NENA Technical Standard for Reporting and Resolving ANI/ALI Discrepancies and No Records Found for Wireline, Wireless and VoIP Technologies

NENA Technical Standard for Reporting and Resolving ANI/ALI Discrepancies and No Records Found for Wireline, Wireless and VoIP Technologies
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NENA's Technical Committee has developed this document. Recommendations for change to this document may be submitted to:

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Acknowledgments:

The National Emergency Number Association (NENA) Data Technical Committee, Data Miscellaneous Issues Working Group members developed this document.

NENA recognizes the following industry experts and their companies for their contributions in development of this document.

Version 1, 06/06/2009

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1 Executive Overview

1.1 Purpose and Scope of Document

This NENA document sets forth standards for PSAP jurisdictions, Access Infrastructure Providers (AIP), Service Providers and Data Base Management System Providers (DBMSPs) in reporting and resolving discrepancies that occurred during a 9-1-1 call. These processes are meant to standardize ANI/ALI Trouble and "No Record Found" reporting to facilitate their timely resolution. An ANI/ALI Trouble is defined as a wrong ANI, no ANI or an ALI Discrepancy, which includes "No Record Found". This document takes into account all the technologies available for 9-1-1 calls to date. Due to the various ways these technologies deliver 9-1-1 calls to PSAPs, there are various timelines for resolution of discrepancies.

1.2 Reason to Implement

Standardize reporting by 9-1-1 Governing Authorities and DBMSPs of discrepancies revealed from a 9-1-1 call. Standardize processes and timelines for resolution of discrepancies for Access Infrastructure Providers, Service Providers and DBMSPs. This standardization is instrumental for the timely resolution of reported discrepancies for each of the technologies used to deliver 9-1-1 calls to PSAPs today.

1.3 Benefits

Industry adoption of these standards will:

- Standardize ANI/ALI Trouble and "No Record Found" reporting processes for wireline, wireless and VoIP
- Standardize repair and cause codes for wireless and VoIP NRFs and ANI/ALI Trouble
- Standardize ANI/ALI Trouble and NRF error resolution timelines for wireline, wireless and VoIP
- Clearly defines roles and responsibilities of all parties involved in ANI/ALI Trouble and NRF error resolution

2 Introduction

2.1 Operational Impacts Summary

This document is written for DBMSPs, Access Infrastructure Providers (LECs, CLECs, Wireless Carriers, VoIP Providers, PS-911 customers, and any other future entity who may be required to provide address records for inclusion in an Enhanced 9-1-1 System), Service Providers, and 9-1-1 Governing Authorities. It details standards for reporting and resolving ANI/ALI Trouble and NRF errors.

2.2 Security Impacts Summary

ANI/ALI discrepancies and No Records Found are typically completed via an electronic interface provided by the 9-1-1 Service Provider. DBMSPs have implemented strict security requirements for this interface. For areas still using a faxing method, care should be taken that these documents are sent to a secure fax machine accessible only by 9-1-1 Authority or 9-1-1 Service Provider personnel. These requests typically involve a telephone number and address being indicated on the form and those pieces of information must be kept private.

2.3 Document Terminology

The terms "shall", "must" and "required" are used throughout this document to indicate required parameters and to differentiate from those parameters that are recommendations. Recommendations are identified by the words "desirable" or "preferably".

2.4 Reason for Issue/Reissue

NENA reserves the right to modify this document. Upon revision, the reason(s) will be provided in the table below.

Version	Approval Date	Reason For Changes
Original	06/06/2009	Initial document meant to convey 9-1-1 database industry standards for all 9-1-1 DBMSPs, SPs, 9-1-1 Governing Authorities and other database providers in defining roles, responsibilities and procedures for resolving ALI Discrepancies and NRFs that are revealed during 9-1-1 calls from either wireline, wireless or VoIP Technologies.

2.5 Recommendation for Additional Development Work

None known at this time.

