Attachment E – CHE Technical Requirements

This Technical Requirements section is comprised of a series of tables. Each table contains specific requirements, applicable to a particular aspect of the associated solution, as indicated by the heading immediately preceding each table. The Respondent is required to clearly mark one (and only one) of the three right-most columns (Complies, Does Not Comply, Partially Complies) for each requirement, as follows:

- **Complies** The proposed solution does, today (or will, at the time of contract award), fully satisfy the requirement.
- **Does Not Comply** The proposed solution does not, today (nor will it, at the time of contract award), substantially satisfy the requirement.
- **Partially Complies** The proposed solution does, today (or will, at the time of contract award), substantially (though incompletely or, perhaps, in an alternate way) satisfy the requirement.

Following each table is a space for the Respondent to add additional information supporting, or elaborating upon, the compliance declaration for the requirements in the table. While there are no limitations on the extent of this additional information, such information should be focused on the specific requirements being addressed. Concise details and brevity are encouraged. It is asked that, if no additional information is being provided for a particular table of requirements, that the Respondent include a statement to that effect (e.g., "N/A," "None," "No details provided," etc.) to confirm that the lack of supporting information is deliberate and not an oversight.

By checking this box, you acknowledge you have read and understand.

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1 CALL-HANDLING ADMINISTRATION

1.1 CHE Network

Requirements:	lies	Not ly	lly lies
	Comp	Does I Comp	Partia Comp
1. The solution shall align with NENA STA-010.3b-2021, <i>Detailed</i> <i>Functional and Interface Specifications for the NENA i3 Solution</i> , (or its successor document, when ratified).			
2. The solution shall have diverse entrance facilities for aggregation sites (if different than core sites), core sites, and hosted call-handling facilities.			
3. Primary (of at least two) connection into each facility shall be terrestrial (copper or optical circuit); secondary connection(s) may be wireless (e.g., long-term evolution (LTE), microwave, carrier-diverse fiber, etc.).			
4. The solution shall offer network connectivity options to support call and data delivery to existing emergency communications district (ECD) or agency mobile command and control assets.			
5. The solution shall use open standards.			
6. The solution shall use District-provided SIP URIs for all calls and transfers.			
7. The solution shall support and enforce quality of service (QoS) marking using Differentiated Service Code Point (DSCP).			
8. The solution shall provide network traffic convergence of less than 54 milliseconds (ms).			
9. The solution shall maintain a Mean Opinion Score (MOS) of 4.0.			
10. The solution shall scale to support growth by 50% without replacement of any critical hardware component.			
11. Failure of any single instance of a hardware or software element, or physical connection shall not impact overall solution performance.			
12. All network-connected elements shall support at least two redundant network interfaces with automatic failover between them.			
13. All powered devices shall include a minimum of two redundant power supplies (each shall be able to power the device alone) that would be connected to separate circuits OR be connected to a power-transfer			

device that allows a single power supply to be connected to two isolated power sources (i.e., circuits) with automatic, uninterrupted failover, in the event the primary circuit fails.		
14. The Respondent proposed solution(s) will meet the requirements in		
<u> Appendix A.2 – IP Network Measurement and Reporting Requirements</u>		
of this solicitation package.		

1.2 Security

Requirements:		Complies	Does Not Comply	Partially Complies
1. The Respondent shall describe how its security in-depth ap embodies the best practices outlined in the latest version of <i>NENA Security for Next-Generation 9-1-1 Standard (NG-SE</i> whether security is treated as an integral function of each s from the initial design stage or if security is treated holistic separate overarching functional element of the solution.	pproach NENA 75-001, C(), and solution element ally as a			
2. The Respondent shall include a security plan (physical, app network).	plication, and			
3. The solution shall utilize encryption in all communications network.	across the CHE			
4. The Respondent shall ensure that all components and/or fue elements providing call-handling and/or NG9-1-1 services, contract from this solicitation, carry credentials traceable PSAP Credentialing Agency (PCA).	unctional under a to the national			
5. The Respondent shall have a credentialing plan/process for entities with staff requiring access to any elements or servic a part of any contract resulting from this procurement.	r external ces provided as			

6.	The Respondent shall perform proactive analysis of the network for vulnerabilities including independent security audits of the solution.		
7.	The Respondent shall have a defined continuity of operations (COOP) plan as well as a disaster recovery (DR) plan and make those plans available for review at GCRECD's request.		
8.	The Respondent shall provide access reports from facilities (physical access) down to the individual device level (physical or virtual access), upon request, when a service-impacting issue has occurred.		
9.	The solutions shall require multifactor authentication for any access to externally accessible portals, user interfaces (UIs), etc. (Policy Routing Function [PRF] portal, reporting portal, system dashboards, etc.).		
10.	The Respondent shall describe security software update policy, frequency, and procedures.		
11.	The Respondent shall describe plan/approach for adopting evolving security best practices.		
12.	The Respondent shall complete the <u>NG-SEC Audit Checklist</u> , and submit for approval, as described in NENA 75-502, <i>Next Generation 9-1-1 Security</i> <i>(NG-SEC) Audit Checklist 75-502.</i>		
	For this procurement, the Respondent must comply with all requirements designated as Required "R" in column labeled "Compliance Finding."		

1.3 Documentation

The Respondent shall provide the documentation that follows for its proposed ESInet, NGCS, or both, as applicable.

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The Respondent shall provide its proposed network design (transitional and end state).			
2.	The Respondent shall provide as-built documentation depicting circuit path and equipment diversity prior to acceptance testing.			
3.	The Respondent shall provide network interface specifications for interoperating with CHE.			
4.	The Respondent shall provide as-built solution design documentation to include configured parameters and policy-routing flow-downs (planned design and actual implemented design).			

1.4 Monitoring and Alarming

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The Respondent shall provide physical access monitoring and reporting for all call handling, ESInet, and NGCS facilities.			
2.	The Respondent shall provide automated network node monitoring and alarming in real- or near-real-time.			
3.	The Respondent shall provide event logging and reporting in real- or near- real-time.			
4.	The Respondent shall provide ability to replicate select alerts to a third- party monitoring/reporting system.			
5.	The Respondent shall provide user-definable notification levels and recipients with text and email delivery options.			
6.	The Respondent shall provide an executive dashboard with (near) real- time updates of tickets and network status.			

1.5 Network Operations Center/Security Operations Center

Requirements:	Complies	Does Not Comply	Partially Complies
1. The Respondent shall provide 24 x 7 x 365 staffed network operations center (NOC)/security operations center (SOC) with hot (preferred) or warm backup.			
2. The Respondent shall provide the ability for users to submit, track, and modify tickets by phone, email, and direct information technology (IT) service management (ITSM) user access for incidents, problems, and changes.			
3. The Respondent shall provide outward notifications and updates of customer tickets through phone, email, and text.			
4. The Respondent shall provide fully documented escalation procedures with contact information for all primary and secondary responsible personnel at all levels of escalation.			
5. The Respondent shall provide reason for outage (RFO) reports and regulatory compliance according to Federal Communications Commission (FCC) standards.	n		
6. Preliminary RFO reports are due to GCRECD within five business days of initial report of issue; final root-cause analysis within 30-calendar days of root cause determination.	of		
7. The Respondent shall provide a media contact for any outage or service failure. The contact information shall be updated annually/quarterly.			
8. The Respondent shall provide service management contact for any outage or service failure.	2		
9. The Respondent shall provide its documented and maintained COOP plan.			

