State of Texas

TEX-AN Next Generation

Ongoing Help Desk Management Plan
1. INTRODUCTION

1.1. Purpose

The purpose of this Ongoing Help Desk Management Plan is to disclose Level 3’s processes and procedures for ongoing management of the Help Desk.
2. ONGOING HELP DESK MANAGEMENT OVERVIEW

2.1. Ongoing Help Desk Management Plan Approach

This Ongoing Help Desk Management Plan employs processes and procedures to effectively manage the Help Desk in support of DIR and DIR customers on an ongoing basis.

Level 3 is committed to our customer’s and their experience with service delivery and support. To this end, we have defined processes and procedures that have been developed as a result of customer feedback that are focused on ensuring a positive experience when working with Level 3. These processes are outlined in this document.

2.2. Sources of Change

Any changes to this document will be mutually agreed upon between Level 3 and DIR.

2.3. Key Personnel

Please refer to the Key Personnel Addendum for the key personnel related to this contract.
3. ONGOING HELP DESK MANAGEMENT PROCEDURES

3.1. Report Requests

DIR or DIR customers will have a dedicated Client Support Manager (CSM) to support post-sales activities such as report requests. DIR or DIR customers would simply contact their CSM when requesting a custom report. Level 3’s on-line self-service tool, MyLevel3 Customer Portal, contains account and performance information and can be accessed around-the-clock.

DIR’s Support team will consist of the following:

- **Account Management Specialist**
  - Your Level 3 advocate who will proactively monitor and manage your account.
- **Customer Project Manager**
  - Your dedicated single point of contact for all implementation needs.
- **Account Executive**
  - Lead member of your support team, with a focus on the delivery of new services and applications.
  - Specializes in designing network solutions for any of your needs.
- **Director of Operations**
  - Responsible for city infrastructure.
  - Manages technicians, engineers and outside plant team to ensure we build and maintain the highest performing network possible.
- **Network Application Engineer**
  - Supports any technical aspects of your solutions and services pre and post sales.
  - Assists in all pre-sales design, configuration, diagrams and requirements as well as ongoing support and review with the lead of the Account Executive.

3.2 Support of DIR Customers in Transition

Level 3 will assign a long-term dedicated Customer Project Manager (CPM) to DIR’s account. The role of the CPM is to manage and coordinate all aspects of the provisioning process for the State of Texas. On any given project, the CPM will collaborate with DIR to coordinate internal and external project calls with the frequency of the call be determined by the State. During these calls the CPM will go over all aspects of the project which include updates on status, builds, Type II details, vendor installation, and transition dates. The CPM will also produce a detailed project plan for all sites that require a build. The Project Plan will track all aspects of the build along with the standard install process. The CPM will also produce an order tracking worksheet. This sheet will track all critical dates along with the scheduled transition date and soak period. Both documents will be updated and sent prior to all calls.

3.3. General Information Requests

DIR or DIR customers will have a dedicated Account Management Specialist (AMS) to support post-sales activities such as information requests. DIR or DIR customers would simply contact their AMS for information requests. MyLevel3 Customer Portal contains account and performance information and can be accessed around-the-clock.
3.4. **Support for at DIR Customer Conferences**

Level 3 will provide support for DIR Customer conferences at no cost to DIR. This support will include, but not be limited to:

1. Briefings on CTSA and Service offerings;
2. Training sessions;
3. AAR briefings;
4. On-site representative(s) to answer questions and document special topic issues, and
5. Demonstrations of new or Emerging Technology offerings.

3.5. **Reports Generated by Level 3’s System(s)**

Level 3 will provide monthly customer care reports in tab delimited format as specified in the Vendor Reporting Guide provided during the onboarding process so DIR may determine service and performance quality. Reports will be provided in this way until such time as Level 3 and DIR mutually agree on XML interface specifications.

In addition, Level 3 will work with DIR or DIR customers to provide any necessary reporting over and above what is already provided by MyLevel3 Customer Portal.
ONGOING HELP DESK MANAGEMENT PLAN

Vendor will provide monthly Customer Care reports in tab delimited format as specified in the Vendor Reporting Guide as required so DIR may determine service and performance quality. Reports will be provided in this way until such time as Vendor and DIR mutually agree on XML interface specifications.

The Level 3 Team will provide Service Desk support for all issues and concerns expressed by the DIR as part of daily operations. The Level 3 Team’s Service Desk will be the single contact point for DIR users to report problems. Initially, DIR will report problems to Level 3 by phoning into customer care number 877-4-LEVEL3. Working out of our Service Management Center, Level 3 will resolve problems and incidents according to a well-structured set of processes. This centralized structure allows us to control costs, while enabling us to dispatch technicians for Level 3 Team organic services anywhere in Texas or escalate to the Level 3 NOC for additional network repair assistance.

