9 Corporate Drive, Clifton Park, NY 12065
Phone: 518.438.6000 / Fax: 518.982.0182
John Michne, Vice President
john.michne@dirad.com

ORIGINAL

Request for Proposal
Nebraska DHHS
Text Messaging Solution
RFP 5965 Z1

Form A
Bidder Contact Sheet
Request for Proposal Number 5965 Z1

Form A should be completed and submitted with each response to this RFP. This is intended to provide the State with information on the bidder's name and address, and the specific person(s) who are responsible for preparation of the bidder's response.

Preparation of Response Contact Information	
Bidder Name:	DiRAD Technologies, Inc.
Bidder Address:	9 Corporate Drive, Clifton Park, NY 12065
Contact Person & Title:	John Michne, Vice President
E-mail Address:	john.michne@dirad.com
Telephone Number (Office):	518-438-6000 ext. 149
Telephone Number (Cellular):	518-505-6912
Fax Number:	518-982-0182

Each bidder should also designate a specific contact person who will be responsible for responding to the State if any clarifications of the bidder's response should become necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required.

Communication with the State Contact Information	
Bidder Name:	SAME
Bidder Address:	
Contact Person & Title:	
E-mail Address:	
Telephone Number (Office):	
Telephone Number (Cellular):	
Fax Number:	

REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM

BIDDER MUST COMPLETE THE FOLLOWING

By signing this Request for Proposal for Contractual Services form, the bidder guarantees compliance with the procedures stated in this Request for Proposal, and agrees to the terms and conditions unless otherwise indicated in writing and certifies that bidder maintains a drug free work place.

Per Nebraska's Transparency in Government Procurement Act, Neb. Rev Stat § 73-603 DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska Contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

_____ NEBRASKA CONTRACTOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Contractor. "Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this RFP.

______I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. § 73-107 and wish to have preference, if applicable, considered in the award of this contract.

_____ I hereby certify that I am a blind person licensed by the Commission for the Blind & Visually Impaired in accordance with Neb. Rev. Stat. §71-8611 and wish to have preference considered in the award of this contract.

FORM MUST BE SIGNED USING AN INDELIBLE METHOD (NOT ELECTRONICALLY)

FIRM:	DiRAD Technologies, Inc.
COMPLETE ADDRESS:	9 Corporate Drive, Clifton Park, NY 12065
TELEPHONE NUMBER:	518-438-6000
FAX NUMBER:	518-982-0182
DATE:	12/26/2018
SIGNATURE:	
TYPED NAME & TITLE OF SIGNER:	John Michne, Vice President

1 Cover page / Response

2 Traceability Matrix

3 Terms and Conditions

4 Sample Documentation

5 pricing / Security whitepaper

1

December 26, 2018

State Purchasing Bureau
1526 K Street, Suite 130
Lincoln, NE 68508

Re: RFP 5965 Z1

DiRAD is pleased to provide a response to Nebraska DHHS for an SMS Text Messaging Solution that DHHS can use to better communicate with their clients. The proposed solution is turn-key and includes the following components:

- Discovery and Business Analysis
- Project Management
- Call flow design and SMS scripting
- Custom design and provision of all web interfaces
- Custom-designed web portal designed with DHHS security policy in mind
- Real time and historical reporting
- Collaborative User and Load Testing
- **Dedicated Short Code**
- Complete documentation as described in the requirements
- Onsite Training

With more than 34 years of experience with developing telecommunications solutions for government entities, DiRAD will leverage best practices and know-how from myriad deployments in the public sector, to provide a state-of-the-art solution that is secure, reliable, and easy to use. We look forward to next steps.

Sincerely,

John Michne
Vice President
john.michne@dirad.com
Phone: 518-438-6000 Ext 149
Fax: 518-982-0182

I. PROJECT DESCRIPTION AND SCOPE OF WORK

The bidder should provide the following information in response to this RFP.

A. PROJECT OVERVIEW

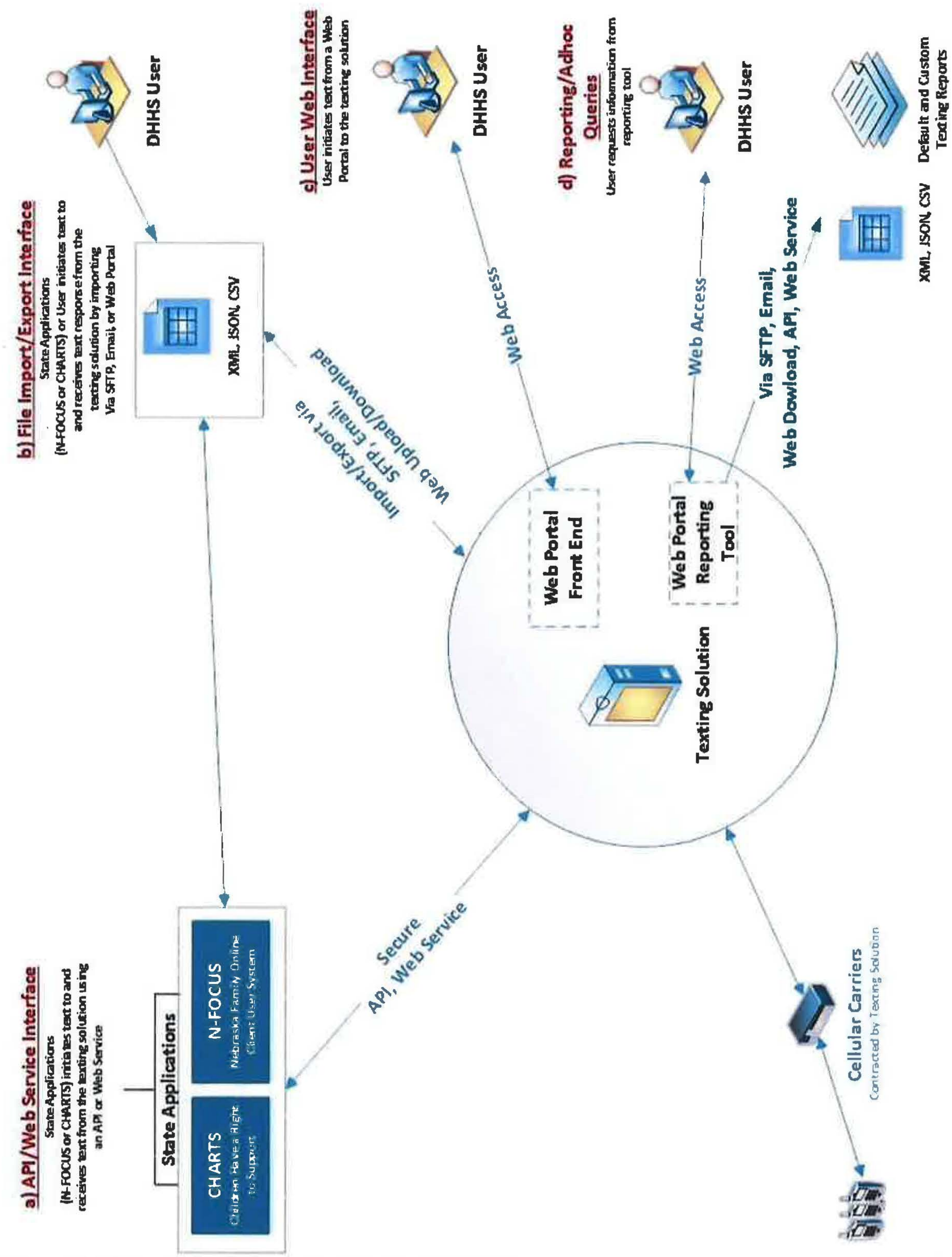
The Nebraska Department of Health and Human Services (DHHS), division of Children and Family Services (CFS), is issuing an RFP seeking a Short Messaging Service (SMS) Texting Solution hosted by the Contractor that will allow DHHS programs to send and receive text messages to and from clients. DHHS is looking to:

1. Improve communication to better assist clients by providing a more efficient means of communication;
2. Provide more efficiency for staff by reducing phone calls to the DHHS call centers;
3. Provide less churning of benefit applications and more timely responses from clients regarding information needed to continue benefits;
4. Provide fewer breaks in service for clients because of untimely filing of review/recertification applications; and,
5. Enhance client contact and augment existing communication.

DHHS requires a solution that is Contractor hosted and maintained. All hardware and software for the solution must be provided through the Contractor. The solution must offer two way texting. The solution must provide and maintain connections to all cellular carriers. State backend applications (NFOCUS and CHARTS) must be allowed to communicate to and from the solution via Application Programming Interface (API), web service, and Secure File Transfer Protocol (SFTP). Import and export of files must be allowed for DHHS programs that have with no backend application. A web portal front end application must be available in the solution for specific DHHS staff to administer/manage the texting, allow input of texting, and manually upload or download texting information. A reporting tool must be available via the web portal for creating reports, adhoc queries, and metrics.

DiRAD Response: DiRAD is proposing a turn-key SMS solution designed to DHHS specifications, with features matching the features required above, plus API access for further refinements and add-on applications. The proposed system meets or exceeds requirements for features and functionality, reliability, and security. In addition, DiRAD's onsite training and 24x7 emergency support are a hallmark of the company's 34-year history of customer service.

The following diagram is a representation of the DHHS vision of the texting solution:



DiRAD Response: The proposed application mirrors the diagram above, without exception.

B. PROJECT ENVIRONMENT

The State is soliciting bids for a solution to meet the needs of the Nebraska DHHS Children and Family Services (CFS). CFS programs that will initially use texting comprise of Economic Support programs, Child Welfare and Adult Protective Services, and Child Support Enforcement (CSE), In the future, other DHHS programs may utilize the texting solution.

1. Each program may include several sub-programs:

a. **CFS – Economic Assistance:** Economic Assistance programs include Supplemental Nutrition Assistance Program (SNAP), Employment First, Aid to Dependent Children, Refugee Resettlement, Energy Assistance, Child Care Subsidy, Aged, Blind, and Disabled as well as Social Services for Aged and Disabled.

DiRAD Response: DiRAD's government experience spans decades, with the largest US cities as customers. DiRAD will leverage best practices and share the knowledge of what we've learned in our implementation of Nebraska's DHHS system.

b. **CFS – Protection and Safety:** Child Welfare and Adult Protective and Safety services include prevention activities and coordination, child and adult protective services, foster care and independent living, adoption, domestic violence, safety and treatment services, and educational initiatives.

DiRAD Response: DiRAD's applications related to the above requirement are in production at New York City Administration for Children's Services (ACS), a vast agency with myriad responsibilities for the health and welfare of New York City's families. DiRAD's solution includes applications such as multiple Call Centers, Emergency Notification, Interactive Voice Response (IVR), and Enterprise Telephony. ACS departments and programs served by DiRAD include:

- Agency-Wide Employee Emergency Notification System (ENS)
- Adoption Subsidy & Payments
- Advocacy
- Housing Policy & Development
- Infoline
- KidSafe Emergency LIne
- Caseworker Voice Mail Accountability System
- Help Desk
- Early Care & Education
- Information & Referral
- COOP (Continuity of Operations)
- IT Asset Management
- Information and Referral
- 676-WISH

c. **CFS – Child Support:** Child Support Enforcement is a family-first program intended to ensure families' self-sufficiency. The program goals are to ensure that children have the financial and medical support of both their parents; to foster responsible behavior towards children; and to emphasize that children need both parents involved in their lives.

DiRAD Response: DiRAD will apply best practices from our many years of experience working with health and human services agencies, to create a new standard in constituent communications.

2. Initial usage for text messaging is planned for various client events/transactions including but not limited to: interviews reminders, verification and review/recertification due reminders, and notifications when correspondence is available on the client's account.

DiRAD Response: A phased approach is ideal as DHHS studies effectiveness and the best ways to communicate such information. DiRAD will be there for the entire effort, providing guidance and paced roll-outs that apply lessons learned from earlier efforts.

Annual usage figures provided are estimates and are not to be construed as either a minimum or maximum text quantity. Contractor must not impose minimum text quantity requirements. The estimated number of text messages per month for the first year is expected to be approximately 105,000 for Economic Assistance, 45,000 for Protection and Safety and 54,000 for Child Support for a total of 2,448,000 texts for the year.

DiRAD Response: DiRAD's solution elastically expands to accommodate traffic, while maintaining cost effectiveness.

3. Initial State backend Applications include:

   a. **N-FOCUS (Nebraska Family Online Client User System)** – a system that automates benefit/service delivery and case management for more than 30 Nebraska Department of Health and Human Services (DHHS) programs, including Child Welfare, Aid to Dependent Children,
   Supplemental Nutrition Assistance Program, and Medicaid

   DiRAD Response: DiRAD has many years of experience with integrating to proprietary backend services, abstracting the complexity and providing exactly the functionality the customer intended.

   b. **CHARTS (Children Have A Right To Support)** - a system used to maintain and enforce Nebraska Child Support

   DiRAD Response: What is discussed in our answer above also applies here, and to any backend systems DHHS wishes to expose for integration.

4. The solution must be compatible with the following interfaces:

a. **API/Web Service Interface**
Text messaging requests may be originated from the backend state applications and communicated to the texting solution via secure API or web service. Source information such as cell phone numbers and messages will be originated and stored in DHHS application data outside of the texting solution and sent to the texting solution. Status of the texting results and text responses will be communicated from the texting solution back to the State Applications via secure API or web service.

DiRAD Response: This is our understanding: the NFOCUS and CHARTS applications will first apply its own logic or programming which produces the lists of people to text, and hosts it for consumption by the DiRAD solution. This can be push or pull – the DiRAD system can react to an event, or it can institute a "watcher" service that looks for text messages to send. When it has a call to make, it writes to various DB records and launches the campaign on the record data. After the call is made, data is written to the DHHS backend with the results. DiRAD also records results for reporting purposes, if required. DiRAD's solution supports many different data exchange methods, including web service/API's and S/FTP.

b. **File Import/Export Interface**
Text messaging requests may be originated from either a backend state application or DHHS user and sent via Secure File Transfer Protocol (SFTP), Email, and Web Upload. The texting request information will be in a predefined format contained in a file type of XML (Extensible Markup Language), JSON (JavaScript Object Notation), and CSV (Comma-separated Value) and be uploaded to the texting solution. Texting results and responses will be downloaded back to the State Application or user via the same method.

DiRAD Response: Related to GEN-3 in the Traceability Matrix, there are a few ways to do this, and DiRAD's experience is that each customer has their own preferences and security concerns. In the case of DHHS, we look at HIPAA compliance in the storage of the data and the transfer of the data. Here's how we would do the (3) different methods:**1. SFTP:** Either DiRAD or DHHS would spin up an SFTP server, and DiRAD would automate the process of obtaining the files from DHHS (which DHHS posts to the SFTP Server). During the SFTP session, data can be scrubbed for errors and duplicates, and also for comparison to any Do-Not-Call database that has been established. **2. Email:** DiRAD setups up a email box that receives the updates via email attachments.DiRAD's software can strip the attachment and parse the data – the file can be either XML, CSV, or JSON and the software is designed to automatically determine the file type. **This option is NOT secure. 3: Web Upload:** DiRAD can create a secure web frontend that is part of the DiRAD Dashboard which will allow for manual file upload. The file is validated and scrubbed before being imported in the DiRAD JSON File or database.

c. **User Web Interface**

The texting solution must provide a secured web front end for designated staff to enter cell phone numbers, create text messages, perform any administration or management of texting features, and manually upload/download files via web.

DiRAD Response: DiRAD develops and hosts custom portals that leverage Microsoft Azure's innate security features. DiRAD designs portals that are easy to use, and require little to no training. Below are some examples – Keep in mind that DHHS will be able to choose the screen layout, design, data elements, security, and functionality. DiRAD's web application provides real-time and historical reporting, manual file upload, and control of the application functionality. DiRAD abstracts the technical configuration to provide a "fly-by-wire" overlay that gives users much power over the application, without the complexity.

d. **Reporting/Adhoc Queries**

The texting solution must provide a secured web front end to access reporting and statistic information. It should also allow reporting/statistic information to be sent in XML, JSON, and CSV file to DHHS via SFTP, Email, Web Download, API, and Web Service.

DiRAD Response: DiRAD is providing both standard and customized reports. An ad hoc reporting tool is also included, integrated into the web portal.

C. SCOPE OF WORK

1. Contractor for this solution must have a minimum of two years' experience hosting, servicing and supporting a Texting Solution.

   DiRAD Response: DiRAD's experience exceeds the requirement.

2. The general system requirements for the solution, which bidders must address, are described in Attachment 1 - Functional Business/Technical Requirements Traceability Matrix for the proposed solution.

   DiRAD Response: The Traceability Matrix has been completed and is included with the response.

3. The Contractor will conduct business analysis, establish a detailed project schedule, provide a test environment and a production environment, complete system setup and configuration, provide testing, provide training, and implement the solution.

   DiRAD Response: DiRAD's proposal complies with the above requirement, as described in several sections of the Traceability Matrix.

D. FUNCTIONAL BUSINESS/TECHNICAL REQUIREMENTS

1. REQUIREMENTS

The proposed solution must meet or exceed all requirements as outlined in Attachment 1. Bidders must provide detailed information on how the proposed solution addresses the requirements.

DiRAD Response: All requirements are met by the DiRAD solution. Detailed information is provided in the Traceability Matrix.

The solution must comply with State and Federal requirements, including but not limited to the Health Insurance Portability and Accountability Act (HIPAA) and all associated regulations. In addition, if the clients are covered by Medicaid the Medicaid-specific, above-and-beyond-HIPAA privacy protections found at 42 CFR Part 431, Subpart F will apply as well. DHHS is a covered entity under HIPAA and the selected Contractor will be a Business Associate. See Business Associate Agreement (BAA) Provision, Attachment Two Significant changes that are required in order to comply with new regulations will be addressed through the change control process and change order identified in this RFP. Any known applicable requirements that are published and publicly available at the time of proposal submission, including requirements with a future effective date (albeit within the contract term) will be considered included in the contract scope and the State will not agree to any additional charges to comply with these requirements.

DiRAD Response: DiRAD's experience with compliance, combined with Twilio's HIPAA compliance efforts, will result in a 100% HIPAA compliant system. DiRAD also agrees to complete and sign a Business Associate Agreement, and will remain compliant through changes in the law or policy.

2. HARDWARE AND SOFTWARE REQUIREMENTS

This RFP requires a Texting Solution where all hardware and software are hosted and maintained through the Contractor. The Contractor will, during the entire contract, maintain any and all third-party software products necessary at their most current version, or no more than two (2) versions back from the most current version, at no additional cost to the State. All security patches for the software must be applied and kept up to date.

DiRAD Response: DiRAD is providing the solution as a cloud-based service, with no software or hardware to maintain.

E. PROJECT PLANNING AND MANAGEMENT

Table 1.1 contains the list of requirements and due dates expected of the Contractor for the Planning and Analysis phase of the project. Details for these requirements follow in the text after the table.

Table 1.1

Phase		Requirements	Due Date
1.1	1.0 Project Planning	Draft Project Work Plan	Submitted with Proposal
1.2		Detailed Project Work Plan	Due 2 weeks after Contract Start Date

1.3		Project Management Plan: 1. Testing Methodologies	Due 2 weeks after Contract Start Date
1.4		Project Management Plan part 2 1. Risk Management and Resolution Plan 2. Issue Management and Resolution Plan 3. Change Control Plan	Due 2 weeks after Contract Start Date

Phase		Requirements	Due Date
1.5		Project Management Plan Status Reporting Plan Project Status Meeting Protocol	Due 2 weeks after Contract Start Date
2.1	2.0 Requirements Analysis	Requirements Validation Document (RVD)	Due dates to be determined in the Detailed Project Work Plan
2.2		Fit/Gap Analysis	Due dates to be determined in the Detailed Project Work Plan

DiRAD Response: A dedicated DiRAD Project Manager will be assigned to the project. A high-level project plan is included with our response.

1. **PROJECT PLANNING** (1.0)
The State requires that each bidder has established project management processes and has integrated these into its organizational culture and projects of similar scope and size. Proven methodologies and standards, used to control all project activities, are crucial to the success of this project. The State is not dictating a specific methodology or approach; it prefers that the bidder use an approach that has proved successful in the past. However, DHHS reserves the right to mandate the approach be revised if it does not result in the completion of timely and quality project deliverables, or it affects the project's success.

DiRAD Response: With many years of project experience, DiRAD will apply best practices and know-how to comply with the above requirement and produce a solution that exceeds expectations.

a. **DRAFT PROJECT WORK PLAN** (submitted with proposal) (1.1)
Integral to the success of the project is a solid project plan and the management of that plan. The bidder must prepare a Draft Project Work Plan to be submitted with bidder's Proposal. The bidder must develop a viable Draft Project Work Plan that meets contractual requirements and timelines with the timing necessary for successful implementation activities.

DiRAD Response: A high-level draft work plan has been provided as part of this response.

b. **DETAILED PROJECT WORK PLAN** (1.2)
Project kickoff meetings will be held between the Contractor and DHHS to discuss timing and staffing issues that will impact the timeline. The result of the kickoff meetings will be a Detailed Project Work Plan to be mutually agreed to by the Contractor and DHHS.

This will be developed within two weeks from the contract start date and must include a schedule and Gantt chart (for all project tasks, subtasks, and activities), milestones, and Detailed Project Work Plan deliverables. Resources from the Contractor and DHHS must be included for all tasks, subtasks, and activities that exist as line items within the Detailed Project Work Plan.

DiRAD Response: DiRAD agrees and will comply with this requirement.

The Contractor's Detailed Project Work Plan will also maintain the following date-sensitive information:

i. Originally scheduled Start and End dates for all tasks, subtasks, and activities (including milestones and deliverables);
ii. Anticipated Start and End dates for tasks, subtasks, and activities, if schedule fluctuation has occurred;
iii. Task Durations;
iv. Actual Start and End dates for all current and completed tasks, subtasks, and activities;
v. Descriptions of the projects tasks.

The Contractor must work with the DHHS Project Leader to maintain an integrated Detailed Project Work Plan for all project related activities throughout the life of the contract and identify issues that affect deadlines. The Contractor must update the Detailed Project Work Plan and submit an updated Detailed Project Work Plan to DHHS for approval as needed.

DiRAD Response: DiRAD agrees and will comply with this requirement. The Project Work Plan is a fluid document and will be updated as required.

c. **PROJECT MANAGEMENT PLAN** (1.3 and 1.4)

The Project Management Plan defines how the project is executed, monitored, and controlled. It will include the Contractor's plan for the project and must be developed within two weeks and include the following items:

i. **Testing Methodologies** (1.3)

The Contractor presents methods for developing and maintaining test scenarios, test sets, and test cases. Testing Methodologies must also address the Contractor's approach to documenting test procedures and test results.

DiRAD Response: DiRAD agrees and will comply with this requirement.

ii. **Risk Management and Resolution Plan** (1.4)

The Plan presents a description of the Contractor's standard process for identifying, managing, and reporting preliminary and ongoing risks by the Contractor and/or DHHS staff.The description should include a proposed mitigation strategies, resolutions and/or contingency plans.

DiRAD Response: DiRAD agrees and will comply with this requirement, with a detailed document that applies to the specific DHHS project.

iii. **Issue Management and Resolution Plan** (1.4)
The plan presents a description of the Contractor's standard process for resolution of problems identified and reported by the Contractor and/or DHHS staff. This description must include the Contractor's plan for ensuring that issues, requests, and decisions are recognized, agreed upon, assigned to an owner who will work towards resolving the issue, incorporated to an issue log, monitored, documented, and managed.

DiRAD Response: DiRAD agrees and will comply with this requirement.

iv. **Change Control Plan** (1.4)
a) **Change Control Process**
The Contractor must work with DHHS to establish a change control process. Change control is the formal process for identifying changes that arise in the natural flow of the project and determining the disposition of the requested change or correction. The Change Control Process will span the entire project life cycle and incorporate a formal change request process, including formal DHHS review and approval. After going through the process in Section V.E.1.c.
iv.a. and b., all changes must go through the Change Order process in Section II-E.

Each Change Control Request will:
1). Provide a clear description of what is included from each change request.
2). Delineate impacts to the project's schedule.
3). Require successful completion of testing before the implementation stages.
4). Incorporate multiple levels of priority for change requests (e.g., critical, must-have, desired, etc.).
5). Support the Change Control Process by estimating impacts, investigating solutions, identifying alternatives, inputting appropriate information into the Project tracking tools, participating in the decision- making process, and implementing the agreed-upon solution.

DiRAD Response: DiRAD agrees and will comply with this requirement. DiRAD will work with DHHS to promulgate a change control process that makes sense for the specific project.

b) **Change Control Tracking System**

The Contractor must provide a change control tracking system that provides the following minimum requirements:

1). The means to control and monitor change requests;
2). A process for reporting the status of all change requests;
3). The ability for DHHS to set and change priorities on individual change requests;
4). A method for DHHS to determine the estimated and actual hours allocated to each change request and the personnel assigned to each request; and,
5). A method to schedule a completion date provided by DHHS for each change request.

DiRAD Response: DiRAD agrees and will comply with this requirement. DiRAD will work with DHHS to use a mutually-acceptable tracking system.

v. **Status Reporting Plan** (1.5)

This is the protocol for submittal of Status Reports, including the format and media for submittal and the procedure for submittal. The Contractor's Project Manager must provide weekly Project Status Reports, which must include:

a) Work plan activities performed during the reporting period, reviewing the completed activities and comparing the results to plan;
b) Deliverables completed during the reporting period, identifying milestones reached and comparing the results to the plan;
c) Work plan activities planned for the next reporting period;
d) Deliverables expected to be completed in the next reporting period;
e) Project risks and recommendations to mitigate such risks;
f) New issues and status of previous problems/issues; what is being done to achieve resolution of problems/issues;
g) Summary of project's progress according to the schedule; and,
h) Project notes and comments.

DiRAD Response: DiRAD agrees and will comply with this requirement. DiRAD will work with DHHS to complete the plan and provide weekly status reports that comply with the plan.

vi. **Project Status Meetings Protocol** (1.5)
This is the protocol for project Status Meetings. Status Meetings will be scheduled by the Contractor every week. The Contractor's project management team, DHHS's Project Lead, and other key staff will attend the Status Meetings. Meetings will follow a standard pre-set agenda jointly prepared by the Contractor and the DHHS Project Lead. The meeting agenda will be distributed by the Contractor twenty-four (24) hours before the scheduled meeting. The agenda should be flexible to allow discussion of other issues or concerns. The Contractor must create written meeting records, in an agreed format, for the DHHS Project Lead. All meeting records and related documents will be supplied to DHHS.
DiRAD Response: DiRAD agrees and will comply with this requirement.

2. **REQUIREMENTS ANALYSIS** (2.0)

a. Requirements Validation Document (RVD) (2.1)
Attachment 1 contains DHHS' Business and Technical requirements for the proposed solution. The bidder must submit a Requirements Validation Document.
DiRAD Response: We have submitted a completed RVD in the appropriate section of the solicitation response.

b. Fit/Gap Analysis (2.2)
The fit/gap analysis will document the disposition of each requirement and the resolution of identified gaps (e.g., customization, workaround, eliminate requirement). Traceability and mapping are key components throughout this process.

F. DESIGN, DEVELOPMENT, AND IMPLEMENTATION PHASE REQUIREMENTS

Table 2.2

	Phase	Requirements	Please Insert Anticipated Timeframe
3.1	3.0 Design	Detailed System Design Document (DSDD)	Due dates to be determined in the Detailed Work Plan
3.2		Testing Plan	Due dates to be determined in the Detailed Work Plan
4.1	4.0 Development, Interfaces, Integration	Development/Customization (as needed)	Due dates to be determined in the Detailed Work Plan
4.2		Interface Development and Testing (as needed)	Due dates to be determined in the Detailed Work Plan
5.1	5.0 Testing	User Acceptance Plan and Testing	Due dates to be determined in the Detailed Work Plan
5.2		User Acceptance Testing Results	Due dates to be determined in the Detailed Work Plan

6.1	6.0 Training	Training Plan	Due dates to be determined in the Detailed Work Plan
6.2		Training Session(s)	Due dates to be determined in the Detailed Work Plan
7.1	7.0 Implementation	Implementation Plan	Due dates to be determined in the Detailed Work Plan
7.2		Final Readiness Assessment	Due dates to be determined in the Detailed Work Plan
7.3		Documentation	Due dates to be determined in the Detailed Work Plan
7.4		Problem Resolution Plan	Due dates to be determined in the Detailed Work Plan
	Phase	**Requirements**	**Please Insert Anticipated Timeframe**
7.5		System Go-Live	Due dates to be determined in the Detailed Work Plan

DiRAD Response: Each of the above components will be included in the Project Work Plan.

1. **DESIGN** (3.0)

a. **Detail System Design Document** (DSDD) (3.1)

The Contractor will conduct any design sessions, Joint Application Development (JAD) sessions, business rules sessions, and workflow sessions to develop the Detailed System Design requirements. Prior to each session, the Contractor must develop/update proposed preliminary design, to the extent that it is possible, and present it at the design session. The DSDD must be updated to reflect changes identified throughout the design phase.

DiRAD Response: DiRAD agrees and will comply with this requirement.

b. **Testing Plan** (3.2)

The Contractor must also define and document test requirements and a schedule for testing. Testing requirements must include any compliance testing.

DiRAD Response: DiRAD agrees and will comply with this requirement. The Test Plan will reflect the unique requirements of DHHS.

2. **DEVELOPMENT, INTERFACES, AND INTEGRATION** (4.0)

a. Development/Customization (4.1) (as needed)

The Contractor must complete any customization development needed and provide a report of the customization completed including assurance of unit testing.

DiRAD Response: DiRAD agrees and will comply with this requirement.

b. **Interface Development and Testing** (4.2)

The Contractor must be responsible for development of any interfaces needed in the texting solution to meet the requirements. This includes interface design, development, validation, testing, and documentation. DHHS will coordinate any required interactions with other parties to develop interfaces needed from backend applications. The Contractor must assist DHHS as needed by providing consulting support and assistance with interface testing at no additional cost to the State.

DiRAD Response: DiRAD agrees and will comply with this requirement. Interface testing and support are included in the cost, with no additional charges incurred as specified.

i. **The Contractor must:**

a) Develop a schedule of interface development efforts integrated with the Detailed Project Work Plan;
b) Ensure a stable and accessible interface testing environment is available by an agreed upon date;,
c) Complete any development needed; and,
d) Complete successful testing.

DiRAD Response: DiRAD agrees and will comply with this requirement.

ii. **Interface functionality must include:**

a) An API/Web Service for texting requests and responses for DHHS backend Systems (N-FOCUS and CHARTS);
DiRAD Response: DiRAD agrees and will comply with this requirement.

b) An SFTP, Email, and Web Upload/Download of a XML, JSON, and CSV files for texting requests and responses;
DiRAD Response: DiRAD agrees and will comply with this requirement, although DHHS has changed their requirements with respect to email.

c) User web portal interface for approved users to initiate texts; and,
DiRAD Response: DiRAD agrees and will comply with this requirement.
User web access to texting reporting tool and a predefined extract XML, JSON, and CSV file containing reporting/adhoc information received viaSFTP, Email, Web Download, API, and Web Service.
DiRAD Response: DiRAD agrees and will comply with this requirement.

3. **TESTING** (5.0)

a. **User Acceptance Plan and Testing** (5.1)

The Contractor shall be responsible for working with DHHS to unit test, system test, and integration test for all texting requirements throughout the development and management life cycles. All testing is expected to be completed prior to implementation.

The Contractor shall be responsible for working with DHHS in structuring testing environments that mirror the production environment.

The Contractor shall be responsible for the initial development of User Acceptance Testing test scenarios, building detailed testing scripts, determining expected results, establishing testing procedures and protocols, etc. Acceptance testing will include testing by users of all system

functions, including but not limited to, proper functioning of software, hardware and network components, as well as both data content, output, and connectivity components.

DiRAD Response: DiRAD agrees and will comply with this requirement. DiRAD is also providing the requirement number of test environments as pointed out in the Traceability Matrix.

User Acceptance Testing Results (5.2)
The Contractor shall be responsible for the management of the testing effort and communicating this ongoing information with the State testing team(s). The Contractor must provide DHHS with all test results, to include the tracking and correction of deficiencies.

DiRAD Response: DiRAD agrees and will comply with this requirement.

4. TRAINING (6.0)

a. TRAINING PLAN (6.1)

The Contractor must detail all activities for training using the texting solution including web portal, reporting, and interfacing. It will provide a description of the training strategy including methods, materials, and timing.