10.	The Respondent shall provide access to technical and executive staff for escalations.		
11.	The Respondent shall provide NOC/SOC staff trained or experienced with 9-1-1 issues with regular refresher/update training plan.		
12.	The Respondent shall provide the ability to access and troubleshoot, diagnose, and repair network remotely.		
13.	The Respondent shall provide the ability and commitment to support the troubleshooting of all service affecting issues, even when it is determined that the root cause of the issue is outside the scope of the Respondent's solution or service. (e.g., provide call traces and log analysis to assist in troubleshooting a third-party CHE location display issue).		

2 CALL-HANDLING REQUIREMENTS

Adopted Standards: The Respondent shall describe the proposal's compliance with the adopted standards listed in this solicitation package, Section 4, Industry Standards.

By checking this box, you acknowledge you have read and understand.

2.1 Common Call-Handling Requirements - Architecture

Requirements:	Complies	Does Not Comply	Partially Complies
 To simplify the procurement process and minimize the number of CHE options to be supported across the region, GCRECD requires any Respondent providing a proposal in response to the CHE portion of this RFP to support the deployment of its solution as Host–Remote. Other deployment models will not be considered. To be clear, a proposal that is not a Host–Remote solution will not be considered. 			

2.2 Industry Standards Evolution

Requirements:	Complies	Does Not Comply	Partially Complies
1. As industry standards evolve, the Respondent's solution shall be upgraded to maintain conformance with the current version of established industry standards. The Respondent's solution shall support new call-handling and security industry standards within 18 months of ratification of applicable industry standards. Conformance requirements apply also to the supporting standards referenced within each standard.	d		
2. As solution updates are made to maintain conformance, the solution shall not abandon services, features, or functionality in place at the time of the solution upgrade. The Respondent must divulge and justify any performance or feature changes prior to the upgrade and report them to GCRECD and the affected ECC(s) for approval.			

2.3 i3 Conformance

The Respondent's solution shall be an i3-conformant call-handling system.

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution shall conform to the latest published/ratified version of NENA STA-010.3b-2021, <i>NENA i3 Standard for Next Generation 9-1-1</i> .			
2.	The solution shall interface with any NENA i3-conformant NGCS and ESInet.			
3.	The Respondent shall provide the number of its operational call-handling installations that utilize Presence Information Data Format Location Object (PIDF-LO), HTTP ¹ -enabled location delivery (HELD), Location-to- Service Translation (LoST), Additional Data Repository (ADR) queries, and other i3 protocols.			
4.	The solution shall function in a legacy 9-1-1 network environment during the transition to NGCS and ESInet stages.			

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.4 Call-Handling Technical Support

¹ Hypertext Transfer Protocol

1.	The Respondent shall provide a 24 x 7 NOC/SOC for reporting and escalating software and hardware issues beyond Tier 2.		
2.	The Respondent shall provide a redundant/secondary/backup NOC/SOC or equivalent support capabilities and capacity in the event the primary center is offline or otherwise unusable.		
3.	The Respondent shall provide a NOC/SOC COOP that provides for situations when NOC/SOC staff are unable to work onsite (such as the COVID-19 pandemic environment).		

2.5 Solution Validation

Requirements:	Complies	Does Not Comply	Partially Complies
1. At the discretion of GCRECD, The Respondent shall ensure independent third-party validation of all mandatory solution requirements and feature functionality prior to cutover of the site.			
2. The solution shall provide transparency and access to all SIP messaging, call detail records (CDRs), key performance indicators (KPIs) (e.g., MOS, delay, jitter, and packet loss at ingress and egress of delivering network), call logs, and any other data determined to be necessary in order to verify compliance with contractual obligations or to troubleshoot issues.			
3. The Respondent shall provide documentation of completed results from acceptance testing.			

2.6 Multi-Tenant capability

The Respondent's solution shall support partitioning of tenants' (i.e., agencies') call-handling resources.

Requirements:	Complies	Does Not Comply	Partially Complies
1. All GCRECD ECCs shall be able to create their own unique set of configurations (e.g., agent identifications [IDs], roles, permissions, and groups, screen layouts, speed-dial catalogs, management information system [MIS] reports, system status screen layouts, etc.) that are not accessible to any other ECC configured in the solution.			
2. Authorized GCRECD administrative personnel shall have full visibility into the enterprise, including configuration control and reporting.			

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.7 Integrated Text-to-9-1-1

The Respondent's solution shall support an integrated short message service (SMS)-based text-to-9-1-1 solution via SIP/Message Session Relay Protocol (MSRP).

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The Respondent shall explain how text calls are received, queued, answered, and tracked in the system.			
2.	The Respondent shall explain disposition of attached multimedia and how text calls are handled by the MIS.			
3.	The Respondent shall explain how text calls are transferred and shared, as well as any limitations.			
4.	The Respondent shall provide examples of the applicable UIs (e.g., screenshots).			
5.	The Respondent shall provide the ability to text from 9-1-1.			
6.	The solution shall be able to accept SMS delivery via ESInet connection (i.e., not require a separate connection for SMS delivery).			
7.	The Respondent shall describe SMS foreign language translation capability.			

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Describe if your solution accepts SMS message from alarm companies. Add additional lines as needed.

2.8 Real-Time Text

The Respondent's solution shall support real-time text.

Requirements:		Complies	Does Not Comply	Partially Complies
 The Respondent shall describe plans for supporting real-time text-to-9-1-1 sessions as a part of Its solution or explain roadmap to offer this feature in the future. 	e			
 If not currently developed, the Respondent shall provide details of when this capability will be included in the proposed solution as a no-charge upgrade/deliverable. 				

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.9 User Profiles

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The Respondent shall provide user profile settings, which are retained between logins, during upgrades, and between sessions (i.e., logoff and return next day).			
2.	Profiles shall be stored on the network and be available from any workstation on the same call-handling system.			
3.	The solution shall be capable of establishing skills-based profiles.			
4.	Access to call-handling assets (e.g., trunks, lines, queues, speed dials, configurations, screen layouts, etc.) may be controlled by a user's profile.			

2.10 Redundancy, Reliability, Availability

The Respondent's proposed solution shall satisfy the redundancy, availability, and diversity requirements that follow.

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution shall automatically (i.e., without manual intervention) transfer or failover core processing functionality upon detection of a problem that impacts the system's ability to meet the 99.999% service level requirement (SLR).			
2.	During such an event, call-handling capacity and performance shall not be degraded.			
3.	It shall be possible to manually switch core-processing functionality back to its normal operating state, as well as to have the system automatically recover and resync once the problem is corrected.			
4.	The Respondent shall provide a detailed description of how the solution achieves 99.999% availability.			
5.	Core-processing functionality may be distributed across two or more call- handling centers (CHCs) provided (at the tenant ECC's discretion) by either the Respondent or the ECC(s).			
6.	Each CHC shall have sufficient configured capacity to support 125% of busy- hour 9-1-1 call volume and call-mapping functionality for all ECCs served by that call-handling system.			
7.	The solution shall support the use of laptops as fully functional call-handling workstations with virtual private network (VPN) capability to provide remote call-taking via FirstNet or other broadband connectivity.			