2.6 Date Compliance

All systems that are associated with the 9-1-1 process shall be designed and engineered to ensure that no detrimental, or other noticeable impact of any kind, will occur as a result of a date/time change up to 30 years subsequent to the manufacture of the system. This shall include embedded application, computer based or any other type application. To ensure true compliance, the manufacturer shall upon request, provide verifiable test results to an industry acceptable test plan such as Telcordia GR-2945 or equivalent.

2.7 Anticipated Timeline

Deployment or implementation will take place as required.

2.8 Costs Factors

Some database management system and/or service order extract modifications may be required. In addition, CPE equipment and software may be required to automate the completion of discrepancy reporting.

2.9 Future Path Plan Criteria for Technical Evolution

In present and future applications of all technologies used for 9-1-1 call and data delivery, it is a requirement to maintain the same level or improve on the reliability and service characteristics inherent in present 9-1-1 system design.

New methods or solutions for current and future service needs and options should meet the criteria below. This inherently requires knowledge of current 9-1-1 system design factors and concepts, in order to evaluate new proposed methods or solutions against the Path Plan criteria.
Criteria to meet the Definition/Requirement:

1. Reliability/dependability as governed by NENA's technical standards and other generally accepted base characteristics of E9-1-1 service
2. Service parity for all potential 9-1-1 callers
3. Least complicated system design that results in fewest components to achieve needs (simplicity, maintainable)
4. Maximum probabilities for call and data delivery with least cost approach
5. Documented procedures, practices, and processes to ensure adequate implementation and ongoing maintenance for 9-1-1 systems

This basic technical policy is a guideline to focus technical development work on maintaining fundamental characteristics of E9-1-1 service by anyone providing equipment, software, or services.

2.10 Cost Recovery Considerations

Normal business practices shall be assumed to be the cost recovery mechanism.

2.11 Additional Impacts (non cost related)

The information or requirements contained in this NENA document are not expected to have any impacts, based on the analysis of the authoring group.

2.12 Intellectual Property Rights Policy

NENA takes no position regarding the validity or scope of any Intellectual Property Rights or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; nor does it represent that it has made any independent effort to identify any such rights.

NENA invites any interested party to bring to its attention any copyrights, patents or patent applications, or other proprietary rights that may cover technology that may be required to implement this standard.

Please address the information to:

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2.13 Acronyms/Abbreviations

Some acronyms/abbreviations used in this document have not yet been included in the master glossary. After initial approval of this document, they will be included. See NENA 00-001 - NENA Master Glossary of 9-1-1 Terminology located on the NENA web site for a complete listing of terms used in NENA documents.

The following Acronyms are used in this document:	
AIP	Access Infrastructure Provider
ALI	Automatic Location Identification
ANI	Automatic Number Identification
ATIS	Alliance for Telecommunications Industry Solutions
CBN	Call Back Number
DBMSP	Data Base Management System Provider
ESGW	Emergency Services Gateway
ESRK	Emergency Services Routing Key
ESQK	Emergency Services Query Key
ISUP	Integrated Services Digital Network User Part
NRF	No Record Found
VPC	VoIP Positioning Center
VSP	VoIP Service Provider

3 WIRELINE NO RECORD FOUND REPORTS

3.1 The 9-1-1 Data Base Management System Provider (DBMSP) shall provide centralized/regional ALI systems' "No Record Found Reports" to the appropriate Access Infrastructure Provider (AIP) on a daily basis.

3.2 It is required that AIPs generate a service order update back to the DBMSP within one (1) business day. AIPs must send back an explanation within one (1) business day as to whether the record was updated or the NRF was a type of service that could not be fixed; i.e.; Express Dial Tone Service, Quick Connect Service, call from illegal service, etc.

3.3 Jurisdiction 9-1-1 Administrator may opt to report "No Record Found" as 9-1-1 telecommunicators can obtain valuable information from the caller as to location and/or customer name. This information can assist service providers in resolving the "No Record Found" more efficiently. Jurisdiction Database Coordinator would submit this report to the DBMSP for distribution to the appropriate AIP within one business day of the "No Record Found".

