

DATE: 01/07/2025 NON-CONSTRUCTION CONTRACT SOLICITATION NOTICE MTA- HQ IS NOW ADVERTISING FOR THE FOLLOWING: SSE #: 0000492965 OPENING/DUE DATE: 02/06/2025 TYPE OF SOLICITATION: IFB DOCUMENT AVAILABILITY DATE: 1/07/2025 SOLICITATION TITLE: PBX Telephone Mgmt. System Maint. & Support **DESCRIPTION:** A contract is needed for the maintenance support and emergency response of the Private Branch Exchange (PBX) central switching system that guides the NYCT phone system. The new PBX system was upgraded under capital contract D-34785 in 2023 with result that new features within the PBX architecture need to be maintained. Funding: 100% Operating Goals: N/A Est \$ Range: \$1M - \$5 M Contract Term: 2 Years ****PLEASE SEE THE ATTACHED SCOPE OF WORK FOR ADDITIONAL INFORMATION**** () PRE-BID CONFERENCE DATE: TIME: () SITE TOUR N/A DATE: TIME: PLACE: FOR MORE INFORMATION, PLEASE CONTACT: PROCUREMENT REPRESENTATIVE: Flerida Erazo EMAIL: ferazo@mtabsc.org

<u>Private Branch Exchange (PBX) Telephone Management</u> <u>System Maintenance & Support</u>

Technical Specifications and Scope of Work

A contract is needed for the maintenance support and emergency response of the Private Branch Exchange (PBX) central switching system that guides the NYCT phone system. The new PBX system was upgraded under capital contract D-34785 in 2023 with result that new features within the PBX architecture need to be maintained.

A central element of the new PBX is the C20 Call Session Controller Service essential to the management of a phone system with more than 35,000 phone lines. The new C20 Service being installed under Capital Contract D-34785 will serve to assist in the transition of the legacy PBX network to a modern, fully virtualized, IP core. The Virtual C20 allows NYCT to migrate the legacy Nortel telephone switches to a modern platform that leverages the latest virtualized software architecture, is fully supported, and reduces operational costs.

The C20 Call Session Controller Service relies on software provided by a firm called Ribbon Communications. Ribbon Communications in the new name of a firm that provided support of the legacy software since 2014, then called GENBAND. Ribbon Communications prefers to work with firms that take responsibility for the administration of its contracts with the MTA, MTA needs a Vendor who is a certified Value-Added Reseller (VAR) for Ribbon Communications to handle administration and contractual matters. The contract provides for the ongoing support of the Ribbon C20 system for two (2) years.

The Vendor shall provide a package of maintenance support for all Ribbon-provided equipment hardware and/or software to support the NYCT's PBX system in accordance with the terms and conditions of this Scope of Work.

Under this agreement, NYCT shall provide the Vendor access to its systems subject to the latest cybersecurity protocols, in return for which the Vendor shall be responsible for all maintenance tools, record keeping, diagnostic tools and remote access required to provide these services. All remote access shall be secured and approved by NYCT with multiple password levels and audit trails of all activities.

The Vendor shall provide detailed, quarterly and annual (roll up) reports on all contracted services. All reports will be jointly developed for content and format.

Section 1: Repair and Replacement of Defective Hardware

1.1 Centralized Exchange of Defective Hardware

The Vendor shall provide NYCT with a new or repaired functionally equivalent replacement for any defective PBX equipment including the SL 100 PBX equipment at remote sites, new IP gateways, C20/A2core equipment and PBX equipment (see List in Attachment I). Under this agreement, NYCT will perform all initial identification, removal and replacement of defective equipment hardware with vendor support. The Vendor shall accept designated defective components from the NYCT at a designated exchange location within the NYCT network coverage area.

1.1.1 Routine Service & Repair

The Vendor shall ship within ten (10) business days of receipt of defective Field Replaceable Units ("FRUs") at the designated Vendor repair depot either of the following:

- A functionally equivalent replacement for NYCT's defective parts
- The defective component fully repaired and tested.

The Vendor will provide NYCT a replacement part for any covered component that can no longer be obtained. A per port uplift will be proposed in the event that any covered component can no longer be obtained. Once the uplift is contractually enacted, defective hardware for which a like for like component cannot be secured, will be replaced with the current commercially viable replacement at no cost to NYCT.

If the replacement or repaired hardware is not received by NYCT within thirty (30) days of turnover of the defective hardware to the Vendor, NYCT may require the Vendor to provide a fully functional equivalent to NYCT within twenty-four (24) hours of notifying the VAR at no additional charge to NYCT.

