

**CENTRAL FLORIDA DIVISION** 

# E911 Issues & Procedures

**BIS Call Center** 

Confidential

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#### Version

Version 0.8



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# 1 – Introduction

In June of 2005 the FCC issued a report and order which requires interconnected VoIP providers to integrate Enhanced 911 emergency calling capabilities as a mandatory feature of the service. E911 automatically provides a PSAP (Public Safety Answering Point) operator with a caller's physical address, allowing for accurate dispatch of emergency personnel.

From its initial offering of Digital Phone in 2004, before the FCC order, Bright House Networks has emphasized E911 capability as an integral component of its Digital Phone service and regards its proper functioning as a highest priority. As such, this document details contingency procedures that are to be followed in the unlikely event a customer's E911 call fails to reach a PSAP operator through network switching systems, or the call fails to register a correct address at a PSAP.

Use of the information and processes contained in this document will help ensure that E911 issues are addressed immediately and managers are consulted at the proper time. These processes also help streamline responses to E911 issues with direct, person-to-person contact when necessary, bypassing timeconsuming reliance on email and trouble ticket communications.

## Scope

The scope of this document is limited to critical information and BHN procedures pertaining to three E911 scenarios:

- When a customer cannot reach 911 and calls BHN with a complaint.
- When no address or the wrong address is displayed for a PSAP operator.
- When the E911 Daily Report from the BNOC indicates a failed call.

# Policy

It is company policy to make every effort to resolve an E911 issue within 48 hours after notification of an E911 failure.

Interruption of a subscriber's E911 capability is a primary concern and will be addressed as a top priority to restore its function. Our customers have a reason-

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able expectation that this feature will be available as a part of the many calling features offered with Digital Phone.

However, BHN states in the Work Order that each customer signs upon installation of Digital Phone that there will be a period after installation, between dial tone and "CLEC Complete," when a customer can make a 911 call but will not yet have Enhanced 911 capability (providing the dispatch operator with a caller's physical address).

## Audience

This document is intended for use by team leads, supervisors, managers and directors of Broadband Internet Services (BIS), as part of Bright House Networks Central Florida Division.

## Structure

The document's structure is based on two main chapters that describe two sets of processes: the first, for a customer or PSAP calling to report an E911 problem; the second, for an E911 call failure reported by the network operations center.

The last four chapters describe systematic practices for eliminating E911 information discrepancies: MSAG file delivery; BHN/MCI audit processes; general information on MSAG and the E911 system; PAC Research for CLEC Invalids.

Appendices provide contact and other information supporting the execution of the procedures. Notably, Appendix E – Phone Scenarios and Responses – is placed at the end of this document for ease of access.



# 2 – Customer/PSAP Issue Procedures

The following Chapter describes the initial intake and processing of three E911 issues: when a customer is unable to reach 911, no address is accessed by a PSAP, or a wrong address is displayed at a PSAP during a 911 call.

## **Call Center**

Initial communication with customers, PSAP personnel or others through the Call Center concerning an E911 issue should be limited to information gathering and the assurance that every effort will be made to resolve the issue. Until BHN can determine the cause of an E911 problem, conjecture on possible reasons for a call failure may be mistaken and cause damage to customer relations.

**Important:** If a customer mistakenly calls BHN to report an E911emergency, instruct the customer to hang up and dial 911. BHN cannot relay emergency information, or route emergency calls, to PSAP operators.

**Important:** Customer contact information should never be released over the phone, apart from existing guidelines. This includes persons stating that they are the police, or some other emergency personnel, and require the information during an emergency situation.

### **Product Specialist**

The Product Specialist will normally be the first point of contact with a customer or PSAP calling to report a problem.

- Receive a call reporting an E911issue. (Appendix E Phone Scenarios & Responses)
- 2. Open Coyote Tracks ticket. Choose 'E911' from the Call Specifics dropdown list in cTracks.