Continuing with services and response in the Help Desk Implementation Plan, Level 3 commits to provide DIR with an Ongoing Help Desk Management Plan in its Response which promotes the ongoing management of the Level 3 Help Desk for Level 3 Network Services.

The Level 3 Network Operations Center (NOC) is responsible for all facilities and network management, monitoring, and repair. Level 3 staffs highly trained operations managers and network technicians at regional monitoring centers located in Denver, CO; Atlanta, GA; and London, England. These centers enable geographically diverse, 24-hour a day, year-round network management.

Level 3 has uniformly implemented network management systems and operational processes across all Gateways. By maintaining consistency across all systems and processes, Level 3 maximizes automation and efficiency of monitoring systems, resulting in swift fault isolation and repair. The NOC also provides proactive monitoring of traffic across the Level 3 Network. Through this monitoring, we can identify potential problems and provide resolution in a more timely fashion.

Technical Support for DIR and its Customers

From a corporate perspective, Level 3’s marketing department would also be instrumental in supporting the needs of service activities in relation to Texas DIR and their eligible customers. Such activities are presently performed on a regional basis across the U.S., but could include specifically for Texas any or all of the following activities:

- AAR briefings, press releases and other notifications
- Support and participation in regular conferences and trade shows, based on anticipated schedules and speaker presentation opportunities afforded to Level 3
- Briefings on CTSA, Service Offerings and service overviews
- Demonstrations of new or Emerging Technology offerings.

Support for DIR customers in transition:

Level 3 will assign a Customer Care Manager who will be the primary contact to support customers in transition. Further, when warranted, a Project Manager will be assigned to further assist with planning and implementation.

Trouble Ticket Management

Texas DIR and their eligible purchasers can submit a trouble ticket via MyLevel3 Portal or directly via toll free number to a Level 3 Customer Service Management (CSM) Technician.
For every service related issue reported a unique case is created with a related ticket number. Tickets created online are treated with the same priority as those called into our CSM team.

The Level 3 Technical Support Center Technician model provides a one-stop approach to trouble and issue management as well as addressing questions or concerns.

Level 3’s trouble reporting system and architecture includes the following features:

- CSM Technicians use the help desk software Clarify™ as the problem management system for logging and managing problems. Clarify provides the basic functionality for call and problem tracking, escalation, notification, and resolution.
- CSM Technicians have real-time views and access into Level 3’s network topology viewers (NTV) Riversoft™ and Wolverine TM for network management status.
- Level 3 uses an Operations Automation (OA) tool to automate network monitoring and management and provide automated fault isolations. The system monitors and manages all alarms received across the network through our NTV database.
  - The OA tool evaluates the alarms and correlates them to the specific service for a customer.
  - OA automatically creates a record in the Clarify Trouble ticketing system, with all relevant alarm data, including diagnostic network information, included in the body of the ticket.
  - The Level 3 CSM Technician and OA tool update the trouble ticket data throughout the life cycle of the event.
- Information is available via the MyLevel3 Portal and includes alarms and CSM Technician notes.

Level 3’s OA system supports event acquisition, processing, and management for all transport and IP-critical impacting events. OA is an event-driven rules manager that generates network-automated tickets. In addition, it provides triage, diagnostics, device and interface history, and prioritization. It generates Clarify tickets for outages impacting customers, critical network events, and network performance threshold violations.

Level 3 will provide joint technical support to DIR and any other TEX-AN NG Vendor(s) in order to resolve Service disruptions efficiently and expeditiously.

Level 3 Communications

Updated 2018
Escalation procedures:
Level 3 adheres to trouble reporting and management procedures for two classes of events – Outages and Impairments. The process is well defined, with:

- Strictly enforced resolution intervals and escalation triggers
- Automatic internal communication to next escalation level when intervals are not satisfied
- Hourly status contact to affected customers by the technician during an outage event
- Two-hour interval status contact to affected customers by the CSM technician during an impairment event
- The Texas DIR NOC or the eligible purchaser has the option to escalate to any level in the Level 3 organization at any time
- Online trouble ticket access by customers using the MyLevel3 Customer Portal

Note: For all escalations please dial into 877-4Level3 (877-453-8353), and press Opt 2, Opt 3 for Escalation. Your call will be answered by an individual who will ensure your escalation is delivered to the appropriate level and is recorded in the ticket.

Level 3 provides an Escalation Matrix online link that is continuously updated: http://www.level3.com/~/media/assets/escalations/us_tsc_customer_escalation_list.ashx

Upon Service Implementation, DIR will be able to view an updated escalation list at any time via the MyLevel3 Customer Portal.

