E 9-1-1 Activation Process

For Ziply Fiber Wholesale Customers

Revised: 10/08/2020

E911 Activation Process

Contents

1.0 Introduction

This document is intended for all Carriers providing service in the Ziply Fiber market service areas which include former Ziply Fiber and Citizens properties. As used in this document, the term "Carrier" will apply to facilities-based Competitive Local Exchange Carriers (CLECs), Independent Telephone Companies (ITC), Resellers, and Wireless Carriers, collectively. Information provided in this document is intended solely to assist Carriers in the interconnection of 9-1-1/E-9-1-1 service with Ziply Fiber. Interconnecting VoIP providers impacted by FCC's First Report and Order released June 3, 2005 ("In the Matter of IP-Enabled Services (WC Docket No. 04-36) and E911 Requirements for IP-Enabled Service Providers (WC Docket No. 05-196)" that desire to order facilities and/or trunking from Ziply Fiber can address their facility and trunking inquiries by using this Guide. In addition, interconnected VoIP providers should refer to the VoIP 9-1-1 Guide on the Ziply Fiber E9-1-1 web site for further assistance in providing 9-1-1/E 9-1-1 service to their end users in Ziply Fiber service areas.

The Carrier is responsible for assessing and meeting all requirements of applicable federal, state, and/or local law in connection with 9-1-1/E-9-1-1 services. If conflicts arise between the information contained in this document and applicable law, including federal, state and/or local statutes, regulations and standards or the carrier's Interconnection Agreements, the information/requirements of applicable law or in such specific documents shall take precedence.   By its use, the Carrier agrees to release Ziply Fiber and hold harmless from any claims resulting from information obtained from this document.

This Guide has been updated to include all market areas where Ziply Fiber is certificated to provide 9-1-1 services.

1.1 What is 9-1-1 ?

1.1.1 Basic 9-1-1 Service (9-1-1)

Basic 9-1-1 Service is an emergency telephone system that automatically connects 9-1-1 callers to a designated answering point. Call routing is determined by originating central office only. Basic 9-1-1 services are provided in areas where Enhanced 9-1-1 is not available.

1.1.2 Enhanced 9-1-1 (E 9-1-1)

E 9-1-1 service delivers a voice connection and the caller's telephone number ('TN') Automatic Number Identification ("ANI") to a Public Safety Answering Point ("PSAP"). E
9-1-1 provides additional selective routing flexibility for 9-1-1 calls. E 9-1-1 uses end user data contained in the E 9-1-1 database to determine routing to the appropriate PSAP. The E 9-1-1 database provides the PSAP with the name and street address of the calling party. The E 9-1-1 database must be updated when an end user is added to the database, changes local service provider, telephone number, name or street address.

1.2 Responsibilities of Carriers

1.2.1 Facility Based CLECs and Independent Telephone Companies

1.2.1.1 Trunking

Facility Based CLECs (CLECs owning their own switching equipment), Wireless carriers and Independent Telephone Companies are responsible for establishing facilities and trunks from their switch to the designated Ziply Fiber Selective

Router(s). See also Sections 2.2-Network Information and Section 2.3-Recommendations for the Provisioning of Facilities.

1.2.1.2 Database

Facilities-Based CLECs, Wireless carriers and ITCs are responsible for entering their end-users' name and address information into E 9-1-1 databases, and for the accuracy of that information. Facility-based CLECs, ITCs and Wireless Carriers submit end-user information to the E 9-1-1 databases using the Ziply Fiber Electronic Interface. This electronic database interface uses an industry-standard format. Carriers may submit up to ten files containing multiple entries each business day. Carriers are responsible for the accuracy of their end-user E 9-1-1 information and must verify that the name and address information entered into the database is complete,

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correct, and accurate. This information must also be validated against the local Master Street Address Guide (MSAG) for facility-based CLECs and Independent Telephone Companies.

