



## **Request for Proposals**

### **Emergency Communications Consoles**

PROPOSALS WILL BE RECEIVED UNTIL

**12:00 Noon, Tuesday, May 23, 2017**

in

City/County Purchasing Department  
City Hall Suite 324  
101 North Main Street  
Winston-Salem, NC 27102

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#### **ADVERTISEMENT FOR BIDS**

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Pursuant to N.C.G.S. 143-129.8, sealed proposals endorsed Emergency Communications Consoles to be furnished to the City of Winston-Salem and County of Forsyth will be received by the City/County Purchasing Department in Suite 324, City Hall Building, 101 North Main Street, Winston-Salem, NC until 12:00 Noon, Tuesday, May 23, 2017.

To obtain the complete proposal document or receive instructions for submitting proposals contact Jerry Bates via email [jerryjb@cityofws.org](mailto:jerryjb@cityofws.org), phone 336-747-6939, or visit the City/County Purchasing Department in Suite 324 of City Hall Building, 101 North Main Street, Winston-Salem, N.C. from 8:00 A.M. to 5:00 P.M. Monday through Friday. The City/County reserves the right to reject any or all proposals.

Jerry Bates  
Purchasing Director

## **BID SPECIFICATIONS FOR CONSOLE FURNITURE**

Public Safety/911 Emergency Communication Centers pose unique challenges and demands. Unlike an office environment, personnel are constantly in a reactive mode and required to manage multiple monitors and additional ancillary rack mount electronics within seconds. Additionally, Emergency Communications Consoles are utilized 24 hours per day/ 7 days per week by different employees with different physical sizes and needs, and thus must provide a unique ergonomic approach for a high stress and demanding environment. With this in mind, only console furniture specifically designed and engineered for Emergency Communication Centers will be acceptable and only manufacturers specializing in designing, manufacturing, and installing console furniture for mission critical environments will be considered. All products must meet ANSI/HFES 100-2007 requirements, ADA guidelines, and ISO 9001 quality assurance. **Note: Standard office furniture will not be acceptable or considered in this installation.**

### **Scope of Work**

The city of Winston-Salem is in the process of renovating their primary PSAP located at 725 N. Cherry St., Winston-Salem, NC 27101 and will require 12 new console/dispatch positions and Forsyth County Emergency Services 911 is in the process of relocating its' primary PSAP to the Forsyth County Public Safety Building located at 301 Church St, Winston-Salem, NC 27101 and will require 8 new console/dispatch positions. The purpose of this RFP is to streamline the bidding and purchasing process for both organizations.

The WSPD 911 PSAP is responsible for call taking/dispatching function for the Winston-Salem Police and Fire Departments and the Forsyth County Emergency Services 911 PSAP is responsible for call taking/dispatching of the counties EMS agency as well as the counties 19 Fire Departments. Through this RFP, both organizations intend to procure a total of (20) 911 console furniture positions **(12 for the WSPD PSAP and 8 for FCES PSAP)** as part of this project. **The workstations will be designed for full featured call taking and dispatching functions. Services are to include but may not be limited to: hardware, software, installation, training and other ancillary services as described in this RFP.**

### **FURNITURE CONFIGURATION OVERVIEW**

Respondents shall provide separate location pricing for all furniture components to permit the City and County the flexibility to provide their respective governing bodies the ability to review and approve separately.

The breakdown of the total of (20) 911 console furniture positions required for each agency is listed below:

**A WSPD 911 Dispatch:** Eight (8) Call-take/Dispatch Positions, three (3) Call-take only Positions and one (1) Supervisor Position. The vender will need to plan on a live cut-over at this site. Old consoles will be removed and the new ones installed. Only 2-3 positions can be taken out of service at one time.

**B FCES 911 Dispatch:** Seven (7) Call-take/Dispatch Positions and one (1) Supervisor Position. The vender will need to plan on a full install of all eight positions at this site. This will be a new location and is not operational at this time.

Note: Call-take/Dispatch Positions and Supervisors Positions will accommodate four (4) flat monitors in a single row. Call-take only Positions will accommodate three (3) flat monitors in a single row. Console shall be capable of adding a second row of flat monitors above the first row.

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## **Dispatch Center Floor Plans**

Refer to the attached floor plans (Exhibit A for WSPD and Exhibit B for FCES) associated with this RFP. The arrangement of the furniture in both centers is intended to support specific operational functionality, and must be adhered to as closely as furniture design permits.

Proposers shall submit drawings that depict their proposed furniture as shown within the dispatch center space. Any variance from the attached furniture layout must be described, as to the need for the variance and the justification for any changes.