Requirements:	Complies	Does Not Comply	Partially Complies
8. The Respondent shall describe the solution's hot-seating capabilities (i.e., the ability for a telecommunicator from one ECC or agency to login at a workstation at a different ECC or agency, provided both ECCs/agencies are co-tenants on the same system, and have their "home" assets [e.g., trunks, lines, queues, speed dial lists, screen layouts, map, etc.] available at the other ECC).			

2.11 Security

Ree	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution shall comply with NENA 75-001.1, <i>Security for Next-Generation</i> 9-1-1 Standard (NG-SEC). The Respondent shall detail how its solution addresses the requirements of the following sections of the standard:			
	a. Section 6 – General Security.			
	b. Section 7 – Safeguarding Information Access.			
	c. Section 9 – Network and Remote Access Security Guidelines.			
2.	The Respondent shall describe CHE security software update policy, frequency, and procedures (include frequency of antivirus updates).			
3.	The Respondent shall describe policy/approach to independent system security audits.			

2.12 Long-term Availability

The Respondent shall commit to long-term availability.

Requirements:	Complies	Does Not Comply	Partially Complies
1. The Respondent shall provide 12 months' (minimum) advance written notification to GCRECD for any end-of-life (EOL) or end-of-support (EOS) component, with a plan for how the affected component(s) will be replaced without affecting service.			
2. The proposed solution shall be supported by the manufacturer(s) for a minimum of five years (plus any optional contract extensions) from the date of full system acceptance by GCRECD.	n n		

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.13 CAD Interoperability

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution shall support the computer-aided dispatch (CAD) system interface as described in NENA-STA-027.3-2018, <i>NENA E9-1-1 PSAP Equipment Standards</i> .			
2.	The solution shall support both serial and IP-based connections.			
3.	The solution shall support a bi-directional interface with the CAD system.			
4.	Respondents' solution shall detail the process to import and export phone book data from the CHE into CAD and vice versa.			

2.14 Location Information Server/Location Database

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution should support interface(s) with the Location Information Server (LIS) and Location Database (LDB) as defined in NENA-STA-010.3b-2021, <i>NENA Detailed Functional and Interface Standards for the NENA i3 Solution</i> , (or its successor document, once published).			
2.	The Respondent should describe how the proposed solution will address any transition period, during which both legacy automatic location identification (ALI) services and i3-compliant LDB/LIS services may need to be accessed by the Respondent's call-handling solution.			

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.15 ECC Hardware

Requirements:	Complies	Does Not Comply	Partially Complies
1. All ECC hardware (e.g., monitors, keyboards, mice, headsets, phones) must be new and covered by (extended) manufacturer warranty for no less than five years from the date the device is placed into operation.			

Requirements:	Complies	Does Not Comply	Partially Complies
2. Whenever supported by the device manufacturer, all servers, switches, routers, firewalls, and other devices within the solution shall be configured with redundant power supplies and redundant network interfaces.			
3. The Respondent shall work with interested ECCs to interface/integrate Host- Remote positions in their existing mobile command and control assets with wireless ESInet connectivity to the NGCS for call delivery.			

2.16 Human-Machine Interface (HMI)

Ree	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution shall comply with NENA 54-750, <i>NENA/APCO Human Machine Interface & PSAP Display Requirements</i> , and provide an explanation of any areas of non-compliance with the standard.			
2.	If a call is default-routed or otherwise diverted to a destination other than the normally intended destination, the call-handling solution shall recognize and present the originally intended destination and the reason why the call was diverted (reference sections 3.3.CC of NENA 54-750).			

2.17 Distinctive Ring Tones

Re	juirements:	Complies	Does Not Comply	Partially Complies
1.	The solution shall provide a ring tone for 9-1-1 calls that is distinctly different than the ring tones for administrative calls and text messages.			
2.	The solution shall provide a ring tone for text messages that is distinctly different than the ring tones for administrative and 9-1-1 calls.			
3.	The solution shall support user-selected, distinctive ring tones for each automatic call distribution (ACD) queue or call type.			
4.	The solution shall provide distinctive ring tones to be customized by agent role or login.			

2.18 Conference Controller

The Respondent shall support the conferencing capabilities that follow.

Red	quirements:	Complies	Does Not Comply	Partially Complies
1.	The conference controller shall enable the telecommunicator to add an outside caller or inside caller to an in-progress "live" call while remaining on the line, with no limitation as to what type of call the telecommunicator is handling.			
2.	The conference controller shall automatically control the audio levels (AGC) of the calling parties so that no degradation of voice quality occurs.			
3.	The original telecommunicator shall be able to mute/unmute (i.e., disable/enable the microphone of) any party on the conference.			
4.	The original telecommunicator shall be able to deafen/undeafen (i.e., disable/enable the earpiece/speaker of) any party on the conference without muting that party's audio (i.e., allow the telecommunicator to speak to others on the conference, without that party hearing, while still able to hear that party).			
5.	The original telecommunicator shall be able to select and drop any party from the conference.			
6.	The original telecommunicator, or any of the conference parties, shall be able to drop out of the conference without disconnecting the original caller.			
7.	The conferencing feature shall support, at a minimum, any combination of up to six parties.			

2.19 Call Monitoring

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution shall allow authorized ECC personnel to listen quietly to another telecommunicator's live conversation.			
2.	The monitoring feature shall be controlled by the authorized personnel's credentials.			
3.	Monitoring shall include the option as to whether the telecommunicator being monitored is made aware (visually or audibly) when their call is being monitored.			
4.	Monitoring shall not degrade the audio quality of the call.			
5.	The Respondent shall describe its options, or plans, for supporting a call- monitoring-like functionality for text-to-9-1-1 sessions.			

2.20 Call Barge-In

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution shall allow authorized ECC personnel to listen quietly and mute/unmute (barge-in) while listening to another telecommunicator's live conversation.			
2.	The feature shall be activated by utilizing a mouse or an easily invoked keyboard command.			
3.	This feature shall not degrade the audio quality of the call.			
4.	This feature shall be configurable to provide a tone to announce the barge-in.			
5.	The telecommunicator or supervisor is then part of a three-way call with the caller and original telecommunicator.			
6.	The Respondent shall describe options or plans for supporting a barge-in-like capability for text-to-9-1-1 sessions.			

2.21 Callback

The Respondent's solution shall support the callback capabilities that follow.

Ree	quirements:	Complies	Does Not Comply	Partially Complies
1.	Callback of any 9-1-1 "call" (i.e., wireline, wireless, telecommunications device for the deaf/teletypewriter [TDD/TTY], text, and Voice over IP [VoIP} callers) shall be based on the calling party number.			
2.	The solution shall utilize the calling party number (CPN) of a 9-1-1 caller to invoke the callback process.			
3.	The solution shall call back wireless or VoIP 9-1-1 calls utilizing the caller's telephone number, located within the PIDF-LO fields and automatically recognize +1 calls.			
4.	The solution shall use the Caller ID (CID) information to allow a callback to an administrative caller.			
5.	Any required dialing prefix digit(s) insertion/deletion (e.g., adding +9 or removing the area code) shall be automatic and not require manual input.			
6.	The callback function shall require only a single mouse click.			