DiRAD Response: DiRAD agrees and will comply with this requirement – training details are outlined in the Traceability Matrix. A summary is also repeated below:

Since the solution will be provisioned via an easy-to-use web application, the training involved is dramatically less than with typical software packages. The solution is not a software application, rather it is a solution that is tailored to meet JAUNT's specifications only. All functionality from administration to running reports is dedicated to the JAUNT solution. This lack of superfluous information improves the training process and results in lower training costs. Training will be added to reflect the specific needs of DHHS, as part of the cost of the proposal. Below is a description of the elements of the training program for DiRAD's hosted systems:

- Onsite training pre-cutover
- Onsite day-of cutover for supplemental training and customer support
- Documentation customized to the specifics of the application
- Dedicated customer portal with resources, help, and support ticket generation

b. TRAINING SESSIONS (6.2)

The Contractor must conduct onsite training (6.2) for approximately twelve (12) staff at a central DHHS location in Lincoln, Nebraska. Training materials for the session(s) shall be provided to DHHS a minimum of three (3) weeks before the onsite training session(s). The Contractor must provide electronic copies of training materials.

DiRAD Response: DiRAD's solution includes all training materials, onsite training, and any travel expenses.

The Contractor must provide, at no additional cost to the State, supplemental training if the State determines that significant system updates occurred. This supplemental training may occur onsite or via video conference, web portal, manual, or other mutually agreeable delivery method.

DiRAD Response: DiRAD agrees and will perform such training as needed by DHHS.

5. **IMPLEMENTATION** (7.0)

a. **IMPLEMENTATION PLAN** (7.1)

The Contractor must develop a System Implementation Plan that includes:

i. Activities needed immediately prior to implementation with dates needed by;
ii. Staffing Requirements;
iii. Communication Activities;
iv. Checklists of work to be performed and/or outputs to be produced on the first day andat the end of the first week, month, etc; and,
v. Rollback plan to include in detail what will be done if the implementation does not succeed.

DiRAD Response: DiRAD will comply with the above requirement by providing a project-specific Implementation Plan that reflects dependencies and any issues that may arise.

b. **FINAL READINESS ASSESSMENT** (7.2)

The Contractor must create the Final Readiness Assessment to assist in the determination of final implementation readiness. Written approval of this Assessment constitutes DHHS' decision to move forward with implementation. At a minimum, the Assessment must address the following:

i. An Assessment Summary that includes the analysis completed, risks, and mitigation associated with implementation, and a recommendation for proceeding;
ii. An assurance that Disaster Recovery, where applicable is documented and ready;
iii. Documentation of user acceptance testing approved by DHHS;
iv. Assurance that all locations, system users, and security profiles have been identified and setup; and,
v. Documentation that Contractor Help Desk is ready and staffed for deployment.

DiRAD Response: DiRAD agrees and will furnish information for each of the above requirements as the project is rolled out.

c. **DOCUMENTATION** (7.3)

The Contractor must develop and maintain the following documentation:

i. **On-line Help (7.3)** for all web portal features, functions, and data element fields, as well as descriptions and resolutions for error messages, using help features including indexing, searching, tool tips, and context-sensitive help topics.

DiRAD Response: DiRAD is providing on-line help as part of the solution.

ii. **On-line User Manual (7.3)** with a printable version available. The documentation should include full mock-ups of all screens/windows and provide narratives of the navigation features for each window/screen.

DiRAD Response: DiRAD is providing on-line user manuals as part of the solution.

iii. **On-line Reporting Manual (7.3)** with a printable version available that includes descriptions, definitions, and layouts for each standard report. Include definitions of all selection criteria parameters and each report item/data element, all field calculations defined in detail, and field and report titles.

DiRAD Response: This document is included as specified.

iv. **On-line Installation and Technical System Operation Manual (7.3)** with a printable version available. The documentation should include operating procedures to assist technical staff in operation and maintenance of the Texting solution. These procedures help define and provide understanding of system operations and performance.

DiRAD Response: DiRAD agrees.

d. **PROBLEM RESOLUTION PLAN** (7.4)
The Contractor must establish procedures for receiving, recording, and tracking problem reports and providing resolution/feedback to DHHS. Whenever problems are encountered, the problems must be recorded and entered into the problem resolution process. The Contractor must implement this plan prior to completion of the system implementation.

DiRAD Response: DiRAD agrees and will comply with this requirement by maintaining a shareable document on which project teams collaborate.

e. **SYSTEM GO-LIVE** (7.5)
System go-live is the date on which the solution has been fully implemented (meets all established functional and technical requirements). This is the date on which the twelve (12) month post implementation support period begins. The System Go-live date is dependent on DHHS' acceptance of date.

DiRAD Response: DiRAD agrees with this requirement.

6. **OPERATIONS & MAINTENANCE PHASE (**8.0)
The following table contains the list of requirements and due dates expected of the Contractor for the Operations and Maintenance phase following the implementation of the solution. Details for these requirements follow in the narrative after the table.

Table 3.3

	Phase	Requirements	Due Date
8.1	8.0 Operations and Maintenance	Operating and Maintenance Activities	Due dates to be determined in the Detailed Work Plan

a. **Operations & Maintenance (O&M) activities (8.1)** include, but are not limited to, the following:
   i. Perform system maintenance, including testing, documentation, etc.;
   ii. Continue procedures for receiving, recording, and tracking problem reports and modification requests from DHHS and providing resolution/feedback to DHHS;
   iii. Resolve System defects at no additional costs to DHHS;

iv. Conduct necessary software updates;
v. Conduct maintenance of interfaces;
vi. Provide help desk support with predefined technical support prioritization levels;
vii. Provide security management;
viii. Support policy and process changes;
ix. Keep portal up to date; and,
x. Keep all written material, including all user documentation and system documentation up to date as changes occur.

DiRAD Response: DiRAD agrees with the above requirement and acknowledges that the project is an ongoing effort, with continuous improvement throughout the length of the contract.

G. DELIVERABLES (REQUIRED)

The awarded Contractor for the texting solution must deliver the following documents and activities that meet with DHHS approval:

Table 4.4

Requirements	Due Date
Project Planning	Due 2 weeks after Contract Start Date
Requirements Analysis	Due dates to be determined in the Project Schedule
Design	Due dates to be determined in the Project Schedule
Development, Interfaces, Integration	Due dates to be determined in the Project Schedule
Testing	Due dates to be determined in the Project Schedule
Training	Due dates to be determined in the Project Schedule
Implementation	Due dates to be determined in the Project Schedule
Operations and Maintenance	Due dates to be determined in the Project Schedule

1. Project Planning
   a. Contact information for the Contractor's project manager and staff assigned to the contract;
   b. Detailed Project Work Plan;
   c. Testing Methodologies;
   d. Risk Management, Issue Management, and Change control procedures; and,
   e. Status Reporting Plan and Protocol.
2. Requirements Analysis
   a. Requirements Validation Documents; and,
   b. Fit/Gap Analysis.
3. Design
   a. Detailed System Design Documentation; and,
   b. Testing Plan.
4. Development, Interfaces, and Integration
   a. Development/Customization; ; and,
   b. Interface Development and Testing.
5. Testing
   a. User Acceptance Plan and Testing; and,
   b. User Acceptance Testing Results.
6. Training
   a. Training Plan; and,
   b. Training Sessions.
7. Implementation
   a. Implementation Plan ;
   b. Final Readiness Assessment;
   c. Documentation;

d. Problem Resolution Plan; and,
e. System Go-Live.

8. Operations and Maintenance

DiRAD Response: DiRAD is furnishing all of the above deliverables as part of our turn-key solution.

II. PROPOSAL INSTRUCTIONS

This section documents the requirements that should be met by bidders in preparing the Technical and Cost Proposal. Bidders should identify the subdivisions of "Project Description and Scope of Work" clearly in their proposals; failure to do so may result in disqualification. Failure to respond to a specific requirement may be the basis for elimination from consideration during the State's comparative evaluation.

Proposals are due by the date and time shown in the Schedule of Events. Content requirements for the Technical and Cost Proposal are presented separately in the following subdivisions; format and order:

A. PROPOSAL SUBMISSION

1. REQUEST FOR PROPOSAL FORM

By signing the "RFP for Contractual Services" form, the bidder guarantees compliance with the provisions stated in this RFP, agrees to the Terms and Conditions stated in this RFP unless otherwise agreed to, and certifies bidder maintains a drug free work place environment.

The RFP for Contractual Services form must be signed using an indelible method (not electronically) and returned per the schedule of events in order to be considered for an award.

Sealed proposals must be received in the State Purchasing Bureau by the date and time of the proposal opening per the Schedule of Events. No late proposals will be accepted. No electronic, e-mail, fax, voice, or telephone proposals will be accepted.

It is the responsibility of the bidder to check the website for all information relevant to this solicitation to include addenda and/or amendments issued prior to the opening date. Website address is as follows: http://das.nebraska.gov/materiel/purchasing.html

Further, Sections II through VII must be completed and returned with the proposal response.

2. CORPORATE OVERVIEW

The Corporate Overview section of the Technical Proposal should consist of the following subdivisions:

a. BIDDER IDENTIFICATION AND INFORMATION

The bidder should provide the full company or corporate name, address of the company's headquarters, entity organization (corporation, partnership, proprietorship), state in which the bidder is incorporated or otherwise organized to do business, year in which the bidder first organized to do business and whether the name and form of organization has changed since first organized.

DiRAD Response:

Since 1984, DiRAD Technologies has been providing innovative communications solutions for a primarily government customer base. DiRAD began as an IVR company, and in 2000 become a Genesys (then Interactive Intelligence) partner. With this partnership, DiRAD soon became a well-known call center solution provider for government agencies. The company deployed systems for large metropolitan agencies such as the New York City Police Department, Minneapolis Bureau of the Treasury, Atlanta Housing Authority, the New York City Board of Elections, and New York City Poison Control.

With over 30 years of implementing telecommunications projects, DiRAD has developed processes that ensure a smooth flow of work, while exceeding customer expectations for performance. With contact center and IVR deployment as our core business, we have been able to constantly improve, and develop best practices that are held closely as valuable assets --- yet shared with our customers. DiRAD will dedicate staff who will remain with the project for its duration.

The company was acquired by long-time management in 2014 – with financing obtained through an SBA loan through a rigorous application process. Since the acquisition, DiRAD was certified as a Women-Owned Business, and has added lines of business such as call center outsourcing (leveraging our already legendary customer support) and local telephone services. DiRAD has 23 employees and numerous independent contractors.

In 2017, DiRAD was awarded a contract to provide an IVR, SMS Notification and contact center solution for Memphis Light, Water & Gas, the largest utility of its kind in the US. The system is slated to go live in July 2018. Earlier this year, DiRAD was selected by a prime contractor to provide helpdesk support for a new DMV initiative in New York State. A new building has been selected for the call center, and major operations began in May of this year.

DiRAD is an S-Corporation located in the State of New York.

Address:
9 Corporate Drive
Clifton Park, NY 12065
Phone:
518-438-6000

b. **FINANCIAL STATEMENTS**

The bidder should provide financial statements applicable to the firm. If publicly held, the bidder should provide a copy of the corporation's most recent audited financial reports and statements, and the name, address, and telephone number of the fiscally responsible representative of the bidder's financial or banking organization.

If the bidder is not a publicly held corporation, either the reports and statements required of a publicly held corporation, or a description of the organization, including size, longevity, client base, areas of specialization and expertise, and any other pertinent information, should be submitted in such a manner that proposal evaluators may reasonably formulate a determination about the stability and financial strength of the organization. Additionally, a non-publicly held firm should provide a banking reference.

DiRAD Response: DiRAD is a private company with a 34-year track record of success. Not including our SBA loan, DiRAD is a cash company with no additional long-term debt. We are in the 5th year of repaying our loan. DiRAD's customer base includes large, successful projects that include both setup fees and recurring revenue.

DiRAD is a certified Womend-Owned Business.

certified
WBENC
WOMEN'S BUSINESS ENTERPRISE

Since management purchased the company in 2014, we have grown from 12 employees to over 30 staff in (2) locations.

Banking Reference:
Kimberly Phelan, Vice President, M&T Bank
327 Great Oaks Boulevard, Albany NY 12203
518 464 6142 | (F) 518 464 6115
kphelan@mtb.com | mtb.com

The bidder must disclose any and all judgments, pending or expected litigation, or other real or potential financial reversals, which might materially affect the viability or stability of the organization, or state that no such condition is known to exist.

DiRAD Response: We have no pending litigation, and no judgements in our 34-year history.

The State may elect to use a third party to conduct credit checks as part of the corporate overview evaluation.

DiRAD Response: We welcome this and can provide any information necessary for the State to complete examination of the company.

c. CHANGE OF OWNERSHIP

If any change in ownership or control of the company is anticipated during the twelve (12) months following the proposal due date, the bidder should describe the circumstances of such change.

DiRAD Response: There is no change in ownership anticipated during the next (12) months.

and indicate when the change will likely occur. Any change of ownership to an awarded Contractor(s) will require notification to the State.

d. **OFFICE LOCATION**
The bidder's office location responsible for performance pursuant to an award of a contract with the State of Nebraska should be identified.

DiRAD Technologies
9 Corporate Drive
Clifton Park, Y 12065

e. **RELATIONSHIPS WITH THE STATE**
The bidder should describe any dealings with the State over the previous ten (10) years. If the organization, its predecessor, or any Party named in the bidder's proposal response has contracted with the State, the bidder should identify the contract number(s) and/or any other information available to identify such contract(s). If no such contracts exist, so declare.

DiRAD Response: We've had no dealings with the State of Nebraska in the last ten years.

f. **BIDDER'S EMPLOYEE RELATIONS TO STATE**
If any Party named in the bidder's proposal response is or was an employee of the State within the past twelve (12) months, identify the individual(s) by name, State agency with whom employed, job title or position held with the State, and separation date. If no such relationship exists or has existed, so declare.

If any employee of any agency of the State of Nebraska is employed by the bidder or is a subcontractor to the bidder, as of the due date for proposal submission, identify all such persons by name, position held with the bidder, and position held with the State (including job title and agency). Describe the responsibilities of such persons within the proposing organization. If, after review of this information by the State, it is determined that a conflict of interest exists or may exist, the bidder may be disqualified from further consideration in this proposal. If no such relationship exists, so declare.

DiRAD Response: DiRAD has no such employees.

g. **CONTRACT PERFORMANCE**
If the bidder or any proposed subcontractor has had a contract terminated for default during the past five (5) years, all such instances must be described as required below. Termination for default is defined as a notice to stop performance delivery due to the bidder's non-performance or poor performance, and the issue was either not litigated due to inaction on the part of the bidder or litigated and such litigation determined the bidder to be in default.

It is mandatory that the bidder submit full details of all termination for default experienced during the past five (5) years, including the other Party's name, address, and telephone number. The response to this section must present the bidder's position on the matter. The State will evaluate the facts and will score the bidder's proposal accordingly. If no such termination for default has been experienced by the bidder in the past five (5) years, so declare.

If at any time during the past five (5) years, the bidder has had a contract terminated for convenience, non-performance, non-allocation of funds, or any other reason, describe fully all circumstances surrounding such termination, including the name and address of the other contracting Party.

DiRAD Response: We have not had a contract terminated in our 34-year history.

h. SUMMARY OF BIDDER'S CORPORATE EXPERIENCE

The bidder should provide a summary matrix listing the bidder's previous projects similar to this RFP in size, scope, and complexity. The State will use no more than three (3) narrative project descriptions submitted by the bidder during its evaluation of the proposal.

The bidder should address the following:

i. Provide narrative descriptions to highlight the similarities between the bidder's experience and this RFP. These descriptions should include:

a) The time period of the project;
b) The scheduled and actual completion dates;
c) The Contractor's responsibilities;
d) For reference purposes, a customer name (including the name of a contact person, a current telephone number, a facsimile number, and e-mail address); and
e) Each project description should identify whether the work was performed as the prime Contractor or as a subcontractor. If a bidder performed as the prime Contractor, the description should provide the originally scheduled completion date and budget, as well as the actual (or currently planned) completion date and actual (or currently planned) budget.
f)

DiRAD Response: Each of the projects below were completed with DiRAD as the prime (and only) contractor, and operating within budget:

Customer Name	Memphis Light, Water & Gas
Contact	Cynthia Jones
Phone Number	901-729-8945

Email	cjjones@mlgw.org
Time Period	2017 – Present, Ongoing Project – completion of punch list ongoing
DiRAD Responsibilities	Project Management, Design, Implementation, Training, and Support of Call Center Automation Software, Web-Based Notification System and IVR.
Customer Name	Hampton Roads Transit
Contact	Rodney Davis
Phone Number	757-222-6000 x6034
Email	rdavis@hrtransit.org
Time Period	2018 – Present, ongoing project (In production, completion of punch list ongoing)
DiRAD Responsibilities	Project Management, Design, Implementation, Training, and Support of Interactive Voice Response System integrated with IBM Watson, with administrative web portal.

Customer Name	New York City Administration for Children's Services
Contact	Don Legendre
Phone Number	212-393-5000
Email	Don.legendrea@acs.nyc.gov
Time Period	2008 – Present (customer continues to add more software and functionality while the system has been in production since 2008)
DiRAD Responsibilities	Project Management, Design, Implementation, Training, and Support of contact center, IVR, Outbound Employee Notification System (ENS), various web applications.

Customer Name	New York City Department of Information Technology & Telecommunications
Contact	Djo Srour
Phone Number	718-804-4875
Email	dsrour@doitt.nyc.gov
Time Period	2017
DiRAD Responsibilities	Project Management, Design, Implementation, Training, and Support of Outbound Notification System utilizing SMS, Voice, and Email

ii. Contractor and subcontractor(s) experience should be listed separately. Narrative descriptions submitted for subcontractors should be specifically identified as subcontractor projects.

DiRAD Response: No subcontractors were used.

iii. If the work was performed as a subcontractor, the narrative description should identify the same information as requested for the Contractors above. In addition, subcontractors should identify what share of contract costs, project responsibilities, and time period were performed as a subcontractor.

i. **SUMMARY OF BIDDER'S PROPOSED PERSONNEL/MANAGEMENT APPROACH**
The bidder should present a detailed description of its proposed approach to the management of the project.

The bidder should identify the specific professionals who will work on the State's project if their company is awarded the contract resulting from this RFP. The names and titles of the team proposed for assignment to the State project should be identified in full, with a description of the team leadership, interface and support functions, and reporting relationships. The primary work assigned to each person should also be identified.

The bidder should provide resumes for all personnel proposed by the bidder to work on the project. The State will consider the resumes as a key indicator of the bidder's understanding of the skill mixes required to carry out the requirements of the RFP in addition to assessing the experience of specific individuals.

Resumes should not be longer than three (3) pages. Resumes should include, at a minimum, academic background and degrees, professional certifications, understanding of the process, and at least three (3) references (name, address, and telephone number) who can attest to the competence and skill level of the individual. Any changes in proposed personnel shall only be implemented after written approval from the State.
DiRAD Response:

DiRAD's team members are experts in their field, and are constantly learning new technologies and ways of working more efficiently for our customers. Our development experiences also complemented by the following competencies:

- Web and Mobile interface development
- Microsoft technical certifications in voice (Lync), Exchange, SQL and Server Operating Systems
- Cisco CCNA Certifications
- Project Management certifications
- WAN/LAN design expertise
- Telephony architecture and design
- Speech Recognition design and development

- Business Analysis expertise
- Call Center implementation and support
-

DiRAD Technologies is a Small, Women-Owned Business Enterprise. Our products and services offerings include the following:

1. Contact Center technology and services
2. Enterprise IP/PBX
3. Interactive Voice Response (IVR) solutions
4. Enterprise Notification solutions
5. Virtual Agent development
6. Custom application development
7. Project management, implementation, training, and support

Our staff includes Business Analysts, Project Managers, Software Developers, System Engineers, and Trainers. Resumes of key staff, including those who would work on the DHHS project, are listed below:

Maria Massa, President and Chief Operating Officer

Experience Summary:

Over 20 years' experience working with DiRAD's government clientele in performing the following:

- Business analysis, consulting
- Management of UI design for custom IVR and Web applications
- Management of QA staff
- Integrating with various databases/mainframes
- Managing and implementation of large-scale projects
- Performing system administrator and end user training
- Ensuring overall customer satisfaction
- Interactive Intelligence certifications

Duties and Responsibilities:

1. Set the company's vision and ensure execution matches the goals of the company
2. Daily oversight of company operations, P&L, Balance Sheet, Cash Flow
3. Build business and customer partnerships within, and external to company's industry
4. Represent the company to new customers deemed to be large or strategic opportunities
5. Responsible for hiring/firing and building the company's culture
6. Final decision maker on all matters pertaining to the company's operations

Employment Experience:

<u>DiRAD Technologies, Inc. | 9 Corporate Drive | Clifton Park, NY 12065</u>

1994 – 1995: Sales Coordinator

1995 – 2004: Application Development/Project Manager

2004 – 2014: Vice President
2014 – June 2015: Chief Operating Officer
June 2015 – Present: President/COO

Education:

Bachelor of Science in Business Management & Marketing, Binghamton Treasurer School of Management

---

Rami Hachem, Vice President, Project Technical Lead

Experience Summary:

Over 14 years' experience in networking, VoIP and IVR deployments.

- Leads Technical Support
- Primary point of contact for technical issues pre-deployment
- WAN/LAN design
- Telephony provisioning and specification
- Customer Advocate
- Microsoft/Cisco/Interactive Intelligence certifications
- Supervise technical employees

Employment Experience:

DiRAD Technologies, Inc. | 9 Corporate Drive | Clifton Park, NY 12065

2004 to 2010: System Engineer
2010 – Present: Vice President
1998 – 1999: Elevator Technician (Otis Elevator Company | 2A Soor St., Kuwait City, Kuwait)

Education:

Bachelor of Science in Computer Science, SUNY Morrisville College, 2004

Kevin Garabedian, Senior Developer

Experience Summary:

Over 12 years of experiencing designing user interfaces for Voice (IVR), mobile, and web.

- Responsible for backend IVR development
- Web Services development
- Fluent in HTTP, CSS, JSON, REST

- .NET C# with over 12 years of experience
- Voice (SIP) engineering and configuration
- Chief Architect of DiRAD's AlertRT Notification System

Employment Experience:

DiRAD Technologies, Inc. | 9 Corporate Drive | Clifton Park, NY 12065

2010 – Present: Senior Developer
– System Engineer/Developer (General Control Systems, Albany, NY)

2005 – 2006: Senior Programmer/Analyst (InfoEd International)

Education:

BA State Treasurer of New York at Delhi - Computer Information Systems, 2005

Annie Gartelman, **PMP**, Business Analyst

Experience Summary:

Over 13 years of experience as a project manager, and over 7 years of experience conducting business analysis.

- PMP-Certified Project Manager
- Primary Business Analyst for large IVR projects
- Manage complex call center, IVR, and web development projects
- Liaison with customer and DiRAD development staff
- Voice and Web User Interface design
- Testing and documentation

Employment Experience:

DiRAD Technologies, Inc. | 9 Corporate Drive | Clifton Park, NY 12065

2008 – Present: Project Manager/Business Analyst
2007 – 2008: Project Assistant (MTV Networks, New York City)
2006 – 2007 Senior Analyst (Dowden Health Media)
2000 – 2006 Project Manager
Education:

BA State Treasurer of New York at Oswego, Business

John Van Dyke, System Engineer

Experience Summary:

- Experience Summary: Over 7 years of experience as an information technologist, specializing in network communications.
- Multiple certifications including Interactive Intelligence, Cisco, Shortel, and Microsoft
- SIP and VoIP architecture, configuration and troubleshooting
- Network management

Employment Experience:

DiRAD Technologies, Inc. | 9 Corporate Drive | Clifton Park, NY 12065

2015 – Present: System Engineer

2014 – 2015: NOC Technologies (SendWordNow)

2014: Intern (nfrastructure)

2013 – 2014: Apple Work at Home Advisor (Apple)

2011 – 2012: Onsite Technician (Staples)

2008 – 2010: Supervisor/AV Technician (Six Flags)

Education:

BS SUNY Morrisville, Network Administration

The bidder will assign a project manager and shall provide sufficient staffing from project kickoff through the end of the contract, including all optional renewal periods. The project manager will be responsible for the management, oversight, and coordination of project including timely resolutions to project issues. The project manager will participate in weekly meetings with DHHS and prepare status reports.

j. **SUBCONTRACTORS**

If the bidder intends to subcontract any part of its performance hereunder, the bidder should provide:

i. name, address, and telephone number of the subcontractor(s);
ii. specific tasks for each subcontractor(s);
iii. percentage of performance hours intended for each subcontract; and
iv. total percentage of subcontractor(s) performance hours.

3. **TECHNICAL APPROACH**

The technical approach section of the Technical Proposal should consist of the following subsections:

a. **UNDERSTANDING OF THE PROJECT REQUIREMENTS**

Provide a narrative that illustrates the bidder's understanding of the State's requirements and project schedule. Include a summary description of how the proposed solution will address the purpose and requirements and include a project planning approach.

DiRAD Response: Our understanding of the project centers on DHHS's need to communicate with its clients without incurring unreasonable costs, and using common communications medium like SMS is a solution that can deliver on all the State's goal to better assist clients. In addition, DHHS needs a system that can relieve staff by reducing phone calls to the call enters --- calls that often result because of untimely filings. The system will proactively remind clients and thus cut down on the phone calls.

DHHS has effectively communicated the purpose of the project, especially the connectivity and integration to backend data sources like CHART and NFOCUS. In addition, web interfaces and security requirements are well-defined.

Concerns

One issue that concerns us is the unknown number of programs and departments that may use the system, and whether they'll want any specific customization. While we support the concept of a phased approach, we also see a project that can drag on too long because of the long list of stakeholders (program/department representatives). Competing priorities, political considerations, union rules, and IT policies also contribute to the risk of missing deadlines. We strongly recommend, and are pricing as such, a standard model for SMS communications that any agency can use but not change. With this in mind, it's important to have a vendor that will surface any challenging issues and resolve them before the system is completed.

Approach

In order to mitigate issues and complete the project on-time and to the satisfaction of DHHS, we offer the following information that should shed light on our approach:

1. One of the single greatest elements of success is an engaged project manager on the customer side, working as a member of DiRAD's team. This customer-appointed project manager should be able to command IT, software, telephony and network resources from the State if necessary.
2. During the project, weekly conference calls/webex sessions should be held to ensure the project stays on track. In parallel, Joint Application Development (JAD) sessions are held to build the applications.
3. DiRAD provides a secure, dedicated web portal for the project. This allows customers, DiRAD staff, and third-party vendors to collaborate on the project and be aware of all tasks, milestones, due-dates and project changes.
4. DiRAD includes custom web interfaces for reporting, administration, and any dial-out applications. The customer will be given an opportunity to jointly design the interfaces with DiRAD. Often an afterthought, web design should remain a crucial aspect of the overall design.
5. Active engagement of third-party vendors is key, especially during mainframe integration development, if necessary.

6. A realistic project schedule should be defined with as much detail as possible, including threats such as key staff vacations, vendor issues and third-party delays (for example, carrier lead time).
7. The application should be developed using a team approach with DiRAD. The customer should build time into the project for review by stakeholders who aren't necessarily part of the project (i.e. Press Office).
8. SMS script development is often a work in progress, even after cutover. DiRAD customers often receive fresh feedback from their clients, necessitating changes to the application. As a government contractor, DiRAD expects such changes and offers them free-of-charge for 30 days after go-live.

b. FUNCTIONAL BUSINESS AND TECHNICAL REQUIREMENTS TRACEABILITY MATRIX

Bidders must complete Attachment 1 for the proposed solution and include it with their bid. Detailed responses to the technical and functional requirements of the proposed solution must be provided in the response matrices.

DiRAD Response: We have included the completed Traceability Matrix.

c. DRAFT PROJECT WORK PLAN

Provide a draft work plan identifying tasks, resources/staffing needed, deliverables, dependencies, timelines, and milestones.

DiRAD Response: this is included below and is very high-level:

	Task Name	Duration	Start	Finish	Resource Names	Predecessors
1	**PROJECT PLAN FOR SMS PROJECT (Phase) - HIGH LEVEL**	81 days	Fri 2/1/19	Thu 5/23/19		
2		1 day?	Wed 12/26/18	Wed 12/26/18		
3	Kickoff Meeting	1 day	Fri 2/1/19	Fri 2/1/19	DIRAD/DHHS	
4	Introductions / Roles & Responsibilities Identified	1 day	Fri 2/1/19	Fri 2/1/19	DIRAD/DHHS	
5	Overview of requirements	1 day	Fri 2/1/19	Fri 2/1/19	DIRAD/DHHS	
6	Discussion of current notification process	1 day	Fri 2/1/19	Fri 2/1/19	DIRAD/DHHS	
7	Discussion of DiRAD's solution	1 day	Fri 2/1/19	Fri 2/1/19	DIRAD/DHHS	
8	Technical discussion (Web services / SFTP	1 day	Fri 2/1/19	Fri 2/1/19	DIRAD/DHHS	
9	Action items / Next steps	1 day	Fri 2/1/19	Fri 2/1/19	DIRAD/DHHS	
10						
11	DiRAD development of preliminary data and contact flow	6 days	Mon 2/4/19	Mon 2/11/19	DIRAD	
12	Preliminary SMS Message Scripts provided to DHHS for review	1 day	Mon 2/11/19	Mon 2/11/19	DIRAD	
13	Submit Short Code Application ASAP - waiting period expected	1 day?	Mon 2/4/19	Mon 2/4/19		
14	Script review / revision period (meetings, calls, emails geared toward finalizing the SMS scripts and business rules)	15 days	Thu 2/14/19	Wed 3/6/19	DIRAD/DHHS	13
15						
16	SFTP Sandbox Created by this date	1 day	Fri 2/28/20	Fri 2/28/20	DIRAD/DHHS	
17	SMS message scripts are completed	1 day	Fri 3/22/19	Fri 3/22/19	DIRAD/DHHS	14
18	Web services developed (if applicable) by DHHS & specs provided to DiRAD	1 day	Thu 2/28/19	Thu 2/28/19	DHHS	
19	Database design fnalized / Database creation completed	1 day	Mon 3/25/19	Mon 3/25/19	DIRAD	18
20	DiRAD develops SMS application	15 days	Mon 3/25/19	Fri 4/12/19	DIRAD	
21	DiRAD develops Web application	10 days	Sat 3/9/19	Fri 3/22/19	DIRAD	
22	DHHS to provide test data by this date, in preparation for DiRAD QA	1 day	Mon 3/11/19	Mon 3/11/19	DHHS	
23	DiRAD QA and load test of SMS backend integration	8 days	Mon 3/16/20	Wed 3/25/20	DIRAD	
24	DiRAD QA of Web application	10 days	Mon 3/18/19	Fri 3/29/19	DIRAD	
25	Load test of all applicatoins	5 days	Mon 4/1/19	Fri 4/5/19	DIRAD	
26	DiRAD train major project participants in preparation for general training - via web	1 day	Mon 4/8/19	Mon 4/8/19	DIRAD/DHHS	25
27	DHHS IT testing of Web and SMS applications	5 days	Wed 4/10/19	Tue 4/16/19	DHHS	
28	Feedback / Modification / Retest period for solution	5 days	Sat 4/20/19	Thu 4/25/19	DIRAD/DHHS	
29						
30	**Training**	1 day?	Mon 7/24/23	Mon 7/24/23		
31	Onsite System Administrator Training	1 day?	Wed 5/1/19	Wed 5/1/19	DIRAD	
32	Onsite Power User Training	1 day?	Wed 5/1/19	Wed 5/1/19	DIRAD	
33						
34	Begin Cutover of Application in specific program areas within DHHS	1 day	Thu 5/2/19	Thu 5/2/19	DIRAD	32
35	DHHS user acceptance testing of solution	5 days	Wed 5/1/19	Tue 5/7/19	DHHS	
36						
37	Open cutover conference bridge	1 day	Thu 5/9/19	Thu 5/9/19	DIRAD	28
38	Confirm active traffic in production environment	1 day	Thu 5/9/19	Thu 5/9/19	DIRAD/DHHS	28
39	Confirm solutiion is responding properly / providing correct data	1 day	Thu 5/9/19	Thu 5/9/19	DIRAD/DHHS	28
40	Confirm report data being logged	1 day	Thu 5/9/19	Thu 5/9/19	DIRAD/DHHS	28
41	Confirm web application showing report data	1 day	Thu 5/9/19	Thu 5/9/19	DIRAD/DHHS	28
42	DiRAD monitoring of the SMS application remotely after cutover (indefinitely)	1 day	Thu 5/9/19	Thu 5/9/19	DIRAD	28

III. COST PROPOSAL REQUIREMENTS

This section describes the requirements to be addressed by bidders in preparing the State's Cost Proposal. The bidder must use the State's Cost Proposal. The bidder should submit the State's Cost Proposal in accordance with Section I Submission of Proposal.

THE STATE'S COST PROPOSAL AND ANY OTHER COST DOCUMENT SUBMITTED WITH THE PROPOSAL SHALL NOT BE CONSIDERED CONFIDENTIAL OR PROPRIETARY AND IS CONSIDERED A PUBLIC RECORD IN THE STATE OF NEBRASKA AND WILL BE POSTED TO A PUBLIC WEBSITE.

A. COST PROPOSAL

This summary shall present the total fixed price to perform all of the requirements of the RFP. The bidder must include details in the State's Cost Proposal supporting any and all costs.