Level 3’s standard service type definitions and examples of those follow:

<table>
<thead>
<tr>
<th>Service</th>
<th>Type</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP</td>
<td>Critical</td>
<td>Outage affecting:</td>
<td>• Loss of Backbone network</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• More than 1 service in more than 1 city or market</td>
<td>• Loss of one IP service network-wide</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• One service network-wide</td>
<td>• AS isolation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• One or more services in a city</td>
<td></td>
</tr>
<tr>
<td>Major</td>
<td></td>
<td>Outage affecting customers on multiple devices, or where the network did not operate as designed for redundancy failures</td>
<td>• Loss of one IP service in a gateway</td>
</tr>
<tr>
<td>Minor</td>
<td></td>
<td>Events affecting edge-facing devices, errored circuits, router reboot or linecard restart where the network operates as designed and service is maintained through redundant paths</td>
<td>• Loss of one redundant edge device</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Loss of one IP service in a gateway</td>
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|         | Critical | • Network Critical Event: Service-impacting event that affects multiple ADM and/or DWDM systems by way or network element equipment failure, OSP related failure, or Infrastructure related failure  
• Infrastructure Critical Event: Service-Impacting event that affects multiple service platforms (such as Switch, IP, or Colocation services) by way of infrastructure plant failure located in Level 3 owned/operated facilities | • Fiber cut with more than one customer down  
• Entire Network Element out of service with more than one customer down  
• Level 3 POP out of Service with a customer |
| Transport | Major | • Network Major Event: Fiber cut resulting in outage for unprotected traffic or a service-impacting event that impacts two or more customers in a specific market (OC-48 and above)  
• Infrastructure Major Event: service-impacting event that affects a single transport network element and/or two or more collocated customers | • Level 3 backbone facility with more than one customer down  
• Nortel regional ring with one customer down |
|          | Minor  | • Events affecting multiple protected services (OC3-OC12 or three or more DS3s)  
• Events impacting unprotected services (OC3-OC12 or three or more DS3s)  
• Fiber cut impacting Dark Fiber services only (OC3-OC12 or three or more DS3s) | ILA out of service however circuit path is on protect and no customers are down |
|          | HazCon Major | Hazardous conditions that may cause a service impacting event to multiple network systems or service platforms | Weather warning that could disable a region of the country |

**Telecommunication Service Priority**

TSP (Telecommunication Service Priority) is a program designed by the FCC to ensure all telecommunication service pertaining to national security and emergency preparedness (NS/EP) will receive top priority in both provisioning and restoration. TSP is governed by the Office of Homeland Security and must be proven to be related to NS/EP to receive a TSP code.

Repair issues for any service instance having a TSP Authorization code should take priority over all other service outages, except over internal Level 3-owned control services or orderwires needed for provisioning, restoration, or maintenance.
In the event that service outages occur that involve more than one service instance having a TSP Authorization code, the following sequence should be followed for repair and provisioning of those services:

- Restore TSP services with restoration priority 1.
- Provision Emergency TSP services with a provisioning priority E.
- Restore TSP services with restoration priority 2-5.
- Provision TSP services with provisioning priority 1-5.

**Note:** Priority levels E (the highest provisioning level), 1, 2, 3, 4, and 5 are assigned to TSP provisioning requests. Priority level "E" is assigned only to Emergency provisioning requests. Priority levels 1 (the highest restoration level), 2, 3, 4, and 5 are assigned to TSP restoration requests. A zero (0) in either priority-level position indicates no priority.

Level 3 will provide support for at DIR Customer conferences, at no cost to DIR, including, but not limited to conferences pertaining to the following:
1. Briefings on CTSA and Service offerings;
2. Training sessions ;
3. AAR briefings ;
4. On-site representative(s) to answer questions and document special topic issues ; and
5. Demonstrations of new or Emerging Technology offerings.

Trouble Tickets can be created for the following:
A. Any Service disruption reported by DIR or Customer, or detected by the Vendor or its Subcontractor(s);
B. Any hazardous condition that has the potential for major Service impact (e.g., fire in a node);
C. Failure of network management system that results in loss of visibility to network and telemetry data;
D. Any other Fault, event or request that DIR determines should be monitored or tracked through the Customer Care organization.

Level 3 shall maintain the following data elements for each trouble ticket, at a minimum:
A. Trouble ticket number;
B. Fault description and definition of problem;
C. Fault date and time of detection;
D. Identification of Customers affected by the Fault;
E. Service(s) and locations affected by the Fault;
F. Information about detection of Service-affecting Faults for peripheral network resources indicating whether the Fault is internal or external to the Vendor's network;
G. Estimated time to resolve;
H. TSP or Non-TSP Service; and
I. Affected SLA, if known

**Help Desk Reporting**
Level 3 will provide monthly customer care reports in tab delimited format as specified in the Vendor Reporting Guide so DIR may determine service performance quality. Reports will be provided in this way until such time as Level 3 and DIR mutually agree on XML interface specifications.