ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Commission's	)	
Rules to Define Effective Means	)	RM - 8143
for Internetworking of Customer	)	
Premises Equipment and Public	)	
Enhanced 9-1-1 Systems	)	

COMMENTS OF BELL ATLANTIC[1]

Bell Atlantic agrees with Adcomm that uniform standards are appropriate to ensure compatibility of customer premises equipment and enhanced 911 networks.[2] However, those standards should be adopted through voluntary industry consensus, rather than being frozen into Part 68 of the Commission's Rules, as Adcomm proposes. In this way, the standards can evolve as the technology changes, without the need for yet another formal rulemaking.

If the Commission chooses to grant Adcomm's petition, however, it should make two changes to Adcomm's proposal. First, the rules should address compatibility between PBX equipment and 911 systems, so that the signalling and protocol specifications of calls sent from PBXs to 911 systems properly identify the

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[1] The Bell Atlantic telephone companies ("Bell Atlantic") are The Bell Telephone Company of Pennsylvania, the four Chesapeake and Potomac telephone companies, The Diamond State Telephone Company and New Jersey Bell Telephone Company.

[2] Petition for Rule Making of Adcomm Engineering Company (filed Oct. 20, 1992) ("Adcomm").

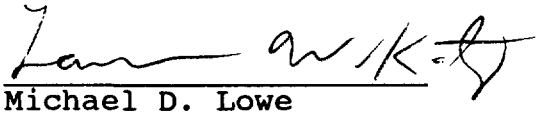
call, telephone number, and location of the PBX. Accordingly, Bell Atlantic urges the Commission to adopt in its Rules the attached standards for the exchange of location information data published by the National Emergency Number Association.

Second, Adcomm's proposed Section 68.106(f)(4) specifies that the telephone company is responsible for supplying "8-digit numbers for use as ANI for the identified locations." The quoted text should be changed to read "7-digit numbers consistent with the North American Numbering Plan for use as ANI for the identified locations."

Respectfully submitted,

The Bell Atlantic Telephone Companies

By Their Attorneys



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January 28, 1993

NENA Recommended Formats For Data Exchange

Contents

1. General

1.1 Purpose

This document sets forth NENA standard formats for Automatic Location Identification (ALI) data exchange between telephone companies and Enhanced 9-1-1 systems.

Movement of ALI data between telephone companies and/or E9-1-1 data base systems is a necessary activity for the activation of E9-1-1 systems. Means of moving such data is varied and many.

1.2 Copyright and Responsibility

This practice was written by the NENA Data Standards Subcommittee. The NENA Executive Committee has recommended this practice for industry acceptance and use. For more information about this practice, contact:

Bill Sloan
NENA Standards Committee Chairman
415-671-5900
or
Tom Hicks
NENA Data Standards Subcommittee Chairman
214-718-4289

1.3 Disclaimer

This document has been prepared solely for the voluntary use of E9-1-1 service providers, E9-1-1 equipment vendors, and participating telephone companies.

By using this practice, the user agrees that the National Emergency Number Association (NENA) will have no liability for any consequential, incidental, special, or punitive damages that may result.

2. Overview

2.1 Acronyms/ Terms

Acronym/Term	Definition
E9-1-1	Enhanced 9-1-1(name,address, and telephone number displayed)
ALI	Automatic Location Identification
MSAG	Master Street Address Guide
NENA	National Emergency Number Association

2. Overview, continued

2.2 Types of Formats

The NENA Data Standards Subcommittee has established standard data formats for use by data exchange partners when exchanging E9-1-1 data base information. A standard data format has been defined for each of the following:

- ALI data exchange
- MSAG data exchange
- Header and trailer records

2.3 Reasons to Implement

Industry adoption of the standard will:

- Minimize costs incurred in providing E9-1-1 data base services.
- Ensure timely activation of E9-1-1 data base systems.
- Ensure consistent provision of ALI data.
- Enable data compatibility for system integration of E9-1-1 products and services.

2.4 When To Implement

Since most telephone companies and equipment vendors are currently unable to satisfy the data formats defined herein, April 1, 1992, has been established as the date when data exchange partners should be capable of sending and/or receiving in the new formats.

It is further understood that many in-service data flows may be unable to conform to the NENA formats by the target date. To ensure E9-1-1 system data bases are not compromised, execution of the new formats will require thorough consideration and coordination before conversion.

2.5 Data Content Considerations

The data formats defined in the following pages represent the "minimum" data requirements for an E9-1-1 system.