1.2.2 Resellers, UNE – Platform & UNE Port

1.2.2.1 Trunking

1.2.2.1.1 Resellers and UNE-Platform

9-1-1 calls for end-users of Carriers utilizing Resale and UNE-Platform use the same trunking from the end office to the 9-1-1 selective router as Ziply Fiber subscribers. All calls for Resale and UNE-Platform are selectively routed to the correct PSAP based on the Caller's telephone number (ANI).

1.2.2.1.2 UNE Port

Ziply Fiber provides one telephone number (ANI) per UNE Port. All 9-1-1 calls made over this port will be routed to a single PSAP based on the address associated with the port telephone number. As such if specific multiple subscribers (Telephone numbers) with multiple addresses are provided over this UNE – Port, they will only be identified at the PSAP by the single UNE – Port telephone number. For information to identify unique Subscriber location to the PSAP for UNE Port, please contact your Wholesale Account Manager.

1.2.2.2 Database

The Carrier is responsible for the accuracy of its end-user information, including the ANI as well as name and address information, which must be validated against the local 9-1-1 system's MSAG. Ziply Fiber uses its standard Service Order Process to update and maintain end-user information for these types of Carriers in the E 9-1-1 Database. This data is derived from data received from the Local Service Request (LSR) received from the Carrier. For UNE-P, Ziply Fiber is evaluating alternatives for updating end-user information. On an interim basis, Ziply Fiber will update and maintain CLEC UNE-P end-user E-9-1-1 information through the LSR process described above.

1.3 Municipality Contacts

1.3.1 Carrier Responsibilities

Carriers are responsible for notifying the appropriate state agency and/or local agency where telecommunications and required 9-1-1 services are to be provided. If you require assistance in obtaining contacts within these agencies, the Carrier may contact the Ziply Fiber 9-1-1 Specialist in the specific area in which it intends to provide service.

1.3.2 Service Contacts: E911 Specialists

E9-1-1 Specialists are a primary point of contact for all 9-1-1 service related matters for their assigned states.

The 9-1-1 Specialists, by assigned states, are as follows:

Ziply Fiber E911 Specialists			
Territory	**Service Manager**	**Phone Number**	**Email**
Idaho	Darin French	208-215-0729	Darin.french@ziply.com
Oregon	Darin French	208-215-0729	Darin.french@ziply.com
Washington	Darin French	208-215-0729	Darin.french@ziply.com
9-1-1 Services Mgr.	Darin French	208-215-0729	Darin.french@ziply.com

1.4 General

1.4.1 Localities without E 9-1-1

Generally, in areas where there is no Enhanced 9-1-1, Basic 9-1-1 service is provided. In these situations, Carriers (other than Resellers, UNE – Platform and UNE - Port providers) must establish direct trunks from their switch to the local Emergency Service Provider in order to provide basic 9-1-1 service.

1.4.2 Certified Carriers

A Carrier must be certified by applicable state regulatory bodies to provide telecommunications services in an area before they request 9-1-1 services from Ziply Fiber.

1.5 Note to Wireless Carriers

Basic interconnection and data input is the same for both wireline and wireless carriers.

2.0 General Network Information

2.1 9-1-1 Repair

Shown below is the contact number for carriers to report troubles in the event of a 9-1-1 trunk failure. The Carrier must have the circuit ID of the trunk for which it is reporting the trouble.

Ziply Fiber Maintenance/Repair Center: 888-488-0072

2.2 Network Information

2.2.1 Important Points to Remember

The Carrier (other than Resellers, UNE – Platform and UNE - Port providers) is responsible for their subscriber's 9-1-1 service and ensuring that their network is properly tested and operational at all times. The Carrier must have 9-1-1 trunk circuits in place and operational from its switch to the correct Selective Router for Enhanced 9-1-1 service to work. Carriers must connect to each of the selective router(s) serving their end users' 9-1-1 calling areas. The Selective Routers are determined by identifying the PSAP that will answer the call. You can view a list of the PSAPs and the selective routers later in this document.

