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Department Review of Consolidation

(For **c**onsolidation of an unserved county with an existing 9-1-1 authority and the creation of a Joint ETSB or consolidation of either paper ETSBs or multiple ETSBs resulting in the creation of a Joint ETSB and consolidation of individual PSAPs)

Requirement	Information Included	Staff Comment
Contact and 9-1-1 System information	Yes ⊠ No □	Justin Vaughn 115 North 5 th St. Vienna, IL 62995 (618) 771-2901 jvaughn@joco911.com
Verification	Yes ⊠ No □	
Letter of Intent	Yes ⊠ No □	
Plan Narrative (if incorporating an NG9-1-1 solution, narrative must include the following:)	Yes ⊠ No □	The Johnson County Emergency Telephone System Board is requesting to change it's 9-1-1 System Service Provider (9-1-1 SSP) from NG911, Inc. to INdigital Telecom (INdigital). The existing Solacom IP Selective routing system will be re-provisioned as an IP based NG9-1-1 call handling System. The Johnson County ETSB is upgrading their call delivery system, to ensure that all carriers are connected directly to the selective routers serving the PSAP. The system will be provisioned as an IP based NG9-1-1 System. In addition, Johnson County is also requesting approval to consolidate its 9-1-1 system with Pope and Hardin Counties which currently have pre-basic 9-1-1 service. Johnson County has entered into intergovernmental agreements with both Pope and Hardin Counties to establish a joint 9-1-1 system and a joint Emergency Telephone Systems Board (ETSB). The current Johnson County PSAP will become the 9-1-1 PSAP for all three counties and will initially answer wireline, VoIP and wireless calls for Johnson and part of Pope County. INdigital will migrate wireless traffic remaining for Pope and Hardin Counties when requested after ISP approval.

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Given the current structure of the network, the implementation of the new 9-1-1 system provider and consolidation will need to occur in 2 stages.

Stage 1: The first stage of implementation is the conversion from NG-911, Inc. to INdigital as the new 9-1-1 system provider. The carrier trunks will remain connected to Frontier's Carbondale central office. New network connections will be established from Carbondale to gateways located at the existing data centers in Murphysboro and Harrisburg. 9-1-1 calls will be directed over the new INdigital connections at Carbondale to the gateways at the data centers and then be delivered to INdigital's IP based selective routers/ESRPs located in Mattoon and Rosiclare for selective routing to the appropriate PSAP. 9-1-1 Selective Routing for 9-1-1 call delivery and Automatic Number Identification (ANI) and Automatic Location Identification (ALI) delivery will be provided by the INdigital 9-1-1 IP based selective routers/ESRPs and ALI database management system.

During Stage 1, INdigital will mirror the current ALI database by requesting a copy of the 9-1-1 Database from Frontier who is currently administering the 9-1-1 database as a subcontractor. INdigital will also request a copy of the MSAG from the 9-1-1 System and will use established update processes with Frontier until the Stage 2 carrier migration is complete.

The current ESInet that exists between the two data centers and the PSAP will remain in place for call delivery. INdigital will install tertiary internet connections to the PSAP along with INdigital's MEVO backup solution prior to the Stage 1 cutover. The PSAP will have the ability to use the hot standby disaster recovery platform in an 'active + active' 9-1-1 delivery platform. This will be used as a backup during the Stage 1 cutover providing the PSAP with the ability to receive 9-1-1 calls with ANI and ALI should there be any issues during the Stage 1 cutover.

The consolidation of the network for Johnson, Pope and Hardin Counties will occur during Stage 2 of the project. All split exchanges are shared with other CSI counties except for the southern border of Pope County which is split with Massac County. All split exchanges will continue to route as they do today during the Stage 1 cutover. PS

