

Private Branch Exchange Phone System (PBX) INCOMPATIBILITY WITH 9-1-1

THE PROBLEM

Private telephone systems, such as PBXs, may not interface to the Enhanced 9-1-1 system. Citizens served by these telephone systems may be denied the benefits of the Enhanced 9-1-1 system, such as the automatic location and number identification and selective routing features. When a 9-1-1 call is made from a telephone connected to a private telephone system, the location information which is displayed at the 9-1-1 communications center may not be correct. In some cases, the address which is displayed is the address where the telephone switch is located, not the location of the 9-1-1 caller. In addition to the incorrect display of location information, the 9-1-1 call may not be routed to the appropriate 9-1-1 communications center as a result of the incorrect address. Especially in situations where the caller is unable to communicate and give their location, responses to these 9-1-1 calls may be delayed, or not possible.

ENFORCEMENT AUTHORITY

The State of Washington has passed the authority to approve the adequacy of Automatic Location Information from private telephone systems to Fire Chiefs within cities and the County Fire Marshal, or their designee, for unincorporated areas. When the Automatic Location Information is determined to be noncompliant, these authorities are directed to issue a determination of noncompliance to the telephone system owner. Fines or penalties for noncompliance are recommended to be \$100 per day per telephone system until compliance is met.

VOLUNTARY COMPLIANCE

Other private telephone systems that are not included in the definitions that follow on the next page as being required to interface to Enhanced 9-1-1 systems may obtain a Certification of Voluntary Compliance.

THE SOLUTION

There are currently no national standards which address the incompatibility between private telephone systems and Enhanced 9-1-1 systems. In an effort to work towards the resolution of this issue, Washington State passed a law that requires private telephone systems which serve citizens in settings where risks are highest to interface to the Enhanced 9-1-1 system by providing a call back telephone number and correct location information. The areas which are covered by this law are: residences served by shared telecommunications service providers; common and public schools; and some settings where multiple unaffiliated businesses are served by a commercial shared telecommunications service provider from a single switch.

In addition to this law, all local exchange companies offering service in the State of Washington are required to provide the capability of interfacing private telephone systems to 9-1-1. Technical solutions have been developed which make this interface possible. Private telephone system owners should contact their local exchange company and their switch vendor for information.

Even though only certain types of private telephone systems are currently required to interface to Enhanced 9-1-1 systems, all private telephone system owners and users should be aware of the incompatibility issue and of the potential delay in 9-1-1 responses this situation creates.

**For additional information contact the
King County E-911 Program Office at:
(206)296-3911.**

RESIDENTIAL CUSTOMERS

Shared telecommunications service providers serving customers who reside in Uniform Building Code Occupancy Group Classification R-1 must assure that their telecommunications system is connected to the public switched network such that calls to 9-1-1 result in accurate Automatic Location Identification for each residential unit.

The residential customers included in this classification are persons living in single-family or multi-family dwellings (e.g., condominiums, apartment buildings and complexes, retirement and nursing homes, and dormitories). Persons detained in jails and persons who are temporarily hospitalized are not included in this classification.

Minimum information requirements for Automatic Location Identification for these residential customers:

- 1) **Customer Name**
- 2) **Street Address and City**
- 3) **Building Unit Identifier**
Defined as Room number or Apartment number.
- 4) **Call Back Telephone Number**

Also included in this classification are residential customers in congregate residences, hotels and motels.

Minimum information requirements for Automatic Location Identification for congregate residences:

- 1) **Customer Name**
- 2) **Street Address and City**
- 3) **Call Back Telephone Number**
- 4) **Building Unit Identifier**
In lieu of Building Unit Identifier, it is also acceptable for specific location information to be supplied by a knowledgeable designated individual(s), such as Hotel Security, who is automatically simultaneously connected with the caller and the 9-1-1 communications center.

MULTIPLE UNAFFILIATED BUSINESSES

Any commercial shared telecommunications service provider of private shared telecommunications services for hire or resale to multiple unaffiliated business users from a single system must assure that the system is connected to the public switched network such that calls to 9-1-1 result in accurate Automatic Location Identification for each telephone. This requirement only applies to providers of service to businesses containing a physical area exceeding 25,000 square feet, or businesses on more than one floor of a building or in multiple buildings. This requirement does not apply to a business that owns a private telephone switch which serves only their own business or affiliated businesses.

MULTIPLE UNAFFILIATED BUSINESSES cont'd

Minimum information requirements for Automatic Location Identification for multiple unaffiliated businesses:

- 1) **Business Name**
- 2) **Street Address and City**
- 3) **Building Unit Identifier**
Defined as Room number or equivalent designation of a specific portion of a structure.
- 4) **Call Back Telephone Number**

COMMON AND PUBLIC SCHOOLS

All common and public schools as defined in RCW 28A.150.010 and .020 must provide persons using school facilities direct access to telephones that are connected to the public switched network such that calls to 9-1-1 result in accurate Automatic Location Identification for each telephone during all times when the school facility is in use. Schools who purchased their phone system prior to January 1, 1997 are not required to modify or replace their existing telephone system. This requirement could be met by installing pay phones or single-line phones in areas that are always accessible to persons using school facilities. However, any school district acquiring a private telephone system that connects to the public switched network after January 1, 1997 must assure that the telephone system connects to the public switched network such that calls to 9-1-1 result in accurate Automatic Location Identification for each telephone.

Minimum information requirements for Automatic Location Identification for common and public schools:

- 1) **Individual School Name**
- 2) **Street Address and City**
- 3) **Building Unit Identifier**
Defined as Room number or equivalent designation of a specific portion of a structure.
- 4) **Call Back Telephone Number**



King County