4 WIRELINE ANI/ALI TROUBLE REPORTING PROCESS (Refer to Exhibit A)

4.1 All ANI/ALI Trouble Reports must be sent to the 9-1-1 DBMSP.

4.2 The 9-1-1 DBMSP must determine if there are any database or selective routing problems on their end prior to forwarding the trouble report to the appropriate AIP.

4.3 Within one (1) business day, the 9-1-1 DBMSP must forward all ANI/ALI Trouble Reports to the appropriate AIP indicating whether or not trouble was found on their end or if the AIP needs to also check their equipment and systems.

4.4 The AIP shall have one (1) business day to resolve the ANI/ALI Trouble Report and return it to the 9-1-1 DBMSP. Upon receipt, the 9-1-1 DBMSP must return a completion notification to the originator.

4.5 Refer to Exhibit A for Process Flow

5 WIRELESS ANI/ALI TROUBLE REPORTING PROCESS FOR 9-1-1 GOVERNING AUTHORITIES

Members of the 9-1-1 Governing Authority, wireless Access Infrastructure Provider, LECs and third party database providers recognize that Wireless ANI/ALI Troubles impact the quality of service for wireless 911 callers. Therefore, it is important that a standard process for reporting and resolving Wireless ANI/ALI Troubles be implemented in order to maintain the level of Enhanced 9-1-1 service required by the FCC.

5.1 It is incumbent on the Wireless SPs to deliver the Wireless 9-1-1 calls with the accuracy outlined in FCC Docket No. 94-102 Third Report and Order. Therefore it is necessary for Wireless SPs and 9-1-1 Governing Authorities to work together to resolve Wireless ANI/ALI Troubles.

5.2 The Jurisdiction Database Coordinator shall provide ANI/ALI Trouble Reports to the appropriate Wireless SP (if known) or MPC 24 X 7 contact e-mail address or facsimile number.

5.3 Examples of situations where ANI/ALI Trouble reports would be used ,but are not limited to the following

- Incorrect Sector Orientation
- Address for tower is incorrect
- Latitude/Longitude of the cell tower is incorrect
- Format of ALI Record is incorrect, i.e. ALI not in all capital letters
-
- Incorrect Routing
- Misspelling of address information of the cell tower

5.4 Wireless ANI/ALI Trouble Reports shall include the following information:

PSAP Name: PSAP name as listed in FCC Master Registry https://www.fcc.gov/encyclopedia/9-1-1-master-psap-registry

PSAP ID Code: Identification number associated with the PSAP as listed in https://www.fcc.gov/encyclopedia/9-1-1-master-psap-registry

PSAP Contact Name: Contact Name or Name of Agency Responsible for the PSAP

PSAP Contact Telephone #: PSAP Point of Contact telephone number

Date/Time: Date and Time of the Wireless ALI bid from the 9-1-1 Database. Time of call shall include whether it is a.m. or p.m. and whether it is EST, CST, MST or PST.

ESRK/ESRD/CBN: ANI provided with ANI/ALI Trouble condition

Wireless SP: Name of Wireless SP that owns the ESRK/CBN of ANI provided with ANI/ALI Trouble

PSAP ALI Screen Print: a digital or hard copy printout of screen with NRF condition information, when available

Discrepancy Description define the problem with the ALI record

ALI Display/Correction list what displayed with the ALI and indicate the correction

5.5 Jurisdiction Database Coordinator must provide ANI/ALI Trouble Reports to the Wireless SP or MPC within one business day of receipt.

5.6 The Wireless SP or MPC shall generate a report back to the Jurisdiction Database Coordinator within one (1) business day of receipt of the ANI/ALI Trouble Report. If the initial report back to the Jurisdiction Database Coordinator does not include a resolution then the wireless SP or MPC must report back within (5) business days from the original date with a resolution. The wireless SP or MPC must include in their final resolution report the original error information from the Jurisdiction Database Coordinator, a description of the corrective action, who performed the corrective action, and date and time the corrective action took effect.