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.22 Abandoned Calls

Requirements:	Complies	Does Not Comply	Partially Complies
	Ŭ	ĂŬ A	L Č

1.	The solution shall provide a visual and audible indication for abandoned calls.		
2.	The solution shall display the number of abandoned calls from the same callback number.		
3.	The solution shall clear the abandoned call count display upon successful callback and answer of the telephone number.		
4.	The solution shall provide a configurable option allowing for an automatic response to an abandoned call.		
5.	The solution shall provide each individual agency with the ability to configure the automatic-callback option to be enabled or disabled by the agency.		
6.	The solution shall allow the system to automatically attempt to return a call and/or text message to an abandoned call, and to prompt the recipient of the call to take an action (e.g., press 1 to notify the agency that no assistance is needed; press 2 to be routed to 9-1-1).		
7.	The solution shall provide abandoned call reports as part of its MIS.		
8.	The solution shall support policy routing of abandoned calls		

2.23 Repeat Callers

Requirements:	Complies	Does Not Comply	Partially Complies
	\sim		

1.	The solution shall provide a caller history feature that displays the date and time of the last 50 to 100 previous calls from the same number and include notes provided by the telecommunicator(s) who handled the previous calls.		
2.	The solution shall identify the repeat-call condition to the telecommunicator.		
3.	The solution shall allow agencies to specify that new calls from the same caller (within a configurable period of time) shall be routed to the same telecommunicator who handled previous call(s), if that telecommunicator is available.		
4.	The Respondent shall describe capabilities for identifying and managing abusive repeat callers (e.g., non-service initialized [NSI] wireless phones, telephony denial of service [TDoS], location).		
5.	The Respondent shall describe system capability to allow call history printing from a snapshot as well as to retrieve printable call history reports. Advise how long call history data will be available for access/reference by GCRECD and its ECCs.		

2.24 Real-time Queries

Requirements:	Complies	Does Not Comply	Partially Complies
 Telecommunicators shall have the ability to query telephone numbers, in real time, with a date/time range to retrieve call information for all calls— 9-1-1 and non-9-1-1—received from a telephone number. 			

2. Telecommunicators do not have to be on an active 9-1-1 call to retrieve this information.

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.25 Speed Dials

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution shall provide separate and multiple speed-dial lists for each group: a. System wide (enterprise). b. ECC/Agency (local operations); and			
	c. Personal (by role or login ID).			
2.	The system administrator shall maintain the enterprise-wide speed-dial list.			
3.	The ECC-wide speed-dial list is managed by the local system administrator at the ECC.			
4.	Telecommunicators will maintain their own personal speed-dial lists.			
5.	The solution shall provide access to speed dials with a minimum of mouse click actions.			
6.	The solution shall provide a hierarchical organization of speed dials (up to at least five levels deep), in which a list entry may refer to a single speed dial or another list.			

7.	The solution shall allow alphanumeric entries, e.g., 1-888-911-HELP.		
8.	The solution shall allow extra digits or codes necessary to automatically dial a number and complete a call based on line type (e.g., long distance access, personal identification numbers [PINs], and star-code transfers).		
9.	Telecommunicators shall not need to take any action to immediately access speed-dial list changes.		
10.	The solution shall associate content (files, links, etc.) with a speed-dial entry to include images, video, floorplans, comments, etc.		
	The Respondent shall describe if and how this content is searchable.		
11.	The solution shall allow display of speed dials in either list form or graphical form (i.e., as a grid of clickable buttons, icons, graphics, and/or images).		
12.	When a speed dial or list is assigned to a button that appears in the telecommunicator UI, the solution shall allow for the display (in a popup window) of a user-selectable set of fields when the mouse pointer hovers over the button.		
13.	The Respondent shall describe how additional information is entered and associated with an entry.		
14.	The Respondent shall describe search functionality (ECC prefers search- as-you-type capability).		
15.	The Respondent shall describe options for uploading and using user- provided icons/graphics/images for speed-dial buttons.		
16.	The Respondent shall support speed-dial entries/buttons that are dynamically populated with agencies (e.g., law enforcement, fire/rescue, emergency medical services [EMS], poison control, animal control) and services (e.g., towing, language translation) based on the caller's location.		
17.	The solution shall support a minimum of eight speed-dial entries per service area (analogous to a legacy emergency service zone [ESZ]).		

18. The solution shall support intelligent manipulation of the dialed digits (e.g area code removal for 7-digit local dialing, adding '+1' for 11-digit dialing etc.).	,	
19. The Respondent shall describe all methods of speed-dial import and expo (e.g., comma-separated values [CSV], Structured Query Language [SQL] XML, etc.).	t	

2.26 Automatic Call Distribution

Requirements:	Complies	Does Not Comply	Partially Complies
1. The solution shall permit trained and authorized GCRECD staff to provision ACD-related queues, routing, and telecommunicator skill settings, as needed.			
2. The solution shall support, at a minimum, the following ACD next- available-telecommunicator selection algorithms on a per-queue basis:			
a. Longest idle.			
b. Top down.			
c. Round robin.			
d. Ring all.			
3. The solution shall provide the ability to change roles without having to log out and log back in.			
4. The solution shall display to a telecommunicator the number of calls in each queue.			
5. The solution shall toggle between "ready" and "not ready." While ready, telecommunicators can receive calls presented through the ACD queues. Conversely, ACD calls are not presented to telecommunicators who are no ready.	t		
6. The solution shall provide the option to require a telecommunicator to select from an agency-defined list of reasons when changing their status to "not ready."			
7. In a "longest idle" ACD environment, switching to "not ready" shall not reset the timer used to determine "longest idle" status.			

8.	The solution shall provide a configurable option of forced (automatic) answer of ACD calls, which connects 9-1-1 callers to the next available telecommunicator, without any action needed on the part of the telecommunicator. Optionally, forced answer can provide an audible alert to the telecommunicator prior to connecting the 9-1-1 caller to the telecommunicator.		
9.	The solution shall provide an optional, automatic, and configurable "wrap up" period following the end of a call. During this period, the telecommunicator is considered unavailable for ACD calls and may perform post-call tasks without interruption. Once the wrap up period expires, the telecommunicator is automatically made available for ACD calls.		
10.	The solution shall support the ability of each telecommunicator to record automatic greetings, in their own voice, for each queue or call type. This enables consistent call answering, as well as giving the telecommunicator a notification of the type of call they are about to handle.		

2.27 Real-time Statistics

Red	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution shall provide an option to each ECC for one or more wall- mounted monitor/television displays for presenting real-time call information as configured by the ECC.			
2.	Display information shall include, at a minimum:			
	a. Name of queue or call type/category.			
	b. Number of calls in queue or call type/category.			
	c. Longest call-in queue or call type/category.			
	d. Number of telecommunicators logged in.			
	e. Number of telecommunicators available for calls.			
	f. Number of telecommunicators not ready.			
3.	The solution shall support configurable thresholds for color and audible alerts.			

An example of the kind of display being requested is shown below.

	Calls			ŀ	Agents	5
	Waiting	Longest	Active	Logged In	Avail	Not Ready
9-1-1	2	0:22	8	9	0	1
Spanish	0	0:00	1	2	0	0
Admin	3	2:13	1	11	0	1

2.28 Call Mapping

In the event that the Respondent's call-handling solution does NOT include call location mapping as a no-charge feature included in the base version of its solution, the Respondent is asked to provide separate pricing for a call location mapping solution that is fully integrated with the call-handling solution, and which meets the requirements below.