## **Console Specifications**

### **1.0. Stability – Function**

- 1.1** The console furniture must be designed specifically for 24/7 operations in an Emergency Communications Center environment
- 1.2** Consoles must be designed in accordance with the quality standards of ISO, BIFMA, CSA and meet all ANSI/HFES 100-2007 Specifications.
- 1.3** The design of the console shall address the functional, ergonomic and aesthetic requirements of the particular working environment while complying with accepted human factor design and ergonomic standards for viewing distance, angle, monitor and keyboard height, and knee-well space.
- 1.4** The console must accommodate a variety of computer, communication, display, environmental controls and operator interface devices.
- 1.5** Console furniture must be modular in design for ease of reconfiguration and upgrading. The consoles shall be reconfigurable with an independent steel or aluminum frame structure. Design shall facilitate future equipment retrofits and full reconfigurations without requiring any major modification to the structure or independent exterior cladding.
- 1.6** Consoles must be able to be customized to fit site specific dimensions making best use of space while maintaining ADA compliance.
- 1.7** Sit-to-stand legs must be attached to the console undercarriage within a footprint designed to allow maximum stability based on the overall size of the monitor and input platform surfaces. Free standing leg and feet systems will not be acceptable, nor will any cantilevered surfaces be allowed. A minimum of 2 legs is required for each moveable surface. Documentation must be presented for load capacity of the monitor surface.

### **2.0 Surface**

- 2.1** Height adjustable workstations adjust from 24”– 48” and utilize a single-surface design that puts the entire work surface at a comfortable working height without any seams in the surface or keyboard mechanisms to get in the way. This also makes it easier to achieve a downward gaze to the monitors since the entire surface can achieve the HFES/BIFMA requirements for input device platforms. This solution coupled with fully articulating monitor arms provides the ultimate in ergonomic flexibility
- 2.2** Work surface must have an intelligent safety feature to support anti-collision to prevent damage or injury.
- 2.3** The work surface must accommodate multiple flat panel monitors with articulating arms that lift the monitors off the surface. The surface should be wide enough to accommodate multiple input devices such as keyboards, mice, and writing surface on a level platform.

- 2.4 All height adjustable surfaces include safety gaps to prevent pinch points.
- 2.5 Unobstructed knee clearance in the seated operating position in accordance with ANSI standards and ADA requirements must be met.
- 2.6 Motors will be UL listed.

### **3.0 Adjustments**

- 3.1 Full console sit to stand height adjustment must be included. Console should use multiple columns for greater reliability and stability. The columns should be attached to the base enclosure and the work surface with metal to metal connectors. No physical demands shall be placed on the end-user when using the sit-stand function. Counter balance or any weight distribution system will not be considered nor will any manual adjustment system.
- 3.2 Console must utilize a single-surface design that puts the entire work surface at a comfortable working height without any seams in the surface or keyboard mechanisms to get in the way. Input platform must be floor supported using an electro-mechanical column for broadest range of adjustment capability between the work surfaces.
- 3.3 Electronic adjustment of the work surface will be required.
- 3.4 A minimum safety clearance shall be required between all moving surfaces.
- 3.5 Software for console control will not be acceptable.
- 3.6 Input platform must have an intelligent safety feature to support anti-collision to prevent damage or injury. The work surface must detect interference when in the up or down mode.
- 1.7 The lift system shall operate quietly and compensate for differential loads from side to side, preventing racking or damage to the structure.

### **4.0 Materials**

#### **4.1 Slatwall**

- 4.1.1 An integrated slatwall system must be available for mounting of monitors and providing the necessary cable management routing from the base enclosures to the work surface. Slatwall extrusions and all sheet metal parts must be finished in a durable, electrostatic powder coating and be able to retrofit without any disassembly to the console
- 4.1.2 Slatwall must be available in multiple heights in order to provide mounting for single array, double array, or large monitor configurations.
- 4.1.3 Slatwall system and work surface should have a common support structure. This keeps the work surface and all slatwall mounted accessories/monitors moving together.
- 4.1.4 Slatwall system is used to support monitors on fully articulating monitor arms and other accessory items.
- 4.1.5 Cable management is required in every section of Slatwall from the front to route power cords for monitors

