are completed in accordance with the project schedule.
- Reasonable notification of schedule and changes for the installation work.
- Attending all project status meetings.

10.2. Site Preparation:

- Ensure equipment room is ready, including all electrical, wiring, grounding, lighting, racks, and HVAC required to maintain equipment within operating conditions specified by the equipment manufacturer.
- Provide required cable/patch panels that meet all requirements for Category 5e, racks, and network connectivity.
- Accept receipt of equipment and store in a secure area. Retain shipping documentation, inventory shipments by box count, and report any obvious external damage to the ConvergeOne Project Manager.
- Provide floor plans for equipment room configuration and related locations if applicable.
- Ensure that existing Customer network is configured, connected, and operating within the manufacturer's specifications.



 Customer will provide QOS on all their network equipment to the WAN-based upon Supplier's guidelines and requirements if carrying voice.

10.3. Ensure availability of appropriate Customer resources that will:

- Assist in the development and execution of applicable test plans.
- Provide accurate documentation for all existing systems and networks.
- Provide all necessary IP addresses, subnet masks, and default gateways.
- Provide a qualified Network Administrator with working knowledge of Customer requirements.
- Provide information on planned changes in the network.



11. PROFESSIONAL SERVICES ASSUMPTIONS

The following assumptions were made to create this Statement of Work. Should any of these assumptions prove to be incorrect or incomplete then ConvergeOne may modify the price, scope of work, or milestones. Any such modifications shall be managed by the Change Order Procedure.

11.1. General Assumptions

- All non-service impacting work described in this scope will be performed during U.S. normal business hours defined as 8:00 AM to 5:00 PM local time; Monday through Friday, excluding ConvergeOne designated holidays. "Cutover" for the sites will be completed during business hours unless otherwise stated in this scope of work.
- The Customer must identify any specific requirements for maintenance windows and change control. The Customer retains overall responsibility for any business process impact and any Customer-internal change management procedures and communications.
- ConvergeOne will install specific software versions agreed upon at the time of project kickoff. Upgrades to the software are not included in the SOW. ConvergeOne may choose to install an upgrade if required by the manufacturer or to resolve a problem.
- The Customer is responsible for the underlying data infrastructure including network and virtualization. Systems must be capable of supporting the proposed solution. ConvergeOne can supply consulting and remediation services to ensure successful implementation, if not included in this scope, through a change order and billed at an additional fee.
- The Customer is responsible for all communications and scheduling of any contractors or vendors not managed by the ConvergeOne Project Manager.
- Any product or service delivery dates communicated outside of this SOW or the Project Plan, are not to be considered valid or binding.
- If the project extends beyond the timeline specified in the Project Plan due to delays caused by parties other than ConvergeOne and its subcontractors, ConvergeOne may invoice for service performed to date.
- The Customer is responsible to verify and arrange the installation of all applicable network connections and provide a functional network for application deployment.
- Projects requiring multiple site visits and/or intervals of inactivity between events must be noted as such prior to acceptance of this SOW.
- The Customer is responsible for removal and disposal of any previously installed Customerowned equipment or cabling unless specifically agreed otherwise herein.
- The Customer is responsible to notify ConvergeOne if the site requires any specialized access for personnel and/or Union trades for any tasks associated with this SOW. Notification of requirements must take place prior to the quote. Any and all



additional costs for post-quote changes or additional site restrictions requiring specialized training or Union Labor shall be chargeable to the Customer.

- The Customer is responsible for managing all 3rd Parties not outlined in this SOW.
- Services not specifically called out in this SOW will be deemed out of scope.
- VPN access will be provided to ConvergeOne resources to allow for work to be accomplished remotely when applicable. If unfettered remote access to the Customer network cannot be provided additional charges will be required.