The State reserves the right to review all aspects of cost for reasonableness and to request clarification of any proposal where the cost component shows significant and unsupported deviation from industry standards or in areas where detailed pricing is required.

B. PRICES

Prices quoted shall be net, including transportation and delivery charges fully prepaid by the bidder, F.O.B. destination named in the RFP. No additional charges will be allowed for packing, packages, or partial delivery costs. When an arithmetic error has been made in the extended total, the unit price willgovern.

2

Attachment 1

Functional Business/Technical Requirements Traceability Matrix

Request for Proposal Number 5965 Z1

Bidders are instructed to complete a Functional Business/Technical Requirements Traceability Matrix for RFP 5965 Z1 Text Messaging Solution. Bidders are required to describe in detail how their proposed solution meets the conformance specification outlined within each Functional Business/Technical Requirement.

The Traceability Matrix is used to document and track the project requirements from the proposal through testing to verify that the requirement has been completely fulfilled. The awarded Contractor will be responsible for maintaining the contract set of baseline requirements. The Traceability Matrix will form one of the key artifacts required for testing and validation that each requirement has been complied with (i.e., 100% fulfilled).

The Traceability Matrix should indicate how the bidder intends to comply with the requirement and the effort required to achieve that compliance. It is not sufficient for the bidder to simply state that it intends to meet the requirements of the RFP. DHHS will consider any such response to the requirements in this RFP to be non-responsive. The narrative should provide DHHS with sufficient information to differentiate the bidder's technical solution from other bidders' solutions.

The bidder must ensure that the original requirement identifier and requirement description are maintained in the Traceability Matrix as provided by DHHS. Failure to maintain these elements may be grounds for disqualification.

How to complete the Traceability Matrix:

Column Description	Bidder Responsibility
Req #	The unique identifier for the requirement as assigned by DHHS, followed by the specific requirement number. This column is dictated by this RFP and must not be modified by the bidder.
Requirement	The statement of the requirement to which the bidder should respond. This column is dictated by the RFP and must not be modified by the bidder.
(1) Comply	The bidder should insert an "X" if the bidder's proposed solution complies with the requirement. The bidder should leave blank if the bidder's proposed solution does not comply with the requirement. If left blank, the bidder should also address the following: • Capability does not currently exist in the proposed system, but is planned in the near future (within the next few months) • Capability not available, is not planned, or requires extensive source-code design and customization to be considered part of the bidder's standard capability • Requires an extensive integration effort of more than 500 hours
(a) Core	The bidder should insert an "X" if the requirement is met by existing capabilities of the core system or with minor modifications to existing functionality.
(b) Custom	The bidder should insert an "X" if the bidder proposes to custom develop the capability to meet this requirement. Indicate "custom" for those features that require substantial or "from the ground up" development efforts.

Column Description	Bidder Responsibility
(c) 3rd Party	The bidder should insert an "X" if the bidder proposed to meet this requirement using a 3rd party component or product (e.g., a COTS bidder, or other 3rd party). The bidder should describe the product, including product name, its functionality and benefits in their response.

Introduction

The State realizes that not all of the requirements stated in this specification may be in the bidder's solution. While it is hoped that many of the functions and tasks are available, the State encourages bidders to note any modifications necessary to provide the functions required in this specification, and to meet the design needs of the system.

Texting Software Functional Business/Technical Requirements

The functional requirements listed below are those that DHHS staff deem essential. Bidders should note if their application meets each specific requirement, and describe how their software will meet each requirement. Bidders should also define and describe any additional functionality available in their software, beyond what is listed in the functional requirements.

Each requirement is identified by the following first three characters:

GEN	General System Requirements
TXT	Texting System Requirements
RPT	Reporting Requirements
DBM	Database/Data Management Requirements
TEC	General Technical Requirements
ERR	Error Handling Requirements
BKP	Backup and System Recovery Requirements
SEC	Security Requirements
DOC	System and User Documentation
TRN	Training
PTT	Production, Test and Training Requirements
INT	Interfaces/Imports/Exports Requirements
PER	System Performance Requirements

General System Requirements

This section represents the overall business requirements that apply to the software. Describe in the response how the proposed solution meets the requirement.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
GEN-1	Describe overall functionality of the bidder's Short Messaging Service (SMS) Texting solution. Provide a description and diagram of the solution including the architecture, hardware, and software, including location of the solution (cloud solution, vendor site, host site, etc).	X	X		

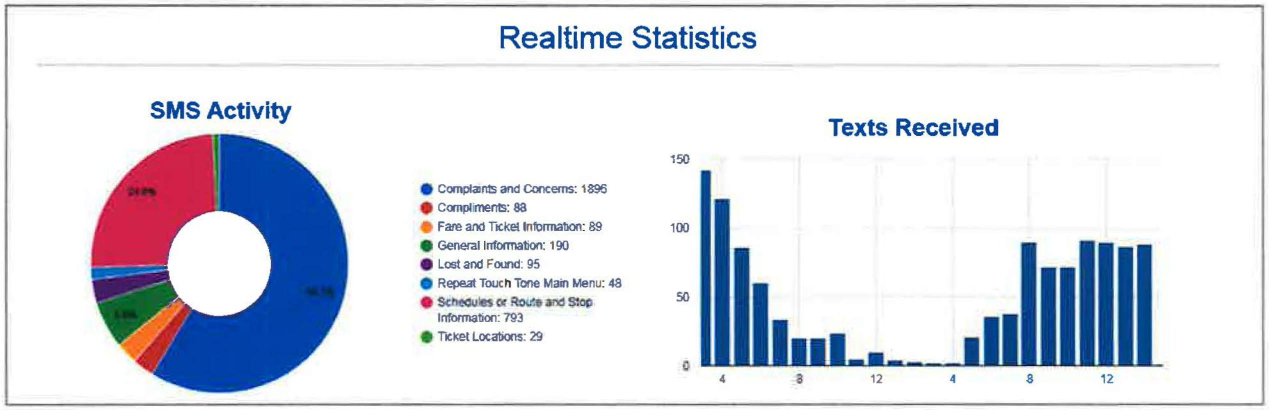
<table>
<tr><th>Req #</th><th>Requirement</th><th>(1) Comply</th><th>(a) Core</th><th>(b) Custom</th><th>(c) 3rd Party</th></tr>
<tr><td colspan="6">Response: DiRAD is providing a customized, turn-key solution built to the specifications of DHHS. The proposed solution is cloud-based, with Twilio handling the messaging and Microsoft Azure hosting the web applications. There is no direct utilization of hardware or software. The proposed application utilizes “Serverless Computing” to achieve redundancy, reliability, elasticity, and security. Our solution provides the following components:
1. Automated process(s) to pull and push data between CHARTS and N-FOCUS.
2. 2-Way SMS messaging services running on the Twilio Super Network
3. File Import/Export functions
4. User web interfaces via the DiRAD web portal
5. Standard and customized reports
6. Access to the Twilio API</td></tr>
<tr><td>GEN-2</td><td>Describe the bidder's connectivity and relationship to Wireless Service Providers (Carriers). Include how the proposed solution handles message content, delivery scheduling, and message routing services via multiple cellular network carriers/vendors. Include a list of your current Carriers and any known gaps in coverage in the State of Nebraska.</td><td>X</td><td>X</td><td></td><td></td></tr>
<tr><td colspan="6">Response: DiRAD is leveraging Twilio, a cloud-based communications platform that handles the relationships and network traversal for all SMS carriers in the Nebraska area (and in the world). To make this possible, Twilio created the Super Network, which has abstracted the complexities of routing among different carriers. The Super Network saves you from managing carrier complexities, piecing together connectivity, and building redundancy. Now, you can leverage a reliable global ecosystem of Tier 1 carriers with a few clicks. Twilio’s strategy for providing the highest-quality communications network centers around taking a provider-agnostic approach to how traffic is routed.
Twilio finds the best providers to work with, continually test and evaluate all providers to determine their performance and capabilities, and route traffic to deliver the best quality for its customers. With this in mind, DiRAD’s Twilio Solution can route SMS messages to any SMS carrier in the State.
DiRAD is a Twilio Gold-Certifed Partner, the highest partner designation.
twilio</td></tr>
<tr><td>GEN-3</td><td>Describe the bidder's proposed solution ability to interface with DHHS backend applications (NFOCUS and CHARTS) via API or web service. DHHS will be managing the phone numbers and text messages within the DHHS applications and providing data to the texting solution. In return the texting solution must provide data back to the DHHS applications via the same method.</td><td>X</td><td>X</td><td></td><td></td></tr>
</table>

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
Response: This is our understanding: the NFOCUS and CHARTS applications will first apply its own logic or programming which produces the lists of people to text, and hosts it for consumption by the DiRAD solution. This can be push or pull – the DiRAD system can react to an event, or it can institute a "watcher" service that looks for text messages to send. When it has a call to make, it writes to various DB records and launches the campaign on the record data. After the call is made, data is written to the DHHS backend with the results. DiRAD also records results for reporting purposes, if required. DiRAD's solution supports many different data exchange methods, including web service/API's and S/FTP.					
GEN-4	Describe the bidder's proposed solution to provide a file import/export interface to allow text messaging requests from DHHS from a XML(Extensible Markup Language), JSON (JavaScript Object Notation), and CSV (Comma-separated Value) files to be sent via SFTP, Email, and Web Upload. In return, the texting solution must provide a file back to DHHS via the same method.	X	X		
Response: Related to GEN-3, there are a few ways to do this, and DiRAD's experience is that each customer has their own preferences and security concerns. In the case of DHHS, we look at HIPAA compliance in the storage of the data and the transfer of the data. Here's how we would do the (3) different methods:**1. SFTP:** Either DiRAD or DHHS would spin up an SFTP server, and DiRAD would automate the process of obtaining the files from DHHS (which DHHS posts to the SFTP Server). During the SFTP session, data can be scrubbed for errors and duplicates, and also for comparison to any Do-Not-Call database that has been established. **2. Email:** DiRAD setups up a email box that receives the updates via email attachments.DiRAD's software can strip the attachment and parse the data – the file can be either XML, CSV, or JSON and the software is designed to automatically determine the file type. **This option is NOT secure.. 3: Web Upload:** DiRAD can create a secure web frontend that is part of the DiRAD Dashboard which will allow for manual file upload. The file is validated and scrubbed before being imported in the DiRAD JSON File or database.					
GEN-5	Describe how the bidder's solution supports a secured, front-end Web Portal for the texting system. DHHS requires a front-end, web based system with an easy-to-use portal for authorized staff to create text messages, define receiving groups, define settings and view or query information for reporting. Please submit screenshots and descriptions of your solutions front end portal.	X	X		

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party

Response: DiRAD develops and hosts custom portals that leverage Microsoft Azure's innate security features. DiRAD designs portals that are easy to use, and require little to no training. Below are some examples – ***Keep in mind that DHHS will be able to choose the screen layout, design, data elements, security,and functionality. DiRAD's web application provides real-time and historical reporting, manual file upload, and control of the application functionality.*** DiRAD abstracts the technical configuration to provide a "fly-by-wire" overlay that gives users much power over the application, without the complexity.

Real Time Dashboard



Sent Texts Report – Designed to Customer Specifications

Text Sent	Court Date	Phone Number	Event ID	Court Event Type	Court ID	Court Source	Verbiage
Sep 10, 2018, 6:30:01 PM	Sep 12, 2018, 10:00:00 AM	7404122354	1481	Plea	4D	General Sessions Court	Court Reminder. 9/12/2018 2:00:00 PM: General Sessions Court https://goo.gl/maps/2rMTAMbqcFu Questions call 8439585000 or go to https://bit.ly/2AZEkQj
Sep 10, 2018, 6:30:02 PM	Sep 12, 2018, 10:00:00 AM	8434803303	7605	Plea	4D	General Sessions Court	Court Reminder. 9/12/2018 2:00:00 PM: General Sessions Court https://goo.gl/maps/2rMTAMbqcFu Preguntas llame 8439585000 o visite https://bit.ly/2AZEkQj
Sep 11, 2018, 6:30:01 PM	Sep 12, 2018, 10:00:00 AM	7404122354	1481	Plea	4D	General Sessions Court	Court Reminder. 9/12/2018 2:00:00 PM: General Sessions Court https://goo.gl/maps/2rMTAMbqcFu Questions call 8439585000 or go to https://bit.ly/2AZEkQj
Sep 11, 2018, 6:30:02 PM	Sep 12, 2018, 10:00:00 AM	8434803303	7605	Plea	4D	General Sessions Court	Court Reminder. 9/12/2018 2:00:00 PM: General Sessions Court https://goo.gl/maps/2rMTAMbqcFu Preguntas llame 8439585000 o visite https://bit.ly/2AZEkQj

Sent Texts Summary Report - Custom

Texts Sent Summary Report

Start Date/Time	End Date/Time
2018-12-01 12:00 AM	2018-12-21 12:00 AM

Total Number of Texts Sent: 2593

Number of Texts Sent in English: 91

Number of Texts Sent in Spanish: 3

Number of Texts Sent for Initial Appearance: 52

Number of Texts Sent for Jury Trial: 0

Number of Texts Sent for Motion: 0

Number of Texts Sent for Plea: 3

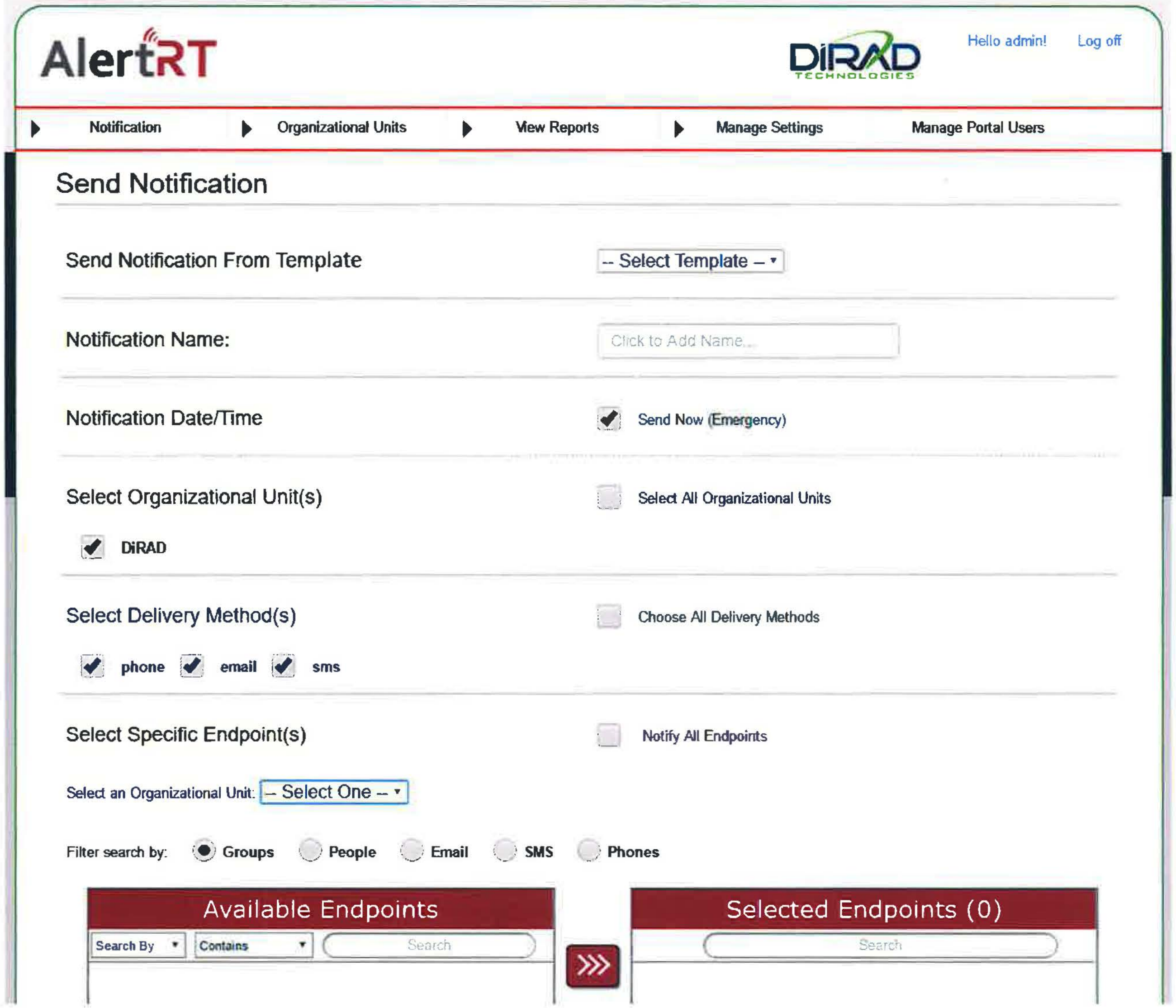
Number of Texts Sent for Status Conference: 39

Number of Texts Sent for Status Conference Req: 0

Number of Texts Sent from City of Charleston Municipal: 0

Number of Texts Sent from General Sessions Court: 94

DiRAD's Own AlertRT Production Notification System



GEN-6	Describe any Federal and/or State entities that are currently using the bidder's solution(s) and how the solution is used by the entity.	X	X		

Response: DiRAD has many government entitities using our solutions. Below are select customers:

- New York City Administration for Children's Services – IVR, Call Center, Web, Emergency Notification
- New York City Department of Information Technology and Telecommunications – AlertRT Emergency and Day-to-Day Notification System
- New York City Criminal Justice Agency – Defendant Reminder System
- Charleston County Courts – Hearing Reminer System
- New York City Police Department – IVR, Call Center, Outbound Notification
- City of Minneapolis – Utilities IVR and Notification System
- South Carolina Department of Social Services – Inbound IVR/Outbound Notification System

GEN-7	Describe how the bidder's solution complies with regulations – TCPA (Telephone Consumer Protection Act), FCC (Federal Communications Commission), FTC (Federal Trade Commission), MMA (Mobile Marketing Association), and CTIA (Cellular Telecommunications Industrial Association).	X	X		

Response: DiRAD leverages Twilio and various security options in Microsoft Azure to ensure compliance. TCPA compliance involves scrubbing against the Do-Not-Call List, plus any DNC list the DHHS wishes to provide. In addition, DiRAD can offer the message recipients the ability to opt out of the messaging system. DiRAD adheres to CTIA and MMA best practices and will consult with DHHS on compliance. ***DiRAD confirms that our applications are in compliance with all federal and state laws regarding outbound notification.***

GEN-8	Describe any system or user customization preferences available with the bidder's proposed solution.	X	X		

Response: The DiRAD/Twilio solution is entirely customizable, but runs on a proven core service. DiRAD offers customization for web interfaces, as well as report data – custom fields are included in the solution.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
GEN-9	Describe the customer support availability and process for obtaining help from the bidder's proposed solution. For example, Help Desk, live chat, knowledge base, FAQs, video tutorials, etc. Include the hours that customer support is available.	X	X		

Response: DiRAD provides live support via telephone, email, live chat and the customer's web dashboard. DiRAD provides emergency technical support 24x7, with live answer 6am to 8pm 7 days a week. As part of the solution, and in alignment with contracted DHHS deliverables, DiRAD provides detailed documentation on call flows, databases, operations and procedures.

GEN-10	Describe the software licensing model of the solution, including any required third party licensing. Include a description of setup, a general description of what is included with the "base" product, system components or "extras". Describe if short codes are included with the bidder's proposed solution. Describe how the Bidder's maintains licensed software no more than two supported versions behind the latest release and updated with latest security patches.	X	X		

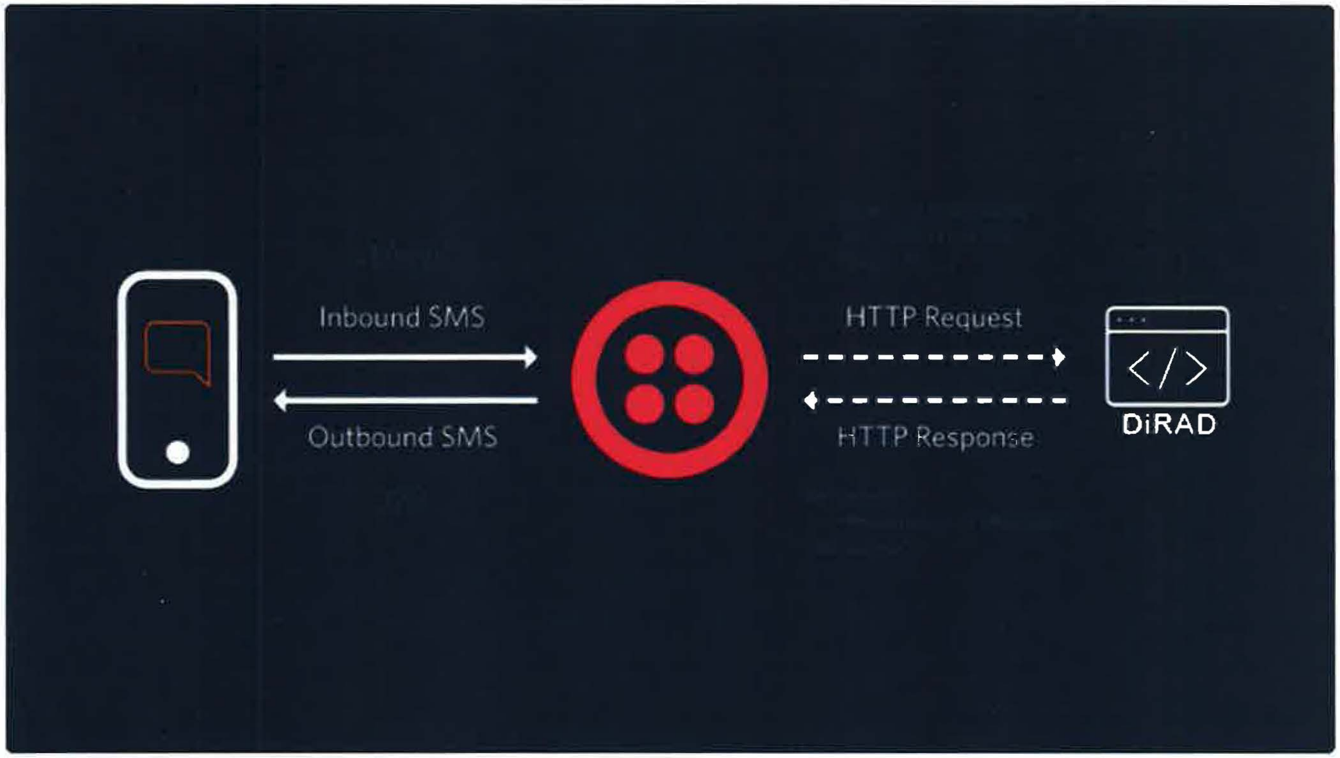
Response:

DiRAD is providing this solution as a service --- there are no licensing requirements on DHHS, nor are there any software licenses agreements with Twiliio. All software is the responsibility of DiRAD. The solution is being implemented as specified, and any necessary updates to the code or software are the responsibility of DiRAD. . Short Code pricing is being provided as an option. DHHS may also choose a dedicated long code or a toll-free number.

Texting System Requirements

This section represents the overall texting requirements that apply to the software. Describe in the Response how the proposed solution meets the requirement.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
TXT-1	The bidder's proposed solution must have the ability to support two-way communication both sending and receiving text messages. Describe how your solution meets this requirement.	X	X		

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
Response: The DiRAD solution leverages the Twilio Super Network's ability to receive text messages as well as sending. Twilio utilizes webhooks for this function. When a caller sends a text message to the DHHS SMS number, Twilio triggers a webhook running on a DiRAD web service, where it is processed. 					
TXT-2	Describe how the bidder's proposed solution supports both individual and broadcast messaging. Broadcast messaging is defined as the ability to send a message to thousands of clients.	X	X		
Response: Both individual messages and broadcast messages are sent using the Twilio Super Network, which has the capacity to send to thousands of clients as specified. In both cases, the messages can contain information specific to each individual being messaged.					
TXT-3	Describe how the bidder's proposed solution handles OPT IN and OPT OUT functionality.	X	X		

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
Response: DiRAD can provide several options for this functionality: For opt-in, clients can text the SMS number with a key word just as YES. For opt out, a client could send a NO. Other options for this feature include a web interface for clients to sign up for the service and manage their account and preferences. In this web interface, clients can specify business rules for time of day/day of week reminders. DHHS system administrators can also set this information on an individual, group, or global basis.					
TXT-4	Describe how the bidder's proposed solution handles incoming texts from the client when no response is expected. For example, if a text response is received from a client that was not solicited. What happens and where does the text message go?	X	X		
Response: Incoming texts are matched agains the database of existing clients. If there is no match, the the number is stored as a record in the database which can thusly be reported on. DHHS may choose a number of options for how to respond to this message, if at all. DiRAD's solution provides the flexibility to implement whatever decision functionality is desired by DHHS.					
TXT-5	Describe how the bidder's solution assures DHHS that the text or group of texts was delivered to the intended client phone number. Describe how DHHS is notified of text messages delivered. How does this work?	X	X		
Response: Twilio provides Programmable SMS outbound message status tracking with Status Callbacks. These callbacks can be helpful to see if a message has been delivered, failed, or ran into some other delivery issues. This allows DiRAD to develop advanced analytics to see the state of all messages.. Once a message is created, it progresses through multiple states until it is finally completed. Outbound messages initiated via the REST API cycle through these states in order: • Queued or Accepted: Twilio has accepted your API request, and has queued your message to be sent. • Sending: Twilio is forwarding your message request to one of our Super Network partners. • Sent: Twilio has received a confirmation from our Super Network partner advising they have accepted the message. • Delivered: Twilio has received a confirmation from our Super Network partner advising the message has been delivered. • Other statuses include Undelivered and Failed, with associated error codes (where applicable)					
TXT-6	Describe how the bidder's proposed solution handles texts that fail to get delivered to the intended recipient. Is the text retried, and if so, how many times? Describe how DHHS is notified of failed text messages.	X	X		
Response: Leveraging the analytics described above, DiRAD provides configurable options for retries in the web portal. Notification of failed messages is also configurable, with the ability to run reports and receive email and web notifications.					

TXT-7	Describe how the bidder's solution has the ability to schedule text messages to be sent at specific timeframes.	X	X		

Response: Time of day settings are configured in the web portal and stored in the database. As the application runs, it looks for messages to send, and compares against the time of day settings. It will only send the messages if they meet specific criteria; time being just one of them.

TXT-8	Describe the bidder's proposed approximate length of time for delivery for individual and bulk text messages. Provide the volume and timeframes for bulk messages.	X	X		

Response:Individual messages are sent instantly according to the criteria describe in TXT-6. Bulk messages default send time is (1) Call Per Second (CPS) or 60 calls per minute/3,600 calls per hour. **With a short code**, that CPS increases dramatically to 100 messages per second. This is especially useful for emergency situations when dealing with a large list of recipients. DiRAD is including a short code in this solution.

TXT-9	Describe any messaging limitations including the maximum number of characters that can be used for texts sent with the bidder's proposed solution.	X	X		

Response: The character limit for a single SMS message is 160 characters, however most modern phones and networks support concatenation and segment and rebuild messages up to 1600 characters. Messages not using GSM-7 encoding are limited to 67 characters.

Req #	**Requirement**	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
TXT-10	Describe how the bidder's proposed solution handles multiple text messages going to the same recipient during the same timeframe. Is there any ability to prioritize messages or setup a predetermined order? Does the solution limit the number of text messages sent to a client in a specified timeframe?	X	X		

Response: Twilio cannot guarantee that SMS messages will arrive in order. While we will send the SMS messages you pass to us in the order that you've queued them, the SMS messages are delivered individually with no association to each other. The order of delivery depends on the carrier.

To help your users understand the order of your messages, we recommend that you append a page reference following each message, for example 1/3, 2/3, 3/3e:

TXT-11	Describe how the bidder's proposed solution allows the use of long codes and short codes. If short codes are available in the bidder's proposed solution, describe if the solution offers both dedicated and shared short codes. Describe the estimated timeline for setting up new short codes.	X	X		

Response: Both long codes and short codes are available from the Twilio SMS platform. Twilio only offers dedicated short codes, as shared short codes can be shut down if another vendor is using the code inappropriately. To start the process, you can DiRAD fills out an application on behalf of DHHS. The application will allow you to choose either a US, UK, or Canada short code, as well as to indicate your use case and message flow.

Once the application is submitted to Twilio, the Short Code Team will review it and advise you of any changes you may need to make in order to be compliant with carriers' requirements. Once Twilio has reviewed and approved the application, you will be able to start the carrier approval process. Here is a more detailed timeline of the process:

1. Twilio Review Process (1-3 Days): Twilio reviews your application and helps you refine it before it can be submitted to carriers.
2. Once our team has approved your application, we will notify you that you can log in here and pay for your short code. (for more information about how payment works, see How Twilio bills for Short Codes).
3. Mobile Carriers review process (8-12 weeks on average)*: Twilio submits a provisioning request to carriers and it enters their review and testing process before being connected and ready for use.

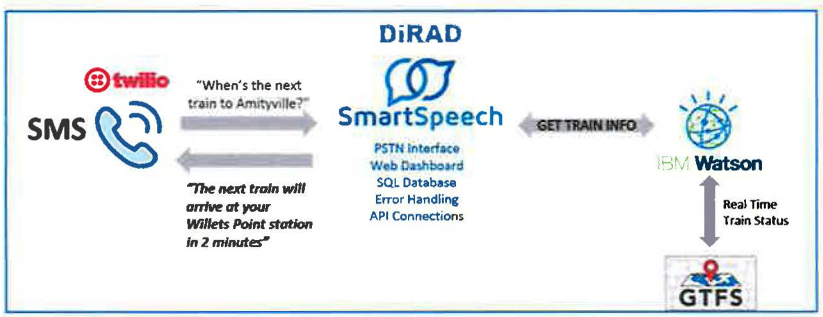
*Note that carriers require payment before they begin the review process. Short code provisioning can vary considerably depending primarily on the time that it takes for mobile carriers to review and approve your short code.

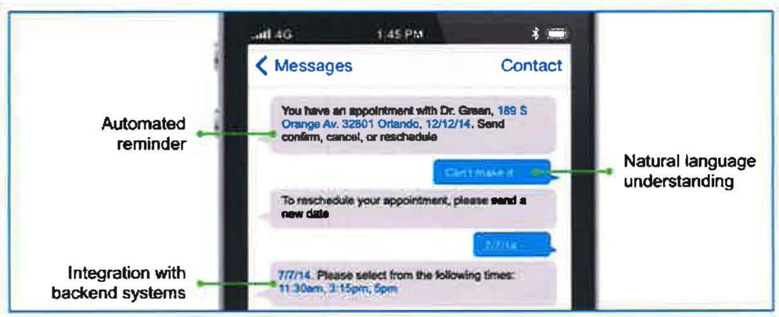
TXT-12	Describe how the bidder's proposed solution can perform functions based on keyword responses from a client. Can keywords be customized? Are certain keywords included with the base solution? Is there a maximum number of keywords that can be used? Can the use of keywords be tracked in the solution?	X	X		

Response: Text responses are essentially text that can be parsed, and keywords acted upon. Keywords are managed in the web portal, and there is no limit of keywords. Keywords are tracked via historical reporting.

TXT-13	Describe how the bidder's proposed solution has the ability to send out an automated response or series of responses to a specific incoming text messages from a client.	X	X		

Response: DiRAD leverages IBM Watson Assistant to intelligiently digest incoming messages and respond appropriately in the given context. This Artificial Intelligence (AI) -assisted feature allows for a natural language SMS exchange, and can also be used in the application of chat bots in web apps and social media. The example below is from a transit application and an appointment reminder:





TXT-14	Describe how the bidder's proposed solution avoids having a large batch of distributed messages caught in spam filters.	X	X		

Response: Carriers in the U.S. and Canada appear to be using adaptive (machine learning) software systems to protect their users. These systems factor in both the rate of send, as well as the content of the messages and behave very much like email filtering systems. Messages receive a cumulative score based on how many messages have come from a phone number during a time period, how many similar messages have transited the carrier's network, or if the message contains content that makes it a high match for spam. Time periods are measured by the second, minute, hour and day.

The use of Short Codes virtually prevents the messages from being filtered. Short codes are essentially numbers which have been whitelisted for a particular type of pre-approved traffic. If you are sending many messages with identical content to a large number of users, you are at high risk of having your messages filtered by carriers and should consider the DiRAD Short Code option.

TXT-15	Describe the security methods used by the bidder's proposed solution to prevent and eliminate spam replies.	X	X		

Response: DiRAD's solution will check each SMS inbound number and assign it to an exception list that is stored in the database. Subsequent messages by these numbers can be rejected.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
TXT-16	Describe how the bidder's proposed solution allows an active URL link within the text that can direct clients to a website.	X	X		

Response: DiRAD's solution natively supports this feature, as illustrated in the response to GEN-5.

TXT-17	Describe the bidder proposed solution's capability to send surveys to clients and create reports of voting results and number of responses.	X	X		

Response: Our suggestion would be to send a URL of the survey and have the respondents answer the questions from there. Reports are then available on the web portal.