## 4.2 Base Enclosure

- 4.2.1 Steel or Aluminum must be powder coated to match edge treatments. Enamel paint is not sufficiently durable and will not be acceptable.
- 4.2.2 The frame will have the sit-stand actuator mechanisms incorporated into the structural frame.
- 4.2.3 The console shall have a modular design allowing multiple reconfiguration options. The base frame shall be independent of the console work surface thus allowing for various work surface options without the need to change the base frame structure.
- 4.2.4 The frame must accommodate the installation of a partition system.
- 4.2.5 The partition system should include options for acoustical, tackable, high pressure laminate, or Plexiglas material and be constructed of materials that match existing base enclosure to insure proper fit and color scheme.
- 4.2.6 The functionality of the partition system should accommodate addition after the initial installation or change-out for future technology requirements; panel-based systems that are integrated into the console frame are not acceptable.
- 4.2.7 All fasteners of the partition system must be completely concealed
- 4.2.8 The horizontal frame members shall be constructed with pre-designed ports providing equipment mounting locations along the length of each module as well as the addition of accessories after the installation without the need for additional drilling.
- 4.2.9 The frame structure shall have fully integrated cable management. The base structure shall accommodate a minimum of 3 horizontal raceways; the transition from the base to the work surface must have a minimum of 4 vertical raceways; and the work surface must have a lateral raceway location depending on the size of equipment mounted in the console. The cable raceways shall be continuous throughout the entire console layout providing uninterrupted cable management, including through the slatwall system.
- 4.2.10 Leveling glides must be an integral part of the system to accommodate uneven floors.
- 4.2.11 End gables that attach to the steel or aluminum frame should be constructed of a 1" composite solid core material with a minimum density of 45 lbs. per square foot and a minimum screw-holding face of 247 lb. Gables must be pressure bonded with a high-pressure laminate surface on both sides and use a mechanical fastening system that readily accepts future reconfigurations and additions with no site cutting, drilling, or machining required. Wood screws shall not be acceptable.
- 4.2.12 Panel cladding edges shall receive post applied 1.4 mm PVC edging in matching or complementary colors.
- 4.2.13 All panels must attach to the frame with concealed fasteners. Console access panels must be removable without the use of tools. Front and back panels must be hinged, removable and replaceable without the use of tools.

## 4.3 Surfaces

- 4.4.1 All work surfaces are constructed of 1-1/8” thick wood core material, pressure bonded with a high-pressure horizontal grade laminate top and sealing horizontal grade backing sheet of laminate on the underside to prevent deflection.
- 4.4.2 The work surface flammability to meet, Class 1/A under ASTM E-84
- 4.4.3 Work surfaces should be available in 24”, 30” and 36” depths.
- 4.4.4 All edges should be treated in a high impact vinyl edging material and thermally fused to the work surface.

### **4.3 Fabric**

- 4.3.1 Abrasion resistance to comply with ASTM D-3597 MVPTS-198 standards.
- 4.3.2 Flammability requirements must adhere to ASTM E-84 (Tunnel Test) or Class A or 1 and the State of California Technical Bulletin 117 Sec. E (SC-191-53).

### **5.0 Base Enclosures**

- 5.1 Equipment enclosures underneath the monitor surface are required for CPU equipment and cable routing, keeping the knee space below the consoles unobstructed to allow dispatchers a full range of movement to reach necessary equipment.
- 5.2 All equipment enclosures are to be vented for passive airflow.
- 5.3 An option for enclosure fans must be available if heating issues arise
- 5.4 Access to the equipment enclosures must be available from the top, front, side, and/or rear depending on the configuration.
- 5.5 Processor shelves shall accommodate the console’s CPUs housed within the base of the console. All cables running between equipment shall have a 6-inch separation between power and data. Cables from equipment shall be managed effectively within the console base frame. The size and spacing of equipment support kits shall be variable to optimize the available equipment mounting area and maximize the number of devices the console enclosure accommodates.
- 5.6 The internal frame structure shall accommodate various equipment mounting options including:
  - a. Processor shelves – The shelves shall be available in a fixed, hinged-elbow slide-out or swing-out option depending on the specific equipment application.
  - b. Rack mount shelves – The rack mount shelves shall be available as fixed or optional slide-out. The rack mount shelves shall be available in a 2-point or 4-point mounting configuration depending on the equipment weight or access requirements. The 4-point rack mount shelf shall have an optional adjustable depth-mounting bracket to accommodate varying equipment depths.
  - c. Hardware included with pullout shelves must be full-extension, ball bearing construction with caster support to provide a rating for a minimum 150 lb. load.
- 5.8 Integrated Personal Storage should be available within the base enclosure in order to keep the footprint of the consoles at a minimum if required. Options should include file drawers, box drawers, or fixed closed door shelves.

## **6.0 Electrical Requirements**

- 6.1 Each console base enclosure will need a minimum of 8 outlets provided from either standard power bars or from a hard-wire system.
- 6.2 Total actual power draw for an individual console must not exceed 16 amps (as per NEC).
- 6.3 An option for surface mounted, user-accessible power, voice, and data connections must be available.
- 6.4 Color coding around the receptacles must differentiate multiple power sources.
- 6.5 Hard-wire solution must be UL listed; CSA approved and have low smoke, zero-halogen properties.