The "General Use" field may be used when exchange partners agree to exchange information not defined in the standard.

Further, all data fields should be treated as "left-justified" with trailing spaces. Unused fields should be space-filled.

NENA RECOMENDED FORMAT FOR DATA EXCHANGE

FIELD NAME	POSITION	BYTES	TYPE	DESCRIPTION
Function Code	1	1	A	Type of activity the record is being submitted for. Valid entries: C Change D Delete I Insert
NPA	2-4	3	N	Three digit area code of the Calling Number.
Calling Number	5-11	7	N	Seven digit telephone number of the Calling Number.
* House Number	12-21	10|8	AN	House number. The field should be space filled if no house number is available.
NOTE:	Although the House Number field is ten characters , it is understood that telephone companies may only support up to 8 characters.			
House Number Suffix	22-25	4	AN	House number extension (eg. 1/2). The field should be space filled if no suffix applies.
Prefix Directional	26-27	2	A	Leading street direction prefix. The field should be space filled if no prefix applies. Valid entries: N S E W NE NW SE SW
Street Name	28-67	40	AN	Valid service address of the Calling Number.
Street Suffix	68-71	4	A	Valid street abbreviation, as defined by the U.S. Postal Service Publication 28. (eg. AVE)
Post Directional	72-73	2	A	Trailing street direction suffix. The field should be space filled if no suffix applies. Valid entries: N S E W NE NW SE SW
Community Name	74-105	32	A	Valid service community of the street name/house number as designated by the MSAG.

NENA RECOMENDED FORMAT FOR DATA EXCHANGE

FIELD NAME	POSITION	BYTES	TYPE	DESCRIPTION
State	106-107	2	A	Alpha state abbreviation (eg. TX)
Location	108-127	20	AN	Additional address information (free formatted) describing the exact location of the Calling Number (eg. APT 718).
Customer Name	128-159	32	AN	Subscriber name associated with the Calling Number.
Class of Service	160	1	AN	Value of: 1=Residence 6=Coin 1W out 2=Business 7=Coin 2way 3=Residence PBX 8=Mobile 4=Business PBX 9=Residence OPX 5=Centrex 0=Business OPX
Type of Service	161	1	N	Value of: 0=Not FX nor Non-Pub 1=FX in 911 serving area 2=FX outside 911 serving area 3=Non-Pub 4=Non-Pub FX in 911 serving area 5=Non-Pub FX outside 911 serving area
Exchange	162-165	4	AN	Phone company exchange identifier for the serving telephone office of the customer
ESN	166-170	5	AN	Emergency Service Number associated with the House Number and Street Name.
NOTE:	ESN field may be space filled when the receiving data partner is validating the address. The telephone company providing the E9-1-1 tandem routing will provide a list of ESN's available for assignment.			
Main NPA	171-173	3	N	Three digit area code of the Main Number associated with the Calling Number.
Main Number	174-180	7	N	Seven Digit telephone number of the Main Number associated with the Calling Number.
Order Number	181-190	10	AN	Service order number for the activity establishing this record.

NENA RECOMENDED FORMAT FOR DATA EXCHANGE

FIELD NAME	POSITION	BYTES	TYPE	DESCRIPTION
Extract Date	191-196	6	N	Date on which the record was created in the format... MMDDYY
County ID	197-200	4	AN	County Identification code (usually the FIPS code).
NOTE:	County Identification field is used to identify the county of call origination. The Subcommittee recommends use of the FIPS code assigned to each county by the US Census Bureau.			
Company ID	201-205	5	AN	Telephone Company Identification code
Source ID	206	1	AN	Code which indicates whether data is part of the initial database creation process or part of the daily update process. Daily=Space, Initial Load=C
Zip Code	207-211	5	AN	Postal Zip Code
Zip +4	212-215	4	AN	Postal Zip Code Extension
General Use	216-226	11	AN	This field will be mutually used by data exchange partners to pass information not defined in previous fields.
Reserved	227-239	13	AN	This field is reserved for the processing telephone company's use.
End of Record	240	1	A	Always an asterisk (*).

ASSUMPTIONS:

- All fields are left-justified, with trailing spaces.
- The telephone company providing E9-1-1 Tandem routing must provide the governmental entity with a list of ESN's available for assignment by MSAG development personnel.