- 3. Provide as much detail as possible in the Description of Issue field with failed call specifics, including date and time the issue occurred and the caller's general attitude about the problem. If possible, ask the caller to provide the address for the account concerned and include it in this information field.
- 4. Inform the Digital Phone subscriber that a BHN representative will call them back within the next 24 hours to provide an update or resolution.
- 5. Directly inform verbally the on-duty Call Center Supervisor of the E911 call, describing the call in detail.

## **Call Center Supervisor**

Upon direct verbal notification of an E911 issue, or after speaking with the caller making the complaint, the on-duty Call Center Supervisor must immediately inform, verbally, the on-duty TEC Lead of the call, detailing the nature of the call and providing the cTracks ticket number.

## **TEC Team**

The TEC Lead on duty at the time of a reported E911 issue is responsible for making a fundamental decision about the relative seriousness of an E911 issue – and whether or not it warrents escalation.

## Response to a Serious E911 Incident – Escalation Required

1. The on-duty TEC Lead must determine whether the E911 issue reported represents a serious incident, that is, whether the call concerns a life or death issue and/or the customer is extremely upset.

**Note:** This is dependent on the Call Center Supervisor's description of the call and the TEC Lead's evaluation of the issue.

- If the TEC Lead determines this to be a serious incident, the Lead must escalate the issue to the Voice Services Operations Manager immediately, 24/7.
- 3. In addition, the TEC Lead should immediately notify, verbally, the onduty PAC Lead of the issue to begin the process of address research.

## Response to an E911 Issue – No Escalation Required

A timely response to a 'non-serious' E911issue is a priority, however it does not require immediate, 24/7 escalation to the Voice Services Operations manager.



- 1. If the E911 problem is not a serious incident, the TEC Lead determines whether the call is related to a wrong or no-address display for a PSAP.
- 2. If the issue relates to address information, the TEC Lead immediately notifies the on-duty PAC Supervisor of the issue and its cTrack ticket number. The TEC Team processes the cTrack ticket.
- 3. If the E911 issue is a call failure, not related to incorrect address information, the TEC Team processes the cTrack ticket.
- 4. TEC informs Voice Services Operations Manager of issue during normal business hours.
- 5. The TEC Team conducts diagnostic tests on subscriber equipment.
- 6. If diagnostic tests are successful, TEC closes cTracks ticket.
- 7. If diagnostic tests are not successful, TEC opens a BNOC ticket at Urgent severity.
- When the BNOC ticket is opened, TEC sends Email notifications of E911 issue, including the cTrack and BNOC ticket numbers, to the following Email addresses:
  - CFL-PAC@mybrighthouse.com Gary.Walsh@mybrighthouse.com Jennifer. Pearce@mybrighthouse.com CFL-TEC@mybrighthouse.com

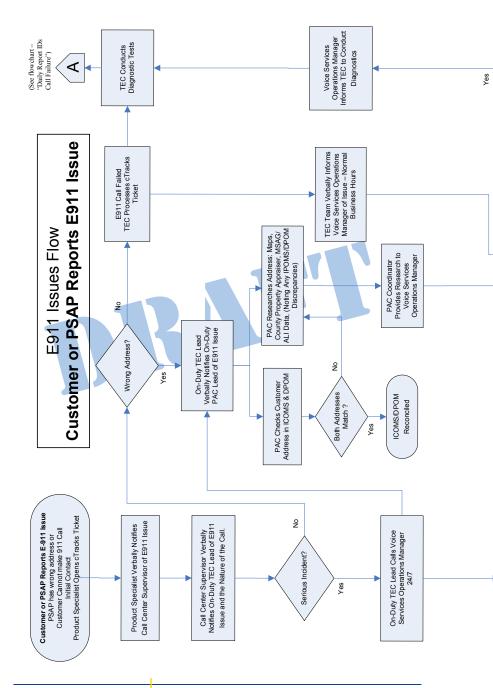
# PAC Team

When the TEC Lead verbally notifies the PAC Lead of an incorrect address issue for E911, research on the address should begin.