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The HMI shall display emergency event location and calling device location information on a map display.			
2.	Map display configuration (e.g., map scale, base map data, iconography, caller/event location display rules) shall be determined by the user's profile/role.			
3.	The HMI shall provide the ability to display updated location (from CHE re-bids) on the map display in real time.			
4.	The HMI shall display z-axis location data received by value or reference.			
5.	The HMI shall display the z-axis uncertainty estimate and estimated accuracy.			
6.	The HMI solution shall convert 3D (x, y, z)-axis information back to 2D (x, y) data if required for the CAD, sometimes known as flattening.			
7.	The HMI solution will implement the NENA 3D GIS specification within 18 months of becoming available, including implementing			

	"fallback" to 2D capabilities for queries to any direct or recursive ECRF that does not have 3D support.		
8.	The HMI shall provide the ability to accept or reject the update request results.		
9.	If previous calls/incidents are shown on the display, the HMI shall provide the ability to configure how long previous calls/incidents will remain on the display before being automatically removed/hidden.		
10.	The HMI shall provide the ability to draw and label, modify, and delete geometric shapes or points on the map display.		
11.	The HMI shall provide the ability to make such dynamic features private (i.e., visible only to the creating agent), visible to specific groups (i.e., roles, agencies), or visible to all users.		
12.	Such dynamic features shall be able to be captured and stored for easy reuse.		
13.	The HMI shall have the ability to "zoom" the map display.		
14.	Zoom parameters (e.g., default zoom level when call arrives; appearance of various features, information, iconography, and layers at different zoom levels) shall be configurable based on user role.		
15.	Zoom history shall make it possible to return to the previous zoom level with a single click (up to ten steps back).		
16.	It shall be possible to return to the default zoom level with a single click.		
17.	The HMI shall provide the capability to pan the display.		
18.	Pan history shall make it possible to return to the previous pan location with a single click (up to ten steps back).		

19. It shall be possible to return to the current call location with a single click.		
20. The HMI shall provide the ability to set default geographic information system (GIS) layers that are visible based on user login/role, and to manually select/unselect individual GIS layers for display.		
21. The HMI shall provide the ability to search for a location using either: a) geo-coordinates, b) civic addresses, or c) common place name.		
22. The HMI shall display location search results to the call-taker.		
23. If multiple results are returned, each shall include a confidence/match- score and clicking on a result shall re-center the map on the selected location.		
24. The HMI shall provide the ability to retrieve location information (i.e., address and geo-coordinates) by clicking on a point on the map display.		
25. The HMI shall provide the ability to designate a location as a call/incident location by clicking on a point on the map or selecting it from the list of search results.		
26. The HMI shall provide the capability to display the emergency response agencies associated with a <i>caller's location</i> on the map display.		
27. The HMI shall provide the ability to display the emergency response agencies associated with an <i>emergency location</i> on the map display.		
28. The HMI shall provide the ability to graphically display the accuracy/uncertainty associated with a given calculated position.		
29. The HMI shall support the ability to represent calls on the map with different icons based on class of service/type of call (e.g., wireline, wireless, VoIP, SMS).		

30. The HMI shall support the representation of additional location information for a call based on call type/class of service (e.g., wireless, SMS, VoIP).		
31. The HMI shall provide the ability to answer and manage calls directly from the map.		
32. The Respondent shall describe how its solution integrates with GIS and RapidSOS on the same display.		
33. The Respondent shall describe the process for updating map data and aerial imagery.		
34. The solution shall integrate Google or other platforms that provide street-level views.		

2.29 Training

Requirements:	Complies	Does Not Comply	Partially Complies
1. Proposals shall include options for both train-the-trainer and end-user models with different training content for telecommunicator staff versus supervisors and/or administrators.			
2. Operational training on the call-handling and mapping features and functionality will be provided to all telecommunicators and superusers.			
3. Training for superusers shall also include monitoring, reporting, system health, and performance (MIS).			
4. Training for superusers shall also include GIS and mapping administration.			
5. Proposals shall include options for ECC-specific training at each ECC and train-the-trainer instruction for regional training personnel.			
6. Training schedules shall accommodate 24 x 7 shifts.			
7. All training materials shall be available in digital form.			
8. GCRECD reserves the right to record all training sessions and make available to staff online for refresher and new-agent training at no additional charge.			
9. Training services shall include an onsite trainer/coach in each ECC for a minimum of four hours for each different shift immediately following cutover (on-the-job training/coaching).			
10. The Respondent shall provide a summary/syllabus and duration of each training class so that ECCs can coordinate personnel schedules.			

11.	Training materials shall include quick-reference guides for call-takers (CHE and mapping).		
12.	Training for call-takers shall take place no more than one week prior to go-live (retention issues).		
13.	The Respondent shall describe the suite of training classes available, including in-person and online options.		
14.	GCRECD technician certification training (at manufacturer's site) for two people in two different sessions on different days.		
15.	GCRECD technician training shall include refresher (or new technician) training every two years for the same number of personnel.		

2.30 MIS

Requirements:	Complies	Does Not Comply	Partially Complies
1. Authorized personnel shall be able to run reports specific to their ECC, and other ECCs shall not have visibility into another ECC's reports.			
2. Authorized regional or agency personnel shall be able to run reports on any ECC within their jurisdiction.			
3. Authorized GCRECD personnel shall be able to run reports on any ECC within the District.			

4.	Each ECC shall be provided with a business-grade color network printer for printing reports from the MIS.		
5.	Reports shall support color charts and graphs.		
6.	Authorized personnel shall have the ability to query the data to create and print ad hoc reports.		
7.	Respondent shall provide documentation on the following:		
	a. All built-in reports included in the proposal.		
	b. All additional reports currently available for an additional fee.		
	c. Options available for custom report creation by the manufacturer.		
	d. Options for supplementary training for ECC personnel on ad hoc report development.		
	For each report, the Respondent shall include a description as well as an anonymized sample to show the report's layout.		
8.	The Respondent's MIS documentation shall include a data dictionary and explanations of data fields available for reporting.		
9.	After ad hoc reports have been developed, the solution shall have the ability to save the ad hoc report as a template and to optionally schedule the report for automatic execution.		
10.	The solution shall provide for reports to be scheduled for output to files, printers, or other network locations.		
11.	The Respondent shall describe how its solution can support ECaTS reporting for GCRECD's Verizon Wireless backup and generate reports for misrouted and on hold calls.		

2.31 Instant Recall Recorder

Re	quir	ements:	Complies	Does Not Comply	Partially Complies
1.	The tele	e solution shall support recording at workstations for both radio and ephony.			
2.	The or t	e solution shall support playback of radio and 9-1-1 calls independently together.			
3.	The tha con	e solution shall support the following with single-click playback controls t enable the user to navigate to any portion of the recorded aversation(s):			
	a.	Play.			
	b.	Pause.			
	c.	Stop.			
	d.	Play forward/fast forward (without altering voice pitch).			
	e.	Rewind.			
	f.	Repeat.			
	g.	Skip forward or back a configurable number of seconds.			

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.32 Project Management and Progress Reports

Since no specific call-handling deployment projects will immediately result from the award of this contract, the following project management-related requirements will apply, generally, to any such deployment projects (CHE or Host–Remote) undertaken under a contract.