NENA RECOMENDED FORMAT FOR MSAG DATA EXCHANGE

NAME	POSITION	BYTES	TYPE
Prefix Directional	1-2	2	AN
Street Name	3-42	40	AN
Street Suffix	43-46	4	AN
Post Directional	47-48	2	AN
Low Range	49-58	10	AN
High Range	59-68	10	AN
Community Name	69-100	32	A
State	101-102	2	A
Odd/Even	103	1	O, E, or B
ESN	104-108	5	AN
Extract Date	109-114	6	MMDDYY
PSAP ID	115-118	4	AN
County ID	119-122	4	AN
Exchange	123-126	4	AN
General Use	127-146	20	AN
Reserved	147-159	13	AN
End of Record	160	1	Always "*"

NOTE: All fields left-justified with trailing spaces.

NENA RECOMENDED HEADER FORMAT FOR DATA EXCHANGE

NAME	POSITION	BYTES	TYPE
Header Indicator	1-5	5	"UHL"
Extract Date	6-11	6	MMDDYY
Company Name	12-61	50	AN
Cycle Counter	62-67	6	N
County ID	68-71	4	AN
State	72-73	2	A
General Use	74-93	20	AN
Reserved	94-159	66	AN
End of Record	160	1	Always "*"

NOTE: All fields left-justified with trailing spaces, except for the Cycle Counter, this field will be right-justified with leading spaces.

Header records will employ cycle counting to ensure a cycle of updates is not missed.

When used with an ALI data file, the Reserved field will be expanded to 145 bytes.

NENA RECOMENDED TRAILER FORMAT FOR DATA EXCHANGE

NAME	POSITION	BYTES	TYPE
Trailer Indicator	1-5	5	"UTL"
Extract Date	6-11	6	MMDDYY
Company Name	12-61	50	AN
Record Count	62-70	9	N
Reserved	71-159	89	AN
End of Record	160	1	Always "*"

NOTE: All fields left-justified with trailing spaces, except for the Record Count, this field will be right-justified with leading spaces.

Trailer records will employ record counting to ensure a record within an update file is not missed.

When used with an ALI data file, the Reserved field will be expanded to 168 bytes.

September 6, 1991

NENA Recommended Standard For Street Thoroughfare Abbreviations

Contents

1. General

1.1 Purpose

This document sets forth NENA standard street thoroughfare abbreviations for Automatic Location Identification (ALI) data exchange between telephone companies and Enhanced 9-1-1 systems.

1.2 Copyright and Responsibility

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NENA Standards Committee Chairman
415-671-5900
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2. Overview

2.1 Acronyms/ Terms

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ALI	Automatic Location Identification
MSAG	Master Street Address Guide
NENA	National Emergency Number Association

2. Overview, continued

2.2 Reasons to Implement

Industry adoption of the standard will:

- Minimize costs incurred in providing E9-1-1 data base services.
- Ensure timely activation of E9-1-1 data base systems.
- Ensure consistent provision of ALI street thoroughfare abbreviations.
- Enable data compatibility for system integration of E9-1-1 products and services.

2.3 When To Implement

Since most telephone companies and equipment vendors are currently unable to satisfy the recommended street thoroughfare abbreviations defined herein, September 30, 1993, has been established as the date when data exchange partners should be capable of sending and/or receiving in the new street thoroughfare abbreviations.

It is further understood that many in-service data flows may be unable to conform to the NENA abbreviations by the target date. To ensure E9-1-1 system data bases are not compromised, execution of the new abbreviations will require thorough consideration and coordination before conversion.

2.4 Postal Service Compatibility

The street thoroughfare abbreviations defined in Exhibit 1 are consistent with the United States Postal Services "Postal Addressing Standards" publication.

NENA RECOMMENDED ABBREVIATIONS FOR STREET THOROUGHFARES

The following table lists some suffix forms which may appear in address files. The corresponding official USPS suffix (as coded in the ZIP+4 National Directory File) is shown in the adjacent column.