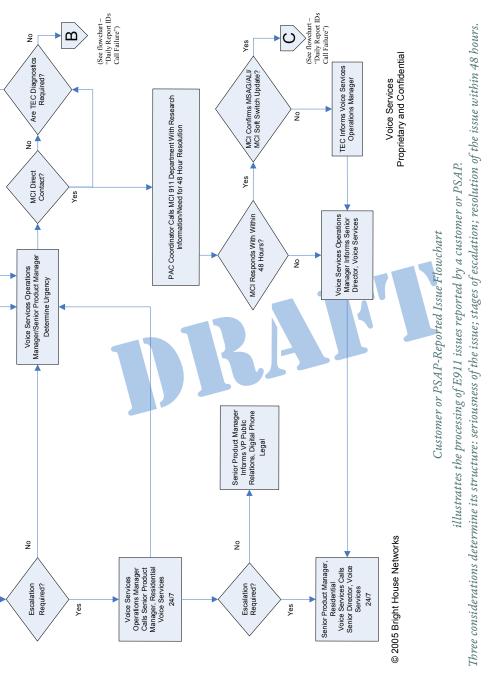
- 1. The PAC Team compares the customer-provided address in the cTrack ticket with addresses in ICOMS and DPOM for matching information.
- 2. The PAC Team verifies that ICOMS and DPOM addresses match each other, along with customer-provided address in the cTracks ticket.
- 3. PAC Team researches address through maps, county appraiser office, PSAPs and MSAG/ALI data.
- 4. PAC Coordinator provides Voice Services Operations Manager with results of address research.

## **Voice Services Operations Manager**

Whether or not an E911 issue is immediately escalated to the Voice Services Operations Manager, his position in the process flow receives information from a number of sources to inform decisions needed within the 48-hour response time.







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# 3 – Daily Report Call Failure Procedures

The E911 Daily Report generated by the Bright House Networks Operations Center lists all of the E911 calls made in the Central Florida, Tampa Bay, Birmingham and Detroit regions. The report indicates the originating telephone number and the city for each call, the duration of the call and it successful completion. If an E911 call is not completed – if it does not connect to a PSAP operator – the report shows that the call has failed and briefly notes a reason for the failure.

Use the following procedures for resolving a call failure appearing on the E911 Daily Report, regardless of the reason indicated. A call failure appearing on this report is considered a priority. It is Bright House Networks policy to investigate and correct the cause of any E911 connection failure within 48 hours.

# **Call Failure Notification**

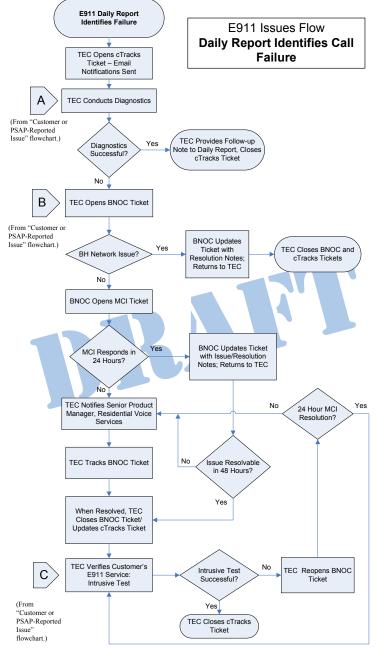
- 1. TEC Supervisor receives notification of E911 call failure on E911 Daily Report, or notes a number of calls made from the same location listed on Daily Report. TEC opens cTracks ticket.
- 2. If report indicates a call failure, TEC conducts the following diagnostic tests on customer number:
- Open DocSis and check signal.
- Run ping test on each IP address.
- Send hit in ICOMS.
- Reset and re provision modem.
- Conduct Intrusive Test.
- 3. If diagnostics resolve issue, TEC closes cTracks ticket, updates E911 Daily Report.
- 4. If diagnostics not successful, TEC opens BNOC Ticket at Urgent severity.
- 5. If BNOC research shows failure as a Bright House Networks internal issue resolved, TEC closes cTracks and BNOC tickets; TEC adds explanation of failure to E911 Daily Report.