TXT-18	Describe how the bidder's solution supports text messages sent and received in foreign languages. Describe the foreign languages supported.	X	X		

Response: Any foreign language that is in an SMS-friendly format can be used. Taken further, DiRAD can again leverage IBM Watson to translate the message from English to the language specified in the database.

TXT-19	Describe how the bidder's solution supports an unlimited number of contacts or contact groups.	X	X		

Response: There is virtualy no limit to the number of contacts or contact groups. Any “limit” would be dicatated by database size limitations, which are far great than in the DHHS use case.					
TXT-20	Describe the bidder solution’s capability to allow standard text messages to be stored in the solution and available for use when sending out messages.	X	X		
Response: Standard text responses are merely database records with records that assign their use. Each message stored has a unique GUID that can be tracked throughout the life cycle of the message.					
TXT-21	Describe the bidder solution’s capability to trace inbound response rate from text messages.	X	X		
Response: SMS inbound messages are time-stampted in the database, thus allowing users to produce reports revealing the response rate.					
TXT-22	Describe all the information that is stored in the texting system database, and the length of time that the information is stored in the system database. Describe the bidder's ability to store message information (metadata) including but not limited to: • Sender Telephone Number; • Recipient Cellular Telephone Number; • Message data that was sent/received; • Date and time that the message was sent; and, • Whether the text message was successful or failed to be received.	X	X		
Response: Each of the above data elements can be stored indefinitely, or through the length of the contract. Also, depending on the users’ settings, location data may be also be available in the form of coordinates (LAT/LON) that can be overlaid on a map in the report output. Mapping functionality in this case would be an option available for an additional cost.					

Reporting Requirements

This section represents the reporting requirements that apply to the software. Describe in the Response how the proposed solution meets the requirement.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
RPT-1	Describe how the bidder’s solution provides access to reporting/statistical information. It must allow access to reporting via the Web portal along with the ability to export the reporting/statistical information in XML, JSON, and CSV file formats to DHHS via SFTP, Email, Web Download, API, and/or Web Service.	X	X		
Response: Reporting and statistical information is stored in SQL databases for web portal access. Reports can then be exported to one of the formats listed above, or the data itself can be sent directly to DHHS data stores via SFTP, Email and API’s.					

RPT-2	Describe any online web based dashboards and metrics available in the bidder's proposed solution. Reporting should include, but is not limited to, the following: • Monthly inbound and outbound traffic reports; • Successful vs Failed Messages; • Uptime and downtime of services; • Error code messages; and, • Opt out rates.	X	X		
Response: DiRAD's solution provides the above data elements in reporting as detailed and summary reports. In addition, real time views will show current traffic, current status of system, and number of inbound/outbound texts in a given period.					

RPT-3	Describe how the bidder's solution has the ability to produce reports including, but not limited to: • DHHS clients that have "opted in" and "opted out" of receiving information via text message; and, • Keywords that are being used along with statistics on their use.	X	X		
Response: During the implementation period, DHHS will have the opportunity to choose custom reports in addition to the standard reports. DiRAD will also provide exception reports (messages from unknown numbers). The reports listed above will be included with the solution.					

Database/Data Management System (DBMS) Requirements

DHHS requires the benefits inherent with a relational database management system (RDBMS). The accessibility, flexibility and maintainability achieved through normalized data structures are essential to achieving the business objectives outlined in this RFP.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
DBM-1	Describe what DBMS is used for storage of data with the bidder's proposed solution. If the bidder's proposed solution requires any DHHS data to be stored off-site (including data "in the cloud") describe how and where the data is secured and stored within the continental United States.	X	X		
Response: Data is stored in encrypted databases in Microsoft Azure. These database instances are confined to US-based Microsoft data centers.					
DBM-2	Describe how the bidder's proposed solution maintains an automated history of all transactions, including but not limited to: date and time of change, "before" and "after" data field contents, and operator identifier or source of the update. Describe how long the history is maintained.	X	X		
Response: Included with DiRAD's web portal package is user auditing that takes place in real time. System administrators can run historical reports to reveal the data on the changes. The history is maintained for the life of the contract.					
DBM-3	Describe how long text messaging data is maintained in the bidder's proposed solution.	X	X		
Response: Data is retained for the length of the contract. During a transition to a new vendor, DiRAD would provide the data as part of the transition process.					

General Technical Requirements

This section presents the overall technical requirements that apply to the software. Describe in the Response how the proposed solution meets the requirement.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
TEC-1	Describe how the proposed solution is scalable and flexible enough to accommodate any changes required by the State and/or federal statute, mandate, decision or policy. Describe the upgrade and maintenance process for the proposed solution.	X	X		
Response: As a government-specialized vendor, DiRAD designs solutions to provide the ultimate in flexibility should conditions or requirements change. In addition, the Twilio platform is truly elastic in nature – scalability happens in real time, providing the resources DHHS needs during times of heavy usage.					
TEC-2	Describe any redundancy built into the proposed solution to limit any downtime in the bidder's proposed solution.	X	X		

Response: The Twilio cloud communications platform runs on the Twilio Super Network, the world's most reliable and resilient communications network. The geographically distributed and scalable platform powers 50,000+ businesses and billions of interactions. Twilio has been recognized by DMG Research as the third largest cloud contact center infrastructure platform (by the number of seats), powering innovative SaaS providers such as Zendesk, Talkdesk, and Serenova as well as large enterprise contact centers at companies like ING and Zillow. From the world's largest public companies to early-stage startups, people rely on Twilio's cloud communications platform to exchange millions of calls and messages every day from web and mobile apps. These communications facilitate deliveries, power customer support, and keep mission-critical applications running without outages. DiRAD's web portal, webhooks and SQL data reside in Microsoft Azure Geo-Redundant Storage and backed by multiple instances across the US.					
TEC-3	Describe what industry standard browsers are supported by the bidder's solution.				
Response: DiRAD's web portal runs primarily HTML, Javascript and React. By default, the application supports all modern browsers.					

Error Handling Requirements

The management of the system requires that all occurrences of errors be logged for review and that critical errors be accompanied by appropriate alerts. Authorized users need to be able to query and review the error log and configure the alerts.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
ERR-1	Describe how the bidder's proposed solution provides edits at the point of data entry in the web portal to minimize data errors and provide immediate feedback in order for incorrect data to be corrected before further processing.	x	x		
Response: The solution is designed to accept automated data from DHHS, plus manually-uploaded data via the web portal. In both instances, data validation is used to inspect the file. If input is rejected, any error messages are communicated back to the user, or logged in the case of the automated file transfer. Validation uses Regular Expressions for validation, which can be customized for the use of DHHS.					
ERR-2	Describe how the bidder's proposed solution provides edits on text messages sending and receiving. The solution should provide a comprehensive set of error messages with unique message identifiers. Please provide a list of error messages.	X	X		

Response: Given that most outbound SMS messages will be template-based with variable data inserted, the body of the message should be relatively error-free. However, missing or bad data in the variable fields will throw errors that will be logged for reporting. In addition, there are SMS and web API errors that are tracked and logged. An overview of the error messages is below.

As a RESTful API, Twilio's Verify API will return HTTP responses and error codes which will help verify normal behavior as well as contextualize exceptions.

Return Codes

The following status codes are used:

200: OK Response is correct. The body of the response will include the data requested.

400: Bad Request There was an error with the request. The body of the response will have more info.

401: Unauthorized Token is invalid. If your API key is wrong a 401 will be generated. Please check the API key.

429: Too Many Requests API usage limit. If you reach API usage limits, a 429 will be returned. Please wait until you pass the limit and attempt the call again.

503: Service Unavailable There are multiple possible reasons for a HTTP 503 error.

Internal Twilio error.

Your application is accessing an API call you don't have access to.

Error Codes

When the API returns a status other than 200, we add an error code in the message body. This table enumerates and describes all of the possible error codes.

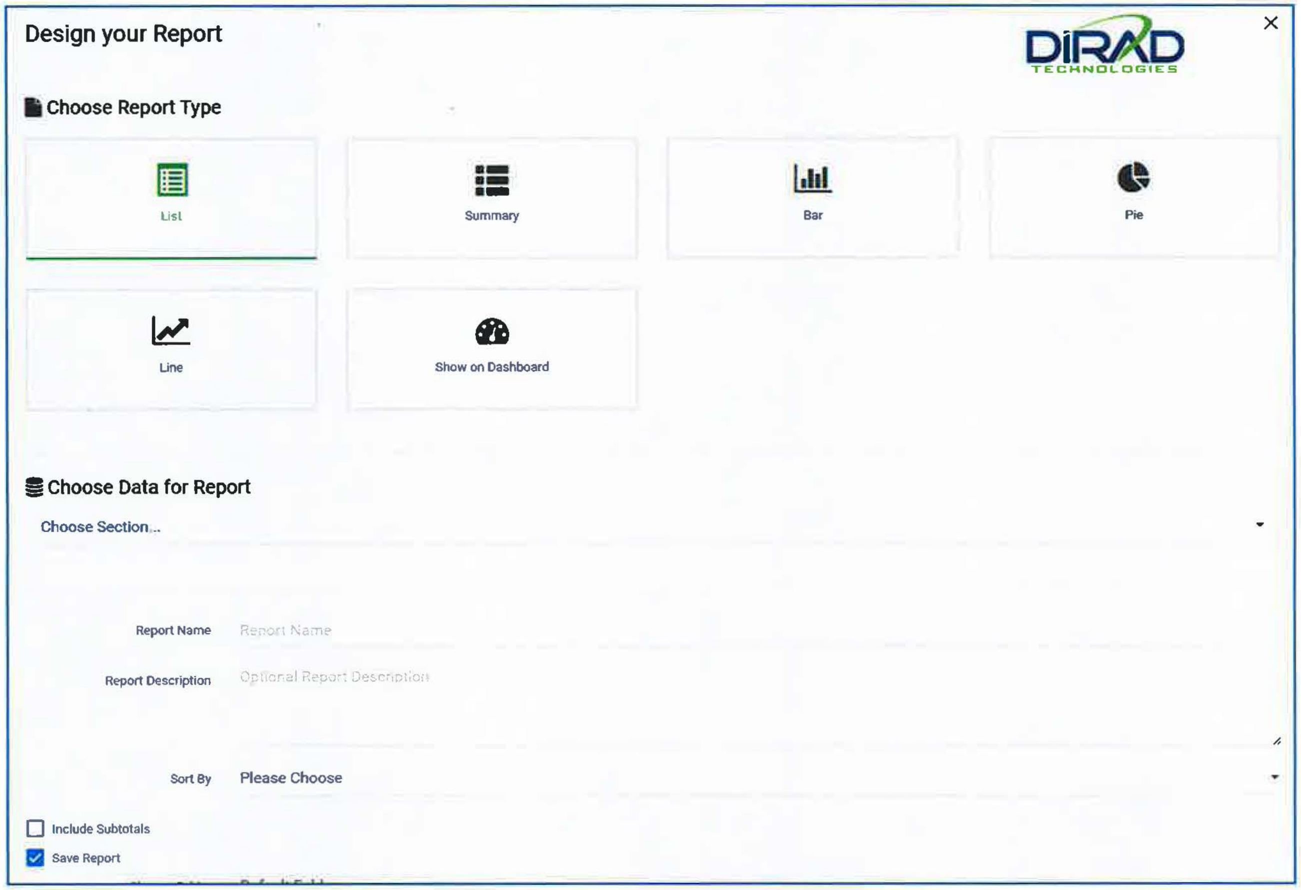
Error Code	HTTP Status	Error Message	Description	Category
60000	400	An error occurred	Default error message when an error is not configured correctly.	ALL
60001	401	Invalid API key	When the given API key does not correspond to any Authy app	ALL
60002	400	Invalid request	A request containing invalid parameters or invalid data	ALL
60003	429	DoS protection	Client has reached the maximum number of requests per time unit on the given endpoint	ALL
60004	400	Invalid parameter	The given parameter is not valid	ALL
60005	400	UTF-8 invalid	Client sending request with UTF-8 invalid characters	ALL
60021	403	Phone verification couldn't be created	An error occurring creating phone verification	Phone Verification

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
60022 401 Verification code is incorrect 60023 404 Phone verification not found 60032 400 SMS was not found 60033 400 Phone number is invalid 60042 400 Either uuid or country_code and phone number are required Invalid parameters in phone verification 60046 400 Missing dashboard account ids to process 60060 503 Your account is suspended Twilio account is suspended 60064 403 Failed to enable OneTouch Can't update application settings on enabling onetouch 60065 403 Needs to enable OneTouch first 60066 403 Error saving the callback information 60069 400 Access key can not be saved 60070 400 Application was not valid 60071 404 Access key not found 60072 404 Invalid access key 60073 400 Invalid application API key 60074 400 Access key doesn't have enough permissions 60075 400 Delete application failed 60078 403 Invalid country code 60082 403 Can not send SMS to landline phone numbers 60083 403 Phone number not provisioned with any carrier					
ERR-3	Describe how the bidder's proposed solution ensures all errors are written and categorized to an error log. Describe how the bidder's proposed solution allows for a user to view, filter, sort, and search the error log.	X	X		
Response: The DiRAD solution writes every Twilio code received to the database, whether from a successful transaction, or an error. The error codes are timestamped and accompanied with metadata to identify the transaction, System administrators can run reports that search by error code, phone number, date/tim e, and other criteria.					
ERR-4	Describe how the bidder's proposed solution provides for the generation of standard and customizable error reports.	X	X		

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party

Response: DiRAD's solution provides open access to the data and call metadata. This data is highly accessible via standard and custom reports. In addition, DiRAD provides an ad-hoc report generator that allows system administrators to build custom reports on-the-fly.

Ad-Hoc Report Generator

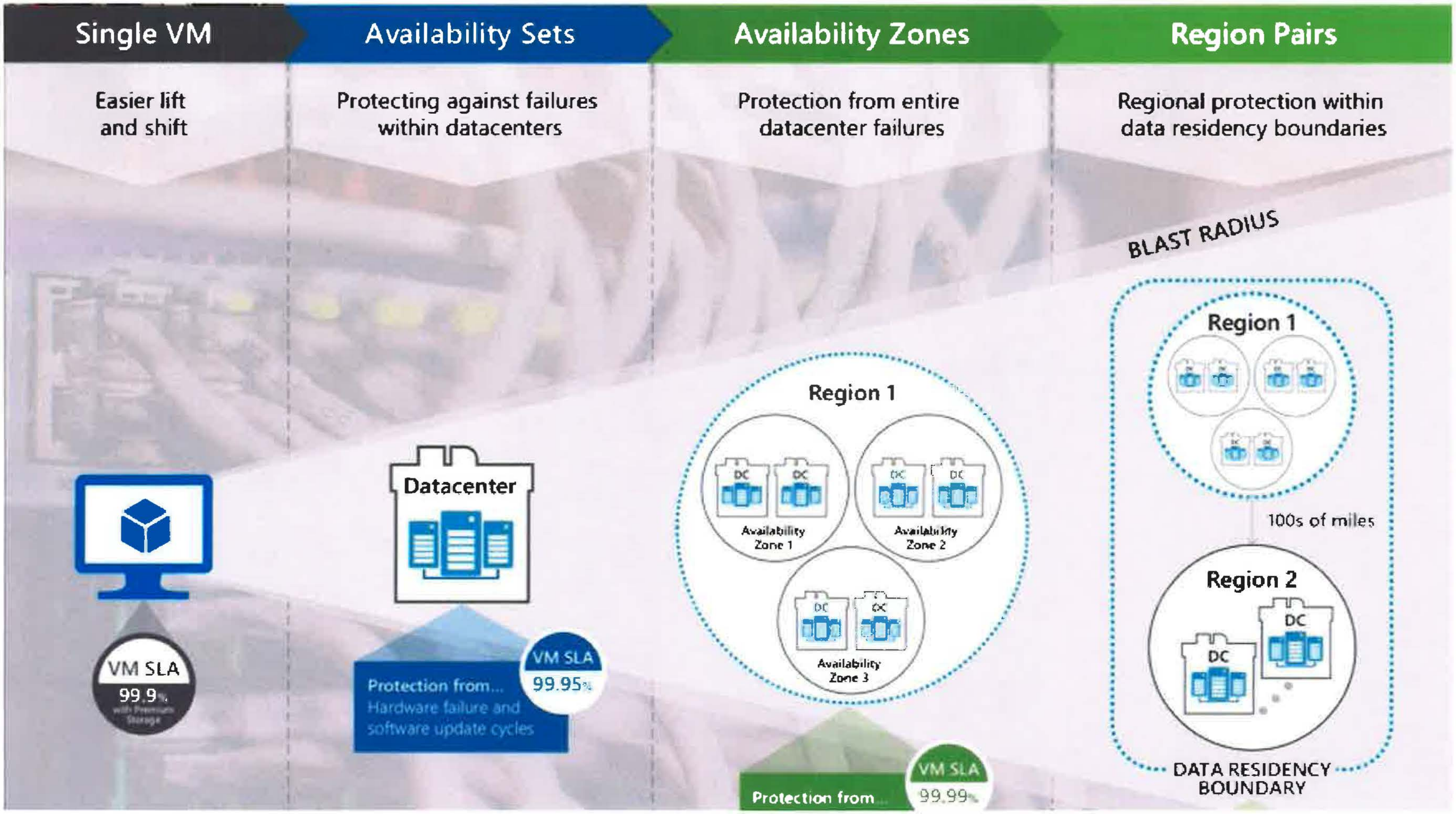


Backup and System Recovery Requirements

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
BKP-1	Describe the bidder's proposed Backup and System Recovery plan and readiness. Describe the bidder's Service Level Agreement (SLA) on returning the solution to service from a backup. Describe the bidder's proposed backup retention schedules – daily, weekly, monthly, quarterly, etc. Bidder must submit a copy of their SLA with their response.	X	X		
Response:	The DiRAD/Twilio solution offers a guaranteed SLA of 99.95%. All web interfaces, portals and dashboards run on secure instances of Microsoft Azure. Also utilizing Availability Zones, backups occur in real time via clusters, with images constantly being synchronized. The DiRAD/Twilio SLA is attached.				
BKP-2	Describe the bidder's proposed Disaster Recovery Plan. Describe the bidder's SLA on returning the solution back to operational service.	X	X		
Response:	Twilio (and DiRAD) both run on a serverless architecture (also known as serverless computing or function as a service, FaaS) which is a software design pattern where applications are hosted by a third-party service, eliminating the need for server software and hardware management by the developer. Applications are broken up into individual functions that can be invoked and scaled individually. Twilio utilizes AWS Lambda, and DiRAD leverages Azure Functions. Thus, the solution leverages the vast resources and know-how of Azure and AWS to provide an extremely High-Availability environment. DiRAD also provides off-site physical copies of all code and databases.				
BKP-3	Describe how backups of the bidder's proposed solution are able to be scheduled without user intervention and without interruption to the system.	X	X		

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party

Response: DiRAD utilizes Azure to maintain its application, including backup and security functions. Azure provides High Availability sets in their datacenters, as well as High-Availability Zones that span geographies.



Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
BKP-4	Describe how the bidder's proposed solution provides testing and validation processes for all of the backup requirements listed previously (BKP-1, BKP-2, and BKP-3).	X	X		
Response: As a Microsoft Azure partner, DiRAD leverages Azure's High Availability Sets and Availability Zones, which fall under Microsoft's SLA – which is continuously validated.					
BKP-5	If there is a backup failure or downtime, describe the bidder's proposed method and timing of communication to DHHS.	X	X		
Response: DiRAD monitors the solution 24x7. In the event of an interruption in either web or SMS services to the DHHS application, DiRAD staff are notified. An automated email is sent to DiRAD company staff as well as DHHS, with updates as they occur.					

Security and Audit Requirements

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
SEC-1	Describe the bidder's proposed security safeguards integrated into their application and how these safeguards address DHHS security. Refer to DHHS Information Technology (IT) Access Control Standard (DHHS-IT- 2018-001B) for specific requirements: http://dhhs.ne.gov/Pages/fin_ist_policies.aspx	X	X		

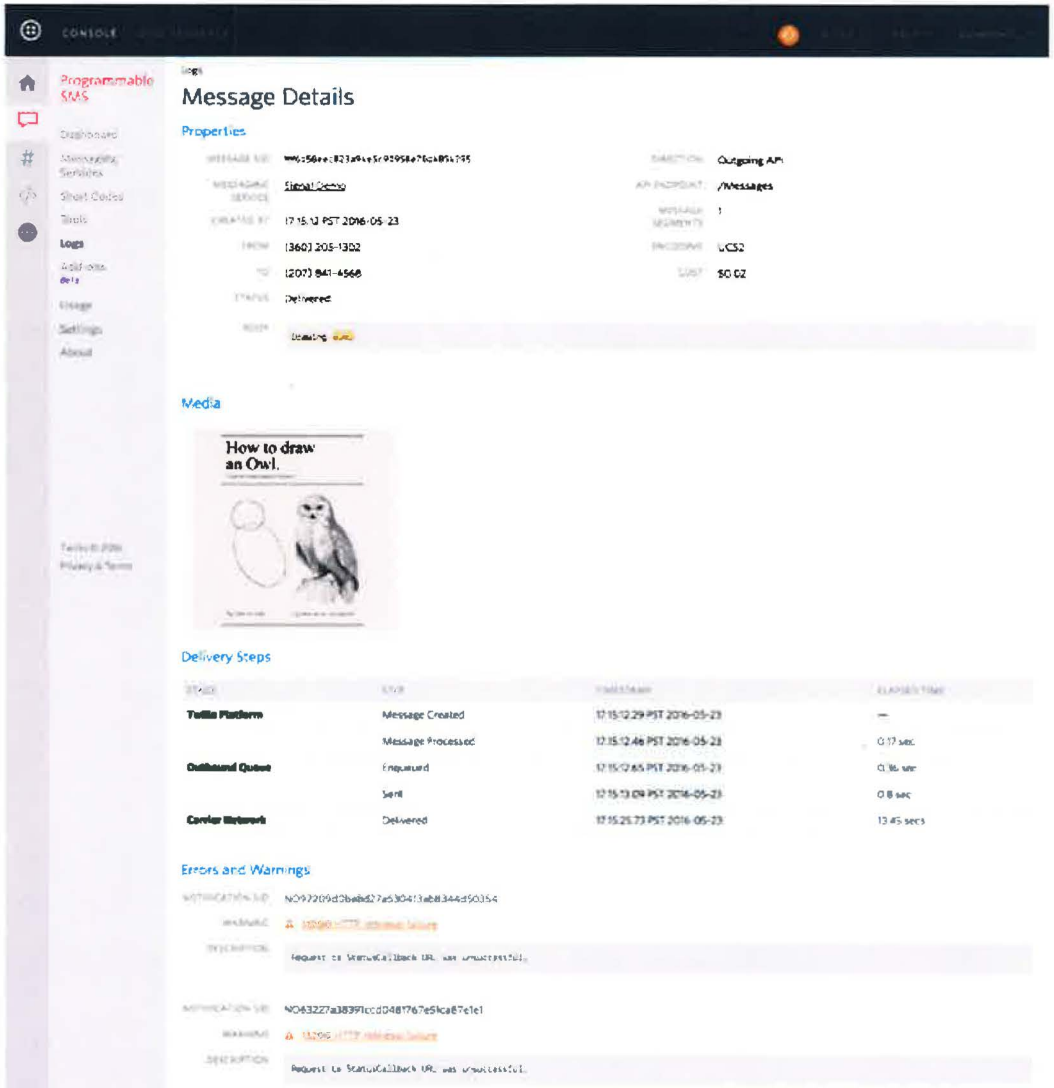
Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
Response: As a web application with secure file exchange with DHHS, the DiRAD solution's vulnerability is relatively less than on-premise software solutions. However, there are certain items that the solution complies with, that would relate to the DHHS IT Access Control Standard, such as (but not limited to): 1. The DiRAD solution will comploy with the DHHS Acceptable Use Policy with respect to data exchanged between systems. DHHS should only deliver the data necessary to complete SMS calls. This includes phone number, and associated codes with respect to which program and what type of message is being sent. Such data is encrypted in transit and at rest, in accordance with DHHS policy. 2. Security in Contracts, Agreements, RFPs/RFIs, and SOWs 3. Encryption Standards: DiRAD complies with the FIPS 140-2 standards or equivalent level of protection data associated with the SMS solution. 4. Changing of Default Passwords 5. Applicaton Development Security Standards (within the scope of the application) It is preferable that the DiRAD solution integrates with DHHS Managed Authentication Source. 6. Change Management Process 7. Storage of data in a FedRAMP certified cloud environment by using various Azure product offerings.					
SEC-2	Describe how the bidder's proposed solution meets the DHHS requirements for unique user ID access. Include: • Specification on configuration of the unique user ID; • How the unique user ID is assigned and managed; • How the unique user ID is used to log system activity; and, • How the system handles the creation of duplicate user ID accounts.	X	X		
Response: More discussion is warranted here --- it should be determined if DiRAD will utilize DHHS Authentication Management. Notwithstanding this, below are DiRAD IT Policy standards for user IDs: • Each DHHS user on the system receives a unique User ID. • There are no shared accounts. • User ID's are tracked via the web application at login. All navigation and page edits are recorded for historical reporting. • Duplicate accounts are prohibited will throw an error if attempted.					

<table>
<tr><th>Req #</th><th>Requirement</th><th>(1) Comply</th><th>(a) Core</th><th>(b) Custom</th><th>(c) 3rd Party</th></tr>
<tr><td>SEC-3</td><td>Describe how the bidder's proposed solution meets the DHHS standard for administering passwords:
• Initial Password assignment;
• Strong Password Requirements;
• Password reset process;
• Password expiration policy; and,
• Password controls for automatic lockout access to any user or user group after an administrator-defined number of unsuccessful log-on attempts.</td><td>X</td><td>X</td><td></td><td></td></tr>
<tr><td colspan="6">Response: DiRAD's web application will apply DHHS standards (DHHS-IT-2018-001B) as the password policy for the SMS application.</td></tr>
<tr><td>SEC-4</td><td>Describe any security processes for managing security updates, and integrated components subject to vulnerability, including anti-virus.</td><td>X</td><td>X</td><td></td><td></td></tr>
<tr><td colspan="6">Response: There are (2) major entities that would fall under this scope: The Twilio platform and Microsoft Azure. Both entities apply rigorous security standards, given their mission-critical nature. Third-party Twilio security certifications include:
1. ISO 27001
2. Privacy Shield
3. Cloud Security Alliance (CSA)
4. SOC-2
5. GDPR
Microsoft Azure Certifications Include:
1. ISO/IEC
2. CSA/CCM
3. ITAR
4. CJIS
5. HIPAA
6. IRS 1075
7. GDPR
8. FedRAMP
9. SOC1/SOC2</td></tr>
</table>

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
SEC-5	Describe how the bidder's proposed solution provides the ability to maintain a directory of all personnel who currently use or access the system.	X	X		
Response: The user list is stored in a .NET-encrypted Azure account database. All accounts are maintained by authorized DiRAD personnel, or customer system administrators.					
SEC-6	Describe how the bidder's proposed solution provides role-based security and allows restricted access to system features, function, screens, fields, database, etc. Role authentication may occur at the directory level, application level, or database level (depending on database solution). Describe the security administration functions integrated into the proposed system that manage role-based access to system functions, features, and data. Include a description of: • How and where the proposed system stores security attributes or roles; • How roles are created and security is applied to the role based on how and where security attributes are stored (if multiple options describe each); • How groups are defined and how roles and security are applied to each group; • How access limits are applied to screens and data on screens by role or group; • How users are created and assigned to one or more roles or groups; and, • How role and group creation and assignment activity is logged.				
Response: DiRAD's web application provides role-based access, which is customizable to the cutomer's specifications. During the implementation process, DiRAD will work with DHHS to develop role-based access that makes sense for the application.					

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
SEC-7	Describe how the bidder's proposed solution provides the capability to monitor, identify, and report on events on the information system, detects attacks, and provides identification of unauthorized use and attempts of the system. Describe how you alert DHHS of potential violations.	X	X		

Response: DiRAD leverages several tools that are provided by Twilio and Microsoft Azure. DHHS is notified of any issues by DiRAD automated messaging. For the SMS monitoring, DiRAD uses Twilio Insight, which is a real time error and status reporting tool (example shown below). Insights lets users drill down to individual text messages (shown below). DiRAD also utilizes the Twilio System Status website, at https://status.twiliio.com.



Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
SEC-8	Describe how the bidder's proposed solution has defined and deployed strong controls (including access and query rights) to prevent any data misuse, such as fraud, marketing or other purposes.	X	X		

Response: As a government contractor, DiRAD has been entrusted with government agency data for the last 20 years. With this in mind, we adhere to the following:

1. Pulling just enough data that is necessary to send the SMS messages – Phone numbers and codes for message handling are all that should be sent to the DiRAD SFTP site.
2. Strict rules regarding employee access of data.
3. Encryption of data at rest
4. Adherence to customer Acceptable Use Policies
5. Adherence to Twilio Acceptable Use Policy: Violation of this policy bars a vendor from the Twilio platform for life. DiRAD is bound by this policy. The Twilio Acceptable Use Policy can be found here: https://www.twilio.com/legal/aup

System and User Documentation Requirements

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
DOC-1	Describe how the bidder's proposed solution provides on-line Help for all web portal features, functions, and data element fields, as well as descriptions and resolutions for error messages, using help features including indexing, searching, tool tips, and context-sensitive help topics. A sample copy of five (5) screen shots must be included with bidder's response.	X	X		

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
Response: DiRAD is providing the proposed solution as a turn-key, custom web interface. Screens that we should below may not apply to DHHS. The application being proposed here is designed for the average user with little or no IT experience – it's intutitve design elimninates the need for reems of documentation. During implementation and as part of the deliverables, DiRAD provides electronic copies of all documentation, including: 1. SMS call flow and logic 2. SMS static verbiage 3. Database definition 4. System Administrator Guide 5. User Guide With the included live training, users will be ready to administer the system and run reports within minutes. Sample documentation is included in lieu of screen shots.					
DOC-2	Describe how the bidder's proposed solution provides an <u>on-line User Manual</u> with a printable version available. The documentation should include full mock-ups of all screens/windows and provide narratives of the navigation features for each window/screen. A sample copy of five (5) pages must be included with bidder's response.	X	X		
Response:DiRAD is providing sample content – please be aware that some screens may not apply to DHHS. Sample documentation is included in lieu of screen shots.					
DOC-3	Describe how the bidder's proposed solution will have an <u>on-line Reporting Manual</u> with a printable version available that includes descriptions, definitions, and layouts for each standard report. Include definitions of all selection criteria parameters and each report item/data element, all field calculations defined in detail, and field and report titles. A sample copy of five (5) pages must be included with bidder's response.	X	X		
Response: DiRAD is providing sample content – please be aware that some screens may not apply to DHHS. Sample documentation is included in lieu of screen shots.					
DOC-4	Describe how the bidder's proposed solution will have an <u>On-line Technical System Operation Manual with a</u> printable version available. The documentation should include operating procedures to assist technical staff in operation and working with the Texting solution. A sample copy of five (5) pages must be included with bidder's response.	X	X		
Response: DiRAD is providing sample content – please be aware that some screens may not apply to DHHS. Sample documentation is included in lieu of screen shots.					

Training Requirements

This section presents the overall training requirements that apply to the software. They are not specific to any technology or platform.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
TRN-1	Describe the bidder's proposed solution training plan. Describe how the bidder develops and provides training material to DHHS for initial training and updates to training material for enhancements and changes made to the system. The content of these materials should be consistent with the on-line Help, User Manual, and Reporting Manual.	X	X		
Response: Since the solution will be provisioned via an easy-to-use web application, the training involved is dramatically less than with typical software packages. The solution is not a software application, rather it is a solution that is tailored to meet JAUNT's specifications only. All functionality from administration to running reports is dedicated to the JAUNT solution. This lack of superfluous information improves the training process and results in lower training costs. Training will be added to reflect the specific needs of DHHS, as part of the cost of the proposal. Below is a description of the elements of the training program for DiRAD's hosted systems: • Onsite training pre-cutover • Onsite day-of cutover for supplemental training and customer support • Documentation customized to the specifics of the application • Dedicated customer portal with resources, help, and support ticket generation					

Production, Test and Training Requirements

DHHS requires three environments (Production, Test, and Training) in order to work with the new software on an ongoing basis:

Test Environment – A test environment is required that mirrors the live production environment, including hardware and software. This test environment would be used to test application changes before they are deployed to production. This step is an important part of quality assurance, where all changes are tested to minimize the risk of adverse reactions in the production environment. While it is necessary to mirror all of the functions of the production environment, it is not necessary to maintain the same load capacity.

Training Environment – A training environment is also required that allows DHHS to provide hands-on training to users. This environment would allow DHHS to maintain unique data for use in training and conduct training without interference with the test and/or production environments. This environment would have occasional use.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
PTT-1	Describe how the bidder's proposed solution supports several environments, i.e., production environment, test environment, and training environment.	X	X		
Response: DiRAD develops using a primary development environment, training environment and a production environment. The development environment may contain one or more staging environments, depending on the project.					
PTT-2	Describe how the bidder's proposed solution provides the ability to refresh any testing or training environment at the request of DHHS. Describe the refresh process and describe how the refresh process occurs.	X	X		
Response: In this case, DiRAD manually clears database information and resets any config files (JSON, XML, etc). In addition, new SMS test numbers are provisioned for testing.					