Street Suffix Abbreviation	USPS Suffix
ALLEY	ALY
ANNEX	ANX
ARCADE	ARC
AVENUE	AVE
BAYOU	BYU
BEACH	BCH
BEND	BND
BLUFF	BLF
BLUFFS	BLF
BOTTOM	BTM
BOULEVARD	BLVD
BRANCH	BR
BRIDGE	BRG
BROOK	BRK
BROOKS	BRK
BURG	BG
BURGS	BG
BYPASS	BYP
CAMP	CP
CANYON	CYN
CAPE	CPE
CAUSEWAY	CSWY
CENTER	CTR
CENTERS	CTR
CIRCLE	CIR
CIRCLES	CIR
CLIFF	CLFS
CLIFFS	CLFS
CLUB	CLB
CORNER	COR
CORNERS	CORS
COURSE	CRSE
COURT	CT
COURTS	CTS
COVE	CV
COVES	CV
CREEK	CRK
CREST	CRES
CRESCENT	CRES
CROSSING	XING
DALE	DL
DAM	DM
DIVIDE	DV
DRIVE	DR
DRIVES	DR
ESTATE	EST
ESTATES	EST
EXPRESSWAY	EXPY
EXTENSION	EXT
FALL	FALL
FALLS	FLS
FERRY	FRY
FIELD	FLD
FIELDS	FLDS
FLAT	FLT
FLATS	FLT
FORD	FRD
FORDS	FRD
FOREST	FRST
FORESTS	FRST
FORGE	FRG
FORGES	FRG
FORK	FRK
FORKS	FRKS
FORT	FT
FREEWAY	FWY
GARDEN	GDNS
GARDENS	GDNS
GATEWAY	GTWY
GLEN	GLN
GLENS	GLN
GREEN	GRN
GREENS	GRN
GROVE	GRV
GROVES	GRV

NENA RECOMMENDED ABBREVIATIONS FOR STREET THOROUGHFARES

(continued)

Street Suffix Abbreviation	USPS Suffix
HARBOR	HBR
HARBORS	HBR
HAVEN	HVN
HEIGHT	HTS
HEIGHTS	HTS
HIGHWAY	HWY
HILL	HL
HILLS	HLS
HOLLOW	HOLW
INLET	INLT
ISLAND	IS
ISLANDS	ISS
ISLE	ISLE
ISLES	ISLE
JUNCTION	JCT
KEY	KY
KEYS	KY
KNOLL	KNLS
KNOLLS	KNLS
LAKE	LK
LAKES	LKS
LANDING	LNDG
LANE	LN
LANES	LN
LIGHT	LGT
LIGHTS	LGT
LOAF	LF
LOCK	LCKS
LOCKS	LCKS
LODGE	LDG
LOOP	LOOP
LOOPS	LOOP
MALL	MALL
MANOR	MNR
MANORS	MNR
MEADOW	MDWS
MEADOWS	MDWS
MILL	ML
MILLS	MLS
MISSION	MSN
MOUNT	MT
MOUNTAIN	MTN
NECK	NCK
ORCHARD	ORCH
OVAL	OVAL
PARK	PARK
PARKS	PARK
PARKWAY	PKY
PASS	PASS
PATH	PATH
PATHS	PATH
PIKE	PIKE
PIKES	PIKE
PINE	PNES
PINES	PNES
PLACE	PL
PLAIN	PLN
PLAINES	PLNS
PLAZA	PLZ
POINT	PT
POINTS	PT
PORT	PRT
PORTS	PRT
PRAIRIE	PR
RADIAL	RADL
RANCH	RNCH
RANCHES	RNCH
RAPID	RPDS
RAPIDS	RPDS
REST	RST
RIDGE	RDG
RIDGES	RDG
RIVER	RIV
ROAD	RD
ROADS	RD

NENA RECOMMENDED ABBREVIATIONS FOR STREET THOROUGHFARES

(continued)

Street Suffix Abbreviation	USPS Suffix
ROW	ROW
RUN	RUN
SHOAL	SHL
SHOALS	SHLS
SHOAR	SHR
SHOARS	SHRS
SHORE	SHR
SHORES	SHRS
SPRING	SPG
SPRINGS	SPGS
SPUR	SPUR
SPURS	SPUR
SQUARE	SQ
SQUARES	SQ
STATION	STA
STRAVENUE	STRA
STREAM	STRM
STREET	ST
STREETS	ST
SUMMIT	SMT
TERRACE	TER
TRACE	TRCE
TRACES	TRCE
TRACK	TRAK
TRACKS	TRAK
TRAIL	TRL
TRAILER	TRLR
TRAILS	TRL
TUNNEL	TUNL
TURNPIKE	TPKE
UNION	UN
UNIONS	UN
VALLEY	VLY
VALLEYS	VLY
VIADUCT	VIA
VIEW	VW
VIEWS	VW
VILLAGE	VLG
VILLE	VL
VISTA	VIS
WALK	WALK
WALKS	WALK
WAY	WAY
WAYS	WAY
WELL	WLS
WELLS	WLS

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing "Comments of Bell Atlantic" was served this 28th day of January, 1993, by delivery thereof by first class mail, postage prepaid, to the parties on the attached list.

Jack H. Campbell

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