11.2. Technical Assumptions

- Unless specifically called out, above, no IP address changes are included in the SOW. If requested, additional charges may apply.
- The Customer is responsible to have current licensing, maintenance, and support on the components of the servers, database, storage, and network infrastructure including hardware, software (including operating systems), and any associated costs.
- The Customer is responsible for any operating system patches and anti-virus software installation and support.
- The Customer is responsible to ensure the existing network is free of layer 3 protocol and broadcast errors.
- The Customer is responsible for the cost and acquisition of any 3rd party security certificates necessary for successful deployment. ConvergeOne can provide services for Security Audits and Certificate deployment which can be billed at an additional fee.
- The Customer is responsible for resolving interoperability issues with other vendors not acting as a sub-contractor to ConvergeOne.
- The Customer is responsible for any firmware updates to re-used circuit packs, media modules, or cards not specifically identified within this SOW. ConvergeOne can provide services for the firmware updates through a change order and billed at an additional fee.



12. PROFESSIONAL SERVICES PRICING AND BILLING SCHEDULE

Billing terms for this project supersede any MSA in place and are only applicable to the services stated in this scope of work. Invoices are due within thirty (30) days from the date of the invoice unless otherwise previously agreed between Customer and ConvergeOne credit department. Any change to the Project Pricing and Payment schedule will be managed through the Change Order procedures specified herein. All stated prices are exclusive of any taxes, fees and duties or other amounts, however designated, and including without limitation value added and withholding taxes which are levied or based upon such charges, or upon this SOW (other than taxes based on the net income of ConvergeOne). The Customer shall pay any taxes related to services purchased or licensed pursuant to this SOW or the Customer shall present an exemption certificate acceptable to the taxing authorities. Applicable taxes shall be billed as a separate item on the invoice.

12.1. Project Price and Milestone Billing Schedule

The fixed fee price for this services engagement is below and will be billed with the following milestone schedule:

Total Price: \$43,133.00

- Milestone 1 (30%) Project Initiation Kick Off Meeting, Resource Assignment
- Milestone 2 (30%) Planning and Design Project Plan, Design
- Milestone 3 (30%) Testing and QA Completion
- Milestone 4 (10%) Final Customer Acceptance of the Project

12.2. Project Expenses:

There are no anticipated project related expenses expected for this project above the price included in this SOW. In the event that the need for additional expense arise, a Change Order will be presented by the Project Manager for approval by the Customer in advance. ConvergeOne will make reasonable effort to minimize expenses and will ensure sufficient time is built into the project schedule to maximize efficiency when scheduling site visits.



13. CUSTOMER AUTHORIZATION TO PROCEED

The use of signatures on this SOW is to ensure agreement and understanding on project objectives and assumptions, and the work and deliverables to be performed by ConvergeOne. By signing below, the duly authorized Customer representative signifies their commitment to proceed with the project as described in this SOW.

Customer's Authorized Representative:			
Signature	_		
Printed Name			
Title	_		
Date	_		
PO Number			
FO NUMBER			

INFORMATION TECHNOLOGY PROJECT REQUEST EXPLANATION DA 519					
1. Project Title	2. Estimat	ed Dates	Projected Months from		
KDOT US-169 Dense Wavelength-Division Multiplexing (DWDM)	Planning Start:	9/1/2021	Execution to Close-Out		
	Execution Start:	3/8/2024	5		
	Close-Out End:	7/16/2024	J		
3. Agency	4. Project Director/Project Manager				
Kansas Department of Transportation	Allan Haverkamp				

5. Qualitative and Quantitative Savings Explanation

The DWDM communications backbone will be used for Intelligent Transportation Systems (ITS) traffic management and other applications. The life of the DWDM switches and routers in the POP stations ranges between 10 to 15 years.

The estimated annual benefits for the DWDM system are derived from a benefit-cost study performed for the Wichita Traffic Management System. The benefits of the DWDM communication backbone is its essential function to provide communication for the ITS system that improves traffic safety and mobility through support of traffic incident management, work zone management, and real-time traveler information. The operation of the ITS system results in reduction of the number of primary and secondary crashes with their associated emergency cleanup, medical, and property damage costs, and a reduction in congestion with the associated savings in fuel consumption, emissions, and lost time spent in traffic.