6 WIRELESS NO RECORD FOUND REPORTING PROCESS FOR 9-1-1 GOVERNING AUTHORITIES

Members of the 9-1-1 Governing Authority, wireless Access Infrastructure Provider, LECs and third party database providers recognize that Wireless NRF conditions impact the quality of service for wireless 911 calls. Because of this, it is important that a standard process for reporting and resolving Wireless NRFs be implemented in order to maintain the level of Enhanced 9-1-1 service required by the FCC. A couple of assumptions have been made in the drafting of this Wireless NRF Reporting Process. They are:

6.1 It is incumbent on the Wireless SPs to deliver the Wireless 9-1-1 calls with the accuracy outlined in FCC Docket No. 94-102 Third Report and Order. Therefore it is necessary for Wireless SPs and 9-1-1 Governing Authorities to work together to resolve Wireless NRFs.

6.2 Ownership of Wireless NRF with a shell record, but without cell tower and/or x,y coordinate location information

6.2.1 The Jurisdiction Database Coordinator shall refer the Wireless NRF to the owner of the ESQK, or its designee, within one (1) business day of receipt. If the ESQK and CBN are included in the Wireless NRF, both shall be provided to the owner of the ESQK. Refer to the recommended format of a wireless shell record in NENA 02-011, section 2.

6.3 Ownership of Wireless NRF with no shell record

6.3.1 The DBMSP shall determine ownership of the Wireless NRFs by accessing Number Portability Administration Center (NPAC). The DBMSP can also use North American Numbering Plan Administration (NANPA) to determine the ownership of the NPA-NXX. (It is understood that this access may prove more complicated now that WNP has been implemented) *[The process for accessing NeuStar IVR and the NANPA database is outlined in NENA 56-001]*

6.3.2 The DBMSP shall return the Wireless NRF report to the Jurisdiction Database Coordinator within one (1) business day of receipt.

6.4 Wireless No Record Found Reports

Jurisdiction Database Coordinator shall provide “No Record Found Reports” to the appropriate Wireless SP 24 X 7 contact e-mail address or facsimile number.

6.5 In an HCAS environment, if the ESRD is provided with the NRF condition then the Jurisdiction Database Coordinator shall provide the “No Record Found Report” to the selective routing provider which will determine the wireless SP that generated the wireless NRF condition. The selective routing provider shall then forward it onto the Wireless SP 24 x 7 contact.

6.6 Wireless No Record Found Reports shall include the following information:

PSAP Name: PSAP name as listed in FCC Master Registry https://www.fcc.gov/encyclopedia/9-1-1-master-psap-registry

PSAP ID Code: Identification number associated with the PSAP as Listed in https://www.fcc.gov/encyclopedia/9-1-1-master-psap-registry

PSAP Contact Name: Contact Name or Name of Agency Responsible for the PSAP

PSAP Contact Telephone #: PSAP Point of Contact telephone number

Date/Time: Date and Time of the Wireless ALI bid from the 9-1-1 Database. Time of call shall include whether it is a.m. or p.m. and whether it is EST, CST, MST or PST.

ESRK/ESRD/CBN: ANI provided with No Record Found condition

Wireless SP: Name of Wireless SP that owns the ESRK/CBN of ANI provided with No Record Found condition

PSAP ALI Screen Print: a digital or hard copy printout of screen with NRF condition information, when available

6.7 "No Record Found Reports" must be reported to the Wireless SP or MPC within two calendar days of the Wireless ALI bid so the Wireless SP or MPC can trace the wireless call within its own network. It is recognized that call information is retained by the switch for only 48 hours.

6.8 The Wireless SP or MPC shall generate a report back to the Jurisdiction Database Coordinator 9-1-1 within (5) five business days of receipt of the "No Record Found Report". The Wireless SP or MPC must include in their status report the original error information from the Jurisdiction Database Coordinator and add for each NRF error the error code and the resolution code.