Interfaces/Imports/Exports Requirements

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
INT-1	Describe the bidder's proposed automated approach to managing interfaces. The proposed solution must provide necessary APIs and/or Web service to allow DHHS to create interfaces to and from the proposed solution.	X	X		
Response: DiRAD manages web user interfaces exclusively. However we may host certain web services for reporting and data exchange. DiRAD may also make available the Twilio API project under the development and test environments, but not production. The customer may also setup their own Twilio account.					
INT-2	Describe how the bidder's proposed solution has the capability to notify System Administrators/ system support staff if an interface is not available for any reason.	X	X		
Response: Various monitoring tools are employed, with automated emails sent to customers if necessary.					

System Performance Requirements

This section describes requirements related to the proposed systems' on-line performance, response times, and sizing from a system architecture standpoint.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
PER-1	Describe the bidder's proposed system performance functionality and monitoring tools.	X	X		
Response: Twilio Insight provides real-time system performance monitoring. Also, current status can be found on https://status.twilio.com. DiRAD web applications are monitored in real time using web service tools exposed by Azure.					
PER-2	Describe how the bidder's proposed solution captures system downtimes, along with the causes of the downtimes where applicable. Describe the bidder's proposed method and timing of communication to DHHS on downtimes.	X	X		
Response:System downtimes and root causes can be found on https://status.twilio.com and https://azure.microsoft.com/en-us/status/					
PER-3	Describe how the bidder's proposed solution supports concurrent users with minimal impact to response time, with the ability to increase the demand on the system by 50% without modification to the software or degradation in performance.	X	X		
Response: Both the Twilio Platform (messaging) and Microsoft Azure (web apps) are configured to expand elastically to extra demand on the system. There is zero disruption in service in this case, and extra system demand is absorbed, then reduced after demand ebbs.					
PER-4	Describe how the bidder's proposed solution is available online 24 hours a day and 7 days a week, 99.9% of the time each month. Describe any known timeframes or past instances where the system has been unavailable for use.	X	X		
Response: Leveraging Twilio and Azure, the system guarantees a 99.5% uptime; however, there are no known instances of when the system was unavailable for use.					
PER-5	Describe how the proposed solution has the ability to generate reports and ad hoc queries without performance impact to user access or system response time.	X	X		
Response: Users run reports against a central database that is decoupled from the SMS Messaging data processing. The SMS application writes its data to a web service that manages database insertion and queueing.					

PER-6	Describe how the bidder's proposed solution provides application performance monitoring and management capabilities, including any key performance indicators (KPI) or other metrics to measure and report system performance for the proposed system.	X	X		
Response: Application Performance Monitoring can be achieived in both Twilio Insights, and Azure Status.					

3

II. TERMS AND CONDITIONS

Bidders should complete Sections II through VI as part of their proposal. Bidder is expected to read the Terms and Conditions and should initial either accept, reject, or reject and provide alternative language for each clause. The bidder should also provide an explanation of why the bidder rejected the clause or rejected the clause and provided alternate language. By signing the RFP, bidder is agreeing to be legally bound by all the accepted terms and conditions, and any proposed alternative terms and conditions submitted with the proposal. The State reserves the right to negotiate rejected or proposed alternative language. If the State and bidder fail to agree on the final Terms and Conditions, the State reserves the right to reject the proposal. The State of Nebraska is soliciting proposals in response to this RFP. The State of Nebraska reserves the right to reject proposals that attempt to substitute the bidder's commercial contracts and/or documents for this RFP.

The bidders should submit with their proposal any license, user agreement, service level agreement, or similar documents that the bidder wants incorporated in the contract. The State will not consider incorporation of any document not submitted with the bidder's proposal as the document will not have been included in the evaluation process. These documents shall be subject to negotiation and will be incorporated as addendums if agreed to by the Parties.

If a conflict or ambiguity arises after the Addendum to Contract Award have been negotiated and agreed to, the Addendum to Contract Award shall be interpreted as follows:

1. If only one Party has a particular clause then that clause shall control;
2. If both Parties have a similar clause, but the clauses do not conflict, the clauses shall be read together;
3. If both Parties have a similar clause, but the clauses conflict, the State's clause shall control.

A. GENERAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The contract resulting from this RFP shall incorporate the following documents:

1. Request for Proposal and Addenda;
2. Amendments to the RFP;
3. Questions and Answers;
4. Contractor's proposal (RFP and properly submitted documents);
5. The executed Contract and Addendum One to Contract, if applicable ; and,
6. Amendments/Addendums to the Contract.

These documents constitute the entirety of the contract.

Unless otherwise specifically stated in a future contract amendment, in case of any conflict between the incorporated documents, the documents shall govern in the following order of preference with number one (1) receiving preference over all other documents and with each lower numbered document having preference over any higher numbered document: 1) Amendment to the executed Contract with the most recent dated amendment having the highest priority, 2) executed Contract and any attached Addenda, 3) Amendments to RFP and any Questions and Answers, 4) the original RFP document and any Addenda, and 5) the Contractor's submitted Proposal.

Any ambiguity or conflict in the contract discovered after its execution, not otherwise addressed herein, shall be resolved in accordance with the rules of contract interpretation as established in the State of Nebraska.

B. **NOTIFICATION**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JN			

Contractor and State shall identify the contract manager who shall serve as the point of contact for the executed contract.

Communications regarding the executed contract shall be in writing and shall be deemed to have been given if delivered personally or mailed, by U.S. Mail, postage prepaid, return receipt requested, to the parties at their respective addresses set forth below, or at such other addresses as may be specified in writing by either of the parties. All notices, requests, or communications shall be deemed effective upon personal delivery or three (3) calendar days following deposit in the mail.

C. **GOVERNING LAW (Statutory)**

Notwithstanding any other provision of this contract, or any amendment or addendum(s) entered into contemporaneously or at a later time, the parties understand and agree that, (1) the State of Nebraska is a sovereign state and its authority to contract is therefore subject to limitation by the State's Constitution, statutes, common law, and regulation; (2) this contract will be interpreted and enforced under the laws of the State of Nebraska; (3) any action to enforce the provisions of this agreement must be brought in the State of Nebraska per state law; (4) the person signing this contract on behalf of the State of Nebraska does not have the authority to waive the State's sovereign immunity, statutes, common law, or regulations; (5) the indemnity, limitation of liability, remedy, and other similar provisions of the final contract, if any, are entered into subject to the State's Constitution, statutes, common law, regulations, and sovereign immunity; and, (6) all terms and conditions of the final contract, including but not limited to the clauses concerning third party use, licenses, warranties, limitations of liability, governing law and venue, usage verification, indemnity, liability, remedy or other similar provisions of the final contract are entered into specifically subject to the State's Constitution, statutes, common law, regulations, and sovereign immunity.

The Parties must comply with all applicable local, state and federal laws, ordinances, rules, orders, and regulations.

D. **BEGINNING OF WORK**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JN			

The bidder shall not commence any billable work until a valid contract has been fully executed by the State and the successful Contractor. The Contractor will be notified in writing when work may begin.

E. **CHANGE ORDERS**

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JN			

The State and the Contractor, upon the written agreement, may make changes to the contract within the general scope of the RFP. Changes may involve specifications, the quantity of work, or such other items as the State may find necessary or desirable. Corrections of any deliverable, service, or work required pursuant to the contract shall not be deemed a change. The Contractor may not claim forfeiture of the contract by reasons of such changes.

For all changes, the Contractor shall follow the Change Control Plan set forth in Section V.E.1.c.iv. Any in-scope changes will require a written change order that will generate an Amendment to the contract. Changes in work and the amount of compensation to be paid to the Contractor shall be determined in accordance with applicable unit prices if any, a pro-rated value, or through negotiations. The State shall not incur a price increase for changes that should have been included in the Contractor's proposal, were foreseeable, or result from difficulties with or failure of the Contractor's proposal or performance.

No change shall be implemented by the Contractor until approved by the State, and the contract is amended to reflect the change and associated costs, if any. If there is a dispute regarding the cost, but both parties agree that immediate implementation is necessary, the change may be implemented, and cost negotiations may continue with both Parties retaining all remedies under the contract and law.

F. NOTICE OF POTENTIAL CONTRACTOR BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

If Contractor breaches the contract or anticipates breaching the contract, the Contractor shall immediately give written notice to the State. The notice shall explain the breach or potential breach, a proposed cure, and may include a request for a waiver of the breach if so desired. The State may, in its discretion, temporarily or permanently waive the breach. By granting a waiver, the State does not forfeit any rights or remedies to which the State is entitled by law or equity, or pursuant to the provisions of the contract. Failure to give immediate notice, however, may be grounds for denial of any request for a waiver of a breach.

G. BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

Either Party may terminate the contract, in whole or in part, if the other Party breaches its duty to perform its obligations under the contract in a timely and proper manner. Termination requires written notice of default and a thirty (30) calendar day (or longer at the non-breaching Party's discretion considering the gravity and nature of the default) cure period. Said notice shall be delivered by Certified Mail, Return Receipt Requested, or in person with proof of delivery. Allowing time to cure a failure or breach of contract does not waive the right to immediately terminate the contract for the same or different contract breach which may occur at a different time. In case of default of the Contractor, the State may contract the service from other sources and hold the Contractor responsible for any excess cost occasioned thereby.

The State's failure to make payment shall not be a breach, and the Contractor shall retain all available statutory remedies and protections.

H. NON-WAIVER OF BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
TW			

The acceptance of late performance with or without objection or reservation by a Party shall not waive any rights of the Party nor constitute a waiver of the requirement of timely performance of any obligations remaining to be performed.

I. SEVERABILITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
TW			

If any term or condition of the contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the provision held to be invalid or illegal.

J. INDEMNIFICATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
TW			

1. GENERAL

The Contractor agrees to defend, indemnify, and hold harmless the State and its employees, volunteers, agents, and its elected and appointed officials ("the indemnified parties") from and against any and all third party claims, liens, demands, damages, liability, actions, causes of action, losses, judgments, costs, and expenses of every nature, including investigation costs and expenses, settlement costs, and attorney fees and expenses ("the claims"), sustained or asserted against the State for personal injury, death, or property loss or damage, arising out of, resulting from, or attributable to the willful misconduct, negligence, error, or omission of the Contractor, its employees, subcontractors, consultants, representatives, and agents, resulting from this contract, except to the extent such Contractor liability is attenuated by any action of the State which directly and proximately contributed to the claims.

2. INTELLECTUAL PROPERTY

The Contractor agrees it will, at its sole cost and expense, defend, indemnify, and hold harmless the indemnified parties from and against any and all claims, to the extent such claims arise out of, result from, or are attributable to, the actual or alleged infringement or misappropriation of any patent, copyright, trade secret, trademark, or confidential information of any third party by the Contractor or its employees, subcontractors, consultants, representatives, and agents; provided, however, the State gives the Contractor prompt notice in writing of the claim. The Contractor may not settle any infringement claim that will affect the State's use of the Licensed Software without the State's prior written consent, which consent may be withheld for any reason.

If a judgment or settlement is obtained or reasonably anticipated against the State's use of any intellectual property for which the Contractor has indemnified the State, the Contractor shall, at the Contractor's sole cost and expense, promptly modify the item or items which were determined to be infringing, acquire a license or licenses on the State's behalf to provide the necessary rights to the State to eliminate the infringement, or provide the State with a non-infringing substitute that provides the State the same functionality. At the State's election, the actual or anticipated judgment may be treated as a breach of warranty by the Contractor, and the State may receive the remedies provided under this RFP.

3. **PERSONNEL**
The Contractor shall, at its expense, indemnify and hold harmless the indemnified parties from and against any claim with respect to withholding taxes, worker's compensation, employee benefits, or any other claim, demand, liability, damage, or loss of any nature relating to any of the personnel, including subcontractor's and their employees, provided by the Contractor.

4. **SELF-INSURANCE**
The State of Nebraska is self-insured for any loss and purchases excess insurance coverage pursuant to Neb. Rev. Stat. § 81-8,239.01 (Reissue 2008). If there is a presumed loss under the provisions of this agreement, Contractor may file a claim with the Office of Risk Management pursuant to Neb. Rev. Stat. §§ 81-8,829 – 81-8,306 for review by the State Claims Board. The State retains all rights and immunities under the State Miscellaneous (Section 81-8,294), Tort (Section 81-8,209), and Contract Claim Acts (Section 81-8,302), as outlined in Neb. Rev. Stat. § 81-8,209 et seq. and under any other provisions of law and accepts liability under this agreement to the extent provided by law.

5. The Parties acknowledge that Attorney General for the State of Nebraska is required by statute to represent the legal interests of the State, and that any provision of this indemnity clause is subject to the statutory authority of the Attorney General.

K. ATTORNEY'S FEES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

In the event of any litigation, appeal, or other legal action to enforce any provision of the contract, the Parties agree to pay all expenses of such action, as permitted by law and if order by the court, including attorney's fees and costs, if the other Party prevails.

L. ASSIGNMENT, SALE, OR MERGER

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

Either Party may assign the contract upon mutual written agreement of the other Party. Such agreement shall not be unreasonably withheld.

The Contractor retains the right to enter into a sale, merger, acquisition, internal reorganization, or similar transaction involving Contractor's business. Contractor agrees to cooperate with the State in executing amendments to the contract to allow for the transaction. If a third party or entity is involved in the transaction, the Contractor will remain responsible for performance of the contract until such time as the person or entity involved in the transaction agrees in writing to be contractually bound by this contract and perform all obligations of the contract.

M. CONTRACTING WITH OTHER NEBRASKA POLITICAL SUB-DIVISIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The Contractor may, but shall not be required to, allow agencies, as defined in Neb. Rev. Stat. §81-145, to use this contract. The terms and conditions, including price, of the contract may not be amended. The State shall not be contractually obligated or liable for any contract entered into pursuant to this clause. A listing of Nebraska political subdivisions may be found at the website of the Nebraska Auditor of Public Accounts.

N. FORCE MAJEURE

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

Neither Party shall be liable for any costs or damages, or for default resulting from its inability to perform any of its obligations under the contract due to a natural or manmade event outside the control and not the fault of the affected Party ("Force Majeure Event"). The Party so affected shall immediately make a written request for relief to the other Party, and shall have the burden of proof to justify the request. The other Party may grant the relief requested; relief may not be unreasonably withheld. Labor disputes with the impacted Party's own employees will not be considered a Force Majeure Event.

O. CONFIDENTIALITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

All materials and information provided by the Parties or acquired by a Party on behalf of the other Party shall be regarded as confidential information. All materials and information provided or acquired shall be handled in accordance with federal and state law, and ethical standards. Should said confidentiality be breached by a Party, the Party shall notify the other Party immediately of said breach and take immediate corrective action.

It is incumbent upon the Parties to inform their officers and employees of the penalties for improper disclosure imposed by the Privacy Act of 1974, 5 U.S.C. 552a. Specifically, 5 U.S.C. 552a (i)(1), which is made applicable by 5 U.S.C. 552a (m)(1), provides that any officer or employee, who by virtue of his/her employment or official position has possession of or access to agency records which contain individually identifiable information, the disclosure of which is prohibited by the Privacy Act or regulations established thereunder, and who knowing that disclosure of the specific material is prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, shall be guilty of a misdemeanor and fined not more than $5,000.

P. OFFICE OF PUBLIC COUNSEL (Statutory)

If it provides, under the terms of this contract and on behalf of the State of Nebraska, health and human services to individuals; service delivery; service coordination; or case management, Contractor shall submit to the jurisdiction of the Office of Public Counsel, pursuant to Neb. Rev. Stat. §§ 81-8,240 et seq. This section shall survive the termination of this contract.

Q. LONG-TERM CARE OMBUDSMAN (Statutory)

Contractor must comply with the Long-Term Care Ombudsman Act, Neb. Rev. Stat. §§ 81-2237 et seq. This section shall survive the termination of this contract.

R. EARLY TERMINATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The contract may be terminated as follows:

1. The State and the Contractor, by mutual written agreement, may terminate the contract at any time.
2. The State, in its sole discretion, may terminate the contract for any reason upon thirty (30) calendar day's written notice to the Contractor. Such termination shall not relieve the Contractor of warranty or other service obligations incurred under the terms of the contract. In the event of termination the Contractor shall be entitled to payment, determined on a pro rata basis, for products or services satisfactorily performed or provided.
3. The State may terminate the contract immediately for the following reasons:
   a. if directed to do so by statute;
   b. Contractor has made an assignment for the benefit of creditors, has admitted in writing its inability to pay debts as they mature, or has ceased operating in the normal course of business;
   c. a trustee or receiver of the Contractor or of any substantial part of the Contractor's assets has been appointed by a court;
   d. fraud, misappropriation, embezzlement, malfeasance, misfeasance, or illegal conduct pertaining to performance under the contract by its Contractor, its employees, officers, directors, or shareholders;
   e. an involuntary proceeding has been commenced by any Party against the Contractor under any one of the chapters of Title 11 of the United States Code and (i) the proceeding has been pending for at least sixty (60) calendar days; or (ii) the Contractor has consented, either expressly or by operation of law, to the entry of an order for relief; or (iii) the Contractor has been decreed or adjudged a debtor;
   f. a voluntary petition has been filed by the Contractor under any of the chapters of Title 11 of the United States Code;
   g. Contractor intentionally discloses confidential information;
   h. Contractor has or announces it will discontinue support of the deliverable; and,
   i. In the event funding is no longer available.

S. CONTRACT CLOSEOUT

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

Upon contract closeout for any reason the Contractor shall within 30 days, unless stated otherwise herein:

1. Transfer all completed or partially completed deliverables to the State;
2. Transfer ownership and title to all completed or partially completed deliverables to the State;
3. Return to the State all information and data, unless the Contractor is permitted to keep the information or data by contract or rule of law. Contractor may retain one copy of any information or data as required to comply with applicable work product documentation standards or as are automatically retained in the course of Contractor's routine back up procedures;
4. Cooperate with any successor Contactor, person or entity in the assumption of any or all of the obligations of this contract;

5. Cooperate with any successor Contactor, person or entity with the transfer of information or data related to this contract;
6. Return or vacate any state owned real or personal property; and,
7. Return all data in a mutually acceptable format and manner.

Nothing in this Section should be construed to require the Contractor to surrender intellectual property, real or personal property, or information or data owned by the Contractor for which the State has no legal claim.

III. CONTRACTOR DUTIES

A. INDEPENDENT CONTRACTOR / OBLIGATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

It is agreed that the Contractor is an independent contractor and that nothing contained herein is intended or should be construed as creating or establishing a relationship of employment, agency, or a partnership.

The Contractor is solely responsible for fulfilling the contract. The Contractor or the Contractor's representative shall be the sole point of contact regarding all contractual matters.

The Contractor shall secure, at its own expense, all personnel required to perform the services under the contract. The personnel the Contractor uses to fulfill the contract shall have no contractual or other legal relationship with the State; they shall not be considered employees of the State and shall not be entitled to any compensation, rights or benefits from the State, including but not limited to, tenure rights, medical and hospital care, sick and vacation leave, severance pay, or retirement benefits.

By-name personnel commitments made in the Contractor's proposal shall not be changed without the prior written approval of the State. Replacement of these personnel, if approved by the State, shall be with personnel of equal or greater ability and qualifications.

All personnel assigned by the Contractor to the contract shall be employees of the Contractor or a subcontractor, and shall be fully qualified to perform the work required herein. Personnel employed by the Contractor or a subcontractor to fulfill the terms of the contract shall remain under the sole direction and control of the Contractor or the subcontractor respectively.

With respect to its employees, the Contractor agrees to be solely responsible for the following:

1. Any and all pay, benefits, and employment taxes and/or other payroll withholding;
2. Any and all vehicles used by the Contractor's employees, including all insurance required by state law;
3. Damages incurred by Contractor's employees within the scope of their duties under the contract;
4. Maintaining Workers' Compensation and health insurance that complies with state and federal law and submitting any reports on such insurance to the extent required by governing law; and
5. Determining the hours to be worked and the duties to be performed by the Contractor's employees.
6. All claims on behalf of any person arising out of employment or alleged employment (including without limit claims of discrimination alleged against the Contractor, its officers, agents, or subcontractors or subcontractor's employees)

If the Contractor intends to utilize any subcontractor, the subcontractor's level of effort, tasks, and time allocation should be clearly defined in the bidder's proposal. The Contractor shall agree that it will not utilize any subcontractors not specifically included in its proposal in the performance of the contract without the prior written authorization of the State.

The State reserves the right to require the Contractor to reassign or remove from the project any Contractor or subcontractor employee.

Contractor shall insure that the terms and conditions contained in any contract with a subcontractor does not conflict with the terms and conditions of this contract.

The Contractor shall include a similar provision, for the protection of the State, in the contract with any subcontractor engaged to perform work on this contract.

B. EMPLOYEE WORK ELIGIBILITY STATUS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of an employee.

If the Contractor is an individual or sole proprietorship, the following applies:

1. The Contractor must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at http://das.nebraska.gov/materiel/purchasing.html

   The completed United States Attestation Form should be submitted with the RFP response.

2. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.

3. The Contractor understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. §4-108.

C. COMPLIANCE WITH CIVIL RIGHTS LAWS AND EQUAL OPPORTUNITY EMPLOYMENT / NONDISCRIMINATION (Statutory)

The Contractor shall comply with all applicable local, state, and federal statutes and regulations regarding civil rights laws and equal opportunity employment. The Nebraska Fair Employment Practice Act prohibits Contractors of the State of Nebraska, and their subcontractors, from discriminating against any employee or applicant for employment, with respect to hire, tenure, terms, conditions, compensation, or privileges of employment because of race, color, religion, sex, disability, marital status, or national origin (Neb. Rev. Stat. §48-1101 to 48-1125). The Contractor guarantees compliance with the Nebraska Fair Employment Practice Act, and breach of this provision shall be regarded as a material breach of contract. The Contractor shall insert a similar provision in all subcontracts for services to be covered by any contract resulting from this RFP.

D. COOPERATION WITH OTHER CONTRACTORS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

Contractor may be required to work with or in close proximity to other contractors or individuals that may be working on same or different projects. The Contractor shall agree to cooperate with such other contractors or individuals, and shall not commit or permit any act which may interfere with the performance of work by any other contractor or individual. Contractor is not required to compromise Contractor's intellectual property or proprietary information unless expressly required to do so by this contract.

E. PERMITS, REGULATIONS, LAWS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The contract price shall include the cost of all royalties, licenses, permits, and approvals, whether arising from patents, trademarks, copyrights or otherwise, that are in any way involved in the contract. The Contractor shall obtain and pay for all royalties, licenses, and permits, and approvals necessary for the execution of the contract. The Contractor must guarantee that it has the full legal right to the materials, supplies, equipment, software, and other items used to execute this contract.

F. OWNERSHIP OF INFORMATION AND DATA / DELIVERABLES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The State shall have the unlimited right to publish, duplicate, use, and disclose all information and data developed or obtained by the Contractor on behalf of the State pursuant to this contract.

The State shall own and hold exclusive title to any deliverable developed as a result of this contract. Contractor shall have no ownership interest or title, and shall not patent, license, or copyright, duplicate, transfer, sell, or exchange, the design, specifications, concept, or deliverable.

G. INSURANCE REQUIREMENTS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The Contractor shall throughout the term of the contract maintain insurance as specified herein and provide the State a current Certificate of Insurance/Acord Form (COI) verifying the coverage. The Contractor shall not commence work on the contract until the insurance is in place. If Contractor subcontracts any portion of the Contract the Contractor must, throughout the term of the contract, either:

1. Provide equivalent insurance for each subcontractor and provide a COI verifying the coverage for the subcontractor;
2. Require each subcontractor to have equivalent insurance and provide written notice to the State that the Contractor has verified that each subcontractor has the required coverage; or,
3. Provide the State with copies of each subcontractor's Certificate of Insurance evidencing the required coverage.

The Contractor shall not allow any subcontractor to commence work until the subcontractor has equivalent insurance. The failure of the State to require a COI, or the failure of the Contractor to provide a COI or require subcontractor insurance shall not limit, relieve, or decrease the liability of the Contractor hereunder.

In the event that any policy written on a claims-made basis terminates or is canceled during the term of the contract or within one (1) years of termination or expiration of the contract, the Contractor shall obtain an extended discovery or reporting period, or a new insurance policy, providing coverage required by this contract for the term of the contract and one (1) years following termination or expiration of the contract.

If by the terms of any insurance a mandatory deductible is required, or if the Contractor elects to increase the mandatory deductible amount, the Contractor shall be responsible for payment of the amount of the deductible in the event of a paid claim.

Notwithstanding any other clause in this contract, the State may recover up to the liability limits of the insurance policies required herein.

1. **WORKERS' COMPENSATION INSURANCE**

   The Contractor shall take out and maintain during the life of this contract the statutory Workers' Compensation and Employer's Liability Insurance for all of the contactors' employees to be engaged in work on the project under this contract and, in case any such work is sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation and Employer's Liability Insurance for all of the subcontractor's employees to be engaged in such work. This policy shall be written to meet the statutory requirements for the state in which the work is to be performed, including Occupational Disease. **The policy shall include a waiver of subrogation in favor of the State. The COI shall contain the mandatory COI subrogation waiver language found hereinafter.** The amounts of such insurance shall not be less than the limits stated hereinafter. For employees working in the State of Nebraska, the policy must be written by an entity authorized by the State of Nebraska Department of Insurance to write Workers' Compensation and Employer's Liability Insurance for Nebraska employees.

2. **COMMERCIAL GENERAL LIABILITY INSURANCE AND COMMERCIAL AUTOMOBILE LIABILITY INSURANCE**

   The Contractor shall take out and maintain during the life of this contract such Commercial General Liability Insurance and Commercial Automobile Liability Insurance as shall protect Contractor and any subcontractor performing work covered by this contract from claims for damages for bodily injury, including death, as well as from claims for property damage, which may arise from operations under this contract, whether such operation be by the Contractor or by any subcontractor or by anyone directly or indirectly employed by either of them, and the amounts of such insurance shall not be less than limits stated hereinafter.

   The Commercial General Liability Insurance shall be written on an **occurrence basis**, and provide Premises/Operations, Products/Completed Operations, Independent Contractors, Personal Injury, and Contractual Liability coverage. **The policy shall include the State, and others as required by the contract documents, as Additional Insured(s). This policy shall be primary, and any insurance or self-insurance carried by the State shall be considered secondary and non-contributory. The COI shall contain the mandatory COI liability waiver language found hereinafter.** The Commercial Automobile Liability Insurance shall be written to cover all Owned, Non-owned, and Hired vehicles.

REQUIRED INSURANCE COVERAGE	
COMMERCIAL GENERAL LIABILITY	
General Aggregate	$2,000,000
Products/Completed Operations Aggregate	$2,000,000
Personal/Advertising Injury	$1,000,000 per occurrence
Bodily Injury/Property Damage	$1,000,000 per occurrence
Medical Payments	$10,000 any one person
Damage to Rented Premises (Fire)	$300,000 each occurrence
Contractual	Included
Independent Contractors	Included
If higher limits are required, the Umbrella/Excess Liability limits are allowed to satisfy the higher limit.	
WORKER'S COMPENSATION	
Employers Liability Limits	$500K/$500K/$500K
Statutory Limits- All States	Statutory - State of Nebraska
Voluntary Compensation	Statutory
COMMERCIAL AUTOMOBILE LIABILITY	
Bodily Injury/Property Damage	$1,000,000 combined single limit
Include All Owned, Hired & Non-Owned Automobile liability	Included
Motor Carrier Act Endorsement	Where Applicable
UMBRELLA/EXCESS LIABILITY	
Over Primary Insurance	$5,000,000 per occurrence
PROFESSIONAL LIABILITY	
All Other Professional Liability (Errors & Omissions)	$1,000,000 Per Claim / Aggregate
COMMERCIAL CRIME	
Crime/Employee Dishonesty Including 3rd Party Fidelity	$1,000,000
CYBER LIABILITY	
Breach of Privacy, Security Breach, Denial of Service, Remediation, Fines and Penalties	$10,000,000
MANDATORY COI SUBROGATION WAIVER LANGUAGE	
"Workers' Compensation policy shall include a waiver of subrogation in favor of the State of Nebraska."	
MANDATORY COI LIABILITY WAIVER LANGUAGE	
"Commercial General Liability & Commercial Automobile Liability policies shall name the State of Nebraska as an Additional Insured and the policies shall be primary and any insurance or self-insurance carried by the State shall be considered secondary and non-contributory as additionally insured."	

If the mandatory COI subrogation waiver language or mandatory COI liability waiver language on the COI states that the waiver is subject to, condition upon, or otherwise limit by the insurance policy, a copy of the relevant sections of the policy must be submitted with the COI so the State can review the limitations imposed by the insurance policy.

3. **EVIDENCE OF COVERAGE**

The Contractor shall furnish the Contract Manager, with a certificate of insurance coverage complying with the above requirements prior to beginning work at:

Economic Assistance
Attn: Administrative Assistant II
301 Centennial Mall S.
Lincoln, NE 68508

These certificates or the cover sheet shall reference the RFP number, and the certificates shall include the name of the company, policy numbers, effective dates, dates of expiration, and amounts and types of coverage afforded. If the State is damaged by the failure of the Contractor to maintain such insurance, then the Contractor shall be responsible for all reasonable costs properly attributable thereto.

Reasonable notice of cancellation of any required insurance policy must be submitted to the contract manager as listed above when issued and a new coverage binder shall be submitted immediately to ensure no break in coverage.

4. DEVIATIONS

The insurance requirements are subject to limited negotiation. Negotiation typically includes, but is not necessarily limited to, the correct type of coverage, necessity for Workers' Compensation, and the type of automobile coverage carried by the Contractor.

H. ANTITRUST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The Contractor hereby assigns to the State any and all claims for overcharges as to goods and/or services provided in connection with this contract resulting from antitrust violations which arise under antitrust laws of the United States and the antitrust laws of the State.

I. CONFLICT OF INTEREST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

By submitting a proposal, bidder certifies that there does not now exist a relationship between the bidder and any person or entity which is or gives the appearance of a conflict of interest related to this RFP or project.

The bidder certifies that it shall not take any action or acquire any interest, either directly or indirectly, which will conflict in any manner or degree with the performance of its services hereunder or which creates an actual or an appearance of conflict of interest.

The bidder certifies that it will not knowingly employ any individual known by bidder to have a conflict of interest.

The Parties shall not knowingly, for a period of two years after execution of the contract, recruit or employ any employee or agent of the other Party who has worked on the RFP or project, or who had any influence on decisions affecting the RFP or project.

J. STATE PROPERTY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The Contractor shall be responsible for the proper care and custody of any State-owned property which is furnished for the Contractor's use during the performance of the contract. The Contractor shall reimburse the State for any loss or damage of such property; normal wear and tear is expected.

K. SITE RULES AND REGULATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The Contractor shall use its best efforts to ensure that its employees, agents, and Subcontractors comply with site rules and regulations while on State premises. If the Contractor must perform on-site work outside of the daily operational hours set forth by the State, it must make arrangements with the State to ensure access to the facility and the equipment has been arranged. No additional payment will be made by the State on the basis of lack of access, unless the State fails to provide access as agreed to in writing between the State and the Contractor.

L. ADVERTISING

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The Contractor agrees not to refer to the contract award in advertising in such a manner as to state or imply that the company or its services are endorsed or preferred by the State. Any publicity releases pertaining to the project shall not be issued without prior written approval from the State.

M. NEBRASKA TECHNOLOGY ACCESS STANDARDS (Statutory)

Contractor shall review the Nebraska Technology Access Standards, found at http://nitc.nebraska.gov/standards/2-201.html and ensure that products and/or services provided under the contract are in compliance or will comply with the applicable standards to the greatest degree possible. In the event such standards change during the Contractor's performance, the State may create an amendment to the contract to request the contract comply with the changed standard at a cost mutually acceptable to the parties.

N. DISASTER RECOVERY/BACK UP PLAN

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The Contractor shall have a disaster recovery and back-up plan, of which a copy should be provided upon request to the State, which includes, but is not limited to equipment, personnel, facilities, and transportation, in order to continue services as specified under the specifications in the contract in the event of a disaster.

O. DRUG POLICY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JL			

Contractor certifies it maintains a drug free work place environment to ensure worker safety and workplace integrity. Contractor agrees to provide a copy of its drug free workplace policy at any time upon request by the State.

IV. PAYMENT

A. PROHIBITION AGAINST ADVANCE PAYMENT (Statutory)

Payments shall not be made until contractual deliverable(s) are received and accepted by the State.

B. TAXES (Statutory)

The State is not required to pay taxes and assumes no such liability as a result of this solicitation. Any property tax payable on the Contractor's equipment which may be installed in a state-owned facility is the responsibility of the Contractor.