6. If call failure is not explained internally, BNOC opens MCI ticket.

**Note:** MCI has agreed to respond to call failure issues within 24 hours.

- 7. MCI notifies BNOC that the issue is resolved or further MCI action is required to resolve issue.
- In Tracking the BNOC ticket, TEC determines whether MCI has responded within 24 hours. If not, TEC notifies Senior Product Manager, voice Services.
- 9. BNOC updates BNOC ticket with resolution or issue notes; returns ticket to TEC.
- 10. If issue is not resolvable within 48 hours through BNOC/MCI procedures, TEC notifies Senior Product Manager for possible escalation and direct MCI contact.
- 11. If issue is resolved, TEC closes BNOC ticket and updates cTracks ticket.
- 12. TEC conducts intrusive testing of customer number.
- 13. If test is successful, TEC closes cTracks ticket.
- 14. If test is unsuccessful, TEC reopens BNOC ticket with current issue updates.
- 15. TEC notifies Senior Product Manager, Residential Voice Services of unresolved call failure issue.





Daily Report Identifies Call Failure Flowchart illustrates procedures for Daily Report Identification of Call Failures.





# 4 – MSAG: Master Street Address Guide

Bright House Networks uses the MSAG data, provided by MCI, to research a customer address when a new order is returned through DPOMS as CLEC Invalid. Portions of the MSAG data fields are loaded into ICOMS fields for comparison to the available USPS address information. Key in this comparison is the MSAG community name, which may differ from the Postal community name.

The following information describing the 911 system and MSAG was taken from the Association of Public-Safety Communications Officials International website.

The MSAG is the portion of the 911 database management system that contains address and Emergency Service Number (ESN) information. The address information contains the following fields: pre-directional, street name, suffix directional, state, MSAG community name (may be different from the postal community name), address odd/even indicator, low address, high address, ESN, and telephone exchange.

The MSAG is traditionally stored at the 911 Service Providers, often the Incumbent Local Exchange Carriers (ILECs)) and third party database providers. LECs and other database contributors, such as private switch ALI operators or agents, periodically receive copies of the MSAG from the 911 Service Providers or database providers, or may subscribe to an on-line MSAG lookup service. The 911 entity (a state or local government authority) operating Public Safety Answering Points (PSAPs) may also house a copy of the MSAG.

The 911 Service Providers maintain the MSAG records but the 911 entity maintains the data. All inserts, changes, and deletions are to be initiated by the 911 entity. It is the responsibility of the 911 entity to resolve any MSAG data issue that the LECs may have. In order to maintain the MSAG properly, it is essential that only the 911 entity update the MSAG.

The MSAG is used to validate the Automatic Location Information (ALI) and corresponding telephone number. The ALI data must match all fields exactly and the address number must fall within the low and high address range. If the record validates against the MSAG, then the telephone record with the associ-

ated ALI record is inserted into 911 ALI database. The PSAPs' 911 equipment queries this database with the Automatic Number Identification (ANI) to retrieve the ALI record.

After the record validates, the ESN associated with the MSAG record is assigned to the corresponding telephone number. The telephone number with the ESN is then inserted into the Selective Routing (SR) database. The ESN is a three to five digit number representing a unique combination of emergency service providers (law, fire, and emergency medical service) designated to a specific address range. The ESN represents a specific geographical area or Emergency Service Zone (ESZ). The ESN is used to selectively route a 911 call to the appropriate PSAP and dispatch the appropriate emergency service providers.