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	Prior to contracting with GCRECD for call handling, the selected Respondent will provide a <i>high-level</i> project plan and timeline that shows the entire project calculated from the date of contract signature.			
2.	Examples of what shall be included in the project plan, at a minimum, include:			
	a. Data gathering.			
	b. ECC onsite testing.			
	c. Core component installation and testing.			
	d. PBX ² /CHE/mapping and workstation installation.			
	e. Gateway/network interface testing at all ECC locations.			
	f. Location format, update, and discrepancy reporting mechanisms, and interface testing.			
	g. CAD, logging recorder, analog, digital, and IP voice testing.			
	h. Comprehensive test and acceptance plan for all network connections verifying complete functionality with the CHE solution.			
	i. An overview of the approach and typical steps taken to ensure continuity of ECC operations throughout the project.			
	j. Respondent's assigned Project Manager shall provide a Gantt chart project plan			
3.	Within 30 days of contract signing, the selected Respondent will provide a <i>detailed</i> project plan, timeline, and schedule, to the contracting			

² Private branch exchange.

	ECC/agency and GCRECD. This plan shall include the specific approach and steps to be taken to ensure continuity of ECC operations throughout the project.		
4.	The selected Respondent shall facilitate biweekly project calls followed by a written progress report, distributed within 24 hours of the call, that captures the minutes and action item updates from the prior biweekly project call.		

2.33 Systems Integration

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The Respondent shall coordinate and work with the appropriate vendors' technicians for the test and turn-up of CAD, recorder, mapping, radio, and local ECC telephone system interfaces, as needed.			
2.	The Respondent shall coordinate and work with GCRECD's NGCS/ESInet vendor for system integration and testing.			
3.	The solution shall support RapidSOS integration within the CHE and not on a separate display monitor.			
4.	The solution shall provide the ability to translate the 9-1-1 call to a text record or documented dialogue.			

2.34 Change Orders

Requirements:	Complies	Does Not Comply	Partially Complies
1. The Respondent shall submit, in writing, of all change orders.			
2. All change orders require approval by GCRECD prior to performing work, not only those for equipment or services not covered under the contract with ECC.			
3. GCRECD will not accept change orders resulting in additional costs unless additional features are requested by the GCRECD.			

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.35 Service Interruptions and Facility Damages

Requirements:	Complies	Does Not Comply	Partially Complies
1. As the selected Respondent performs the installation and cutover of the equipment, the Respondent shall assure the ECC that there will be minimal interruption to normal business operations.			

2.	Prior to any ECC visit, the Respondent shall provide advance notice to, and obtain authorization from, GCRECD, which reserves the right to alter or suspend the intended schedule for any reason at its sole discretion.		
3.	The Respondent shall be responsible for the repair or restoration of any damages caused by the Respondent, its subcontractors, or delivery personnel to any ECC or agency facilities through the receipt, delivery, installation, or testing of the solution.		

2.36 Storage, Staging, Delivery, and Inventory Control

Requirements:	Complies	Does Not Comply	Partially Complies
1. The Respondent shall be accountable for the storage of materials until such time that the items are to be installed.	h		
2. Neither GCRECD nor GCRECD ECC facilities may be used as a warehouse for uninstalled equipment.			
3. The Respondent shall coordinate with GCRECD for the shipping, staging, and testing of all equipment prior to installation.			
4. The Respondent shall be responsible for ensuring that the equipment is fully staged, configured, and tested prior to delivery to GCRECD.			
5. The Respondent shall arrange for equipment to be delivered onsite as- needed, and the cost for delivery shall be included in the Respondent's proposal.			
6. Receipt, inventory, and movement of material are the responsibility of the Respondent.			
7. The Respondent shall be responsible for the disposal of shipping material, as well as the daily removal of other refuse.			
8. The Respondent shall provide GCRECD with a detailed inventory of all equipment installed on ECC premises, whether purchased by GCRECD or provided by the Respondent as part of a Host–Remote offering.	r		
9. At a minimum, the inventory data shall include where it is installed, manufacturer, part number, serial number, quantity, and model number.			
10. The Respondent shall provide the inventory in hard- and soft-copy format using Microsoft Excel.			

11. The Respondent shall be responsible for all hardware, from its receipt prior to staging until it is accepted by GCRECD personnel in writing.		
12. Any hardware or equipment lost, misplaced, or damaged prior to acceptance will be replaced at the Respondent's sole expense.		

2.37 Code Compliance, Grounding, and Transient Voltage Surge Suppression

Ree	quirements:	Complies	Does Not Comply	Partially Complies
1.	Installation must comply with all applicable national, state, and local codes.			
2.	All metallic circuits (data or voice) shall be equipped with both primary and secondary transient voltage surge suppression (TVSS) devices per industry standards and best practices for telecommunications equipment.			
3.	The secondary TVSS device shall have an operational indicator in the form of a light or audible signal to alert maintenance personnel that the device has been exercised, failed, or the circuit is no longer protected.			
4.	Each ECC where TVSS devices are installed shall be provided an onsite spares kit to assist in emergency restoration.			
5.	TVSS equipment shall comply with UL 497A, Secondary Protectors for Communications Circuits.			

2.38 Pre-Cutover Acceptance Criteria

Prior to cutover, the Respondent shall provide the documentation that follows.

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The Respondent shall provide evidence of the backup of all configuration files and databases for all customer-premise-installed equipment.			
2.	The Respondent shall provide confirmation and documentation of control, monitoring, and alarm solutions.			
3.	The Respondent shall provide an inventory of all Respondent-provided, GCRECD premise-installed equipment to include manufacturer, model, part number, quantity, serial number, and installed location.			
4.	The Respondent shall provide acceptance test plans (ATPs) and documentation reviewed and approved by GCRECD.			
5.	If, during testing, GCRECD staff believe that a solution test fails, it will provide Respondent with a written description of what test failed and why. The Respondent will work expeditiously to resolve the problem, providing an estimated time of resolution.			
6.	The Respondent shall provide final as-built drawings (preferably in editable Visio format) within 30 days of cutover.			
7.	As-built documentation shall include all customer-premise-installed cabling, equipment, and configurations, bringing attention to unique or special deployment details.			

2.39 Cutover Coordination

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The Respondent shall coordinate cutover activities with all service providers and GCRECD personnel.			
2.	A detailed cutover plan, along with coordination conference calls and supporting documentation, shall be provided to all participating parties, at least 45 days before cutover begins.			
3.	The Respondent shall review the cutover plan with GCRECD staff at least 14 days prior to cutover.			
4.	The Respondent shall provide trained and capable technical and functional solution support, and the project manager shall be available and onsite the day of cutover.			
5.	The Respondent shall offer the option of in-person, onsite cutover support for end users to ease the transition to the new system. This shall include at least four hours following cutover.			
6.	The Respondent shall state the length of time technical support staff will be onsite for each cutover.			