6. Qualitative and Quantitative Savings Estimate							
Description of Savings		SFY 2022	SFY 2023	SFY 2024	SFY 2025	SFY 2026	SFY 2027
Cost Avoidance (Soft Dollars)							
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cash Savings (Hard Dollars)	\$0	40	\$0	\$0	\$0	\$0	ΨΟ
Traffic Incident Management - (cost benefit of	secondary crash						
reduction, reduced congestion due to faster cle				\$90,400	\$180,800	\$180,800	\$180,800
DMS Travel Time - (cost benefit due to reduce	ed fuel						·
consumption, reduced time in delays, fewer cr				\$32,850	\$65,700	\$65,700	\$65,700
DMS Congestion Messages (cost benefit due t							
consumption, reduced time in delays, fewer cr				\$34,200	\$68,400	\$68,400	\$68,400
Pre-Trip Information - (cost benefit due to red			£450	6000	#000	#000	
consumption, reduced time in delays, fewer cr	ashes)			\$450	\$900	\$900	\$900
Subtotal	\$1,105,300	\$0	\$0	\$157,900	\$315,800	\$315,800	\$315,800
Other (Include Intangible Benefits)	40	40	\$157,500	\$515,000	\$515,000	ψ212,000	
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Quantitative Savings	\$1,105,300	\$0	\$0	\$157,900	\$315,800	\$315,800	\$315,800
7. Summary*	4-,,	SFY 2022	SFY 2023	SFY 2024	SFY 2025	SFY 2026	SFY 2027
Project Costs Total	\$526,724	\$526,356	\$368	\$0	\$0	\$0	\$0
Net Cost Benefit Total	\$578,576	-\$526,356	-\$368	\$157,900	\$315,800	\$315,800	\$315,800
Cost Benefit per Month	\$221,060						
Calendar Months to Break Even							
8. Ongoing Cost	SFY 2022	SFY 2023	SFY 2024	SFY 2025	SFY 2026	SFY 2027	
Operational Cost for three ensuing SFYs	\$0	\$0	\$5,000	\$10,000	\$10,000	\$10,000	
* Project Costs = Total Cost of Project over	all Fiscal Years from	all Funding Source	es				

^{*} Project Costs = Total Cost of Project over all Fiscal Years from all Funding Sources
Net Cost Benefit = Total Qualitative & Quantitative Savings minus Total Project Costs
Cost Benefit per Month = Total Qualitative & Quantitative Savings divided by Length of Project in months
Calendar Months to Break Even = Total Project Costs divided by Cost Benefit per Month

