**DEPARTMENTAL** 

# INDIAN RIVER COUNTY, FLORIDA M E M O R A N D U M

**TO:** Honorable Board of County Commissioners

**THROUGH:** Jason E. Brown, County Administrator

**THROUGH:** Tad Stone, Director of Emergency Services

**FROM:** Maria Resto, Emergency Services Manager

**DATE:** September 1, 2020

**SUBJECT:** Request for Sole Source to Communications International for E911

Multiprotocol Label Switching (MPLS) Project

It is respectfully requested that the information contained herein be given formal consideration by the Board of County Commissioners at the next scheduled meeting.

## **DESCRIPTION:**

The Indian River County's E911 system consists of three (3) primary and one (1) back up Public Safety Answering Points (PSAPs). The system utilizes Interact fiber-optic network connections that originate at the County's EOC (back up PSAP) and are configured with a single connection to each PSAP.

The current IRC 911 interact fiber-optic network links are as follows:

IRC EOC to City of Sebastian Police Department

IRC EOC to City of Vero Beach Police Department

IRC EOC to IRC Sheriff's Department Office

The E911 stand-alone fiber optic system provides no redundancy or route diversity for network communication, leaving all PSAPs vulnerable to fiber outages. To provide network redundancy, staff recommends the development of an alternate Multiprotocol Label Switching (MPLS) routing network utilizing the County's P25 Radio System infrastructure already in place. The proposed project includes the installation of MPLS Routers at each PSAP and at each corresponding the County P25 Radio System sites, where they will interface with the County microwave equipment at those sites to complete the redundant paths for these vital communications services.

The proposed MPLS upgrade will supply a redundant data path between each of the four PSAPs to support the 911 Phones & Data in the event of a failure of the County fiber-optic network.

This upgrade will use the existing microwave radio network system currently in place to support the P-25 system and will not require loading the towers with additional equipment.

On August 16, 2016, the Board approved Communications International as the sole source provider for the P25 Radio System project. Since the MPLS equipment will handle both P25 Radio System traffic and the PSAP traffic, and will use the County's current radio system infrastructure, staff recommends the Board approves Communications International as a sole source provider for the MPLS project.

Utilizing the designated P25 Radio System provider will guarantee system integrity and compatibility between the P25 Radio Networks IP Plan and the MPLS IP Plan. Also, it will assure needed redundancy for the County's mission critical communications.

## **FUNDING:**

Funding for the MPLS project is a planned expenditure, and it is included in the FY2019-2020 Communications Center (120-133) budget.

ITEM	Amount	Account Number
911 Surcharge/Communications Center/ Other Machinery & Equipment	\$140,838.18	12013325-066490

### **RECOMMENDATION:**

Staff recommends that the Board approve Communications International as sole source for the MPLS project. Staff also recommends the Board authorize the Purchasing Division to issue Purchase Orders to Communications International for the project.

## **ATTACHMENTS:**

1. 911 MPLS Project Quote