6.9 Recommended Standard Error Codes for Wireless NRF

These codes are not meant to be all encompassing and additional codes may be added to suit the needs of the 9-1-1 Governing Authority.

Group	Error Code	Description
NRF with CBN Failure		
	1501	Wireless calling to non-emergency and/or administrative hunt group numbers.
	1502	Wireless CBN being passed in the ANI spill.
	1503	CBN only delivery may be arranged as the fall back for the MSC-MPC ISUP communication failures
	1504	CBN transferred from another PSAP. (Note- if call was received over PSTN, hunt group of PSAP may be passed instead of CBN)
NRF with ESRK Failures		
	1601	Steering not yet activated and no shell record exists
	1602	Steering not yet activated for ESRK range and no shell record exists
	1603	Steering links to 3rd party are interrupted and no shell record exists
	1604	3rd party received query, but had no record generated during call set up and 3rd party returned message with response type 3 and with the ESRK populated in the CBN field(MSC>MPC>3rd party db)
	1605	transferred from another PSAP
ANI Failures		
	1701	No ESRK passed to the tandem because MSC to MPC ISUP communication breakdown
	1702	No ESRK passed to the tandem because of Signaling incompatibilities between the MSC and the Tandem
	1703	No ESRK passed to the tandem because of Multi-frequency tone distortions (hot or noisy transmission levels) to the tandem
	1704	(CBN) passed with an NPA that is undefined in the tandem
	1705	MSC default routed call where the cell/sector is undefined in the MPC data base e.g.; new cell towers or COWs
	1706	Failed ANI call transferred to another PSAP, which generated another ANI failure

1707	Other (Provide description of error condition)

6.10 Recommended Standard Resolution Codes for Wireless NRF

Resolution Code	Description
2001	Updated translations to send wireless call over correct 9-1-1 trunks
2002	Updated translations to wireless phase status for 9-1-1 Governing Authority
2003	Updated steering and shell record for ESRK
2004	Updated steering and shell records for ESRK range
2005	Steering links repaired and tested
2006	Link between MSC and MPC ISUP repaired and tested
2007	Link between MSC and Tandem repaired and tested
2008	MSC corrected with cell tower/sector information
2009	MPC corrected with cell tower/sector information
2010	Wireless 9-1-1 call did not access Wireless SP Network
2011	Other (Provide description of repair condition)

7 VoIP NO RECORD FOUND AND ANI/ALI TROUBLE REPORTING PROCESS FOR 9-1-1 GOVERNING AUTHORITIES

7.1 Members of the 9-1-1 Governing Authority, VoIP Service Providers (VSPs), LECs and third party database providers recognize that VoIP NRF and ANI/ALI Trouble conditions impact the quality of service for VoIP 9-1-1 callers. Therefore, it is important that a standard process for reporting and resolving these conditions be implemented in order to maintain the level of Enhanced 9-1-1 service required by the FCC. This process is for those VoIP Service Providers (VSPs) that use VPCs to dynamically provide ALI to the PSAP when a 9-1-1 call is made.

7.2 FCC Requirements for VoIP 9-1-1 Calls

It is incumbent on the VSPs to deliver location information and route 9-1-1 calls according to FCC Order referenced in Docket Nos. 04-36 and 05-196. Therefore, it is necessary for VSPs and 9-1-1 Governing Authorities to work together to resolve VoIP NRFs and ALI Discrepancies.

7.3 Ownership of VoIP NRF with a shell record, but without subscriber and locatable address

7.3.1 The Jurisdiction Database Coordinator shall refer the VoIP NRF to the owner of the ESQK, or its designee, within one (1) business day of receipt. If the ESQK and CBN are included in the VoIP NRF, both shall be provided to the owner of the ESQK or its designee. Refer to the recommended format of a VoIP shell record in NENA 02-011, section 2.