The Carrier is responsible for monitoring growth to ensure that new areas served by the Carrier have access to the correct 9-1-1 Selective Router from the Carrier's switch.

2.2.2 9-1-1 Selective Router Trunking Recommendations

In areas where a 9-1-1 Selective Router is used, all facility-based Carriers are required to connect 9-1-1 trunks from their local switch directly to the appropriate 9-1-1 Selective Router. The appropriate Selective Router is determined by identifying the correct jurisdictional PSAP to answer the 9-1-1 call for the carrier's end user and then making sure the Selective Router serves that jurisdictional PSAP. Where there are questions the assigned 9-1-1 Specialist should be contacted using the chart above.

In most cases the connection will be via a DS1 through a Digital Access Cross Connect (DCS), although certain state and/or local agencies may have their own requirements dictating how a Carrier interconnects to the 9-1-1 network. This will permit the routing of Carrier subscribers to the correct PSAP. In accordance with industry best practices and standards recommendations, diversity means "the practice of routing circuits along different physical paths in order to prevent total loss of 9-1-1 service in the event of a facility failure." In support of service continuity it is recommended that all trunk circuits to the 9-1-1 Selective Routers, should be provisioned in a diverse manner, where facilities permit with a minimum of two trunks per trunk group (unless otherwise specified by the state or local E-9-1-1 agency) for each Selective Router, and the circuit routes should not travel the same physical path at any point from the Carrier's switch to the Ziply Fiber 9-1-1 Selective Router.

Ziply Fiber Emergency Service Number (ESN) procedures:

A default ESN is assigned in translations of the 9-1-1 Selective Router to the Carrier's incoming 9-1-1 trunk group, for any ANI failure from the Carrier switch. Ziply Fiber determines the ESN assignment for this trunk group based on information provided to by the Carrier when the 9-1-1 trunk is ordered. **It is imperative that the Carrier ensures that the proper default routing information is included in the ASR for the 9-1-1 trunk order.**   At the time the Carrier submits their trunk request to Ziply Fiber, they must clearly state what PSAP their ANI failures should default route in plain English based on agreement between the Carrier and PSAP.

Carriers should ensure that PSAPs are aware and agree that if the Carrier only plans to build one trunk group and therefore have only one default ESN on a trunk group that may serve multiple PSAPs.

2.3 Recommendations for the Provisioning of facilities

9-1-1 trunks from the Carrier's switch to the Ziply Fiber 9-1-1 Selective Router should be provisioned as follows:

1. For areas where a single 9-1-1 Selective Router exists, the minimum trunk recommendation is two diversely routed trunks. Where possible, the two trunks should be diversely routed between the Carrier's switch and the Ziply Fiber 9-1-1 Selective Router. For areas that have dual Selective Routers, the minimum trunk recommendation is two diversely routed trunks to the primary Selective Router and with two diversely routed trunks to the secondary Selective Router.

2. All 9-1-1 trunking should meet industry standards of P.01 grade of service except where State requirements are more restrictive.

3. Trunks are 1-Way terminating only trunks with FGD or SS7 protocol. The facility is DS1 or Voice Grade level and does not have to be a dedicated DS1.   If the DS1 is not dedicated, it must terminate at a DCS. The applicable tariff or state regulation may determine available facility type(s).

4. Currently, Ziply Fiber utilizes one type of selective router in the provision of 9-1-1 services, that is: Lucent Technology # 5 ESS

2.3.2 Use of SS7 Signaling

SS7 signaling between the Carrier switch and the Ziply Fiber Selective Router is utilized in areas in which a Lucent 5E switch serves as the Selective Router. All other areas within Ziply Fiber still use MF/CAMA trunking.

2.3.3 Competitive Carrier Requirements for Area Code Overlay

The Carrier may, at its discretion, convert existing 9-1-1 trunk groups to SS7 where SS7 is available. However, it is recommended that if a Carrier has NXX codes in both the existing NPA and the proposed overlay, that it implement SS7 on its 9-1-1 trunk groups to avoid implementation of a second trunk group for the overlay NPA.