C. INVOICES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

Invoices for payments must be submitted by the Contractor to the agency requesting the services with sufficient detail to support payment. Invoices shall include, but not be limited to, details that show text counts, any monthly costs, and any other fees. Invoices shall be sent to:

Economic Assistance
Attn: Administrative Assistant II
301 Centennial Mall S.
Lincoln, NE 68508

The terms and conditions included in the Contractor's invoice shall be deemed to be solely for the convenience of the parties. No terms or conditions of any such invoice shall be binding upon the State, and no action by the State, including without limitation the payment of any such invoice in whole or in part, shall be construed as binding or estopping the State with respect to any such term or condition, unless the invoice term or condition has been previously agreed to by the State as an amendment to the contract.

D. INSPECTION AND APPROVAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

Final inspection and approval of all work required under the contract shall be performed by the designated State officials.

The State and/or its authorized representatives shall have the right to enter any premises where the Contractor or Subcontractor duties under the contract are being performed, and to inspect, monitor or otherwise evaluate the work being performed. All inspections and evaluations shall be at reasonable times and in a manner that will not unreasonably delay work.

E. PAYMENT

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

State will render payment to Contractor when the terms and conditions of the contract and specifications have been satisfactorily completed on the part of the Contractor as solely determined by the State. (Neb. Rev. Stat. Section 73-506(1)) Payment will be made by the responsible agency in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §81-2401 through 81-2408). The State may require the Contractor to accept payment by electronic means such as ACH deposit. In no event shall the State be responsible or liable to pay for any services provided by the Contractor prior to the Effective Date of the contract, and the Contractor hereby waives any claim or cause of action for any such services.

F. LATE PAYMENT (Statutory)

The Contractor may charge the responsible agency interest for late payment in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §81-2401 through 81-2408).

G. SUBJECT TO FUNDING / FUNDING OUT CLAUSE FOR LOSS OF APPROPRIATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The State's obligation to pay amounts due on the Contract for a fiscal years following the current fiscal year is contingent upon legislative appropriation of funds. Should said funds not be appropriated, the State may terminate the contract with respect to those payments for the fiscal year(s) for which such funds are not appropriated. The State will give the Contractor written notice thirty (30) calendar days prior to the effective date of termination. All obligations of the State to make payments after the termination date will cease. The Contractor shall be entitled to receive just and equitable compensation for any authorized work which has been satisfactorily completed as of the termination date. In no event shall the Contractor be paid for a loss of anticipated profit.

H. RIGHT TO AUDIT (First Paragraph is Statutory)

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
JW			

The State shall have the right to audit the Contractor's performance of this contract upon a 30 days' written notice. Contractor shall utilize generally accepted accounting principles, and shall maintain the accounting records, and other records and information relevant to the contract (Information) to enable the State to audit the contract. The State may audit and the Contractor shall maintain, the Information during the term of the contract and for a period of five (5) years after the completion of this contract or until all issues or litigation are resolved, whichever is later. The Contractor shall make the Information available to the State at Contractor's place of business or a location acceptable to both Parties during normal business hours. If this is not practical or the Contractor so elects, the Contractor may provide electronic or paper copies of the Information. The State reserves the right to examine, make copies of, and take notes on any Information relevant to this contract, regardless of the form or the Information, how it is stored, or who possesses the Information. Under no circumstance will the Contractor be required to create or maintain documents not kept in the ordinary course of Contractor's business operations, nor will Contractor be required to disclose any information, including but not limited to product cost data, which is confidential or proprietary to Contractor.

The Parties shall pay their own costs of the audit unless the audit finds a previously undisclosed overpayment by the State. If a previously undisclosed overpayment exceeds one-half of one percent (.5%) of the total contract billings, or if fraud, material misrepresentations, or non-performance is discovered on the part of the Contractor, the Contractor shall reimburse the State for the total costs of the audit. Overpayments and audit costs owed to the State shall be paid within ninety days of written notice of the claim. The Contractor agrees to correct any material weaknesses or condition found as a result of the audit.

4

DIRAD TECHNOLOGIES

Instructional manual for
Hampton Roads Transit's
web portal

Table of Contents

1. Overview	Page 3
2. Accessing the Web Portal	Page 4
3. Main Menu Option: Realtime Statistics	Page 5
4. Main Menu Option: Business Hours	Page 6
5. Main Menu Option: Holidays	Page 7 – 8
6. Main Menu Option: Special Messages	Page 9 – 10
7. Main Menu Option: Transfer Numbers	Page 11
8. Main Menu Option: Delay Messages	Page 12 – 15
9. Main Menu Option: Reports	Page 16 – 31
A. Incoming Calls Detail Report	Page 17 – 18
B. Incoming Calls Summary Report	Page 18 – 19
C. Menu Options Detail Report	Page 19 – 21
D. Menu Options Summary Report	Page 21 – 22
E. Transfer History Detail Report	Page 22 – 24
F. Transfer History Summary Report	Page 24 – 25
G. IVR Call Duration Report	Page 26 – 27
H. DiRAD Advanced Response Processing Report	Page 27 – 28
I. Web Activity Report	Page 28 – 29
J. Web Access Report	Page 30 – 31
10. Main Menu Option: Users	Page 32 – 36
A. Adding a user	Page 32 – 33
B. Changing a user's role(s)	Page 33 – 35
C. Resetting a password	Page 35
D. Deleting a user	Page 35 – 36
E. Logging a user out of the portal	Page 36
11. Main Menu Option: Roles	Page 37 – 40
A. Default role	Page 37
B. Viewing/Editing permission(s) assigned to a role	Page 37 – 38
C. Changing individuals associated with a role	Page 38
D. Adding a role	Page 39 – 40
E. Deleting a role	Page 40
12. Help, Change My Password, Logout and more	Page 41

1. Overview

DiRAD Technologies has provided Hampton Roads Transit (HRT) with an IVR application and an accompanying web portal. This manual contains information on the web portal.

Via the portal, users may perform the following functions:

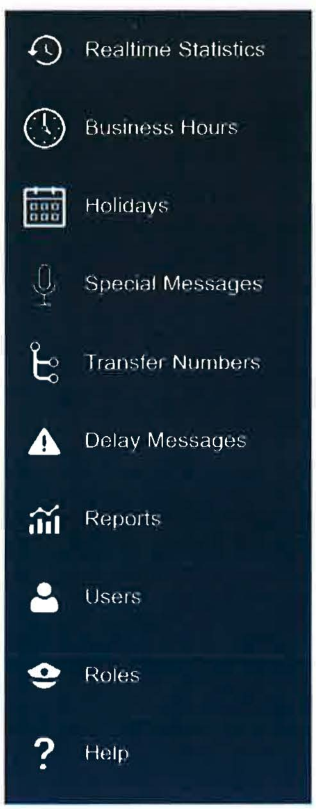
- View and modify the business hours observed by the IVR application
- View, add, modify and delete the holidays observed by the IVR application
- Activate, deactivate and schedule special messages
- View and maintain the telephone numbers the IVR application transfers callers to
- View, add, modify, delete, activate and deactivate delay messages for specific routes and stops
- Run and export reports on IVR activity and web portal use
- Manage access granted to the portal
- View, add, modify and delete the roles/permissions that may be assigned to portal users

2. Accessing the Web Portal

To access the web portal, navigate to the following URL: **hrt.dirad.com.**

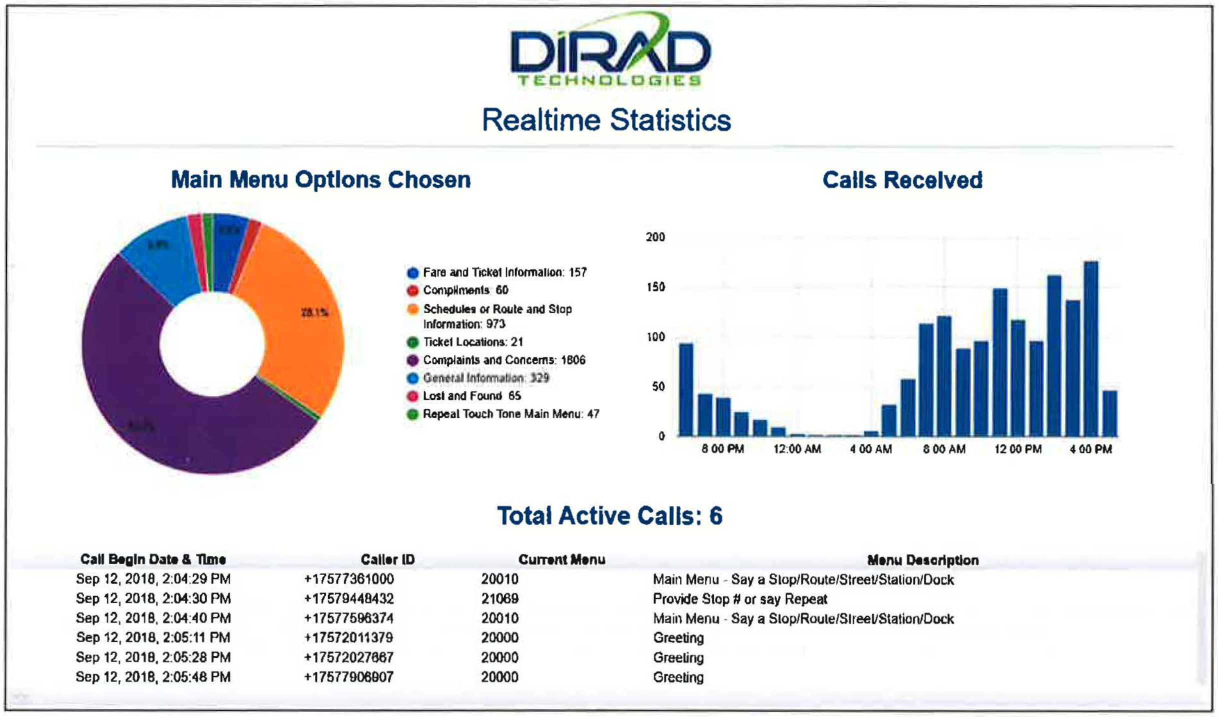
At the **log in page,** shown above, enter your username and password. Please keep in mind that your **username and password are both case sensitive. All usernames end with '@hrt'.** If your username and password don't allow you to log in, contact the system administrator.

The portal's **Main Menu** is located on the left side of every web page in the dark blue bar. When you hover your mouse on the Main Menu, it expands and contains 10 options, as shown below. A user may not have access to all features of the portal; access depends on a user's role. All features are discussed in this manual.



3. Main Menu Option: REALTIME STATISTICS

When you select **Realtime Statistics** from the Main Menu, a page similar to the following is displayed.



The **Realtime Statistics** page, shown above, contains:

- On the upper left side of the page, a pie chart showing the **distribution of the IVR application's main menu options for the previous seven days.** In the example above, you can see that the two most popular options for the past week were 'Complaints and Concerns' and 'Schedules or Route and Stop Information'.
- On the upper right side of the page, a bar graph showing the **distribution of calls received for the last 24 hours.** This chart can be used to spot times of peak call volume. When you hover your mouse on one of the bars, the exact number of calls received for that time period is displayed.
- On the bottom half of the page, a list of all **calls that are currently active** on the IVR application, including:
    - The time the call started
    - The caller ID, if available
    - The prompt number/menu number the caller is currently listening to
    - A description of the menu/prompt

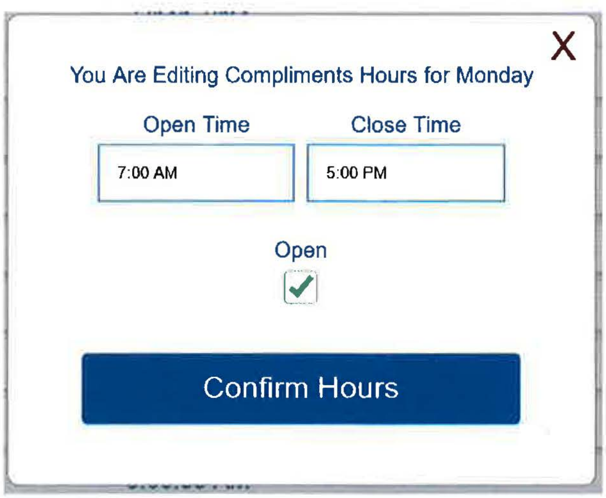
Additional information on calls received by the IVR application may be obtained under the **Reports option** on the Main Menu. See the Reports section of this manual, which starts on page 16, for more information.

4. Main Menu Option: BUSINESS HOURS

When you select **Business Hours** from the Main Menu, a page similar to the following is displayed.

On the Business Hours page, shown above, **select the department you're interested in from the dropdown menu** at the top of the page (circled above).

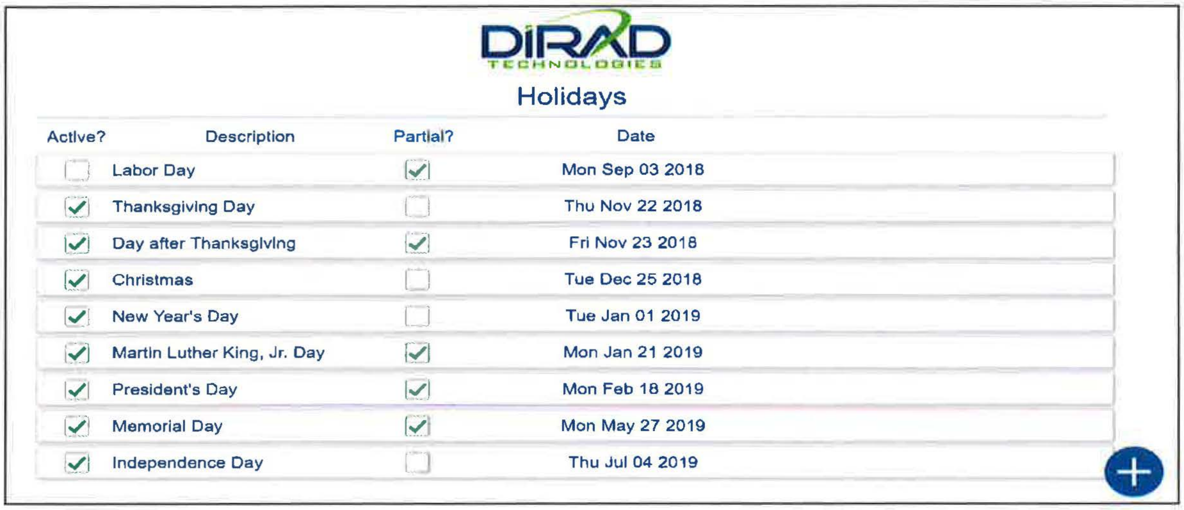
To change the business hours, click on the day in which you're interested. A sample edit page is shown below.



On the **Editing Business Hours page,** shown above, change the Open and Close times as desired. **To indicate the department should be closed,** you may set the Close Time equal to the Open Time, and/or you may uncheck the 'Open' checkbox. **Be sure to select the 'Confirm Hours' button** before navigating away from this web page or your changes will not be saved.

5. Main Menu Option: HOLIDAYS

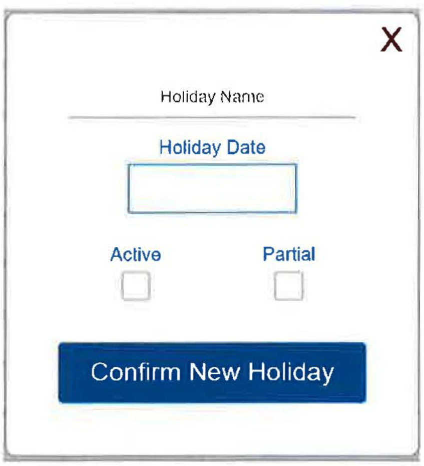
When you select **Holidays** from the Main Menu, a page similar to the following is displayed.



Holidays

Active?	Description	Partial?	Date
☐	Labor Day	☑	Mon Sep 03 2018
☑	Thanksgiving Day	☐	Thu Nov 22 2018
☑	Day after Thanksgiving	☑	Fri Nov 23 2018
☑	Christmas	☐	Tue Dec 25 2018
☑	New Year's Day	☐	Tue Jan 01 2019
☑	Martin Luther King, Jr. Day	☑	Mon Jan 21 2019
☑	President's Day	☑	Mon Feb 18 2019
☑	Memorial Day	☑	Mon May 27 2019
☑	Independence Day	☐	Thu Jul 04 2019

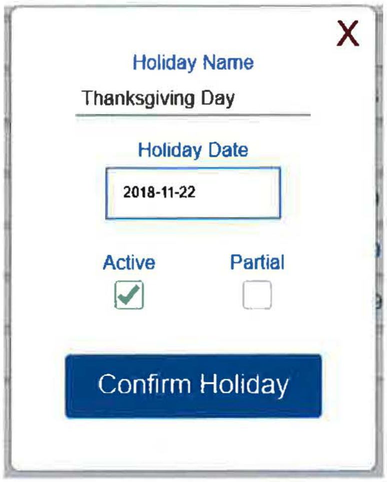
To add a holiday, select the Add icon (⊕) found in the lower right corner of the Holidays web page. A sample New Holiday page is shown below.



To add a holiday:

- Enter a holiday name.
- Select a date from the calendar that appears when you click your mouse in the date box.
- Select the 'Active' checkbox.
- The **'Partial' checkbox** should be selected if HRT has limited business hours on the holiday. If HRT is completely closed on the holiday, leave the 'Partial' checkbox unchecked. **Partial Holiday** business hours are displayed and maintained on the Business Hours web page.
- Be sure to **select the 'Confirm New Holiday' button** before naviagting away from this web page or your new holiday won't be saved.

To modify a holiday, select the holiday in which you're interested. A sample Edit Holiday page is shown below.



On the Edit Holiday page, shown above, you may change the holiday name, select a new date, and/or change the 'Active' and 'Partial' designations**. Be sure to select the 'Confirm Holiday' button** before naviagting away from this web page or your changes won't be saved.

To delete a holiday, select the Delete icon ( ) that appears to the right of the record on the main Holidays page when you hover your mouse over the record. After selecting the Delete icon, a confirmation message will appear. If you confirm the deletion, the holiday will be deleted and it will no longer be applied to the IVR appliation call flow.

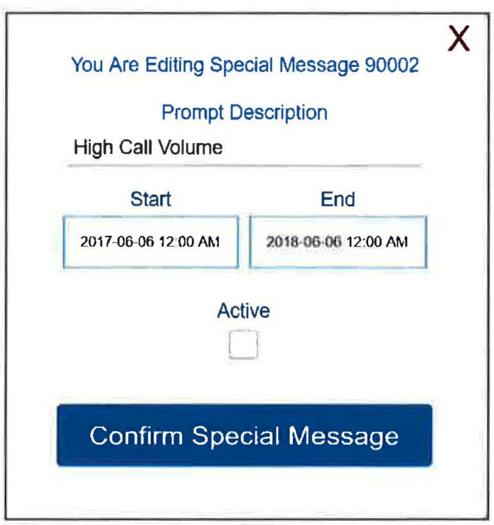
6. Main Menu Option: SPECIAL MESSAGES

When you select **Special Messages** from the Main Menu, a page similar to the following is displayed.

There are six special messages available to use with the HRT IVR application. The verbiage for the **four pre-recorded special messages,** 90002, 90003, 90004 and 90005, may be found on the IVR application script. The **customizable special messages,** 90001 and 90006, may be recorded via the recording utility that DiRAD has provided to HRT. Please see separate instructions for the recording utility.

It's recommended that you **record the special message before activating it via the portal.** This prevents an out-of-date special message from being played to callers before the new special message is recorded.

To activate a special message, start by selecting the message you'd like to activate. A sample Editing Special Message is shown below.



On the Editing a Special Message page, select the date and time the message should start playing and the date and time the message should stop playing. **Be sure to click the 'Confirm Special Message' button** before navigating away from this page or your changes will not be recorded.

To complete the activation of a special message, click your mouse in the 'Active' checkbox of the message you'd like to activate. **The message will begin playing when a selected (indicated by a green check mark) Special Message's start date/time is reached, and it will automatically stop playing when the end date/time has passed.**

To end an activated special message immediately, uncheck the 'Active' checkbox.

Only one special message may be active at a time.

7. Main Menu Option: TRANSFER NUMBERS

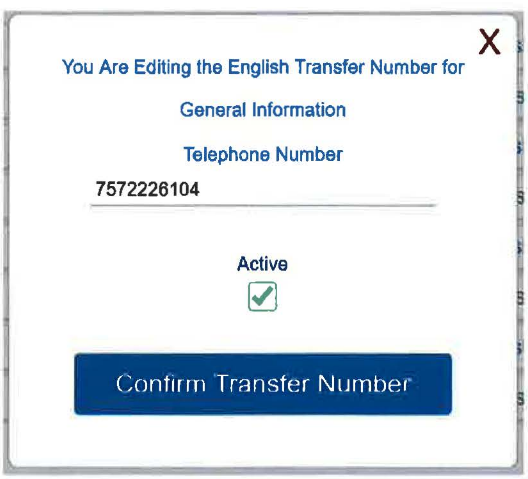
When you select **Transfer Numbers** from the Main Menu, a page similar to the following is displayed.

Transfer Numbers

Active?	Description	Language	Telephone Number
☑	Lost and Found	English	7572226141
☑	Lost and Found	Spanish	7572226179
☑	General Information	English	7572226104
☑	General Information	Spanish	7572226179
☑	Complaints and Concerns	English	7572226113
☑	Complaints and Concerns	Spanish	7572226179
☑	Compliments	English	7572226163
☑	Compliments	Spanish	7572226179

The Transfer Numbers page, shown above, displays the telephone numbers the IVR application transfers callers to when certain options are selected. Refer to the IVR application script for details on when callers are transferred to each department.

To change a transfer telephone number, select the record in which you are interested. A sample 'Edit Transfer Number' page is shown below.



On the 'Edit Transfer Number' page, you may enter any 10-digit telephone number. When entering the teelphone number, please do not include any symbols, such as parentheses, hyphens or periods. **Be sure to select the 'Confirm Transfer Number' button** before navigating away from this web page or your changes won't be saved.

8. Main Menu Option: DELAY MESSAGES

When you select **Delay Messages** from the Main Menu, a page similar to the following is displayed.

DIRAD TECHNOLOGIES

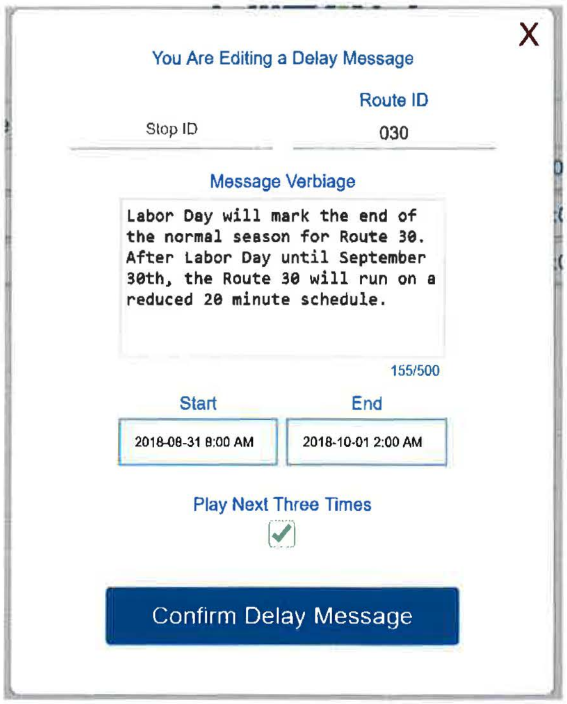
Delay Messages

Next3?	StopID	Stop Name	RouteID	Route Name	Date/Time Range
☑	--	--	030	ATLANTIC AVENUE TROLLEY	8/31/2018, 8:00:00 AM - 10/1/2018, 2:00:00 AM
☐	--	--	031	AQUARIUM AND CAMPGROUND	9/4/2018, 3:01:00 AM - 10/1/2018, 2:00:00 AM
☑	--	--	035	SHORE DRIVE TROLLEY	9/4/2018, 1:00:00 PM - 10/1/2018, 2:00:00 AM
☑	--	--	003	CHESAPEAKE BLVD	9/20/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	004	CHURCH ST	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	006	SOUTH NORFOLK	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	009	SEWELLS POINT ROAD	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	114	WEAVER ROAD	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	116	JEFFERSON LEE HALL	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	119	OYSTER POINT	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	121	WILLIAMSBURG	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	403	BUCKROE SHOPPING CENTER -	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	405	BUCKROE WILLOW OAKS	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	012	INDIAN RIVER ROAD	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	013	CAMPOSTELLA	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	033	GENERAL BOOTH BLVD	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM
☑	--	--	050	ACADEMY PARK	9/21/2018, 7:00:00 PM - 10/31/2018, 12:00:00 PM

The Delay Messages page, shown above, displays the following information for each current delay message:

- If the IVR application should play the next three scheduled departure times after the delay message is played to the caller, the checkbox in the column labelled "Next 3?' will be checked.
- The Stop ID associated with delay message, if applicable
- The Stop Name associated with the Stop ID
- The Route ID associated with the delay message, if applicable
- The Route Name associated with the Route ID
- The date/time range the delay message should play on the IVR application

To view or modify a delay message's record, select the record in which you are interested. A sample 'Edit Delay Message' page is shown below.



On the **Edit Delay Message page,** shown above, you may change the Stop ID, the Route ID, the Message Verbiage and/or the Start and End dates and times. In addition, you may indicate if the IVR application should play the next three departure times for the selected stop/route after the delay message is played.

You may create a delay message for a stop only, for a route only or for a combination of stop and route.

- If you create a delay message for a **stop only,** the delay message will be played to each caller who selects that stop, regardless of the route they select.
- If you create a delay message for a **route only,** the delay message will be played to each caller who selects that route, regardless of the stop they select.
- If you create a delay message for a combination of **stop and route,** the delay message will be played only to callers who select **both the stop *and* the route**. If a caller selects the stop and a different route or the route and a different stop, they will not hear the delay message.

The Message Verbiage will be read to the caller using text-to-speech. When writing the delay message, it's recommended that you don't include abbreviations in the verbiage. In addition, it's important to use correct spelling, punctuation and grammar. When refering to HRT's website, please write it as "go H R T dot com" to ensure it is read correctly to the caller.

Be sure to select the 'Confirm Delay Message' button before navigating away from this web page or your changes won't be saved.

To add a new delay message, select the Add icon (⊕) found in the lower right corner of the main Delay Message web page. A sample Add a New Delay Message page is shown below.

To add a new delay message page:

- Enter a Stop ID, if desired
- Enter a Route ID, if desired
- Enter up to 500 characters of text for the message verbiage
- Select a start date and time
- Select an end date and time
- Check the 'Play Next Three Times' box if the IVR application should play the next three scheduled departure times to the callers who listen to this message

Please remember: You may create a delay message for a stop only, for a route only or for a combination of stop and route.

- If you create a delay message for a **stop only,** the delay message will be played to each caller who selects that stop, regardless of the route they select.
- If you create a delay message for a **route only,** the delay message will be played to each caller who selects that route, regardless of the stop they select.
- If you create a delay message for a combination of **stop and route,** the delay message will be played only to callers who select **both the stop *and* the route**. If a caller selects the stop and a different route or the route and a different stop, they will not hear the delay message.

Please remember: The Message Verbiage will be read to the caller using text-to-speech. When writing the delay message, it's recommended that you don't include abbreviations in the verbiage. In addition, it's important to use correct spelling, punctuation and grammar. When refering to HRT's website, please write it as "go H R T dot com" to ensure it is read correctly to the caller.

Be sure to select the 'Add New Delay Message' button before navigating away from this web page or the new delay message won't be saved.

To delete a delay message, select the Delete icon () that appears on the right side of the main Delay Message web page when you hover your mouse over the record. After selecting the Delete icon, a confirmation message will appear. If you confirm the deletion, the delay message will be deleted and it will no longer be played to IVR application callers. Please note: Deletion of delay messages cannot be undone.

9. Main Menu Option: Reports

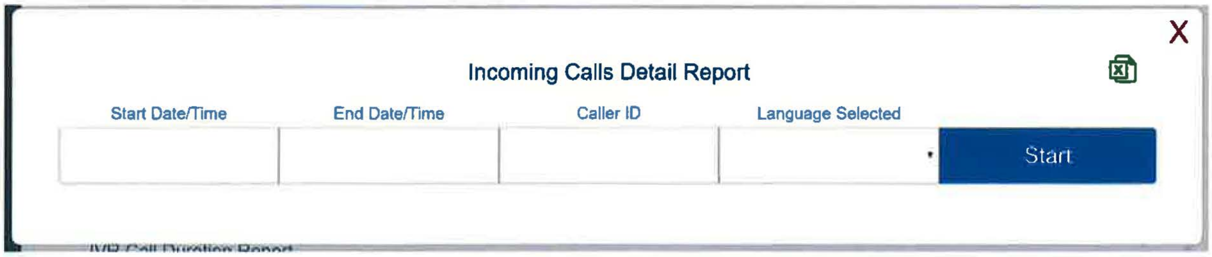
If you select **Reports** from the Main Menu, a page similar to the following is displayed. As shown below, there are 10 reports available for this system.

- Incoming Calls Detail Report
- Incoming Calls Summary Report
- Menu Options Detail Report
- Menu Options Summary Report
- Transfer History Detail Report
- Transfer History Summary Report
- IVR Call Duration Report
- DiRAD Advanced Response Processing Report
- Web Activity Report
- Web Access Report

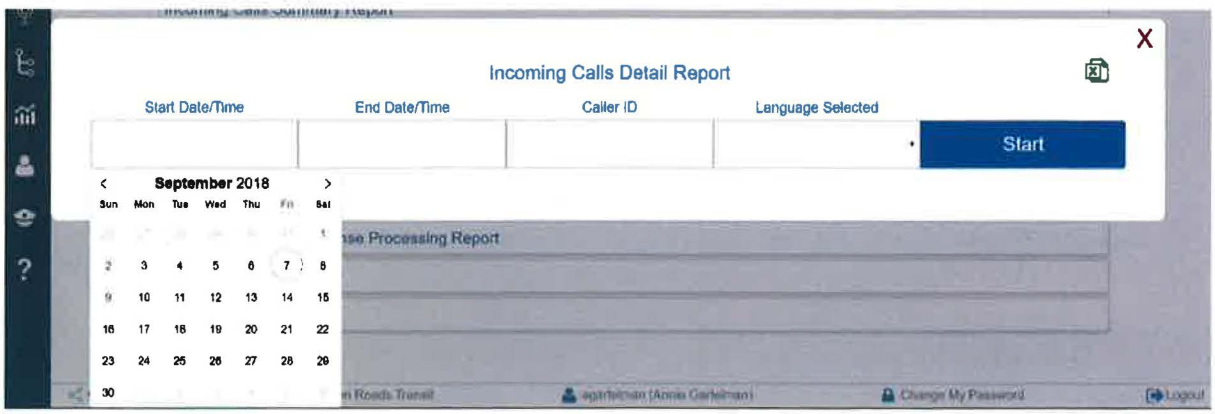
Each report is described in this manual.

A. Incoming Calls Detail Report

If you select **Incoming Calls Detail Report** from the Reports menu, a box similar to the following is displayed.



To run the **Incoming Calls Detail Report,** select the dates and times in which you are interested and then select the 'Start' button. **You may narrow the results returned** by entering a Caller ID and/or selecting a Language, if desired. When you click your mouse in the date boxes, a calendar pops up, as shown below. After you select a date, you'll be able to select a time.



A sample Incoming Calls Detail Report is shown below.

Caller ID	Call Start Date & Time	Call End Date & Time	Call Duration	Language Selected
+17572705236	Sep 10, 2018, 12:50:11 AM	Sep 10, 2018, 12:52:06 AM	00:01:54	English
+17579075565	Sep 10, 2018, 1:16:56 AM	Sep 10, 2018, 1:17:31 AM	00:00:34	English
+17579075565	Sep 10, 2018, 1:17:40 AM	Sep 10, 2018, 1:19:05 AM	00:01:25	English
+17575891213	Sep 10, 2018, 1:27:33 AM	Sep 10, 2018, 1:28:08 AM	00:00:35	English
+17576981474	Sep 10, 2018, 1:49:16 AM	Sep 10, 2018, 1:52:00 AM	00:02:44	English
+17576981474	Sep 10, 2018, 1:55:08 AM	Sep 10, 2018, 1:56:27 AM	00:01:18	English
+17575532844	Sep 10, 2018, 2:15:13 AM	Sep 10, 2018, 2:18:26 AM	00:03:12	English
+17578073179	Sep 10, 2018, 3:33:32 AM	Sep 10, 2018, 3:34:32 AM	00:01:00	English
+17578073179	Sep 10, 2018, 3:34:35 AM	Sep 10, 2018, 3:35:21 AM	00:00:46	English
+17575891213	Sep 10, 2018, 3:37:40 AM	Sep 10, 2018, 3:38:22 AM	00:00:41	English

For the selected criteria, the **Incoming Calls Detail Report,** shown above, displays:

- The total number of calls received
- The caller ID associated with each call, if available
- The date and time each call began
- The date and time each call ended
- The duration of each call
- The language the caller selected

Default display of this report is ascending by Call Start Date and Time, but **you may sort the data** by selecting any column heading.