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		ALI subscribers will continue to route as they currently do during the Stage 1 cutover.
		Stage 2: The second stage of implementation will be to migrate all carriers off the FAS and consolidate the network for Johnson, Pope and Hardin Counties. The carriers that are currently connected to Carbondale for Johnson County will establish new 9-1-1 trunks to the INdigital selective routers/or LNGs that are located in Mattoon and Rosiclare, Illinois. INdigital will also request new 9-1-1 trunks from carriers that provide service in Pope and Hardin Counties that aren't currently connected to Carbondale or INdigital. INdigital will work with each carrier to determine the type of trunk signaling and establish points of interconnection for 9-1-1 call delivery.
		INdigital will work with the 9-1-1 authority to establish and administer the new ALI database for Pope and Hardin Counties. The 9-1-1 authority will provide INdigital with a new Master Street Address Guide (MSAG) that includes Johnson, Pope and Hardin County territory. The MSAG and database development will occur as the network is being established.
		INdigital will administer the 9-1-1 database and MSAG for the subscribers that reside in the service territory of the consolidated system. INdigital will request TN loads and establish update processes with the participating carriers prior to the cutover and assume all 9-1-1 SSP administrative responsibilities for the database at the time of conversion.
		The Joint ESTB will file a wireless plan for the rest of Pope and all of Hardin County territory with the ISP after the Stage 2 consolidation is completed.
Name of certified 9-1-1 system provider	Yes ⊠ No □ N/A □	INdigital
Explanation of the national standards, protocols and/or operating measures that will be followed	Yes ⊠ No □ N/A □	The consolidated system will comply with all State and Federal requirements and be compliant with the National Emergency Number Association Standards.
Explanation of measures taken to create a robust, reliable and	Yes ⊠ No □ N/A □	The network will be provisioned as an IP based, Next Generation i3 capable network and will deliver calls using IP technology to the

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diverse/redundant network and whether other 9-1-1 Authorities will be sharing the equipment		PSAP. Redundant Legacy Network Gateways (LNG's) and Emergency Service Routing Proxy's (ESRP's) otherwise referred to as selective routers will handle all call routing for the PSAP. One set of call routing elements is located in the Consolidated Communications Mattoon, IL Central Office and the other is located in the Shawnee Communications Central Office in Rosiclare, IL.
Explanation of how the existing 9- 1-1 traditional legacy wireline, wireless and VoIP network, along with the databases, will interface and/or be transitioned into the NG9-1-1 system	Yes ⊠ No □ N/A □	All carriers that are currently connected to the Frontier Carbondale central office for Johnson County will establish new 9-1-1 trunks to the INdigital selective routers/or LNGs that are located in Mattoon and Rosiclare. INdigital will work with each carrier to determine the type of trunk signaling and establish points of interconnection for 9-1-1 call delivery. The carriers can deliver 9-1-1 calls to INdigital ESRPs or LNG's by using SS7 signaling or by using a SIP trunk IP based signaling. PS/ALI subscribers will be identified and included in the network and database migration plans.
Explanation of how split exchanges will be handled	Yes ⊠ No □ N/A □	Split exchanges in southern Pope County will be discussed, and the routing will be thoroughly planned for based on ICC/ISP orders during the Stage 2 industry project calls that will be hosted by INdigital on a regular basis. These project calls will include all participating Service Providers, ICC and ISP Staff as well as the 9-1-1 authority.
Explanation of how the databases will be maintained and how address errors will be corrected and updated on a continuing basis	Yes ⊠ No □ N/A □	INdigital will request TN loads and updates from the carriers prior to the cut over and assume all 9-1-1 SSP administrative responsibilities for the database at the time of conversion. INdigital will work with the carriers and the joint ETSB to keep the database current and in compliance with Illinois State law on an ongoing basis. The Solacom ANI/ALI controllers will retrieve the ALI information from INdigital's Database Management System and deliver it to the PSAP call station equipment. The current Datamaster System will also be re-configured at this time by the contracted maintenance provider to no longer provide ALI information to the PSAPs.
Explanation of who will be responsible for updating and maintaining the data, at a minimum on a daily basis Monday through Friday	Yes ⊠ No □ N/A □	INdigital will administer the 9-1-1 database and MSAG for the subscribers that reside in the service territory of the consolidated system.
Explanation of security measures placed on the IP 9-1-1 network and equipment to safeguard it	Yes ⊠ No □ N/A □	All access to the system is secured by individual user level two factor login credentials. The IP based call delivery network is private with no outside access.