ID	Task Name	Duration	Work	Start	Finish	Predecessors	Resource Names	Milestone
1	KDOT US-169 DWDM Project	735 days	27,064 hrs	Wed 9/1/21	Tue 7/16/24			No
2	Project Planning	642 days	24,064 hrs	Wed 9/1/21	Thu 3/7/24			No
3	Equipment List Development	156 days	3,744 hrs	Wed 9/1/21	Fri 4/15/22			No
4	Converge One Equipment Review for Lenexa to Garnett DWDM Expansion	80 days	1,920 hrs	Wed 9/1/21	Tue 12/28/21		ITS Eng Asst,KDOT ITS Engineer,KDOT IT PM	No
5	Converge One Equipment Recommendation for US-169 based on existing DWDM Architecture	30 days	720 hrs	Wed 12/29/21	Thu 2/10/22	4	ITS Eng Asst,KDOT ITS Engineer,KDOT IT PM	No
6	Converge One Scope of Services Development for US-169 DWDM Installation	10 days	240 hrs	Fri 2/11/22	Thu 2/24/22	5	ITS Eng Asst,KDOT ITS Engineer,KDOT IT PM	No
7	Installation	10 days	240 hrs	Fri 2/25/22	Thu 3/10/22	6	ITS Eng Asst,KDOT ITS Engineer,KDOT IT PM	No
8	KDOT Approval of Scope of Services	26 days	624 hrs	Fri 3/11/22	Fri 4/15/22	7	ITS Eng Asst,KDOT ITS Engineer,KDOT IT PM	No
9	High-Level Project Plan Development & CITO Approval	50 days	960 hrs	Mon 4/18/22	Tue 6/28/22			No
10	Develop High Level Plan Documents	40 days	960 hrs	Mon 4/18/22	Mon 6/13/22	8	ITS Eng Asst,KDOT ITS Engineer,KDOT IT PM	No
11	High-Level Plan Submittal	0 days	0 hrs	Mon 6/13/22	Mon 6/13/22	10	KDOT IT PM	Yes
12	CITO High Level Plan Review	10 days	0 hrs	Tue 6/14/22	Mon 6/27/22	11		No
13		0 days	0 hrs	Tue 6/28/22	Tue 6/28/22	12		Yes
14	Installation Preparation	400 days	19,200 hrs	Tue 6/28/22	Wed 1/17/24			No
15		20 mons		Tue 6/28/22	Wed 1/17/24	13	ITS Eng Asst,KDOT ITS Engineer	No
16	Checking Existing Conduit	20 mons	6,400 hrs	Tue 6/28/22	Wed 1/17/24	13	ITS Eng Asst,KDOT ITS Engineer	No
17	Move and Install Communication Building	20 mons	6,400 hrs	Tue 6/28/22	Wed 1/17/24	13	ITS Eng Asst,KDOT ITS Engineer	No
18	Detailed Project Plan Development & CITO Approval	36 days	160 hrs	Thu 1/18/24	Thu 3/7/24			No
19	Develop Detail Plan in Consult with Contractor	16 days	0 hrs	Thu 1/18/24	Thu 2/8/24	17		No
20	Detail Plan Submittal	0 days	0 hrs	Fri 2/9/24	Fri 2/9/24	19		Yes
21	CITO Detail Plan Review	20 days	160 hrs	Fri 2/9/24	Thu 3/7/24	20	KITO Staff	No
22	CITO Detail Plan Approval	0 days	0 hrs	Thu 3/7/24	Thu 3/7/24	21		Yes
23	Project Execution	88 days	2,816 hrs	Fri 3/8/24	Tue 7/9/24			No
24	Enterprise Networking (SOW 6.1)	54 days	1,728 hrs	Fri 3/8/24	Wed 5/22/24			No
25	Switching	27 days	864 hrs	Fri 3/8/24	Mon 4/15/24			No
26	Planning and Design Tasks	10 days	320 hrs	Fri 3/8/24	Thu 3/21/24	22	KDOT IT PM,KDOT ITS Engineer,ITS Eng Asst,ConvergeOne Technician	No
27	Execution Tasks	10 days	320 hrs	Fri 3/22/24	Thu 4/4/24	26	KDOT IT PM,KDOT ITS Engineer,ITS Eng Asst,ConvergeOne Technician	No
28	Post-Install Tasks	7 days	224 hrs	Fri 4/5/24	Mon 4/15/24	27	KDOT IT PM,KDOT ITS Engineer,ITS Eng Asst,ConvergeOne Technician	No
29	Switch Installations Complete	0 days	0 hrs	Mon 4/15/24	Mon 4/15/24	28		Yes
30	Routing	27 days	864 hrs	Tue 4/16/24	Wed 5/22/24			No
31	Planning & Design Tasks	10 days	320 hrs	Tue 4/16/24	Mon 4/29/24	29	KDOT IT PM,KDOT ITS Engineer,ITS Eng Asst,ConvergeOne Technician	No
32	Execution Tasks	10 days	320 hrs	Tue 4/30/24	Mon 5/13/24	31	KDOT IT PM,KDOT ITS Engineer,ITS Eng Asst,ConvergeOne Technician	No
33	Post Install Tasks	7 days	224 hrs	Tue 5/14/24	Wed 5/22/24	32	KDOT IT PM,KDOT ITS Engineer,ITS Eng Asst,ConvergeOne Technician	No
34		0 days	0 hrs	Wed 5/22/24		33		Yes
35	Kore-Tek NCS Installation & Config Services (SOW 6.2)	34 days		Thu 5/23/24	Tue 7/9/24			No
36	•	10 days	320 hrs	Thu 5/23/24	Wed 6/5/24	34	KDOT IT PM,KDOT ITS Engineer,ITS Eng Asst,ConvergeOne Technician	No
37		10 days	320 hrs	Thu 6/6/24	Wed 6/19/24	36	KDOT IT PM,KDOT ITS Engineer,ITS Eng Asst,ConvergeOne Technician	No
38		7 days	224 hrs		Fri 6/28/24	37	KDOT IT PM,KDOT ITS Engineer,ITS Eng Asst,ConvergeOne Technician	No
39	-	7 days	224 hrs	Mon 7/1/24	Tue 7/9/24	38	KDOT IT PM,KDOT ITS Engineer,ITS Eng Asst,ConvergeOne Technician	No
40		0 days	0 hrs	Tue 7/9/24	Tue 7/9/24	39		Yes
41		70 days	184 hrs	Wed 4/10/24				No
42		67 days	64 hrs	Wed 4/10/24				No
43		2 days	32 hrs	Wed 4/10/24			KDOT IT PM,KDOT ITS Engineer	No
44		2 days	32 hrs	Wed 7/10/24			KDOT IT PM,KDOT ITS Engineer	No
45		5 days	120 hrs	Wed 7/10/24				No
46		1 day	24 hrs	Wed 7/10/24		40	KDOT IT PM,ITS Eng Asst,KDOT ITS Engineer	No
47	Develop CITO PIER	4 days	96 hrs	Thu 7/11/24	Tue 7/16/24	46	KDOT IT PM,ITS Eng Asst,KDOT ITS Engineer	No