1.1.2 Emergency Service

In accordance with a RTF (Return to Factory) Repair plan for Emergency Service, upon an Emergency replacement designation (E1 or E2) request made by the NYCT Project Manager, the Vendor shall ship a replacement hardware component within 24 hours of NYCT's request for emergency service subject to availability of parts. Such emergency service shall be available to NYCT 24 hours a day/7 day a week and shall be deemed to continue until declared to be resolved by the NYCT Project Manager. The Vendor and NYCT shall agree upon an appropriate surcharge to the routine service rates; agreed upon and recorded by MTA Procurement. For further description of Emergency Response, please see

1.2 Replacement of Defective Hardware

1.2.1 Routine Service

Subject to the purchase of a Onsite Spares, at the request of NYCT following initial inspection by NYCT forces, the Vendor shall be given the responsibility for the troubleshooting and isolation of the root cause of the identified issue. Upon notification by the NYCT that a problem exists and to the extent NYCT permits such access, the Vendor

shall utilize pre-designated remote access to diagnose troubles, dispatch personnel to the appropriate locations and replace any defective hardware as scheduled by NYCT. Routine service calls shall be provided from 8 AM to 5 PM on weekdays, exclusive of mutually accepted designated holidays.

1.2.2 Emergency Service

When an emergency case is declared by NYCT, the Vendor shall evaluate if the trouble constitutes an E1 and/or E2 defection. In both cases, the Vendor shall provide 24/7 response as defined in section 1.1.2. In extreme circumstances where telephone support, remote diagnosis and all other means of restoring product operation fail, if NYCT requests it, and if it is determined that on-site support is necessary and appropriate, the Vendor will dispatch a trained and qualified technical support engineer to NYCT's premises in order to facilitate diagnosis. If the Vendor determines that the reported problem is caused by reasons not attributable to manufacturer's technology, the Vendor will invoice NYCT for the Vendor's then-current time-and-material fees plus associated travel and living expenses.

The Vendor shall commit to on-site response within four (4) hours of notification pursuant to the purchase of manufacturer Onsite Support program.

1.3 General Hardware Repair and Return Requirements

All repaired hardware shall be warranted by the Vendor for ninety (90) days from receipt by NYCT. Repair and return is included as part of the support plan purchased for that annual term.

The Vendor shall be responsible for all pick-up and return delivery to a designated NYCT location.

SECTION 2: Technical Assistance

2.1: Network Operations Support Services

For the purposes of providing a package of technical support services for all equipment hardware and software procured by this Contract, the Vendor shall establish a Technical Assistance Center (TAC) accessible 24/7 by NYCT to assist in addressing the E1, E2, and Business Critical (i.e. service affecting the potential to lose service, vulnerability due to no redundancy) cases under the support plan, plus 7x24 access to the support portal provided under manufacturer's plan This TAC shall have the expertise required for all the products. This may include the Vendor's utilization of other manufacturers' TACs as required. As required, the NYCT Project Manager may request evidence that that the vendor's TAC shall have all necessary tools and documentation to diagnose and resolve any hardware and/or software problems encountered by PBX Centers.

2.2 Emergency Support

The TAC shall serve as the prime vehicle for response to any emergency situation as reported by NYCT on a 24/7 basis. Emergencies are defined as any problem that significantly degrades (as judged by NYCT) or interrupts service, causes the loss of redundancy for one or more of the PBX Systems, or the loss of monitoring capability for any Alarms that align to the manufacturer's definitions for E1, E2, and Business Critical case severity. The TAC shall respond by telephone and/or remote access within one (1) hour and ensure continuous support until the problem is resolved or a satisfactory (as judged by NYCT) resolution is approved by NYCT and will remain available until the event is resolved.

If NYCT personnel are performing the hardware replacement function, the Vendor shall provide recommendations of actions necessary to restore the System to operational stability for NYCT to act upon. If the Vendor is providing the maintenance staff, their personnel will perform all remote actions as scheduled by NYCT.

2.3 Routine Assistance

For all non-emergency support requests, the Vendor shall respond within twenty-four (24) hours remotely via telephone or remote access to initiate diagnostic analysis, Monday to Friday during normal business hours.

2.4 Technical Information Service

The Vendor shall be available to provide technical information support to NYCT for all hardware and systems including equipment and system integration. This information may include requests by NYCT for information regarding the utilization of all equipment and systems, expansion, reconfigurations, new installations and preventive and remedial maintenance. The Vendor shall respond to all such requests within ten (10) business days and recommendation may include references to provide documentation and manuals. The Vendor shall provide on a regular (monthly or quarterly) basis, all available information, product upgrade information, discontinuation notices, and new product information.

2.5 General Technical Service Requirements

The Vendor shall provide online access to Case history to provide post-resolution report on each problem including resolution, quantity of TAC hours utilized (subject to request), recommendations for prevention of subsequent re-occurrences and other pertinent information.