7.4 Ownership of VoIP NRF with no shell record

7.4.1 The DBMSP shall determine ownership of the VoIP NRFs by accessing Number Portability Administration Center (NPAC). The DBMSP can also use North American Numbering Plan Administration (NANPA) to determine the ownership of the NPA-NXX. (It is understood that this access may prove more complicated now that WNP has been implemented) *[The process for accessing NeuStar IVR and the NANPA database is outlined in NENA 56-001]*

7.4.2 The DBMSP shall return the VoIP NRF report to the Jurisdiction Database Coordinator within one (1) business day of receipt. In their research to determine ownership, the DBMSP may find that the record belongs to a CLEC. If so, the CLEC shall notify the DBMSP whether the NRF belongs to a VSP within one business day of receipt. Then the DBMSP shall notify the 9-1-1 Jurisdiction.

7.5 VoIP NRF and ANI/ALI Trouble Reports

7.5.1 The Jurisdiction Database Coordinator shall provide NRF Reports and ANI/ALI Trouble Reports to the appropriate VSP (if known) or VPC 24 X 7 contact e-mail address or facsimile number...

7.6 NRF or ANI/ALI Trouble Reports shall include the following information:

PSAP Name:	PSAP name as listed in FCC Master Registry https://www.fcc.gov/encyclopedia/9-1-1-master-psap-registry
PSAP ID Code:	Identification number associated with the PSAP as Listed in https://www.fcc.gov/encyclopedia/9-1-1-master-psap-registry
PSAP Contact Name:	Contact Name or Name of 9-1-1 Governing Authority
PSAP Contact Telephone #:	PSAP Point of Contact telephone number
Date/Time:	Date and Time of the VoIP ALI bid from the 9-1-1 Database. Time of call shall include whether it is a.m. or p.m. and whether it is EST, CST, MST or PST.
ESQK/CBN:	ESQK and CBN provided with NRF or ANI/ALI Trouble condition
VoIP SP:	Name of VSP that owns the ESQK/CBN of ANI provided with NRF or ANI/ALI Trouble condition

PSAP ALI Screen Print: a digital or hard copy printout of screen with NRF/ANI/ALI Trouble condition information, when available

Discrepancy Description: define the problem with the ALI record

ALI Display/Correction: list what displayed with the ALI and indicate the correction

7.7 The Jurisdiction Database Coordinator shall provide NRF or ANI/ALI Trouble Reports to the VSP or VPC within one business (1) day of receipt.

7.8 VSPs or VPCs shall generate a report back to the Jurisdiction Database Coordinator within one (1) business day of receipt of the NRF or ANI/ALI Trouble Report. If the initial report back to the Jurisdiction Database Coordinator does not include a resolution, then the VSP or VPC must report back within (5) business days from the original date with a resolution. VSPs or VPCs must include in their final resolution report the original error information from the Jurisdiction Database Coordinator, a description of the corrective action, who performed the corrective action, and date and time the corrective action took effect. The status report must include a ticket number, the original error information from the Jurisdiction Database Coordinator, and the NRF or ANI/ALI Trouble error and resolution codes.

7.9 Recommended Standard Error Codes for VoIP NRF & ANI/ALI Trouble

These codes are not meant to be all encompassing and additional codes may be added to suit the needs of the 9-1-1 Governing Authority.

Group	Error Code	Description
NRF with CBN Failure		
	1501	VoIP calling to non-emergency and/or administrative hunt group numbers.
	1502	VoIP CBN being passed in the ANI spill.
	1503	CBN only delivery may be arranged as the fall back for the ESGW – VPC ISUP communication failures.
	1504	CBN transferred from another PSAP. (Note- if call was received over PSTN, hunt group of PSAP may be passed instead of CBN)
NRF with ESQK Failures		
	1601	Steering not yet activated and no shell record exists
	1602	Steering not yet activated for ESQK range and no shell record exists
	1603	Steering links to 3rd party are interrupted and no shell record exists

