



TOWN COUNCIL – AGENDA REQUEST FORM

THIS FORM WILL BECOME PART OF THE BACKGROUND INFORMATION USED BY THE COUNCIL AND PUBLIC

Please submit Agenda Request Form, **including back up information**, 8 days prior to the requested meeting date. **Public Hearing requests must be submitted 20 days prior to requested meeting date to meet publication deadlines** (exceptions may be authorized by the Town Manager, Chairman/Vice Chair).

MEETING INFORMATION

Date Submitted: December 27, 2023

Date of Meeting: January 11, 2024

Submitted by: Information Technology Coordinator

Jonathan Dias

Department: IT

Time Required: 10 minutes

Background Info. Supplied: Yes: No:

Speakers:

CATEGORY OF BUSINESS (PLEASE PLACE AN "X" IN THE APPROPRIATE BOX)

Appointment:	<input type="checkbox"/>	Recognition/Resignation/Retirement:	<input type="checkbox"/>
Public Hearing:	<input type="checkbox"/>	Old Business:	<input type="checkbox"/>
New Business:	<input checked="" type="checkbox"/>	Consent Agenda:	<input type="checkbox"/>
Nonpublic:	<input type="checkbox"/>	Other:	<input type="checkbox"/>

TITLE OF ITEM

Alarm Monitoring System

DESCRIPTION OF ITEM

Town Council to discuss the options for the replacement of the alarm monitoring system at the Police Dispatch Center.

REFERENCE (IF KNOWN)

RSA:	Warrant Article:	_____
Charter Article:	Town Meeting:	_____
Other:	N/A	

EQUIPMENT REQUIRED (PLEASE PLACE AN "X" IN THE APPROPRIATE BOX)

Projector:	<input type="checkbox"/>	Grant Requirements:	<input type="checkbox"/>
Easel:	<input type="checkbox"/>	Joint Meeting:	<input type="checkbox"/>
Special Seating:	<input type="checkbox"/>	Other:	<input type="checkbox"/>
Laptop:	<input type="checkbox"/>	None:	<input type="checkbox"/>

CONTACT INFORMATION

Name:	<u>Jonathan Dias</u>	Address	<u>6 Baboosic Lake Road</u>
Phone Number	<u>603-423-8504</u>	Email Address	<u>helpdesk@merrimacknh.gov</u>

APPROVAL

Town Manager: Yes No: Chair/Vice Chair: Yes No:

Memo

TO: Paul Micali
FROM: IT Coordinator Jonathan Dias
DATE: Dec 27, 2023



RE: Alarm Monitoring System

Paul,

The alarm monitoring system at the police dispatch center has become unreliable, it is an antiquated and obsolete platform. The system no longer supported by the manufacturer and relies solely on copper telco lines which have also become unreliable. As you are aware the system has continued to degrade which has caused reduced reliability for alarm signals over the past year. The alarm signals are critical signals from all of the town buildings and schools for life safety and security. I am recommending that we replace the obsolete system with a new system ASAP.

The options are as follows:

- 1) Migrate the accounts to an external alarm service provider.

The estimated cost is \$50.00 per account per month to migrate to an external monitoring station. Approx. annual cost is \$21,000 per year.

- 2) Upgrade to a new alarm receiver system with dual path.

The estimated cost is \$27,832.44 to replace the current system. The payback is approx. 1 year and 4 months.

Funding will be from the Communications Capital Reserve Funds

SG-System 5

Virtual Receiver



Features That Make a Difference:

- Monitor up to 1,474,560 IP communicators (Cellular or Ethernet) with up to 24 IP line cards and upgrade license keys
- On board upgradeable memory for offline storage of visual verification "films"
- Supports visual verification features for DSC PowerSeries Neo
- Industry-leading account density per U rack for a reduced overall size of 4U
- SG-DRL5-IP line card with capacity of up to 4,096 IP accounts (512 supervised/3072 unsupervised), upgradable up to 61,440 via license keys
- Integrated redundancy eliminating downtime
- Fully 'hot swappable' modules
- Auto-switching redundancy for power and to output peripherals
- CMS access to visual verification files through SG-Systems Console
- Remote upgradable via SG-Systems Console
- Enhanced real time system status and hardware diagnostics via SG-Systems Console and touch screen interface

Ensures investment for future requirements

The new SG-System 5 builds upon the Sur-Gard legacy, of developing industry-leading monitoring station receivers. Sur-Gard delivers utmost reliability through features such as integrated redundancy, eliminating the costs incurred by downtime of the system. The new SG-System 5 also ensures that the investment in the system caters to growing system requirements. Up to 1,474,560 IP Cellular or Ethernet communicators can be monitored through upgrade license keys as well as upgradeable memory.

Support innovative alarm verification solutions

SG-System 5 supports industry trending alarm verification solutions such as visual verification, significantly reducing incremental costs that can be incurred by false alarms, while adding to the security professional's RMR.