The Vendor may utilize the support centers of other manufacturers, but NYCT will utilize the Vendor's TAC as primary point of contact. NYCT may agree to interface directly with other TACs on a per problem/incident basis.

SECTION 3: On-Site Support

In cases when it is not possible or practical to provide remote assistance, the NYCT may direct the Vendor to provide on-site technical assistance on an as needed basis during the regular hours or after hours. In these cases, at the request of NYCT, the Vendor shall provide personnel to perform a variety of maintenance, administrative, remedial and installation functions. No need for an onsite residential technician to be provided In the event on site hands on support is needed, the vendor will supply a technician from the local area with all expenses paid for by the vendor. During an NYCT declared emergency situation, NYCT may request the Vendor to supply personnel with forty-eight (48) hours notification.

3.1 Field Support

NYCT requires that all responsibilities included in Section 1.2, but shall also include all necessary maintenance and operating functions including preventive maintenance and PBX circuit provisioning and installation functions at all or pre-designated portions of the PBX System

NYCT can contract personnel capable of providing all necessary maintenance and operation support for the Radio Base Station System. Personnel can be contracted for business hours or off-hour support as pre-designated by NYCT. Personnel can be utilized as Command Center or field support.

3.2 System Administration Support

NYCT can contact personnel to perform specific or all system administrative functions for all Management Systems provided under this Contract. Functions shall be performed during normal business hours and include all system backups, maintenance, configuration, database updating, and other manufacturer recommended functions. Emergency off-hour support shall be available on an hourly basis.

3.3 On-Site Support General Requirements

The Vendor's personnel shall attend all NYCT required safety training prior to beginning assignments.

All personnel provided by the Vendor for on-site support shall be pre-approved by NYCT based on resume and interview if requested.

SECTION 4: Software/Firmware Support

The Vendor is responsible for ensuring that all equipment and systems provided are maintained at equivalent or improved performance standards. This includes all software and firmware incorporated into the various hardware and managements systems. The Vendor shall ensure that all software and/or firmware are maintained at revision levels that ensure NYCT of all manufacturers' support for the duration of the Contract and are consistent with MTA cybersecurity standards.

4.1 Remedial Work

The Vendor shall provide all necessary software and/or firmware patches/ fixes/modifications, and software updates notifications required to resolve problems and performance defects with NYCT's software and systems including element management systems and their incorporated software subject to status of that software load and life cycle support policies. For all problems that NYCT declares to be affecting service or reliability, the Vendor shall provide resolution as soon as the fix is available. For any problems on software that cannot be resolved within five (5) days (not business days), the Vendor shall propose and provide an alternative restoration solution to be implemented immediately following NYCT's approval. NYCT may choose to implement the restoration solution itself. Resolutions may be part of a software and/or firmware release upgrade. For non-service or redundancy affecting problems, the Vendor shall advise NYCT regarding the solution and time frames for implementation. Resolution of these problems shall not exceed sixty (60) days, except for Minor (i.e. log or service report issues that have little bearing on functionality) issues, unless agreed to by NYCT based upon a written commitment and roll out schedule.

4.2 Software/Hardware Upgrades

The Vendor shall include a package of software and firmware upgrades necessary to maintain the procured network and all hardware systems at the current (supported) standards of all incorporated manufacturers. Release upgrades shall be provided in an annual basis with the option of one intermediate 'fix' release within that year, subject to the approval of the NYCT Project Manager. All upgrades shall be tested and approved per applicable manufacturer specifications. NYCT shall review and approve all upgrades prior to installation and activation, with the goal of minimizing disruptions of service; to that end, the Vendor shall work with the NYCT Project Manager to minimize phone system interruption. Upon the determination of risk by the NYCT Project Manager, NYCT may exercise the option of performing required upgrades with its own in-house forces.

4.3 Licensing

The Vendor shall ensure that all software licensing agreements are maintained for the duration of this Agreement.

5.0 Support

The vendor recognizes three (3) life cycle categories of software loads: Active, Inactive and Retired. The following table shows the level of technical support availability while under the support plan at each stage. As noted above, support plans may be renewed during the GA, MD, and EOL product life cycle stages at agreed upon commercial terms. Individual software

Software	Technical support	E1 / E2	Business	Minor
life cycle	availability	Recovery	Critical / Major	Resolution
milestone			Resolution	
Active	Fully supported by the			
	Technical Support &	Standard	Standard	Standard
	Emergency Recovery	Performance	Performance	Performance
	team. Software updates	Objectives	Objectives	Objectives
	and patches as required.			
Inactive	Supported by the			
	Vendor's Technical			
	Support and Emergency			
	Recovery team. Vendor			
	will consider Software	Stan land		Standard
	Updates and Root Cause	Standard	Standard	
	Analysis (RCA) for E1	Performance	Performance	Performance
	and E2 severity	Objectives	Objectives	Objectives
	emergency outages and			
	Mutually Agreed to			
	Business Critical			
	severity issues only.			
Retired	The software load is at the Retired stage of the life cycle and is no longer fully supported. The Retired load is not orderable. The Retired load is not patched and RCA is not available. Remote Technical	Performance Objectives not supported	Performance Objectives not supported	Performance Objectives not supported

releases will be designated as either, Active, Inactive, or Retired during a product's various life cycle stages.