2.40 Acceptance Testing

2.40.1 ECC Call-Handling Final Acceptance Testing

Re	quirements:		Complies	Does Not Comply	Partially Complies
1.	GCRECD' that the Ro ECC envir shall be suf The period zero Priori	s call-handling final acceptance testing is intended to validate espondent's solution operates during day-to-day use in each live onment and as asserted in the RFP response. The testing period ficient to demonstrate the solution's performance and reliability. shall be 30-consecutive calendar days with zero Priority One and ty Two faults.			
2.	The selecte Final Acce expected or of the plan weeks to m	d Respondent shall provide a baseline GCRECD Call-Handling ptance Test Plan (including specific test cases, scenarios, and atcomes) to GCRECD and each ECC at least 28 days in advance ned execution thereof and allow each GCRECD ECC a full two odify the test plan to meet their system acceptance criteria.			
3.	If a failure	to comply occurs:			
4.	The GCRE its classific	CD will provide a written notification to the Respondent with ation of the fault according to the four categories:			
	a.	Priority One Fault — A critical system fault that renders the solution even partially inoperable. These faults are unacceptable to the Region.			
	b.	Priority Two Fault — A major system fault that significantly reduces the solution's performance and ability to function. These faults are unacceptable to the Region and must be resolved before the Region will accept the solution.			
	с.	Priority Three Fault — A minor system fault that marginally affects system performance and functionality. These minor faults are operational in nature and only are acceptable while			

		in the final acceptance phase. These faults must be resolved before the Region will accept the solution.		
	d.	Priority Four Fault — A combination of minor system faults and items that are on the punch list. These are items that have minimal or no effect on system performance and functionality, and only are acceptable while in the final acceptance phase. These faults must be resolved before the Region will accept the solution.		
5.	If the Response held at the Parties to the GCRECD's reached with	ondent disputes GCRECD's fault classification, a call will be earliest possible opportunity to resolve the disagreement. hat call shall include GCRECD, the Respondent, and, at s discretion, representative(s) from the ECC. If agreement is not thin 30 minutes, GCRECD's classification will prevail.		
6.	The Respor and Service and shall p	ndent shall remedy the non-compliance per the Service Levels Management Performance Standard sections of the contract rovide written notification of the remedy to GCRECD.		
7.	For any cor restart upo days follow	nditions that reset the baseline period timer, the timer will n GCRECD's written acceptance of the remedy, or five business ing delivery of the remedy, whichever is sooner.		
8.	This procect is achieved Priority Fo the accepta executed, a	lure continues until compliance over the 30-day baseline period (or longer if there remain outstanding Priority Three and ur faults), at which time the cutover will be deemed successful, nce notice (to be defined in the test plan) will be mutually nd services may then be invoiced.		

2.40.2 Call-Handling System Final Acceptance Testing

Definitions for Priority One through Priority Four faults and other terms related to acceptance testing are the same as previously defined in Section 7.40.1, ECC Call-Handling Final Error! Reference source not found..

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	System final acceptance testing is intended to validate overall system performance, especially system-level functionality not otherwise verifiable during individual ECC acceptance testing and includes (but will not be limited to) testing of areas such as the following:			
	a. Inter-ECC transfers and conferences.			
	b. Automatic system failover and maintenance of full system functionality when a redundant element is taken out of service; and			
	c. Alternate routing under functional element and network component failure scenarios.			
	d. High call volume performance.			
2.	System final acceptance testing cannot begin until GCRECD has successfully completed ECC call-handling final acceptance testing. The testing period shall be sufficient to demonstrate the solution's performance and reliability. The period shall be 30-consecutive calendar days with zero Priority One and zero Priority Two faults.			
3.	The selected Respondent shall provide a baseline System Final Acceptance Test Plan (including specific test cases, scenarios, and expected outcomes) to GCRECD at least 28 days in advance of the planned execution thereof and allow the contracting ECC(s) a full two weeks to modify the test plan to reflect their system acceptance criteria.			
4.	If a failure to comply occurs:			
	a. GCRECD will provide a written notification to the Respondent with its classification of the fault according to the four categories.			
	b. If the Respondent disputes GCRECD's fault classification, a call will be held at the earliest possible opportunity to resolve the disagreement. Parties to that call shall include GCRECD, the Respondent, and, at GCRECD's discretion, representative(s) from the ECC. If agreement is not reached within 30 minutes, GCRECD's classification will prevail.			
	c. The Respondent shall remedy the non-compliance per the Service Levels and Service Management Performance Standard sections of the			

	contract and shall provide written notification of the remedy to GCRECD.		
d.	For any conditions that reset the baseline period timer, the timer will restart upon GCRECD's written acceptance of the remedy, or five business days following delivery of the remedy, whichever is sooner.		
e.	This procedure continues until compliance over the 30-day baseline period is achieved (or longer if there remain outstanding Priority Three and Priority Four faults), at which time the cutover will be deemed successful, the acceptance notice (to be defined in the test plan) will be mutually executed, and the call-handling solution will be deemed accepted by GCRECD.		

2.41 Transition Plan

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	Within 30 days of contract signing, the selected Respondent shall provide a detailed transition plan that shall include a full description of the methods and procedures that will be employed to ensure a non-service-affecting transition from the current call-handling environment to the new system.			
2.	The selected Respondent shall provide recommendations considering the complexity of the specific deployment environment.			
3.	This transition plan shall recommend a suggested order for agency migration and provide projected time durations to complete the specific site, based on position count and other information the Respondent has learned of the region's configuration.			

4.	The migration plan shall include a fallback procedure to restore any affected GCRECD remote ECC to a pre-transition operational state in the		
	event of a catastrophic failure.		

2.42 Product Lifecycle Management (PLM)

2.42.1	Software	Release	Management
	Solution	receivabe	in an a serie of the

Requirements:	Complies	Does Not Comply	Partially Complies
1. The Respondent shall describe the frequency of scheduled software releases and the decision-making processes involved in deciding what features and defect resolutions to include in a scheduled release.			
2. Maintenance releases and feature releases shall be provided to all GCRECD ECCs at no cost while a maintenance agreement is in place.			
3. The Respondent shall describe the frequency of defect-resolution software releases and the decision-making processes involved in selecting which software defects to fix.			
4. The Respondent shall provide GCRECD read-only access to the Respondent's defect tracking system in order to track the progress of GCRECD-reported defect resolutions.			
5. The selected Respondent shall provide user training to GCRECD staff, prior to GCRECD final acceptance testing.			
6. The Respondent shall notify and coordinate scheduling with GCRECD whenever solution servicing requires onsite visits. Notification shall occur no less than ten business days before the needed visit and scheduling shall be at the sole discretion of the GCRECD.			
7. The Respondent shall include in its proposal the procedure to manage and track system changes. This is especially important when changes affect the performance of a particular device, and it needs to be returned to its former configuration. The configuration-management procedure shall be available to maintenance personnel and GCRECD staff.			
8. The Respondent shall provide release notes to GCRECD no less than ten business days prior to system upgrades or updates, clearly identifying any new functionality of which GCRECD may wish to take advantage.			

9.	The Respondent shall request authorization from GCRECD no less than ten days prior to performing maintenance, upgrades, backups, restorations, or other system changes that may impact the performance or functionality of the system or service (depending on how the call-handling solution is procured). The only exception to this advance-notice requirement is in cases where an update or upgrade is immediately required to restore a failed or failing service or component.		