PIR cameras are strategically installed as part of a security system and are activated the moment an alarm is triggered. Via the SG-System 5 Receiver, images are sent instantly through to the monitoring facility where the situation can rapidly and accurately be assessed and escalated to authorities, if required, while providing critical information. The SG-Systems Console software allows Central Monitoring Stations access to visual verification images. Alternatively, in conjunction with compatible software automation companies, the integrated receiver allows for seamless visual verification viewing and increased output that enhances the speed of processing alarm communications.

Smaller Yet Packed With Power

SG-System 5's more compact footprint makes for easier space management.

With a reduced overall size of 4U, the receiver offers highest account density per U rack available in the industry.

The built-in redundancy for power and auto-switching assures continuous performance of all peripheral devices connected to the output ports.

The line cards are 'hot swappable' which means they can be quickly removed and/or replaced while the system is live.

The robust CPM has built-in diagnostics that proactively identify any issues and report them to the easy-to-use Windows™-based SG-Systems Console software. Continually monitoring the automation software ensures automatic backup to a redundant port. For example, if the automation system goes offline, the CPM automatically switches from the primary Ethernet port to a secondary one, or to one of two serial ports, before going into manual mode.

Programming changes are easily made using the menu-driven touch screen or remotely over the network Ethernet connection using SG-Systems Console Software. Firmware upgrades can be conveniently done as they become available via SG-Systems Console Software without additional hardware, eliminating associated downtime. The SG-Systems Console Software also offers hardware diagnostics, monitoring the fan, power, network supervision as well as the overall health of the receiver. An intuitive touch screen interface makes

navigating through manual programming easy. Real time system status is also available through this user-friendly touch screen.

The IP line cards – SG-DRL5-IP – support up to 512 supervised accounts and up to 512 visual verification accounts, and up to 3072 unsupervised accounts. Using license keys, two additional standard tables may be added for up to 12,228 per card. Further IP account expansion to adapt to business growth can easily be handled through SG-System 5 extended-capacity license key with up to 15,360 unsupervised accounts, up to 2,560 supervised accounts and up to 2,560 visual verification accounts per table, resulting in up to 61,440 per line card and 1,474,560 for 24 lines.

Ordering Information

Main Hardware

Part No.	Description
SG-S5BASE	SG-MLRF5, SG-CPM5, SG-PSU5-600
SG-S5REDUN	SG-CPM5, SG-PSU5-600, SG-UIB5
SG-DRL5-IPSTD	SG-DRL5-IP receiver line card with paddle board
SG-S5LFANTR	SG-DRL5-IP line card fan tray (Required: one per every 6 line cards)

Upgrade License Keys

Part No.	Description
SG-DRL5-IPSLIC2	additional 512/512/3,072 visual verification/ supervised/unsupervised IP accounts - for a total of 8,192 accounts
SG-DRL5-IPSLIC3	additional 512/512/3,072 visual verification/ supervised/unsupervised IP accounts -for a total of 12,288 accounts
SG-DRL5-IPXLIC	extended capacity of up to 2,560/2,560/15,360 visual verification/supervised/unsupervised IP accounts per table - for a total of 61,440 accounts

Spare Parts

SG-MLRF5	Sub-rack metal work
SG-MLRF5-RM	Rack mount rails
SG-PSU5-600	600W PSU
SG-CPM5	CPM module
SG-DRL5-IPPAD	Paddle card
SG-S5SERCAB	System 5 serial Y cables
SG-UIB5	User interface touch screen module
SG-UIB5-BP	User interface blank plate

Technical Specifications

SG-MLRF5	19" x 3.5" x 12.24" (38 cm x 9 cm x 31.1 cm) 4 U NOTE: Uses standard 19" rack 110/220 VAC, 50/60 Hz, 2.5 A (Max) 200W max.
Battery backup	External UPS (not supplied)
Operating Environment	32 – 122 °F (0 – 50 °C) 90%, non-condensing
Built-in connectors	<ul style="list-style-type: none"> - Parallel printer port - 2 X Serial RS-232 connection to Automation Software (used by monitoring station) - Serial RS-232 connection to external serial printers - Ethernet: RJ45 modular jack for 1GB or 10/100Base automation output
Line card capacity	Up to 24 line cards
Line card - IP (SG-DRL5-IP)	<ul style="list-style-type: none"> - 512-event memory buffer/card - 128-bit AES encryption - Anti-hack design - Compatibility with all DSC IP Alarm Communicators (Cellular or Ethernet) and licensed partners - 512 Visual verification IP accounts - 512 Supervised IP accounts - 3,072 Unsupervised IP accounts
Visual display	Touch screen user interface
Industry approvals	
USA	<ul style="list-style-type: none"> - FCC Part 15 Class B - UL1610 (Commercial Burg) - UL864 (Commercial Fire) Technical Specifications - CSFM (Commercial Fire) - NIST Certification for AES 128 bit encryption
Canada	<ul style="list-style-type: none"> - ICES Class B - ULC-S559 (Commercial Fire) - ULC-S304 (Commercial Burg)
Europe	<ul style="list-style-type: none"> - CE Compliance - EN6100-6-3 - EN50130-4 - EN60950-1
Australia/New Zealand	- C-Tick Compliance