3.0 General Database Requirements

3.1 Introduction

The E-9-1-1 database identifies the name and street address associated with each telephone number to enable PSAPs to automatically identify an emergency caller's location if the caller is unable to communicate this information verbally to the PSAP call taker.

3.2 Regional E 9-1-1 Electronic Interface

Facilities-based CLECs, ITCs and Wireless Carriers use the Regional E 9-1-1 Electronic Interface within all Ziply Fiber states to enter, modify and view their subscriber telephone number and address information into the Ziply Fiber 9-1-1 Data Base Management Systems. This Guide provides the various business rules, by geographic area, for all of Ziply Fiber.

3.2.1 Number Portability

3.2.1.1 General

When an end-user ports a telephone number from one Local Service Provider to another, the ownership of the end-user's E 9-1-1 record must be changed from the previous carrier (known as the Donor Company) to the new carrier (known as the Recipient Company.)

Carriers are responsible for their end-users' E-9-1-1 records; and as such, they are responsible for monitoring E-9-1-1 Error/Record reports provided by Ziply Fiber. Where there is a question concerning a records' "unlock" status, the Carrier must first investigate internally before contacting the Database Management Center (DBMC) regarding Local Number Portability (LNP)-related difficulties with E-9-1-1 records.

3.2.1.2 Instructions for Porting Telephone Number (TN) Records in the E 9-1-1 database

When a Recipient Company wins an end-user from another carrier, the Recipient Company sends a LSR to the Donor company. If the Donor company is Ziply Fiber, then the LSR should be sent to the Ziply Fiber Local Ordering Center. The LSR is the vehicle that begins the transaction process initiating service with the Recipient Company and disconnecting service from the Donor Company.

When a Recipient Company is a Ziply Fiber Reseller or UNE-Platform provider and they win an end-user from another Carrier, it is necessary for the Recipient Company to send a LSR to Ziply Fiber and to also send a LSR to the Donor Company. The LSRs are the vehicles that begin the transaction process initiating service with Ziply Fiber and initiating the disconnect, port and unlock with the Donor Company.

FOLLOWING COMPLETION OF THE DISCONNECT, the Donor Company must issue an "UNLOCK" function transaction record via the appropriate Ziply Fiber electronic interface system. The "UNLOCK" transaction unlocks the end-user's E 9-1-1 record, and enables the Recipient Carrier to assume responsibility for the end-user's E-1-1 record, including any updates to the record.

Subsequent to the Unlock transaction, AND NOT BEFORE, the Recipient Carrier must issue a "Migrate" function transaction record via the appropriate Ziply Fiber electronic interface system. This migrate function transaction record will change the ownership of the TN record from the Donor Company to the Recipient Company, create a new ALI record, and will "Lock" the record to the Recipient company.

In the event that a porting-event is cancelled or postponed for any reason, it is the responsibility of both Carriers involved, to cancel "unlock" or "migrate" transaction functions to the 9-1-1 records.

3.2.1.4 Number Portability Errors

If the Recipient Company receives notification indicating a Migrate has failed via a 763 error [migrate attempted on a locked TN] (There is a 72-hour aging process for unprocessed Migrate orders before a hard error is created) -- the Recipient Carrier must take the following steps:

A) Internally confirm that the port activity completed by confirming they have received a Provisioning Completion Notice (PCN).
B) Determine the order number porting the TN and the date the order completed; and
C) Email the appropriate Ziply Fiber DBMC.

The carrier must not contact the DBMC until it has confirmed internally that the port has successfully completed. The Recipient Carrier may request a status of their Purchase Order Number from the Ziply Fiber on **888-488-0068**.

3.4 Adding new NPA/NXX Codes in Ziply Fiber

Where new NPA/NXX Codes are being established in Ziply Fiber, the following information must be sent by the Wholesale carrier to their Ziply Fiber Account Manager:

1. State
2. CARRIER Name/Contact Name
3. County
4. New Code Effective Date
5. NPA/NXX
6. Name/Location of Selective Router

Please use the form on the following page to add NPA/NXX information for Ziply Fiber states.