2

IC)	Task Name	Duration	Work	Start	Finish	Predecessors	Resource Names	Milestone
	48	Submit PIER to CITO	0 days	0 hrs	Tue 7/16/24	Tue 7/16/24	47	KDOT IT PM	Yes

State Archives Division 6425 SW 6th Avenue Topeka KS 66615-1099



785-272-8681, ext. 272 megan.burton@ks.gov kshs.org

Patrick Zollner, Acting Executive Director

Laura Kelly, Governor

June 22, 2022

Julie Lorenz Secretary of Transportation Kansas Department of Transportation 700 S.W. Harrison Street Topeka, KS 66603-3754

Dear Secretary Lorenz:

As part of the approval process for information technology projects over \$250,000, the State Archivist is required to evaluate the impact of information technology projects on government records with long-term (10+ year) retention requirements. If the project impacts long-term records, the State Archivist must ensure that appropriate provisions have been made for these records in the high-level and detailed project plans, in the system design, and for their ingestion, if prudent and feasible, into the Kansas Enterprise Electronic Preservation (KEEP) system. An Electronic Records Retention Statement (ERRS) and approval letter from the State Archivist must accompany high level and detailed project plans submitted to the Executive Branch Chief Information Technology Officer.

In compliance with this process, Allan Haverkamp, IT Project Manager, for the Department of Transportation recently sent to me for review plan for the Dense Wavelength-Division Multiplexing (DWDM) high level project. From my review of the plan materials, it is clear that this is an infrastructure only plan, and no records will be impacted.

The Electronic Records Retention Statement for the DWDM high level plan is approved. A copy of this approval letter should be included when submitting the project plan to the Executive Branch CITO for approval.

Sincerely,

Megan Burton Senior Archivist

N Jegan Burton

cc: Cole Robison, Director of IT Accessibility, OITS
Allan Haverkamp, Project Manager, KDOT

Executive Branch Information Technology Office of Information Technology Services 2800 SW Topeka Blvd., Building 100 Topeka, KS 66611



Phone: (785) 296-3463 Fax: (785) 296-1168 oits.info@ks.gov

DeAngela Burns-Wallace, Chief Information Technology Officer

Laura Kelly, Governor

May 23, 2022

Julie Lorenz, Secretary Department of Transportation 700 SW Harrison St. Topeka, KS 66603-3745

Dear Sec. Lorenz:

As part of the approval process for information technology projects over \$250,000, a statement indicating compliance with State Information Technology Executive Council (ITEC) Policy 1210 *Information and Communication Technology Accessibility Standards* must be filed with the Branch Chief Information Technology Officer and approved by the Director of Information Technology (IT) Accessibility. I recently received from Allan Haverkamp an Accessibility Statement for the US-169 Dense Wavelength-Division Multiplexing (DWDM) project for review in compliance with this process.