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from malicious attacks or threats to the system operation and what level of confidentiality will be placed on the system in order to keep unauthorized individuals from accessing it		
Financial Information		
Name of ETSB(s) that are being dissolved with Total Reserves to be transferred to the Joint ETSB	Yes ⊠ No □	No reserves will be transferred to the joint ETSB. Neither Pope nor Hardin County has an ETSB prior to this consolidation.
Number of answering positions, full-time and part-time dispatchers prior to and after consolidation	Yes ⊠ No □	There were 2 answering positons prior to the consolidation and there will be 2 answering positions in the consolidated system. There were 6 full time dispatcher/call takers prior to the consolidation and there will be 6 in the consolidated system. There were no part time dispatcher/call taker prior to the consolidation and there will be none in the consolidated system.
Total network cost prior to and after consolidation	Yes □ No ⊠	The total network cost prior to consolidation is \$45,249.12. The total network costs after consolidation will be \$73,810.68. There is an increase in network costs of \$28,561.56 due to new network associated with the two previously unserved counties and the change in 9-1-1 system provider.
Network Costs that the State will be responsible for paying	Yes □ No ⊠	The estimate of network costs that the ETSB believes the State will be responsible for in the consolidated system is \$50,245.68. The estimate is different than the total network costs after consolidation provided above.
Recurring and nonrecurring consolidation cost	Yes ⊠ No □	Recurring costs of the system prior to consolidation is \$191,775. The proposed recurring cost for the consolidated system is \$15,000. It appears that there is an error in the proposed recurring cost for the consolidated system.
All revenue sources for consolidated system	Yes ⊠ No □	The estimated nonrecurring cost for consolidation is \$248,521.75. \$561,012.42
Five Year Strategic Plan	Yes ⊠ No □	

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Communities Served		Yes ⊠ No □	
Participating Agencies		Yes ⊠ No □	
Adjacent Agencies		Yes ⊠ No □	
Carrier Listing		Yes ⊠ No □	
Attachments			
	Ordinances	Yes ⊠ No □	Pope and Hardin Counties do not have ETSBs. Johnson County passed a resolution to authorizing entry into intergovernmental agreements with Pope and Hardin Counties.
	Intergovernmental agreement(s)	Yes ⊠ No □	Pope and Hardin County each entered into an intergovernmental agreement to with Johnson County to create a Joint ETSB.
	Contracts	Yes ⊠ No □	The contract with INdigital was included in the consolidation plan.
	Back-up PSAP agreement	Yes ⊠ No □	Saline County is the current backup PSAP and will remain the backup after consolidation.
	Network Diagram	Yes ⊠ No □	
	Call-Handling and Aid outside jurisdictional boundaries agreements	Yes ⊠ No □	
Te	est Plan	Yes ⊠ No □	

Conclusions:

Under 50 ILCS 750/15.4a (7), the corporate authorities of each county that has no 9-1-1 service as of January 1, 2016, shall provide enhanced 9-1-1 wireline and wireless enhanced 9-1-1 service for that county by either (i) entering into an intergovernmental agreement with an existing ETSB or to create a new joint ETSB, or (ii) entering into an intergovernmental agreement with the corporate authorities that have created an existing joint ETSB. As a result of this legislation, both Pope and Hardin County are required to consolidate.

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In addition to this consolidation, Johnson County is also proposing to change its 9-1-1 System provider from NG911, Inc. to INdigital. It will continue providing a Next Generation 9-1-1 solution in Johnson County during Phase 1 and to Pope and Hardin Counties in Phase 2.

The Department has completed its review of the consolidation plan as prescribed by Section 1324.200(c) of Illinois Admin. Code Part 1324.200 – Consolidation of 9-1-1 Emergency Systems. The plan meets the requirements for consolidation and modification of its 9-1-1 system except for the Financial Information pages 12 and 13. There is a discrepancy in the network costs that the ETSB believes the State will pay for the consolidated system (\$50,245.68) on page 13 and the total network cost of the consolidated system (\$73,810.68) on page 12. Also, on page 13 under Recurring and Nonrecurring Cost, the proposed recurring cost in b) is shown as \$15,000.00. The recurring costs prior to consolidation in a) is \$191,775.00. It is unlikely that the new consolidated system's recurring costs will be \$15,000.00.

Staff requests that the 9-1-1 Authority make the necessary revisions to the Financial Information on pages 12 and 13 specified above and provide a copy to the Department in advance of the ALJ Hearing to provide clarification.

Reviewed by: Stacy Ross

Date: 12/27/18