If the ALI record does not match the MSAG data, the record goes into error status and is not inserted into the 911 ALI database. The LEC or third party database provider attempts to resolve the ALI record that is in error status. If the LEC or third party database provider cannot resolve the ALI record, it is referred to the 911 entity to resolve the error. The 911 entity contacts the appropriate addressing authority and /or the resident or business associated with the error to correct the data. Once the error has been corrected, the record must be validated against the MSAG again.

The MSAG is the key to correct and valid ALI and SR databases. If the MSAG is updated with the most recent street and ESN data, then the other 911 databases should be correct.



# 5 – PAC Research

## **CLEC** Invalid

The PAC team, in researching a CLEC Invalid return of a new phone order in DPOMS, will conduct address research through maps, county appraiser offices, PSAPs and any MSAG/ALI data that may be available, sharing the results with MCI's 911 department to arrive at a resolution for a CLEC Invalid address.

The PAC Coordinator is responsible for coordinating E911 research and maintaining a record of PSAP and MCI communications, including time, date and description of communications.

## **ICOMS MSAG Address**

Bright House Networks uses MSAG data – provided by the LECs, on MCI soft switches – to update the MSAG fields in ICOMS. PAC can use the MSAG information in ICOMS to confirm the possibility that a customer's USPS address is incorrectly associated with a range of MSAG addresses.

If a customer address is similar to other MSAG addresses for a given street name, this may point to a discrepancy between a Bright House customer address and the address MCI has loaded for it on its switches.

The PAC team can use the possibility of this discrepancy to expedite resolution of an E911 issue in its communication with MCI's 911 department.

The following steps guide access to MSAG address ranges through ICOMS.

- 1. Bring up a customer account in the House Maintenance screen.
- 2. Move cursor to MSAG Valid Address Street Name field (bottom of screen).
- 3. Press the F4 key to prompt the MSAG by Street screen.
- 4. Key in the street address and press the Enter key. This provides a list of MSAG addresses for the street address entered.
- 5. Or, select Option 5 to Display the MSAG Record(s) to see the full information provided in the MSAG record.

**Note:** In both steps 4 and 5, the PAC researcher must discern from the data provided reasons for discrepancies between the BHN customer address and the MSAG address record.





# A – Escalation Contacts

## **Escalation Contacts**

### **First Point of Contact**

#### Technical Event Coordination Team (staffed 24/7)

Phone: 407-215-5751, Option 1; ask for TEC Shift Team Lead. If a TEC Shift Team Lead cannot be reached, contact Monica Moore, Technical Services Manager Cell: 407-468-3583 monica.moore@mybrighthouse.com

## Second Point of Contact

#### Voice Services Operations Manager, Central Florida Division

Gary Walsh 2201 Lucien Way, Suite 100, Maitland, FL 32751 Business: 407 215-5879 (Direct) Home: 407-889-7241 Cell: 321-436-3942 gary.walsh@mybrighthouse.com

## Third Point of Contact

#### Senior Product Manager – Residential Voice Services, Central Florida Division

Jennifer Pearce 65 South Keller Road, Orlando, FL 32810 Business: 407-215-8221 (Direct) Home: 407-754-0971 Cell: 407-467-5405 jennifer.pearce@mybrighthouse.com

## Fourth Point of Contact

#### Senior Director of Voice Services, Central Florida Division

Donald Opperman 65 South Keller Road, Orlando, FL 32810 Business: 407-215-8200 (Direct) Home: 407-323-5828 Cell: 407-718-2793 donald.opperman@mybrighthouse.com

### Fifth Point of Contact

#### Vice President – Broadband Internet Services, Central Florida Division

Bill Gilliam 65 South Keller Road, Orlando, FL 32810 Business: 407-215-8080 (Direct) Home: 407-363-0021 Cell: 407-718-7124 bill.gilliam@mybrighthouse.com