This statement indicates that the system will be located in maintenance spaces and only accessed by service personnel, such that it meets the general exception of Section 7.3.4 of ITEC Policy 1210. As such, no further exception is required pertaining to ITEC Policy 1210. It should be noted that this exception does not relieve the Department of Transportation of any obligations or requirements mandated by any other applicable regulation, law, or statute, including, but not limited to, the Americans with Disabilities Act and the Kansas Act Against Discrimination.

The Accessibility Statement for the US-169 DWDM high-level project plan is approved. A copy of this letter should be included with the submittal of the US-169 DWDM high-level project plan for Branch CITO approval.

Sincerely,

DocuSigned by:

Cole D. Robison

Director of IT Accessibility

cc: Shawn Brown, Department of Transportation
Anthony Fadale, State Americans with Disabilities Act Coordinator
Allan Haverkamp, Department of Transportation
Sara Spinks, Director, Kansas Information Technology Office

US-169 Dense Wavelength-Division Multiplexing (DWDM) Project

<u>Architectural Compliance Statement</u>

Date: June/30/2022

The KDOT US-169 project management team has reviewed ITEC Policies 4010 and 9500 as these policies relate to the acquisition and development of equipment, software, communications and other technologies employed to accomplish the US-169 DWDM Project.

The project management team will ensure full compliance with ITEC Policies 4010 and 9500 and does not anticipate the need for a CITA waiver from ITEC Policies. Architectural compliance will be monitored as a project metric.

KDOT US-169 Dense Wavelength-Division Multiplexing (DWDM) Project Ownership of Software Code and Related Intellectual Property (ITEC Policy 1500)

Date: June 30, 2022

Reference: US-169 Dense Wavelength-Division Multiplexing (DWDM) Project

Software components for the communications equipment that is a part of this project will be proprietary. It would be impractical to retain any ownership of software code or intellectual property in this situation.

In the implementation of the US-169 DWDM project, the Kansas Department of Transportation will comply with ITEC Policy $\underline{1500}$ if and where it may be applicable.

May 18, 2022

Cole Robison
Director of IT Accessibility
Kansas Information Technology Office
Office of Information Technology Services
2800 SW Topeka Blvd.
Topeka KS 66612-1220

Subject: Kansas Department of Transportation US-169 Dense Wavelength-Division Multiplexing (DWDM) Project – Web Accessibility Statement

Dear Cole:

The Kansas Department of Transportation (KDOT) is nearing completion of the high-level project planning phase for the US-169 DWDM project.

This project is the establishment of a new section of DWDM communication backbone which involves switches, routers and other related technical equipment. This equipment will be located in POP stations located on the end points of sections of the communications and only accessed by service personnel for maintenance, repair, or occasional monitoring of equipment.

Thank you in advance for your consideration of this information. Upon your review, I request a letter from your office indicating concurrence on this component of the High-Level Project Plan. We will submit a copy of your letter with our High-Level Project Plan to the Kansas Office of Information Technology Services, Enterprise Project Management Office (EPMO).

Regards,

Allan Haverkamp
IT Project Manager
Kansas Department of Transportation
Eisenhower State Office Building
700 SW Harrison Street
Topeka, Kansas 66603

US-169 DWDM PROJECT

Electronic Records Retention Statement

The US-169 DWDM PROJECT project team has addressed each of the following items and has developed the following responses:

1. For each business function supported by the proposed system, what paper records are being replaced and which will continue to exist in both paper and electronic form.

No paper records are being replaced or continuing as electronic records through the deployment of the new US-169 DWDM Project.

2. What new business functions will be implemented?

No new business functions are being implemented through the deployment of the US-169 DWDM Project. It is an infrastructure project that builds a communications backbone in a location that one didn't currently exist.

3. For each business function identified in 1. and 2. above, what are the legal, regulatory or operational reasons for performing it?

It is built for operational reasons. It serves as a communications backbone that will facilitate an expansion of Intelligent Transportation System (ITS).

4. What legal, regulatory or operational requirements, including State Records Board approved retention schedules exist for keeping records related to each business function?