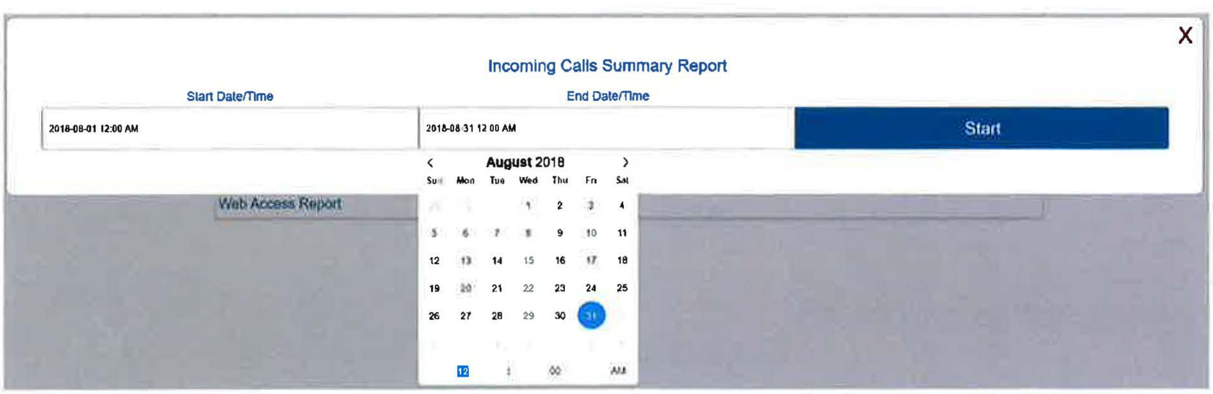
The data displayed on **the report may be exported** by selecting the Excel icon, which may be found on the right side of the report page.

To close this report, select the 'X' in the upper right corner of the report page.

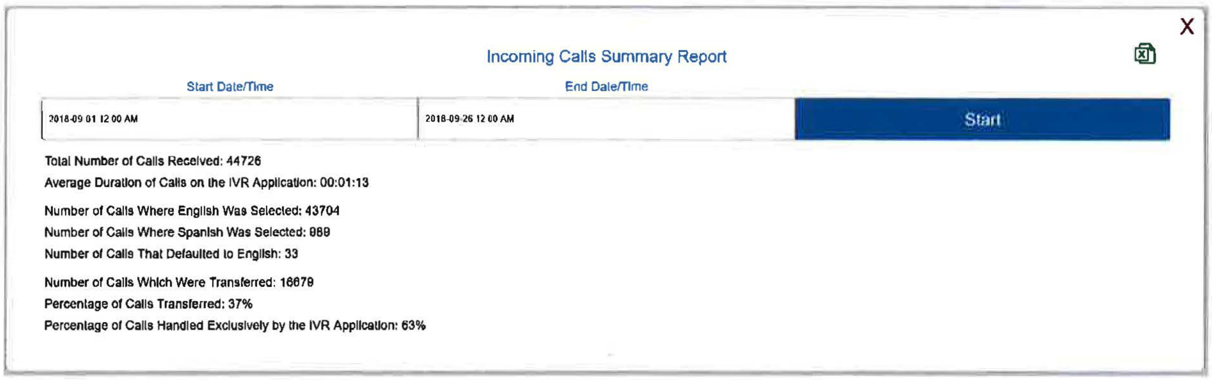
B. Incoming Calls Summary Report

If you select **Incoming Calls Summary Report** from the Reports menu, a box similar to the following is displayed.

To run the **Incoming Calls Summary Report,** select the dates and times in which you are interested and then select the 'Start' button. When you click your mouse in the date boxes, a calendar pops up, as shown below. After you select a date, you'll be able to select a time.



A sample Incoming Calls Summary Report is displayed below.



On the **Incoming Calls Summary Report,** shown above, the following information is provided:

- Number of calls received
- Average duration of calls, shown in HH:MM:SS format
- Number of calls where the caller selected English
- Number of calls where the caller selected Spanish
- Number of calls where the caller didn't select a language and the call continued in/defaulted to English
- Number of calls which were transferred to a call center representative
- Percentage of calls which were transferred to a call center representative
- Percentage of calls handled exclusively by the IVR application

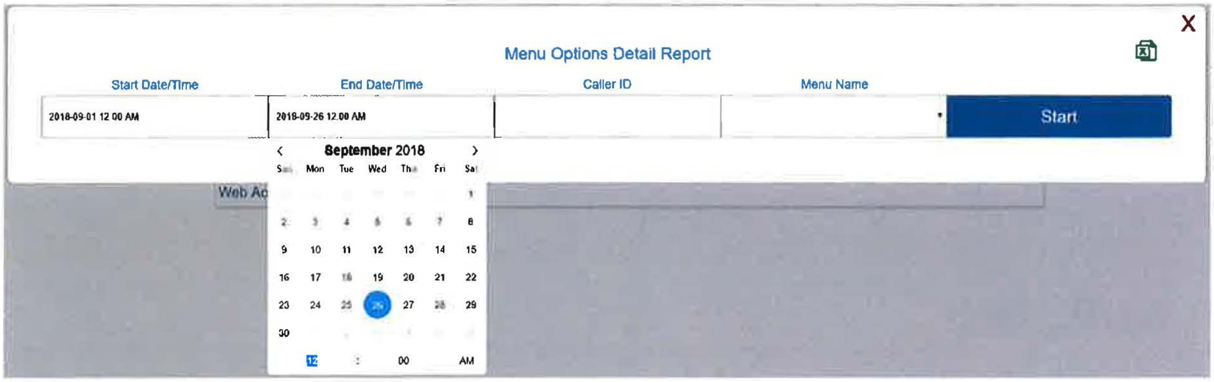
The data displayed on the **report may be exported** by selecting the Excel icon, which may be found on the right side of the report page.

To close this report, select the 'X' in the upper right corner of the report page.

C. Menu Options Detail Report

If you select **Menu Options Detail Report** from the Reports menu, a box similar to the following is displayed.

To run the **Menu Options Detail Report,** select the dates and times in which you are interested and then select the 'Start' button. **You may narrow the results returned** by entering a Caller ID and/or selecting Menu Name, if desired. When you click your mouse in the date boxes, a calendar pops up, as shown below. After you select a date, you'll be able to select a time.



A sample Menu Options Detail Report is shown below.

Menu Options Detail Report

Start Date/Time	End Date/Time	Caller ID	Menu Name
2018-08-10 12:00 AM	2018-08-11 12:00 AM		

Total Records Returned: 3743

Date and Time	Caller ID	Menu Name	Menu Description	Response at Menu	Option Description
Aug 10, 2018, 12:10:03 AM	+17573483333	90010	Touch Tone Main Menu	3	Lost and Found
Aug 10, 2018, 12:49:45 AM	+17573258610	21160	Customer Service - How can the rep help?	General Information	
Aug 10, 2018, 1:31:51 AM	+18048350072	90010	Touch Tone Main Menu	2	Fare and Ticket Information
Aug 10, 2018, 1:32:30 AM	+18048350072	90010	Touch Tone Main Menu	1	Schedules or Route and Stop Information
Aug 10, 2018, 1:33:07 AM	+18048350072	21014	No Matches - Try Again/Start Over/Speak with a Rep?	3	
Aug 10, 2018, 1:34:48 AM	+17573382561	90010	Touch Tone Main Menu	5	Complaints and Concerns
Aug 10, 2018, 1:54:00 AM	+17573382561	90010	Touch Tone Main Menu	1	Schedules or Route and Stop Information
Aug 10, 2018, 1:54:51 AM	+17573382561	21056	Stop Not Found - Provide Another/Start Over/Speak with a Rep?	3	
Aug 10, 2018, 1:55:07 AM	+17573382561	21160	Customer Service - How can the rep help?	3	Complaints and Concerns

For the selected criteria, the **Menu Options Detail Report,** shown above, includes information on the following statistics for each menu selection that was made:

- The date and time the menu was visited
- The caller ID associated with the call, if available
- The name/prompt number of the menu (Full text for each menu/prompt may be found on the IVR application script.)
- A description of the menu
- The response the caller made at the menu
- A description of the response, if available

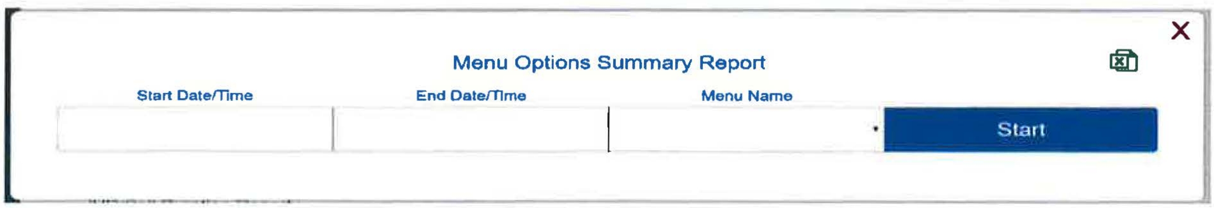
Default display of this report is ascending by date and time, but **you may sort the data** by selecting any column heading.

The data displayed on the **report may be exported** by selecting the Excel icon, which may be found on the right side of the report page.

To close this report, select the 'X' in the upper right corner of the report page.

D. Menu Options Summary Report

If you select **Menu Options Summary Report** from the Reports menu, a box similar to the following is displayed.



To run the **Menu Options Summary Report,** select the dates and times in which you are interested and then select the 'Start' button. **You may narrow the results returned** by selecting a Menu Name, if desired. When you click your mouse in the date boxes, a calendar pops up, as shown below. After you select a date, you'll be able to select a time.

A sample Menu Options Summary Report is shown below.

X

Menu Options Summary Report

Start Date/Time	End Date/Time	Menu Name	
2018-09-03 12:00 AM	2018-09-07 12:00 AM		Start

Total Records Returned: 16

Menu Name	Menu Description	Response at Menu	Option Description	Total Count
21160	Customer Service - How can the rep help?	1	General Information	864
21160	Customer Service - How can the rep help?	2	Lost and Found	44
21160	Customer Service - How can the rep help?	3	Complaints and Concerns	111
21160	Customer Service - How can the rep help?	4	Compliment an Operator or Other HRT Personnel	30
28002	Ticket Locations - Touch Tone Menu	1	Newport News Transit Center	44
28002	Ticket Locations - Touch Tone Menu	2	Hampton Transit Center	29
28002	Ticket Locations - Touch Tone Menu	3	Downtown Norfolk Transit Center	11
90010	Touch Tone Main Menu	1	Schedules or Route and Stop Information	513
90010	Touch Tone Main Menu	2	Fare and Ticket Information	65
90010	Touch Tone Main Menu	3	Lost and Found	47
90010	Touch Tone Main Menu	4	General Information	134
90010	Touch Tone Main Menu	5	Complaints and Concerns	1,173
90010	Touch Tone Main Menu	6	Compliments	49
90010	Touch Tone Main Menu	7	Ticket Locations	22
90010	Touch Tone Main Menu	9	Repeat Touch Tone Main Menu	35
91200	Light Rail Station Menu	11	Newtown Road Station	1

For the selected criteria, the **Menu Options Summary Report,** shown above, displays:

- Each menu that was visited
- A description of the menu
- The response that was made at the menu
- A description of the response
- The number of times each response was selected

If a menu and/or menu option doesn't appear on this report, that means no callers visited that menu or selected that menu option within the selected time period.

Default display of this report is ascending first by Menu Name and then by Response at Menu, but **you may sort the data** by selecting any column heading.

The data displayed on this **report may be exported** by selecting the Excel icon, which may be found on the right side of the report page.

To close this report, select the 'X' in the upper right corner of the report page.

E. Transfer History Detail Report

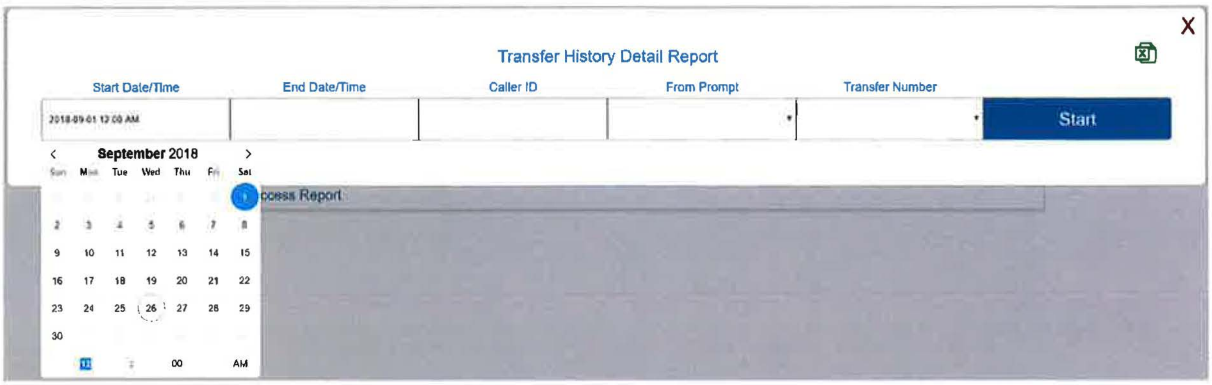
If you select **Transfer History Detail Report** from the Reports menu, a box similar to the following is displayed.

X

Transfer History Detail Report

Start Date/Time	End Date/Time	Caller ID	From Prompt	Transfer Number	
					Start

To run the **Transfer History Detail Report,** select the dates and times in which you are interested and then select the 'Start' button. **You may narrow the results returned** by entering a Caller ID and/or selecting a From Prompt and/or a Transfer Number, if desired. When you click your mouse in the date boxes, a calendar pops up, as shown below. After you select a date, you'll be able to select a time.



A sample Transfer History Detail Report is show below.

For the selected criteria, the **Transfer History Detail Report,** shown above, includes information on the following statistics:

- The total number of calls transferred
- The date and time of each transfer
- The caller ID associated with each transfer, if available
- The prompt number from which the caller was transferred (Full text for each prompt may be found on the IVR application script.)
- A description of the prompt
- The telephone number the call was transferred to

Default display of this report is descending by date and time, but **you may sort the data** by selecting any column heading.

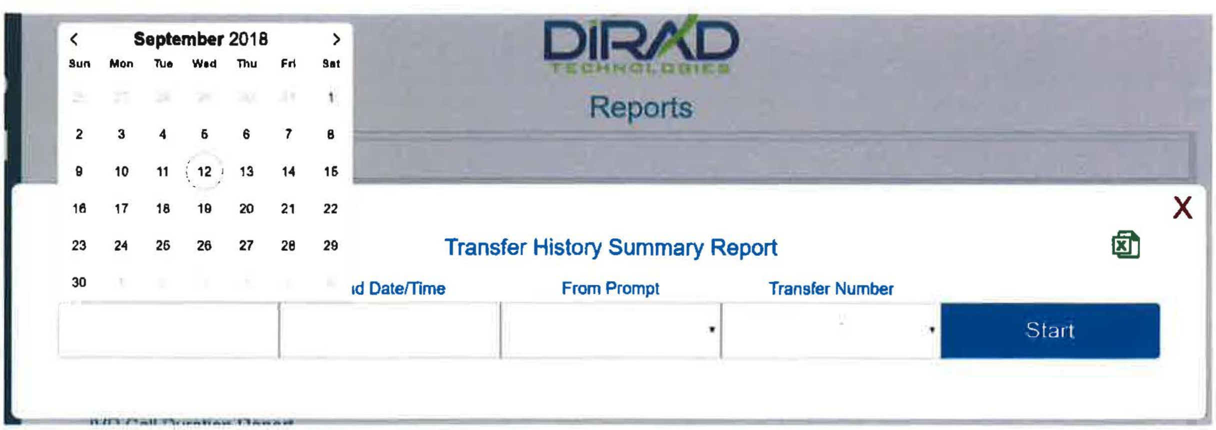
The data displayed on the **report may be exported** by selecting the Excel icon, which may be found on the right side of the report page.

To close this report, select the 'X' in the upper right corner of the report page.

F. Transfer History Summary Report

If you select **Transfer History Summary Report** from the Reports menu, a box similar to the following is displayed.

To run the **Transfer History Summary Report,** select the dates and times in which you are interested and then select the 'Start' button. **You may narrow the results returned** by selecting a From Prompt and/or Transfer Number, if desired. When you click your mouse in the date boxes, a calendar pops up, as shown below. After you select a date, you'll be able to select a time.



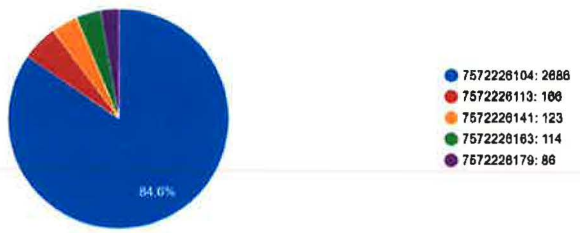
A sample Transfer History Summary Report is shown below.

X

Transfer History Summary Report

Start Date/Time	End Date/Time	From Prompt	Transfer Number	
2018-09-03 12:00 AM	2018-09-07 12:00 AM			Start

Calls by Transfer Number



Total Records Returned: 62

From Prompt	Transfer Number	Number of Calls	Percentage of Transfers	Percentage of Total Calls
90010	7572226104	1,200	37.80%	16.49%
20012	7572226104	1,110	34.96%	15.25%
20012	7572226113	110	3.46%	1.51%
21056	7572226104	83	2.61%	1.14%
21014	7572226104	72	2.27%	0.99%
20012	7572226163	66	2.08%	0.91%
20012	7572226141	61	1.92%	0.84%
21094	7572226104	61	1.92%	0.84%
23010	7572226141	46	1.45%	0.63%
20060	7572226104	38	1.20%	0.52%
90010	7572226113	37	1.17%	0.51%
90010	7572226179	37	1.17%	0.51%
20012	7572226179	31	0.98%	0.43%
22040	7572226104	27	0.85%	0.37%
28110	7572226104	25	0.79%	0.34%
21047	7572226104	23	0.72%	0.32%
90010	7572226163	22	0.69%	0.30%
23010	7572226104	16	0.50%	0.22%
21056	7572226163	7	0.22%	0.10%
20060	7572226163	7	0.22%	0.10%

For the selected criteria, the **Transfer History Summary Report,** shown above, displays:

- A pie chart and key displaying the number of calls and the percentage of calls transferred to each telephone number.
- A list of each unique combination of From Prompt (the point in the IVR application where the call was transferred) and Transfer Number (the telephone number the call was transferred to), along with the number of calls transferred, the percentage of transfers and the percentage of total calls

Default display of this report is descending by number of calls, but **you may sort the data** by selecting any column heading.

The data displayed on the **report may be exported** by selecting the Excel icon, which may be found on the right side of the report page.

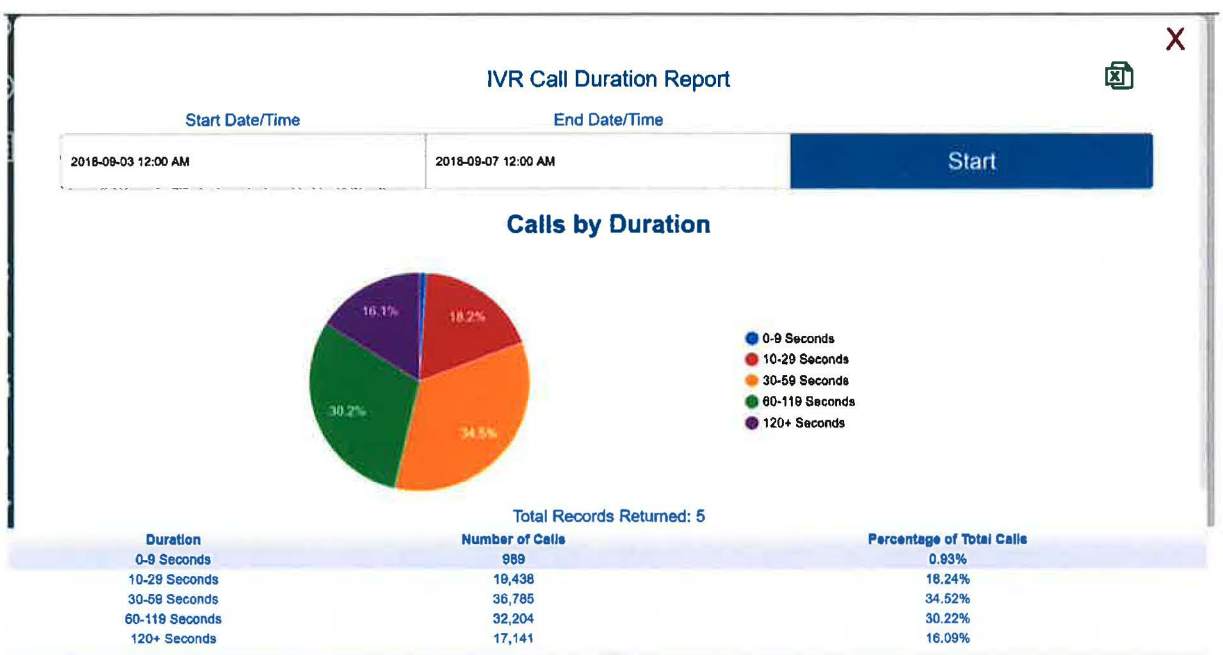
To close this report, select the 'X' in the upper right corner of the report page.

G. IVR Call Duration Report

If you select **IVR Call Duration Report** from the Reports menu, a box similar to the following is displayed.

To run the **IVR Call Duration Report,** select the dates and times in which you are interested and then select the 'Start' button. When you click your mouse in the date boxes, a calendar pops up, as shown below. After you select a date, you'll be able to select a time.

A sample IVR Call Duration Report is shown below.



For the selected date range, the **IVR Call Duration Report,** shown above, displays:

- A pie chart and key displaying the percentage of calls in each call duration range. (The call duration doesn't include time spent with call center representatives; it refers to time spent on the IVR application only.)
- The number of calls within each call duration range, along with the respective percentages

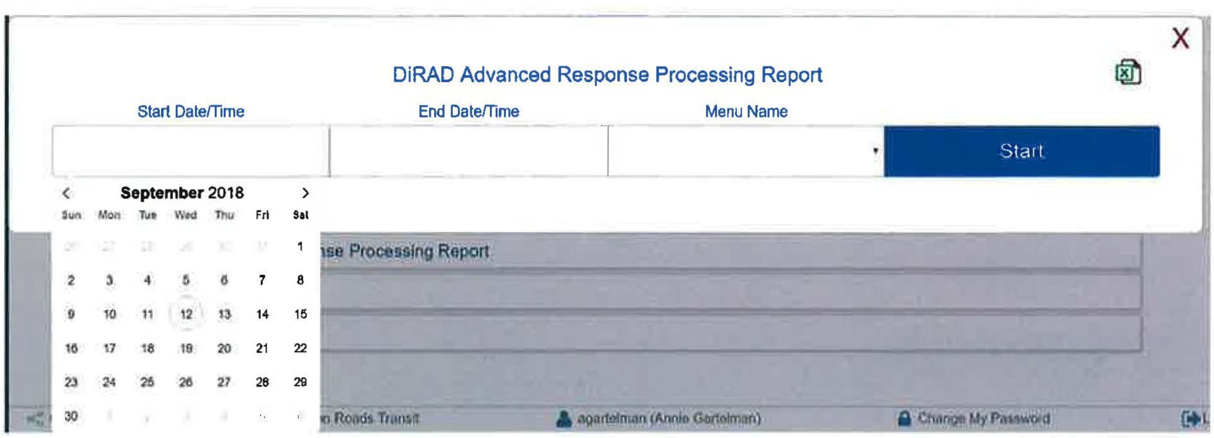
The data displayed on this **report may be exported** by selecting the Excel icon, which may be found on the right side of the report page.

To close this report, select the 'X' in the upper right corner of the report page.

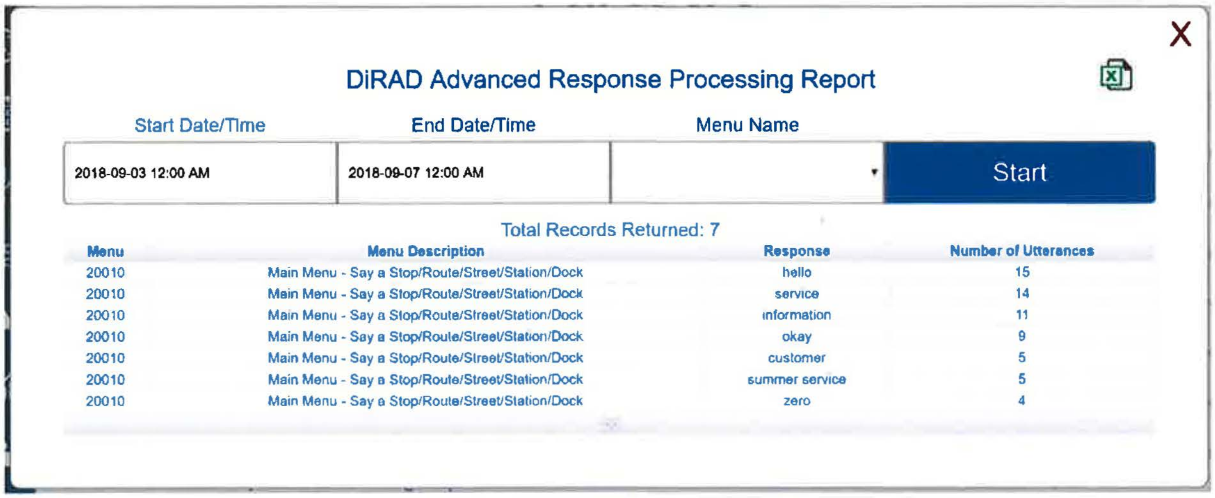
H. DiRAD Advanced Response Processing Report

If you select **DiRAD Advanced Response Processing Report** from the Reports menu, a box similar to the following is displayed.

To run the **DiRAD Advanced Response Processing Report,** select the dates and times in which you are interested and then select the 'Start' button. **You may narrow the results returned** by selecting a Menu Name, if desired. When you click your mouse in the date boxes, a calendar pops up, as shown below. After you select a date, you'll be able to select a time.



A sample DiRAD Advanced Response Processing Report is shown below.



Menu	Menu Description	Response	Number of Utterances
20010	Main Menu - Say a Stop/Route/Street/Station/Dock	hello	15
20010	Main Menu - Say a Stop/Route/Street/Station/Dock	service	14
20010	Main Menu - Say a Stop/Route/Street/Station/Dock	information	11
20010	Main Menu - Say a Stop/Route/Street/Station/Dock	okay	9
20010	Main Menu - Say a Stop/Route/Street/Station/Dock	customer	5
20010	Main Menu - Say a Stop/Route/Street/Station/Dock	summer service	5
20010	Main Menu - Say a Stop/Route/Street/Station/Dock	zero	4

For the selected date range, the **DiRAD Advanced Response Processing Report,** shown above, displays a list of invalid spoken responses provided at specified menus and the number of times each response was provided.

The data displayed on this **report may be exported** by selecting the Excel icon, which may be found on the right side of the report page.

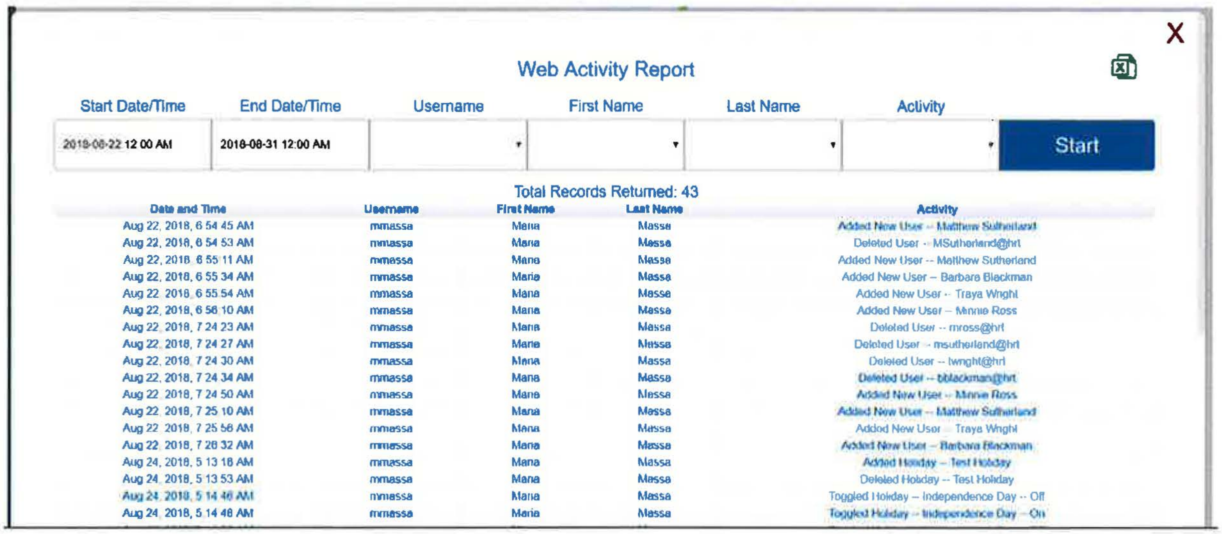
To close this report, select the 'X' in the upper right corner of the report page.

I. Web Activity Report

If you select **Web Activity Report** from the Reports menu, a box similar to the following is displayed.

To run the **Web Activity Report,** select the dates and times in which you are interested and then select the 'Start' button. **You may narrow the results returned** by selecting a Username, First Name, Last Name and/or Activity, if desired. When you click your mouse in the date boxes, a calendar pops up, as shown below. After you select a date, you'll be able to select a time.

A sample Web Activity Report is shown below.



For the selected criteria, the **Web Activity Report**, shown above, displays:

- The date and time of the activity
- The username that was used to log in
- The first name of each user who performed an action
- The last name of each user who performed an action
- A description of the activity that the user performed

Default display of this report is descending by the date and time of the activity. **You may sort the data in** this table by selecting any column heading.

The data displayed on the **report may be exported** by selecting the Excel icon, which may be found on the right side of the report page.

To close this report, select the 'X' in the upper right corner of the report page.

J. Web Access Report

If you select **Web Access Report** from the Reports menu, a box similar to the following is displayed.

To run the **Web Access Report,** select the dates and times in which you are interested and then select the 'Start' button. **You may narrow the results returned** by selecting a Username, First Name and/or Last Name, if desired. When you click your mouse in the date boxes, a calendar pops up, as shown below. After you select a date, you'll be able to select a time.

A sample Web Access Report is shown below.

For the selected criteria, the **Web Access Report**, shown above, displays:

- The username of each user who logged in
- The first name of each user who logged in

- The last name of each user who logged in
- The date and time the user logged in
- The date and time the user logged out (Log out date and time may only be recorded if the user selects the 'Log out' link, which may be found in the lower right corner of each web page of the portal. If the user simply closes the browser window, or navigates to another URL, log out date and time cannot be recorded.)

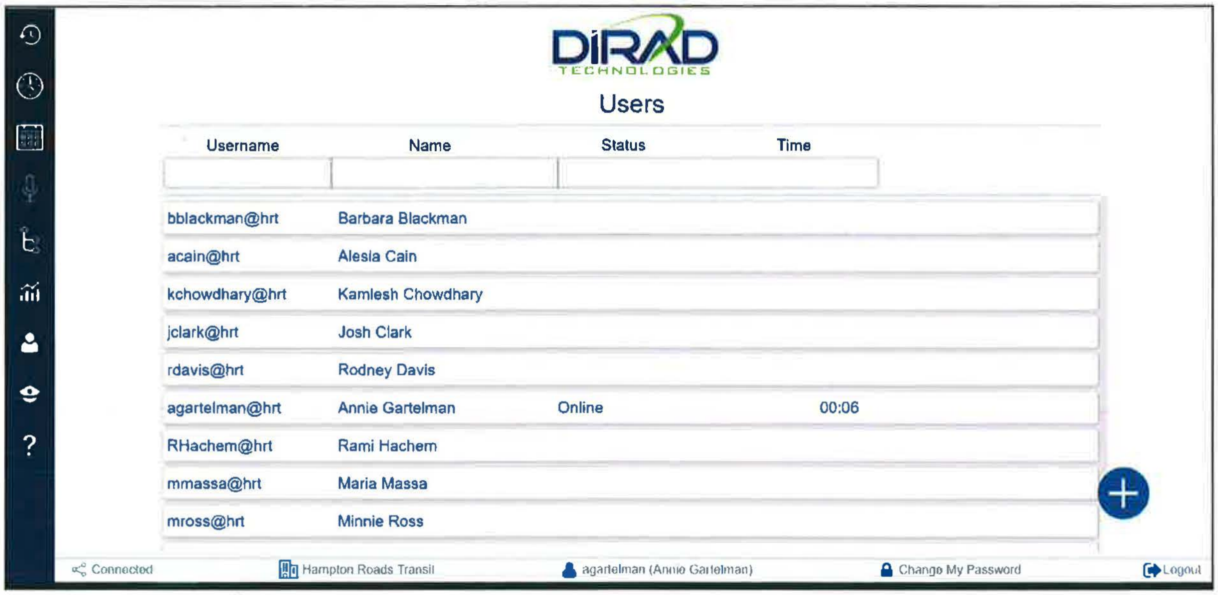
Default display of this report is ascending by the date and time the users logged in. **You may sort the data** in this table by selecting any column heading.