1604	3rd party received query, but had no record generated during call set up and 3rd party returned message with response type 3 and with the ESQK populated in the CBN field (MSC>MPC>3rd party db)
1605	NRF transferred from another PSAP

ANI Failures

1701	No ESQK passed to the tandem because VPC to ESGW ISUP communication breakdown
1702	No ESQK passed to the tandem because of Signaling incompatibilities between the ESGW and the Tandem
1703	No ESQK passed to the tandem because of Multi-frequency tone distortions (hot or noisy transmission levels) to the tandem
1704	(CBN) passed with an NPA that is undefined in the tandem
1705	ESGW default routed call when the locatable address could not be validated in the VPC data base
1706	Failed ANI call transferred to another PSAP, which generated another ANI failure
1707	Other (Provide description of error condition)

7.10 Recommended Standard Resolution Codes for VoIP NRF

Resolution Code	**Description**
2001	Updated translations to send VoIP call over correct 9-1-1 trunks
2002	Updated translations to update VoIP compliance status for 9-1-1 Governing Authority
2003	Updated steering and shell record for ESQK
2004	Updated steering and shell records for ESQK range
2005	Steering links repaired and tested
2006	Link between ESGW and VPC ISUP repaired and tested
2007	Link between ESGW and Tandem repaired and tested
2008	VSP call server/proxy information corrected and tested
2009	VPC information corrected and tested
2010	VoIP 9-1-1 call did not access ESGW
2011	Other (Provide description of repair condition)
2100	VSP customer database corrected

8 References

See related standards documents:

- NENA 02-010, NENA Formats and Protocols for Data Exchange
- NENA 02-011, NENA Data Standards For Local Exchange Carriers, ALI Service Providers & 9-1-1 Jurisdictions
- NENA 06-001, NENA Standards for Local SP Interconnection Information Sharing.
- NENA 56-001 NENA Guidelines for Minimum Response to Wireless 9-1-1 Calls
  NENA 57-001 Wireless Phase I & II Features and Functions Operational Information Document
- NENA 57-002 Wireless Phase I/II Planning and Implementation Checklist and Modules Operational Information Document