## **7.0 Wire and Cable Management**

- 7.1 The frame structure must have fully integrated cable management.
- 7.2 Lateral raceways that transition from the base to the work surface must have a minimum of 2 vertical “energy chain” raceways; and the work surface must have a min of 2 horizontal raceway location depending on the size of equipment being mounted in the console.
- 7.3 The cable raceways shall be continuous throughout the entire console, allowing uninterrupted cable management.
- 7.4 Cable drop areas on extensions and bridges should be included to each fixed equipment enclosure.
- 7.5 Cable management on the work surface shall route through grommets to the underside of the work surface, where cables will be protected by an easily accessible, enclosed management system which runs cables horizontally to the energy chain.
- 7.6 Cables routed within a furniture panel system will not be acceptable.

## **8.0 Storage Accessories**

- 8.1 The console supplier should provide storage modules such as mobile storage pedestals, fixed position credenzas, printer cabinets and have the capability to provide custom millwork when required. All accessory storage cabinets, mobile drawer pedestals, printer enclosures, etc. must be constructed of materials and finishes to match the console exterior.
- 8.2 The console supplier shall provide for the following equipment and operator convenience kits:
  - a. 19" E.I.A. (483 mm) rack mount panels
  - b. Pencil drawers
  - c. Keyboard drawers
  - d. Internal cable management trays and power bars
- 8.3 Drawer hardware shall be full extension, precision ball bearing construction with a minimum 100 lb. load rating per drawer.
- 8.4 All file drawers shall have built in hanging file capability.
- 8.5 All doors shall include full articulation door hardware to accommodate uneven floors.



- 8.6 Shall be finished on all sides for use outside the console.
- 8.7 Mobile storage modules shall be equipped with dual-wheel front-locking casters, and a 5<sup>th</sup> wheel for extra stability when required.
- 8.8 Multiple styles, including pencil-box-file and box-file styles, should be available.

## **9.0 Environmental Control System**

### **9.1 Controller**

- 9.1.1 Must provide a single controller for all environmental settings including high wattage incandescent or fluorescent lamp on/off, LED task light dimming, heating controls, sit/stand adjustments for work surface and air distribution through diffusers.
- 9.1.2 Controller must be located within reach of a wheelchair in order to meet ADA

### **9.2 Air Distribution**

- 9.2.1 System shall offer a minimum of two circulating filtered fans for personal comfort
- 9.2.2 Fans must be moveable allowing the individual user to position the fans for their comfort. All fans will be adjusted through the central controller.
- 9.2.3 Fan filters shall be user replaceable.

### **9.3 Lighting Controls**

- 9.3.1 System must provide for minimum of 2 dimmable LED task lights. All task lights must have a fully articulating movement and are adjustable by the user.
- 9.3.2 System shall provide an additional AC outlet for on/off switching of large light fixtures up to 200W

### **9.4 Heat Options**

- 9.4.1 System must accept a radiant heat accessory rated up to 200 watts
- 9.4.2 System must accept forced air heat accessory rated up to 1,150 watts
- 9.4.3 All heat systems must be adjustable through the central controller
- 9.4.4 The consoles center module will incorporate either, or both, of the above heat systems and be securely mounted to the front enclosure panel. Freestanding heat panels will not be acceptable.

## **10.0 Space Planning & Console Specifics**

- 10.1 Perspective detailed drawings of each console type and equipment layouts for coordination of site measurements, architectural, mechanical, and electrical project elements shall be required in the submittal with dimensions of height, width, and depth in order to determine compliance with the specifications.



- 10.2 In order to obtain project level approval, Vendor shall supply detailed drawings of each console type with its specific equipment. Pre-production review, to include a drawing submittal and component listing complete with samples of selected finish materials upon request.
- 10.3 All accessories being proposed shall be shown in drawings.

#### **11.0 Lead Times and Installation**

- 11.1 Provide lead times from date of order to final installation
- 11.2 Shipping shall be direct to the facility, inside delivery.
- 11.3 Only the manufacturer's factory installers or their trained and authorized designees experienced with the working environment of a public safety dispatch center shall assemble and install the console furniture. Documentation must be provided for installation foreman.
- 11.4 Post-installation walkthrough shall be required with the installation foreman in order to ascertain full compliance to the floor plan, console design, and materials specified.
- 11.5 Training is required for use of ergonomic functions and technical access, provide a detailed plan for training all employees using the console furniture and for technicians installing and maintaining customer provide equipment.

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