

Spectrum Enterprise

ONGOING HELP DESK MANAGEMENT PLAN

Spectrum Enterprise's Ongoing Help Desk Management Plan discloses Spectrum Enterprise's processes and procedures to effectively manage the Help Desk in support of DIR and DIR customers on an ongoing basis.

Process for responding to an *ad-hoc* report request from DIR or DIR Customers:

The Spectrum Enterprise Technical Support team is the main Point of Contact for DIR and DIR customers for all customer requested help desk reports. The Technical Support Team can be contacted by phone at 888-812-2591. The Spectrum Enterprise Technical Support Team should be able to provide all customer requested help desk reports within three (3) business days. If for some reason the report is not available to the Technical Support Technician, then the Technical Support Specialist will collect the necessary information, and update DIR or DIR customers with an estimated time when the requested report will be provided.

Process and procedures to support DIR Customers in Transition:

DIR customers in transition will have the full support of Spectrum Enterprise while the customer transfers from location to location. At the request of DIR, Spectrum Enterprise will assign a project manager to assist during the transition. DIR customers in transition between vendors will be supported by the previous vendor until the Spectrum Enterprise installation date after which they will be fully supported by Spectrum Enterprise. However; Spectrum Enterprise will coordinate with DIR and any third-party vendors as required to facility successful transition and minimize service impacts.

Process for responding to a general information request:

General requests can be answered by a Technical Support Specialist. The Technical Support Specialist can be contacted by phone at 888-812-2591

A corresponding ticket will be created; in the event the Technical Support Specialist is unable to answer the question, from that point, the FSS will contact the appropriate department to have the Customer's question answered; in turn, the Technical Support Specialist will provide a written response back to the DIR and/or DIR customer.

Support for DIR Customer conferences

Spectrum Enterprise 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 representatives to answer questions and document special topic issues,
5. Demonstrations of new or emergency technology offerings

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

In addition, Spectrum Enterprise can provide multiple different usage graphs/reports. As an example:

- o Inbound Broadcast Pkts
- o Inbound Octets

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- o Inbound Discards
- o Inbound Errors
- o Inbound Unicast Packets
- o Operational Status
- o Outbound Broadcast Pkts
- o Outbound Discards
- o Outbound Errors
- o Outbound Unicast Packets
- o Total HC Octets
- o General usage report

Spectrum Enterprise will create a trouble ticket 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.

A Spectrum Enterprise ticket number is created for every call or alert, even if it is only an informational inquiry.

Spectrum Enterprise will 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.

A Spectrum Enterprise ticket number is provided for every incident: fault and problem description is a requirement before any ticket can be closed; Spectrum Enterprise Tickets record date and time from open to close; individual customer tickets can be related to master outage ticket for identification; generalized areas can be determined by Spectrum Enterprise (i.e. Austin, Dallas, etc.), but a list of DIR customer locations would be required for more specific locations (i.e. Maple Dr., Second St., etc.): Spectrum Enterprise monitors connections to the network from core devices to Customer Premise Equipment (CPE) handoff ports; Service affecting faults are recorded, and investigated on an individual basis; an estimated time repair (ETR) can be provided once a preliminary investigation of the incident has been conducted; TSP and Non-TSP customers are identified and handled appropriately within the Spectrum Enterprise ticket; affected SLA can be provided for every ticket created; affected SLA can be provided within the monthly SLA Non-Compliance Report.

Within 10 minutes of customer notification of a service impacting event whether by Remedy email or Customer contact, the Technical Support Specialist must:

- 10 Minutes – Open Trouble Ticket
- 20 Minutes – Remotely isolate potential problem location

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30 Minutes – Dispatch/coordinate with Spectrum Enterprise Regional Technical Operations Department and Spectrum Enterprise Regional Commercial Engineering Department

Customers that have not received an update from the Technical Support Specialist within 1 hour can contact the RC3 Fiber Department: or they can contact RC3 Management. A contact list is provided below:

CONTACT NAME	LEVEL	JOB TITLE	EMAIL ADDRESS	PHONE
Fiber Support Specialist				888-812-2591
Shift Manager	1	Manager		888-812-2591
Rich Smith	2	Director	Rich.smith@charter.com	704-206-4011
Jean Ciullo	3	Sr. Director	Jean.ciullo@charter.com	407-215-8871
Keith Vivona	4	VP	Keith.vivona@charter.com	203-705-4837