EXHIBIT A – ANI/ALI TROUBLE INQUIRY

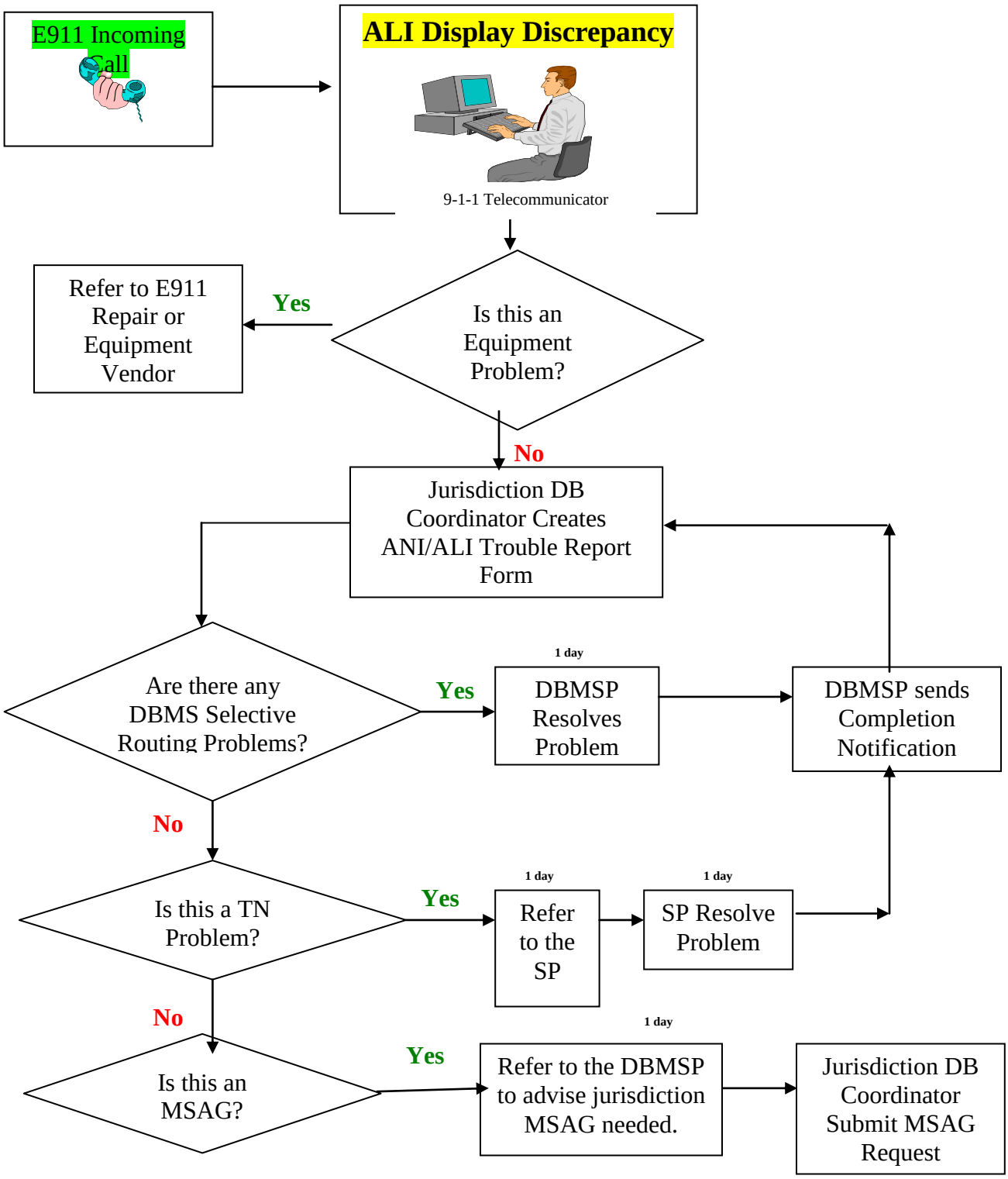

EXHIBIT B – ANI/ALI TROUBLE REPORT FORM

E9-1-1 CALL PROBLEM STANDARD REPORT FORM

(OFFICIAL FORM – USE FOR ALL CALLS)

PSAP NAME	TELECOMMUNICATOR	POSITION #	COUNTY

DATE OF CALL	TIME OF CALL/DURATION	WAS CALL TRANSFERRED ☐ YES ☐ NO	TRANSFER TO	TRANSFER FROM

REASON(S) FOR CALL PROBLEM (CHECK ALL BOXES THAT APPLY)

ANI DISPLAY	ALI DISPLAY	OTHER
☐ NO ANI ☐ ANI FAILURE ☐ WRONG ANI	☐ NO DISPLAY ☐ NO RECORD FOUND ☐ WRONG DISPLAY/INCORRECT INFORMATION	☐ MISROUTE ☐ MAP POINT

Remarks:

ALI DISPLAYED INFORMATION	CORRECT ALI INFORMATION
TN/PANI/ESRK/ESQK/ANI	TN/PANI/ESRK/ESQK/ANI
CUSTOMER NAME ADDRESS	CUSTOMER NAME ADDRESS
COMMUNITY	COMMUNITY
ESN	ESN
LOCATION (Unit/Floor/Bldg.)	LOCATION (Unit/Floor/Bldg.)

CALL TYPE	CLASS OF SERVICE	CELLULAR INFORMATION
☐ Wireline ☐ Wireless ☐ VoIP	☐ Business ☐ Residence ☐ Coin ☐ PBX/Centrex	Cell Site Sector Latitude / Longitude
Date Forwarded to 9-1-1 Jurisdiction Database Coordinator		

SERVICE PROVIDER/NENA COMPANY ID

PSAP CONTACT INFORMATION
CONTACT NAME
DATE
TELEPHONE #
FACSIMILE #
E-MAIL ADDRESS