N/A

5. Will any of the data necessary to document the business functions either be maintained in another system within the state entity or in a system outside the state entity? If so please specify.

The data that this project will generate will be limited to administrative functions of the system that service personnel will access for maintenance, repair, or occasional monitoring of equipment. Such status indicators should not be applicable to electronic records retention.

6. What are the legal, regulatory or operational requirements to providing public access to the records?

N/A

7. What are the legal, regulatory or operational requirements for controlling access to the records in order to ensure confidentially?

N/A

8. Identify all records with retention periods of ten or more years that will be affected by the project or indicate that the project has no such records involved.

N/A

9. Estimate of the three year total cost of addressing records identified in No. 8 above and included on the DA519, Item #8.

N/A.

Risk Identification Summary (Top Five Risks)

A description of project risks, the probability of the risk occurring, the impact of the risk on the project, and the suggested mitigation activities.

Last Risk Assessment Date: June 30, 2022 Prepared by: KDOT Office Information
Technology Services

Category	Prob	Imp	Risk	Mitigation Approaches
Strategic	Low	Med	The solution will not be aligned with the overall business strategy of the Kansas Department of Transportation (KDOT).	As noted in the DA 518 Attachment, the proposed solution aligns with KDOT mission and goals. as well as the KDOT Budget Plan. KDOT will assign a project manager to manage the project and to provide oversight to ensure the implementation aligns with KDOT strategic goals and project requirements.
Financial	Low	Med	Financial risk could accrue to the project through; 1) lack of adequate funding; 2) change orders and increases to vendor costs.	KDOT has identified a funding source for procuring the KDOT US-169 DWDM. The contract will be fixed price with milestone payments. Milestones will be managed by the project team with all payments tied to acceptance of deliverables.
Project Management	Low	Med	The project will experience unanticipated delays, miss key milestones/deliverables and fall short of goals.	The Kansas Department of Transportation has established a high-level project schedule in conjunction with the vendor. Upon completion of the Planning phase the detail plan will be established with KDOT approval. The vendor's contract will contain procedures to identify issues, risks and mitigation strategies well ahead of the time that the critical path is impacted.
Technology	Low	Med	The solution will fail to meet KDOT specifications and requirements.	KDOT has experience with installing these technologies in previous installations of DWDM equipment in our ITS initiatives.

State Organization: KDOT – US-169 DWDM Project Copyright © 1999-2010 State of Kansas

Risk Identification Summary (Top Five Risks)

Category	Prob	Imp	Risk	Mitigation Approaches
Change Management / Operational Risk	Low	Med	 Unanticipated vendor changes lead to additional cost and schedule delays. Misalignment of solution to operational requirements. 	 The project team developed a detailed set of requirements consistent with the existing DWDM system. The project requirements will address change management and scope creep issues.

Legend

Prob = Probability of Occurrence

Imp = Impact

RISK ASSESSMENT MODEL High Level Plan - Summary Report Ver. 1.0

Agency Name: Kansas Department of Transportation

Project Name: KDOT US-169 Dense Wavelength-Division Multiplexing (DWDM)

1. Introduction

The Risk Assessment Model measures risk in distinct areas. Below are the average scores based on the results from the questionnaire. Each area indicates the measured risk on a scale from 1 to 9, with 9 being the highest risk. Scores lower than 2.0 are considered "Low Risk", scores higher than 2.0 are "Medium Risk" and scores higher than 3.0 are considered "High Risk".

2. Summary

Score	Risk Level	Risk Area
1.0	LOW	Strategic Risk
1.0	LOW	Financial Risk
1.0	LOW	Project Management Risk
1.0	LOW	Technology Risk
1.0	LOW	Change Management / Operational Risk

Note: If you get "#VALUE!" as a result in any of the "Score" or "Risk Level" fields, you have unanswered questions. Go back and check your answers.

3. Signature

I have reviewed the results of the Risk Assessment Model. The results are indicators only and do not represent all the risks of the project. ITEC will use the results as the basis of discussion, and will not rely solely on the output.

Mon & Herrekonf