The data displayed on this **report may be exported** by selecting the Excel icon, which may be found on the right side of the report page.

To close this report, select the 'X' in the upper right corner of the report page.

10. Main Menu Option: USERS

If you select **Users** from the Main Menu, a page similar to the following is displayed.

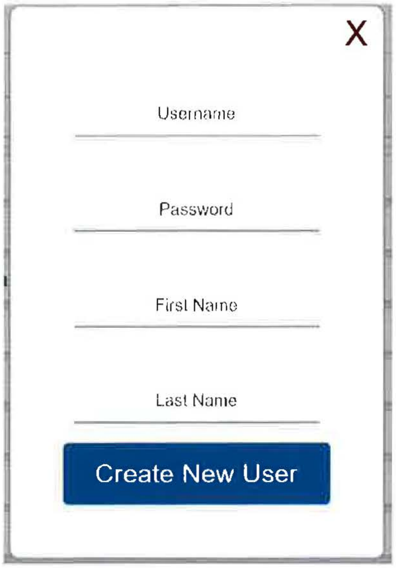


The **Users** table displays all individuals who are authorized to use the portal. The Users page, shown above, displays:

- The username of each user
- The first and last name of each user
- The status of the user ("Online" indicates the user is currently signed in.)
- The length of time the user has been Online, if applicable

Default display of the Users table is alphabetical by last name. **You may search for a record** by entering data into the search boxes under the column heading, as shown below.

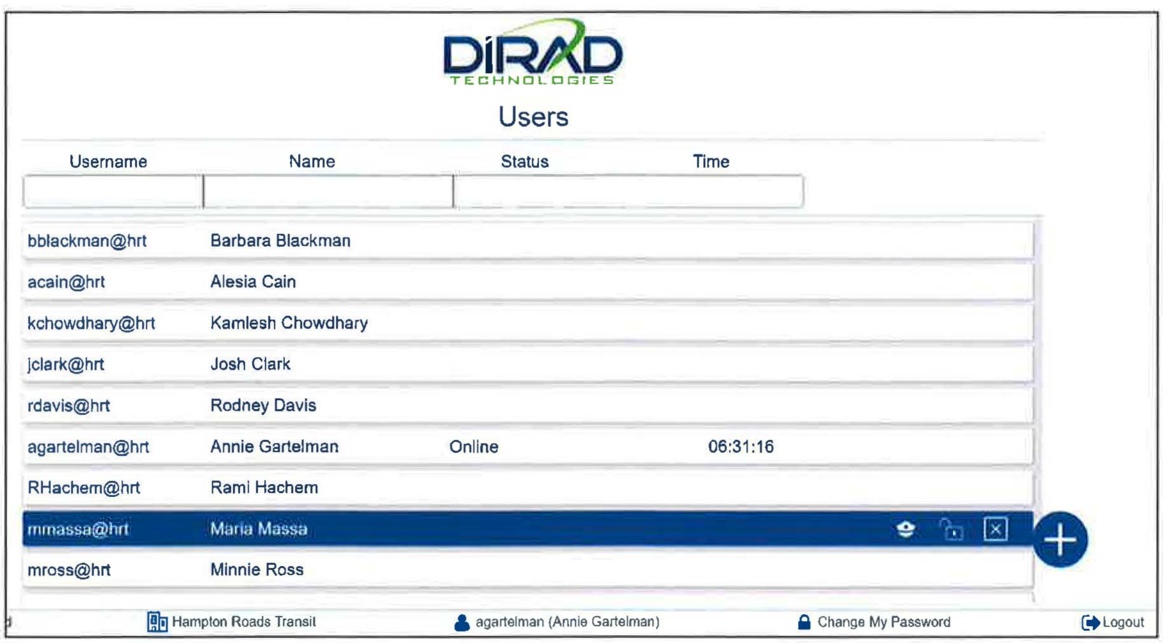
To add a new user, select the Add icon (⊕) in the lower right corner of the main Users page. A sample Add a User page is shown below.



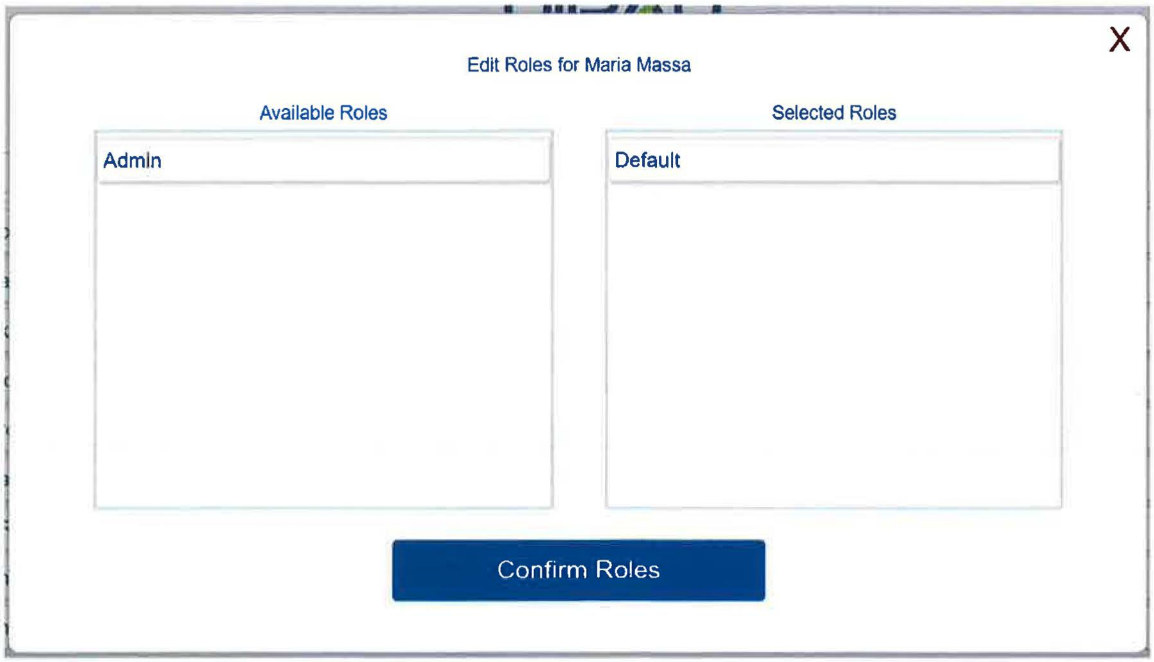
On the Add a User page, enter the username, password, first name and last name of the new user, and then select the 'Create New User' button. Please note: The domain name **(@hrt)** will automatically be added to all usernames and will appear on the page after you select the 'Create New User' button.

Users will automatically be assigned the **Default user role.** The Default user role allows users to view Reports, including Realtime Statistics, and the Help page. There is currently only one other user role available on this application: Admin. **For more information on Roles,** including how to add additional roles, please see the Roles section of this manual, starting on page 37.

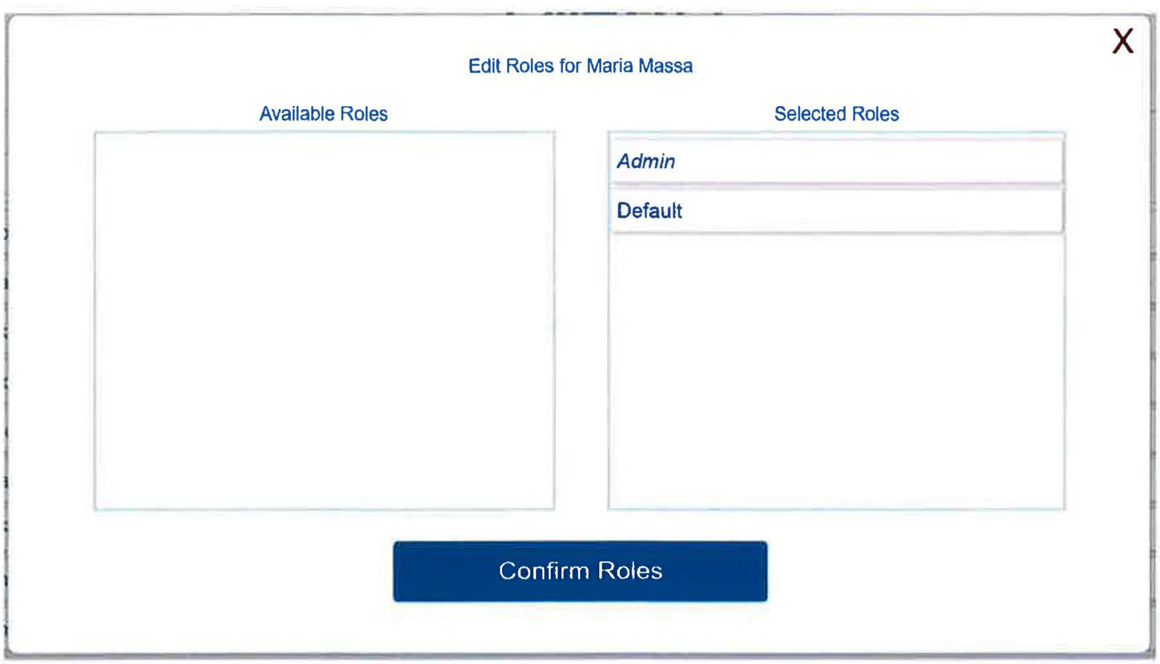
To change a user's role, select the Roles icon ( ) that appears when you hover your mouse on the appropriate record, as shown below.



When you select the Roles icon, a page similar to the following is displayed.



The Edit Roles page, shown above, displays all available roles (left side of page) and the roles currently assigned to the user (right side of page). **To assign a new role to the user,** click on the desired role in the Available Roles section. In the example above, you could click on Admin under Available Roles. When that is done, the Role moves to the Selected Roles section. As shown below, the Admin Role is now shown in the Selected Roles section.



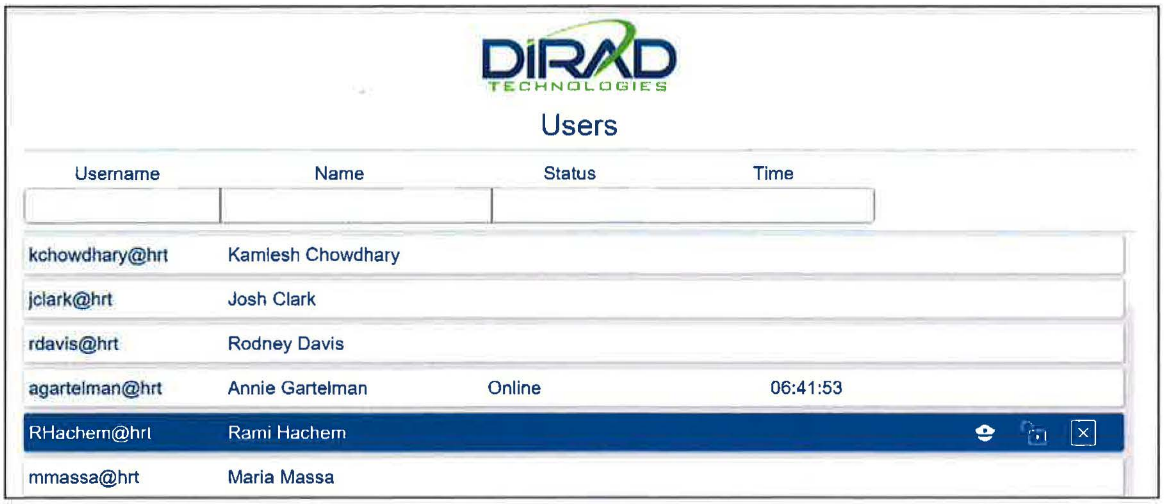
Be sure to select the 'Confirm Roles' button before navigating away from this page or your changes will not be saved.

To reset a user's password, select the Reset Password icon ( ) that appears when you hover your mouse on the appropriate record, as shown below.

When you select the **Reset Password** icon, a box similar to the following is displayed.

When you enter a new password and **select the 'Reset Password' button,** the user will be required to enter the new password the next time they sign in to the portal.

To delete a web user, select the Delete icon ( ) that appears when you hover your mouse over the appropriate record, as shown below.



When you select the **Delete** icon, a confirmation message will be displayed. A sample confirmation message is shown below

When you select the **'Delete This User' button,** the user will be deleted and they will no longer have any access to the portal. Please note: Deletion of users cannot be undone.

To log a user out of the portal, click on the user's record. A box similar to the following will be displayed.

If you select the 'Log Out' button, the user will immediately be logged out of the portal.

11. Main Menu Option: ROLES

If you select **Roles** from the Main Menu, a page similar to the following is displayed.

On the Roles page, shown above, all existing Roles are displayed. **The Default role** is the role that all users are assigned when they are added as a user of the portal. **Default users have access to Reports, including Realtime Statistics, and the Help page.**

If you hover your mouse over a Role's record, options appear to the right of the record, as shown below.

To view and/or modify the permissions associated with a role, select the Roles icon ( ). A sample Editing Permissions page is shown below.

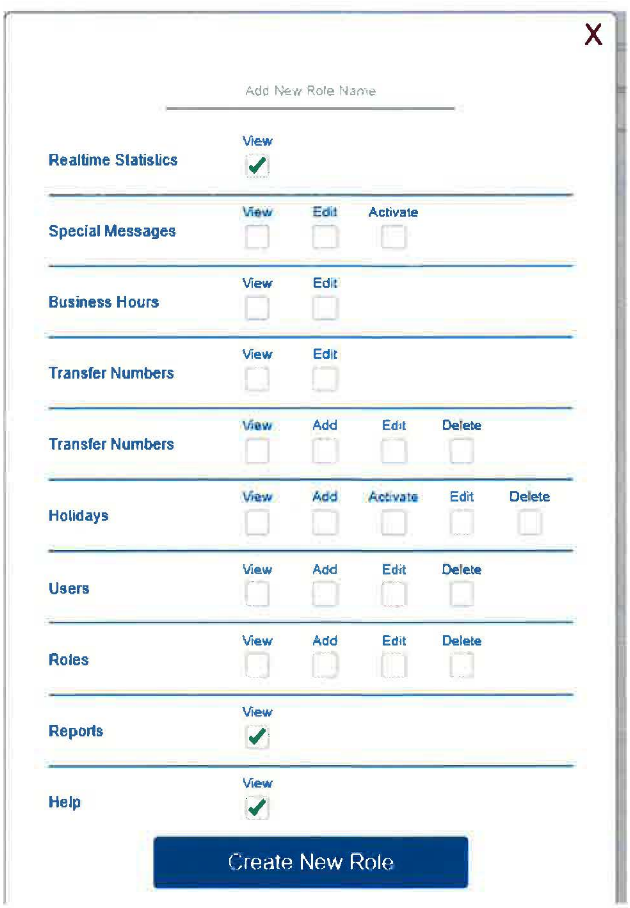
As shown above, the Admin role currently has all permissions enabled. **To remove a permission from a role,** uncheck the desired box.

Be sure to select the 'Confirm Permissions' button before navigating away from this web page or your changes will not be saved.

You may change an individual user's role via their record in the User's section of the portal (see page 32 of this manual). In addition, **you may change the users associated with a specific role** via the Roles section of the portal. **To view, add or remove the users associated with a particular role,** select the Members icon (5) for the desired role. A sample Add or Remove "Admin" Role from Users page is displayed below. (Note: **The number next to the Edit Roles icon,** "5" in the example above, is the current number of users who are assigned to that role.)

To move users from the "without this role" column to the "assigned this role" column, select the desired user(s). **Be sure to select the 'Confirm User Role Assignments' button** before navigating away from this page or your changes will not be saved.

To add a role, select the Add icon ( ) found in the lower right corner of the main Roles page. A sample Add a New Role page is shown below.



On the Add a New Role page, enter a name for the Role and then assign permissions for the role by checking the appropriate boxes. The boxes that are pre-checked are those associated with the Default role. **Be sure to select the 'Create New Role' button** before navigating away from the page or the role will not be saved.

To delete an existing role, select the Delete icon ( ) for the appropriate role. When you select the Delete icon, a box similar to the following is displayed.

If you select the 'Delete This Role' button, the role will be deleted and users' permissions will immediately be affected if they have been assigned that role. Please note: Deletion of roles cannot be undone.

13. Help, Change My Password, Logout and more

If you select **Help** from the Main Menu, a page similar to the following is displayed.

The Help page contains information on contacting DiRAD Tech Support as well as a copy of this web manual.

The bottom of every web page, sample below, contains information on current user information.

- **Connected –** Indicates the portal is connected to the Internet and the web server. If anything other than 'Connected' appears, you may want to check your Internet connection. In addition, you may want to try logging out of the portal and logging back in.
- **Hampton Roads Transit –** Name of the application
- **User name (First Name, Last Name) –** In the example above, agartelman is the username and Annie Gartelman is the First Name, Last Name
- **Change My Password –** You may change your password at any time by selecting this link.
- **Logout –** Select this link to log out of the portal. It is recommended that you log out when you are done using the portal.

WHITEPAPER

Twilio cloud communications

SECURITY

twilio

From the world's largest public companies to early-stage startups, people rely on Twilio's cloud communications platform to exchange millions of calls and messages —every day— from web and mobile apps. These communications facilitate deliveries, power customer support, and keep mission-critical applications running nonstop. Providing reliable voice, video, and messaging is only the first step. These communications must also follow the latest security best practices and comply with strict privacy regulations and corporate policies.

The information contained in this document is intended to provide transparency on Twilio's security stance and processes. We also cover best practices gleaned from customer implementations to help you improve and secure the applications you build with Twilio.

SECURITY ORGANIZATION & PROGRAM

While security is a high priority for all teams, a dedicated Security Team manages Twilio's security program. The Twilio security framework is based on the ISO 27001 Information Security Standard and includes programs covering: Policies and Procedures, Asset Management, Access Management, Cryptography, Physical Security, Operations Security, Communications Security, Business Continuity Security, People Security, Product Security, Cloud and Network Infrastructure Security, Security Compliance, Third-Party Security, Vulnerability Management, as well as Security Monitoring and Incident Response.

Security is represented at the highest levels of the company, with our Chief Information Security Officer meeting with executive management regularly to discuss issues and coordinate company-wide security initiatives. Information security policies and standards are approved by management and available to all Twilio employees.

PEOPLE SECURITY

The people creating Twilio products are important; we've implemented processes to ensure we're bringing in the right people and keeping them up to date on the latest security trends. Here are some of the processes we have in place:

BACKGROUND CHECKS

All candidates in the USA must pass stringent background checks by a specialized third-party before being offered a position. For domestic candidates, these checks include: SSN trace, criminal county search (7-Year address history), multi-state instant criminal, National Sex Offenders Public Registry, OFAC, professional references, and education verification. For international new hires, the background check includes (where legal): international criminal search and education verification.

INFOSEC TRAINING

All new Twilio employees attend a "Security 101" training during the onboarding process. In addition, all Twilio employees must take the Twilio Security and Privacy training once a year, which covers the Information Security Policies, security best practices, and privacy principles.

CONTINUOUS EDUCATION CAMPAIGN

The Twilio Security Team provides continuous communication on emerging threats, performs phishing awareness campaigns, and communicates with the company regularly.

ETHICS HOTLINE

Twilio implemented an anonymous[1] tip line for employees to report any unethical behavior.

[1] Twilio employees can anonymously report issues in geographies where anonymous reporting is legal

PRODUCT SECURITY

The mission of Twilio Product Security program is to enable the product teams to build solutions that are best in class when it comes to security. The following activities help us to achieve this mission:

APPLICATION SECURITY STANDARDS AND GUIDELINES

The Twilio Security Development Lifecycle (TSDL) standard defines the process by which we create secure products and the activities that the product teams must perform at different stages of development (requirements, design, implementation, and deployment).

SECURE BY DESIGN

Twilio security engineers continuously perform numerous activities to ensure that our products are secure, including:

- Internal security reviews before products are launched
- Regular penetration tests performed by third-party contractors
- Continuously running bug bounty program

- Continuously running internal and external security tests
- Regularly conducted threat models

For more information on Twilio bug bounty program, please visit: https://bugcrowd.com/twilio

BUILDING SECURITY DNA

At Twilio, we implement and conduct technology-specific software security trainings. The training material is developed in house and is highly Twilio-specific to ensure our developers get the most out of these trainings. All our developers must pass the final tests to confirm comprehension. We've also embedded security champions within our development teams to amplify the efforts of the Security Team.

CHANGE MANAGEMENT

Twilio has a formal change management process where all changes are tracked and are approved. A change is reviewed before being moved into a staging environment where it is further tested before finally being deployed to production.

ENCRYPTION IN TRANSIT

Twilio supports TLS 1.0, 1.1 and 1.2 to encrypt network traffic between the customer application and Twilio.

PENETRATION TESTING

Twilio regularly performs third-party penetration tests. Additionally, our bug bounty program encourages ongoing testing and responsible disclosure of vulnerabilities from the security community.

ACCOUNT SECURITY

Twilio secures your secrets using industry best practice methods to salt and repeatedly hash your credential before it is stored. Users can also add another layer of security to their account by using two-factor authentication (2FA) for the Twilio console.

TWILIO SECURITY DEVELOPMENT LIFECYCLE (TSDL)

Twilio's developers follow the TSDL while developing our products, ensuring products are secure by design, in development, and after they have been deployed.

CLOUD & NETWORK INFRASTRUCTURE SECURITY

The security of our infrastructure and networks is critical. Creating a safe platform for Twilio applications and customer innovation is the mission of our cloud security program.

Twilio's Cloud Security Standard (TCSS) comprises best-in-class security practices. We've open-sourced the security policy framework on which our own standard is based. All requirements in the TCSS are driven by four key principles:

ASSET MANAGEMENT AND OWNERSHIP

All cloud assets must have a defined owner, security classification, and purpose.

INFRASTRUCTURE MANAGEMENT

Direct access to infrastructure, networks, and data is minimized to the greatest extent possible. Where possible, control planes are used to manage services running in production, to reduce direct access to host infrastructure, networks, and data. Direct access to production resources is restricted to employees requiring access and requires approval, strong multifactor authentication, and access via a bastion host.

DEFENSE-IN-DEPTH

Twilio's production environment, where all customer data and customer-facing applications sit, is a logically isolated Virtual Private Cloud (VPC). Production and non-production networks are segregated. All network access between production hosts is restricted using firewalls to only allow authorized services to interact in the production network.

NETWORK MONITORING FOR TWILIO STANDARDS

Twilio logs high risk actions and changes in the production network. We leverage automation to identify any deviation from our technical standards and raise issues within minutes of the configuration change occurring.

For more information on Twilio's Cloud Security Standard, please visit: https://github.com/twilio/cloudsec

CONTINUOUS MONITORING AND VULNERABILITY MANAGEMENT

At Twilio, the security and resiliency of our products and infrastructure is a top priority. The Continuous Monitoring program builds on our "secure by design" principles. The Continuous Monitoring program develops processes and procedures for leading incidents and designing proactive and detective capabilities for the Twilio Platform. The Vulnerability Management program establishes how we identify, respond, and triage vulnerabilities against the Twilio platform. To ensure security of our platform, Twilio continues to mature the following capabilities:

CONTINUOUS MONITORING PROGRAM

Twilio approaches continuous monitoring through the development of proactive and detective capabilities. Through the ongoing awareness of vulnerabilities, incidents, and threats, Twilio is poised to respond and mitigate accordingly.

INCIDENT RESPONSE PROGRAM

Twilio maintains an incident response program in accordance to NIST SP 800-61. The program defines conditions under which security incidents are classified and triaged. Twilio Security Incident Response Team, or T-SIRT, assesses the threat of all relevant vulnerabilities or security incidents and establishes remediation and mitigation actions for all events.

SECURITY LOG RETENTION

Security logs are retained for 180 days. Access to these security logs is limited to T-SIRT

DISTRIBUTED DENIAL-OF-SERVICE (DDOS) PREVENTION

Twilio leverages industry leading platforms and T-SIRT to detect, mitigate, and prevent DDoS attacks.

PHYSICAL SECURITY

Physical security is an important part of Twilio's security strategy. We're committed to securing our facilities.

DATACENTER SECURITY

Twilio leverages AWS data centers for all production systems and customer data. AWS follows industry best practices and complies with an impressive array of standards.

For more information on AWS Data Center Physical Security, see the AWS Security Whitepaper: https://d0.awsstatic.com/whitepapers/aws-security-whitepaper.pdf

OFFICE LOCATION SECURITY

Twilio has a security program that manages visitors, building entrances, CCTVs, and overall office security. All employees, contractors and visitors are required to wear identification badges which distinguish their respective role.

BUSINESS CONTINUITY / DISASTER RECOVERY

Twilio uses a variety of tools and mechanisms to ensure best-in-class resiliency.

RECOVERY PLANNING

Twilio maintains formal Business Continuity and Disaster Recovery plans that are regularly reviewed and updated.

GLOBAL RESILIENCY

Hosting our services on AWS gives Twilio the ability to remain resilient globally even if one location goes down. AWS spans multiple geographic regions and availability zones, which allow Twilio servers to remain resilient in the event of most failure modes, including natural disasters or system failures.

CUSTOMER DATA BACKUPS

Twilio performs regular backups of Twilio account information, call records, call recordings and other critical data using Amazon S3 cloud storage. All backups are encrypted in transit and at rest using strong encryption. Backup files are stored redundantly across multiple availability zones and are encrypted.

THIRD-PARTY SECURITY

In today's interconnected business environment, maintaining visibility into the software supply chain is of utmost importance. Twilio has implemented the following programs:

VETTING PROCESS

Third-parties used by Twilio are assessed before onboarding to validate that prospective third-parties meet Twilio's security requirements.

ONGOING MONITORING

Once a relationship has been established, Twilio periodically reviews security and business continuity concerns at existing third parties. The program takes into account the type of access and classification of data being accessed (if any), controls necessary to protect data, and legal/regulatory requirements.

OFFBOARDING

Twilio ensures that data is returned and/or deleted at the end of a vendor relationship.

SECURITY COMPLIANCE

Twilio is committed to mitigating risk and ensuring Twilio services meet regulatory and security compliance requirements:

REGULATORY ENVIRONMENT

Twilio complies with applicable legal, industry, and regulatory requirements as well as industry best practices.

TOP TIER INFRASTRUCTURE PROVIDER

Twilio's cloud communications platform is hosted at Amazon Web Services (AWS) data centers, which are highly scalable, secure, and reliable. AWS complies with leading security policies and frameworks, including SSAE 16, SOC framework, ISO 27001 and PCI DSS.

ISO 27000 SERIES

Twilio has obtained our ISO/IEC 27001:2013 certification, showing our maturity within the Information Security space. Security is a top priority for Twilio, and this achievement demonstrates our commitment to information security, data protection and continuous improvement.

EU - U.S. PRIVACY SHIELD FRAMEWORK

Twilio is self-certified under Privacy Shield as a part of our commitment to comply with EU data protection requirements when transferring personal data from the European Union to the United States.

SOC2 TYPE II

Authy (Two-Factor Authentication by Twilio) has recently completed its SOC2 Type II audit for the Trust Services Principles of Security and Availability.

SUMMARY

Twilio cloud communications platform enables businesses to deliver superior customer experiences by easily incorporating voice, video, and messaging into their customer-facing applications. Security mechanisms to protect physical, network and application components of the platform, coupled with transparency about security practices and compliance best practices, give customers the confidence they need to move communications to the cloud.

For further details and steps to secure your Twilio-powered application, check out the API docs security page. Lastly, if you have more questions, or need more detailed answers, feel free to get in touch with our Security Team via the contact form at *https://www.twilio.com/help/sales.*

API docs security details can be found here:
https://www.twilio.com/docs/api/security

Twilio API Service Level Agreement

LAST UPDATED DECEMBER 1, 2018

This Twilio Service Level Agreement (*"SLA"*) governs the use of the Twilio API pursuant to the terms of the Twilio Terms of Service (*"TOS"*) between Twilio Inc. (*"Twilio"*, *"us"*, or *"we"*) and any user of the Twilio API (*"you"*, *"your"*, or *"Customer"*). To the extent you have more than one Twilio account, this SLA applies to each Twilio account individually. Except as otherwise set forth in this SLA, this SLA is subject to the terms of the TOS and capitalized terms will have the meaning specified in the TOS. Twilio reserves the right to change the terms of this SLA in accordance with the TOS.

1. Definitions

a. *"Monthly Uptime Percentage"* means the difference between 100% and the percentage of Unavailable Time for the applicable month.

b. *"Service Credit"* means a dollar credit, equal to 10% of your usage fees in the month in which the Unavailable Time (as defined below) occurred, that Twilio will credit back to an eligible Twilio account.

c. *"Unavailable Time"* means the Twilio API for the applicable product is not available for use, as measured in continuous 5-minute increments. Unavailable Time does not include any unavailability resulting from any Exclusion (as defined below).

Monthly Uptime Percentage	Service Credit
<99.95%[1]	10%

[1] *If you purchase the Twilio Enterprise Plan, then Twilio will make the Twilio API available 99.99% of the time each month and all references to a 99.95% Monthly Uptime Percentage in this SLA shall be replaced with a 99.99% Monthly Uptime Percentage. If you are no longer subscribed to the Twilio Enterprise Plan, then the Monthly Uptime Percentage shall revert to 99.95%.*

2. Service Commitment

Twilio will make the Twilio API available 99.95% of the time each month. If Twilio's Monthly Uptime Percentage is below 99.95% in a given calendar month, then you will be eligible to receive a Service Credit as described in Section 3 below. Availability of the Twilio API is measured by the third party performance and monitoring services contracted by Twilio (the *"Monitoring Service"*). The Monitoring Service reports of availability are currently available at http://status.twilio.com. Twilio may adjust the measure of availability by the Monitoring Service to account for any Exclusions applicable to such period.

3. Credit Request and Payment Procedures:

To receive a Service Credit, you must submit a request to Twilio as described in this Section 3. You must make the submission to Twilio Customer Support within thirty (30) days from the time you become eligible to receive the applicable Service Credit. Such submission must include: (a) "SLA Claim" as the subject of the ticket; (b) the dates and times of Unavailable Time for which a credit is being claimed; (c) any documentation of the applicable outage. Each Service Credit will be applied to future amounts payable by you in connection with the applicable Twilio product. No refunds or cash value will be given. Service Credits may not be transferred or applied to any other Twilio account.

4. Exclusions

Notwithstanding anything to the contrary, no Unavailable Time shall be deemed to have occurred with respect to any unavailability of the Twilio API or any other Twilio API performance issues, that (a) are caused by factors outside of Twilio's reasonable control, including, without limitation, any force majeure event, telecommunications provider-related problems or issues, or Internet access or related problems occurring beyond the point in the network where Twilio maintains access and control over the Twilio Services; (b) result from any actions or inactions of you or any third party (other than Twilio's agents and subcontractors); (c) result from any Customer Application(s), equipment, software or other technology and/or third party equipment, software or other technology (except for equipment within Twilio's direct control); or (d) occurs during Twilio's scheduled maintenance for which Twilio will provide at least twenty-four (24) hours prior notice; or (e) problems or issues related to alpha, beta or not otherwise generally available Twilio features or products (collectively, the *"Exclusions"*).

5. Entire SLA Liability

This SLA states Twilio's sole and entire liability to you and your sole remedy with respect Twilio's failure to meet the Monthly Uptime Percentage.

DiRAD SLA for Technical Support Response Time

As a government vendor, DiRAD holds itself to strict SLA requirements with credits provided should the system downtime exceed the required threshold. Below is a typical DiRAD SLA; however, DiRAD welcomes any changes that are mutually acceptable to DiRAD and HRT:

No.	Service Requirement	Measurement	Service Level Agreement	SLA Credit
1	Problem Response Time – High	Average Response Time for High Priority Problems.	98% <15 minutes	1%
2	Problem Response Time – Normal	Average Response Time for Normal or Low Priority Problems	98% <2 hours	1%
3	Problem Resolution Time – High	Resolution Time for each High Priority Problem	98% <4 hours	1%
4	Problem Resolution Time – Normal	Resolution Time for Normal Priority Problems	98% <24 hours	1%

5	Problem Resolution Time – Low	Resolution Time for Low Priority Problems	98% <72 hours	1%
6	Service Availability	All application functionality and accessibility shall be maintained at 99.9% uptime performance levels. Contractor shall minimize or eliminate unscheduled network downtime to .5% or less.	<99.5%	Additional credits per contract