# **Supporting Contacts**

### MCI 911 Department

**Brenda Osburne, Service Manager, Highlands Ranch, CO** Business: 303-305-1799 Cell: 720-427-9129

Brenda.Osburne@mci.com

### **MSAG File Delivery**

#### Mike Dingman, Director, Software Development, BHN CFL

Business: 407-215- 5167 Mike.Dingman@mybrighthouse.com

#### Corey Fisch, Security/Abuse Manager, BHN Tampa

Business: 813-371-2076 Corey.Fisch@mybrighthouse.com



Darin Zapf, Sr. Mgr CableVoice, MCI Tampa Business: 319-887-5848 Darin.Zapf@mci.com

### **Public Relations**

Sara Brady, VP Public Relations, BHN CFL Business: 407-215-5915 Sara.Brady@mybrighthouse.com

## Legal, Digital Phone

Cody Harrison, SBG charrison@sbandg.com







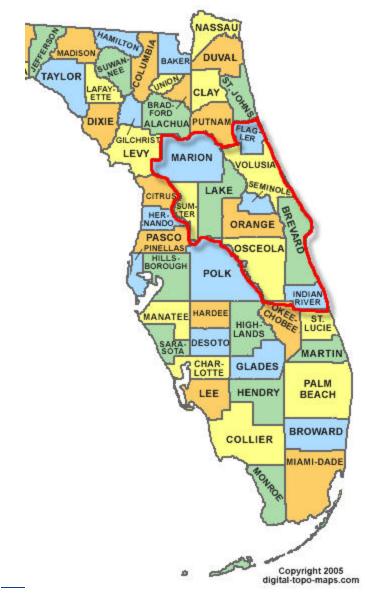
# **B** – **PSAP** Contact Information

County	Name/Address	Phone Number/Email
Orange	Ms. Deborah S. Caruthers E911 Coordinator 3511 Parkway Center Court Orlando, FL 32808	Phone: (407)836-9666 Cell: (407)222-1835 Fax: (407)521-4682 Deborah.caruthers@ co.orange.fl.us
Seminole	Mr. Elmer C. Holt, Senior Coordinator, Emergency Communications/E911 Division Seminole County Government 150 Bush Blvd. Sanford, FL 32773	Phone: (407) 665-5911 Fax: (407)665-5036 SUNCOM: 355-5191 eholt@seminolecountyfl.gov
Osceola	Ms. Ethel Reed 911 Coordinator Osceola County Communications 200 Broadway,SuiteB Kissimmee, FL 34741	Phone: (407)343-6959 Fax: (407)343-6920 eree@osceola.org
Brevard	Mr. Steve O'Conor, ENP 2725 Judge Fran Jamieson Way Bldg. C Rm., 202 Viera, FL 32940-6602	Phone: (321)690-6846 Fax: (321)690-6842 SUNCOM: 366-6846 steve.oconor@brevard- county.us
Indian River	Mr. John King 911 Coordinator Indian River County 1840 25th Street Vero Beach, FL 32960	Phone: (772)567-2154 Fax: (772)567-9323 jking@ircgov.com

Volusia	Ms. Paula Zabo Volusia County E911Coordinator 59 Keyton Drive Daytona Beach, FL 32124	Phone: (386)248-1773 Fax: (386)254-1525 tdavis@so.co.volusia.fl.us
Flagler	Mr. Doug Wright Flagler County Emergency Services 1200 E. Moody Blvd., No. 8 Bunnell, FL 32110	Phone: (386)437-7381 Fax: (386)437-7489 SUNCOM: 370-7381 dwright@fcbcc.org
Lake	Mr. Bruce Thorburn Post Office Box 7800 Tavares, FL 32778-7800	Phone: (352)343-9436 Fax: (352)343-9797 SUNCOM: 659-1436 bthorburn@co.lake.fl.us
Marion	Mr. Richard Nelson 2630 S.E. 3rd Street Ocala, FL 34471	Phone: (352)671-8460 Fax: (352)620-3460 SUNCOM: 667-3400 Fax: 667-3460 dick.nelson@marioncountyfl. org
Sumpter	Ms. Marie Keenum, ENP 911 Coordinator, Sumter County 209 N. Florida St. Bushnell, FL 33513	Phone: (352)259-1400 Fax: (352)259-1401 SUNCOM: 665-0228 E911_mlk@bocc.co.sumter. fl.us