2.42.2 Warranty and Monitoring

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	For all software and Respondent-provided, GCRECD-owned hardware, the Respondent shall include $24 \times 7 \times 365$ parts and labor warranty for the duration of the contract (first five years) from the date of final GCRECD acceptance. The Respondent shall provide $24 \times 7 \times 365$ extended warranty (parts and labor) for years six and seven, as options.			
2.	For all software and Respondent-provided GCRECD-owned hardware, warranties shall cover hardware, cabling and connectors, and software, and include 24 x 7 x 365 phone/web support.			
3.	The Respondent shall include 24 x 7 x 365 remote system monitoring and maintenance. The Respondent shall describe its monitoring facilities (NOC/SOC, primary, secondary, backup, etc.) and staffing to both monitor and respond.			
4.	The Respondent shall describe NOC services, including proactive and reactive maintenance plans. Response shall include details regarding the number of certified technicians who will reside within a two-hour drive time to each call-handling site.			

Requirements:	Complies	Does Not Comply	Partially Complies
5. System monitoring shall include a near-real-time portal thro ECC may configure a dashboard-type view for monitoring i activity as well as overall system status and health.	ugh which each ts data and voice		
6. The Respondent shall describe how out-of-warranty items as replaced. The Respondent shall describe the processes and p with the estimated cost for all system components.	re repaired or rocedures along		

2.43 Incident and Trouble Reporting

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The Respondent shall describe the procedures involved for initiating, tracking, communicating status, and resolving trouble reports. The Respondent shall describe all capabilities available with the solution, including remote monitoring, maintenance, troubleshooting, and repair.			
2.	In addition to the built-in capabilities, the Respondent shall describe capabilities to interface with other management systems using standard protocols such as Simple Network Management Protocol (SNMP) or Common Management Information Protocol (CMIP).			

2.44 Escalation Procedures

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	Following cutover, GCRECD may require escalation of an issue for resolution. The Respondent shall provide:			
	a. Documentation of the escalation process along with names, titles, and contact information.			
	b. The after-hours escalation process if it is different from normal work hours.			
	c. The process for updating escalation documentation as personnel changes occur during the contract period.			
2.	The escalation process shall address inclusion of the manufacturer (if other than Respondents) in meetings and discussions with affected ECCs when the Respondent's efforts have not resolved the issue.			
3.	Escalation processes shall describe in detail the procedures for GCRECD regarding resolution of critical defects, including time to resolution and engagement of Tier 3 or Tier 4 engineering and development resources.			

2.45 Software Backup and Restoration

Ree	quirements:	Complies	Does Not Comply	Partially Complies
1.	The Respondent shall perform automatic backups of software, as well as all ECC-specific configurations and databases. The backups cannot affect system performance.			
2.	The Respondent shall describe in detail, in the proposal, the recommended backup schedule on the workstations, servers, and any other customer-premise-installed devices that have databases, operating systems, and/or configurations that may be backed up.			

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.46 Maintenance and Repair History Log

Requirements:	Complies	Does Not Comply	Partially Complies
1. The Respondent shall provide, utilize, and maintain an online history log for all GCRECD sites that tracks all system issues, resolutions, configuration changes, upgrades, etc. that are performed onsite or remotely.			
The Respondent shall describe the process for managing the history log and provide read access to GCRECD.			

2.47 Spares and Advance Replacement

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The Respondent shall include a critical spares kit for all customer-premise- installed equipment. Any spares used out of the kit shall be replaced within 24 hours with tracking information about the shipment provided in advance.			
2.	The Respondent shall describe the plan for maintaining a readily available cache of replacement parts to be available for delivery onsite within the response time frames outlined in <u>Appendix A.1 – Performance Standards and Terms</u> .			
3.	The Respondent shall provide pricing and documentation describing the repair and advance-replacement processes for out-of-warranty solution components purchased (versus leased) by GCRECD.			

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.48 CHE Documentation

Ree	quirements:	Complies	Does Not Comply	Partially Complies
1.	The Respondent shall provide documentation for all user-accessible configurations.			
2.	The Respondent shall provide CHE (versus Host-Remote) technician certification training for interested GCRECD staff who could serve as local hands during emergency situations.			

Re	quirements:	Complies	Does Not Comply	Partially Complies
3.	The Respondent shall provide documentation for an MIS solution, if provided, including:			
	a. Sample reports.			
	b. Report customization and automation; and			
	c. Ad hoc report design, including best practices.			
4.	The Respondent shall provide administrator guide(s) including screen layout customization and speed-dial directory maintenance, import, and export, user account management, etc.			
5.	The Respondent shall provide telecommunicator quick reference cards for call handling, mapping, discrepancy reporting, and other provided systems.			

2.49 Artificial Intelligence and Machine Learning

Requirements:		Complies	Does Not Comply	Partially Complies
1.	The Respondent shall describe the artificial intelligence (AI)/machine learning (ML) capabilities of the proposed CHE system.			
2.	The Respondent shall describe plans to introduce/enhance AI/ML capabilities into the proposed CHE solution.			
3.	The Respondent shall describe opportunities to apply AI/ML technologies and techniques to the analysis of multimedia content delivered to the ECC.			

2.50 Call-Handling Equipment Requirements

2.50.1 Implementation Model

The Respondent's solution shall support the customer premise deployment model for CHE.

Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution must be architected to support a Host-Remote deployment model with geographically diverse host locations.			
2.	The solution shall Include in the design all necessary hardware to successfully integrate with an i3-conformant NGCS and ESInet.			
3.	All equipment must be new. Used, repurposed, or remanufactured equipment is prohibited.			

Use this space to elaborate on the compliance responses to the requirements in the table above. Include any additional information (diagrams, graphs, screenshots, etc.) you think is needed to describe how your solution addresses these requirements. Add additional lines as needed.

2.50.2 Training Specific to CHE

Requirements:		Does Not Comply	Partially Complies
1. The Respondent shall provide GCRECD technician certification training (at the manufacturer's site) for two people in two different sessions on different days.			
2. GCRECD technician training shall include refresher (or new technician) training every two years for the same number of personnel.			

2.51 Call Handling Requirements

2.51.1 Ho	st - Remote	Implement	tation	Model
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Re	quirements:	Complies	Does Not Comply	Partially Complies
1.	The solution may leverage networking assets (building and connectivity) already deployed by GCRECD in places where establishing new facilities may be cost-prohibitive or technically not feasible.			
2.	It is GCRECD's expectation that all hardware and software required for service delivery will be provided as part of the per-position Host-Remote monthly fees, including all necessary edge router/firewall hardware and time division multiplex (TDM) gateways.			
3.	The solution shall be able to interoperate on the same network with other vendors' standards-conformant Host-Remote solutions without interfering with the performance of the other.			
4.	All equipment must be newly manufactured and fully supported by the manufacturer with no published announcements of end of sale, EOL, or EOS as of the delivery date.			
5.	The Respondent shall provide examples of successful in-the-field production cases where they have implemented solutions with other NGCS providers ensuring its solution has a documented track record of interoperability.			

2.52 CHE Performance Standards and Service Level Requirements

Requirements:		Complies	Does Not Comply	Partially Complies
1.	The Respondent shall describe how the proposed solution(s) will meet the requirements and definitions in <u>Appendix A – Performance Standards and</u> <u>Terms</u> of this solicitation package.			
2.	The Respondent shall describe how the proposed solution(s) will meet the requirements in <u>Appendix A.2 – IP Network Measurement and Reporting</u> <u>Requirements</u> of this solicitation package.			
3.	The Respondent shall describe how the proposed solution(s) will meet the requirements in <u>Appendix A.3 – Service Level Agreement</u> of this solicitation package.			