Requests should be e-mailed by the Ziply Fiber Account Manager for Ziply Fiber states to: nca.dbmc.requests@ftr.com

<<Please note the state where the activity will take place in the subject heading of the note.>>

Form for NPA/NXX additions in Ziply Fiber states:

Carriers, please respond to each of the numbered items and forward to your Ziply Fiber Wholesale Account Manager. The Account Manager will forward the completed form as directed below. If you do not know your Account Manager, please inquire by email to: wholesale@nwfbr.com

1. The state where NPA/NXX is located _____

2. The Carrier name _____

3. The Carrier Contact name _____

4. County _____

5. New code effective date _____

6. NPA/NXX _____

7. Name/location of selective router _____

  Requests should be e-mailed by the Ziply Fiber Account Manager for Ziply Fiber states to: nca.dbmc.requests@ftr.com

  <<Please note the state where the activity will take place in the subject heading of the note.>>

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3.5 – Telephone Number (TN) or ALI Extract Reports

Carriers requesting TN/ALI Extract requests must send in the form on the following page to have Ziply Fiber process and deliver the request according to specified parameters. Ziply Fiber will process the request within 30 days. Carriers are permitted to request, at no charge, one (1) extract per carrier, per state in any calendar year. The requesting Carrier will pay $500 for extract requests exceeding one (1) per carrier, per state, in any calendar year.

Telephone Number (TN) / ALI Extract Request Form

Carriers, please respond to each of the numbered items and forward <u>to your Ziply Fiber Wholesale Account Manager</u>. The Account Manager will forward the completed form as directed below. If you do not know your Account Manager, please inquire by email to: wholesale@nwfbr.com

1. Requested States:

2. Carrier name & 911 COID: _____

3. Carrier Contact name, email address: _____

4. New report(s) requested run date(s) : _____

5. NPA/NXX: _____

6. Name/CLLI of selective router: _____

Carriers are permitted to request, at no charge, one (1) extract per carrier, per state in any calendar year. By signing below, carrier agrees to pay $500 per state requested upon receipt of billing statement from Ziply Fiber for extract requests exceeding one (1) per carrier, per state, in any calendar year:

Signed Name _____

Printed Name _____

Date submitted _____

Contact name and address that should receive billing:

_____
_____
_____

Ziply Fiber Account Manager will e-mail carrier requests to System administration at: nca.dbmc.requests@ftr.com

<<Please note the state(s) where the activity will take place in the subject heading of the note.>>

4.0 Glossary of Acronyms

Key Term/Acronym	Definition
ALI	Automatic Location Identification
ANI	Automatic Number Identification
ASR	Access Service Request
CLEC	Competitive Local Exchange Carrier
CLLI	Common Language Location Identifier
DBMC	Database Management Center
DCS	Digital Cross Connect
ESN	Emergency Service Number
FGD	Feature Group D
ITC	Independent Telephone Company
LNP	Local Number Portability
LSR	Local Service Request
MSAG	Master Street Address Guide
NENA	National Emergency Number Association
NMC	National Market Center
NPA	Numbering Plan Area (Area codes)
PON	Purchase Order Number
PS/ALI	Private Switch/Automatic Location Identification
PSAP	Public Safety Answering Point
SS7	Signaling System 7
TN	Telephone Number

5.0 Ziply Fiber – 9-1-1 Selective Router Listings

• These listings are periodically updated, please check this site frequently or contact the 9-1-1 Specialist for up to date information.

Idaho State Selective Routers

Primary				Paired Router			
Location	Type	CLLI Code	Point Code	Location	Type	CLLI Code	Point Code
Everett	5ESS	EVRTWAXA3ED	202 049 001	Pullman	5ESS	PLMNWAXX1ED	202 050 012