# D – BHN CFL Division County Map







# D – Phone Scenarios & Responses

#### Scenario:

A reporter calls, not masquerading as a subscriber, and asks what happened to our Digital Phone system and subscribers who did not have 911 access.

#### PST:

Unfortunately, I do not have any specific information on the Digital Phone outage. I can assure you that our engineers are dispatched immediately after any outage has been declared. If you are in need of any additional information, feel free to contact our Public Affairs department at 407-215-5915.

Scenario: A customer calls saying that they made a 911 call and the emergency personnel went to the wrong address.

#### PST:

I sincerely apologize for any inconvenience this situation has caused. I certainly understand the urgency of this issue. Please allow me to gather some information from you so I can work to get this issue resolved as quickly as possible.

Can you provide me with you street address please?

What is the closest major intersection to you?

Are you able to give me directions to your home from the closest major intersection? (The directions should be in directional format: North, South, East, West.)

Thank you for the information. I will escalate this issue to our Digital Phone Team immediately. You will be receiving an update within 24 hours. Is the phone number on the account a good number to contact you at?

#### Scenario:

#### A PSAP Supervisor calls to report that a caller's address was not displayed.

PST: I sincerely apologize for any inconvenience this situation has caused. Can you provide me with the caller's telephone number and street address please?

What time was the call received at your center?

May I have your name and contact number in the event that we need any additional information from you?

Thank you for the information. I will escalate this issue to our Digital Phone Team immediately and follow up with the subscriber to notify him/her of the situation.

#### Scenario:

A customer calls saying that the operator could not see their address. It took them too long to describe where they live, they are very angry and they are going to call their lawyer.

#### PST:

I sincerely apologize for any inconvenience this situation has caused. I certainly understand the urgency of this issue. I assure you we will work as quickly as possible to get the situation resolved. Please allow me to gather some information from you so I can work to get this issue resolved as quickly as possible.

Can you provide me with your street address please?

What is the closest major intersection to you?

Are you able to give me directions to your home from the closest major intersection? (The directions should be in directional format: North, South, East, West.)

Thank you for the information. I will escalate this issue to our Digital Phone Team immediately. You will be receiving an update within 24 hours. Is the phone number on the account a good number to contact you at?

**Note:** When faced with these scenarios you should notify a Lead or Supervisor immediately, and document the account with all of the obtained customer information.



# Glossary

- ALI Automatic Location Identifier
- **BNOC** Bright House Networks Operations Center.
- CLEC Competitive Local Exchange Carrier – any company that intends to compete for local exchange service, in addition to long distance, international, Internet access, and entertainment.
- cTracks Coyote Tracks, BIS Trouble Ticket Management application.
- **DOCSIS** Data Over Cable System Interface Specification. This specification allows all cable operators to produce interoperable cable modems on a high-speed data network.

**DPOM** – Digital Phone Order Management application.

**E911** – Emergency service connected to police and fire department. E911 provides ANI (Automatic Number Identification) and ALI (Automatic Location Information) to the 911 operator.

ICOMS – Integrated Communications Operations Management System. A cable and broadband operators' subscriber, billing and operations management system.

- MSAG Master Street Address Guide. A data base of street names and house number ranges within their associated communities defining Emergency Service Zones (ESZs) and their associated Emergency Service Numbers (ESNs) to enable proper routing of 9-1-1 calls.
- **PAC** Provisioning and Confirmation Team.
- **PSAP** Public Safety Answering Point
- **TEC –** Technical Event Coordination Team.



## Bright House Networks

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