Software	Technical support	E1 / E2	Business	Minor
life cycle	availability	Recovery	Critical / Major	Resolution
milestone			Resolution	
	Recovery support are available by the Vendor but are limited.			

The Vendor recognizes three (3) life cycle categories relative to hardware products:

- Generally Available (GA): Product is being manufactured and may be ordered anytime, with standard lead times and warranty. Standard repair & return is provided. The Vendor maintains version control, feature revisions, patch-backs, etc. The support plans are available for purchase and full support is offered.
- Manufacture Discontinued (MD): Product is no longer manufactured. It may be available for order from the Vendor. Repair & return is provided depending on the ability to perform, using components and parts in existing inventory to customers under the support plan. If such replacement parts are no longer available, manufacturer will attempt to repair the customer card itself in a same for same (same serial number) basis vs. like for like (replacement unit may be used). Support plans are available for purchase. The level of support may have some limitations with regards to certain deliverables.
- End of Life (EOL): The product has reached the end of the life cycle and is no longer available. The product is not manufactured, it is not inventoried, and recertification is not available. Hardware repair or replacement is also not provided under a standard plan.

The Vendor may declare independent MD and EOL dates for hardware compared to a software release or product platform. Hardware MD and EOL dates may be issued for individual FRUs, a series of FRUs, or a complete hardware platform. Support services for hardware are subject to End of Life (EOL) and Manufacturer Discontinued (MD) policies and the status of the

products included within NYCT's installed base. Vendor offers hardware repair support during a FRUs' General Availability and Manufacture Discontinuation life cycle phases.

Over the course of the contract, the Vendor will provide Emergency Recovery and Remote Technical Support for all peripherals (XPM, LCM, LGE) maintained as part of the C20/G6 solution subject to purchase of a manufacturer support plan by NYCT from the Vendor. The Vendor will address software fixes subject to the Life cycle status of the core C20/G6 software release that is implemented at the time of any issue (i.e., if the C20/G6 system is running an Active software release. The Vendor will address software fixes, as required to address covered peripherals. The Vendor will provide repair support for covered GA/ MD peripherals and provide spares kits for purchase for EOL FRUs that are no longer repairable

To ensure service continuity regardless of EOL component status, the Vendor will offer a "Critical Spare Parts Kit". Pricing and contents of the spares kit will be an attachment to the applicable agreement between NYCT and the Vendor. The Vendorwill address NYCT's needs and will use every effort to repair or replace the defective equipment. In certain cases (e.g. obsolete equipment) a same-for-same release may be required to facilitate the repair. The Vendor will use commercially reasonable efforts to provide repair services on Product which has been declared, to have reached EOL. The repair shall be limited to restoring Product to a working condition at the same revision level (i.e., no Engineering Changes or Upgrades) as when received. Vendor shall not be liable for any damages which may result from Customer's continued use of the repaired EOL Product. In certain cases, there may be FRUs that can no longer be repaired.

6.0 Other Supporting Agreements

In addition to the C20 Call Session Controller Service the vendor shall provide the agreements with the following vendors for operating subsystems:

6.1 Real Time Monitors, Inc, (RTMI)- for the Switch Expert Management Application. Switch Expert (SE) is an IP-based client/server network element monitoring application that utilizes Advanced Encryption Standard (AES) strong encryption required to meet the Telecommunication Management Network (TMN) mandatory requirements. The application provides monitoring and management of the Call Detail Records (Billing), Quality of Service (QOS), System Events (Alarms), Traffic Analysis, Secure System Access and integrated VB-Scripting. The traffic module provides short/long-term traffic trending statistics essential for proper provisioning of trunk groups, lines modules and remote switching sites.

6.2. Vendor Responsibilities – for the first call and incident management support of the trouble ticketing system, including alerts related to the RTMI Switch Expert network monitoring platform. Vendor shall also have responsibility for updating ticket status upon resolution by the assigned vendor or NYCT resources.

6.3 Kynetic- for the integration and configuration of the Cisco ACI Virtual Pod (Vpod) in the current PBX array which requires that this firm remain incorporated into the maintenance team within the duration of this contract.

6.4. Sotel – for the Terminal servers that support and assisting the management of the system which requires that this firm remain incorporated in the maintenance team within the duration of this contract.