Advanced location technologies are now being delivered by some telecom service providers. Accordingly, the network providers have made changes to their networks and 9-1-1 database systems to identify when advanced location is determined and delivered to the public safety answering point (PSAP) via ALI (automatic location information). This is being done by displaying new classes of service (CoS).

Consistent with National Emergency Number Association (NENA) standards, the State Emergency Communications (SECB) Next Generation 9-1-1 (NG9-1-1) Committee has recommended the addition of four new classes of service to the Minnesota 9-1-1 network related to advanced location. Minnesota PSAPs are being asked to be ready for the ALI database change by Dec. 16.

A training video was created to help explain the changes. The video and PowerPoint can be accessed by clicking this link and downloading the files. This link will be available for next 30 days.

PSAPS must:
1. Provide information about the new CoS to computer aided dispatch (CAD), mapping, and call processing equipment (CPE) maintenance providers.
2. Train frontline telecommunicators.

There are three new wireless classes of service and one voice over internet protocol (VoIP) class of service ready to be turned up on the Minnesota 9-1-1 network. The three wireless classes are: Wireless E9-1-1 dispatchable location 2 (WDL2), Wireless E9-1-1 dispatchable location 1 (WDL1) and Wireless E9-1-1 civic address (WCVC). The one VoIP class is VoIP Nomadic (VNOM.) New classes of service are being added not removed. Also, the ALI format is not changing. Use of these new classes of service does not modify the format or positioning of data in the ALI data stream for wireless or VoIP calls, nor does it change the routing of 9-1-1 calls from wireless or VoIP devices. The change solely allows the use of additional class of service codes.

Telecommunicators should use classes of service on ALI as an indication of the type of telecom service technology used to originate the 9-1-1 call, as well as the type of location information being provided by the telecom carrier. In addition to information from the caller, it is recommended that all data elements presented to the telecommunicator (e.g. ALI screen, CAD, secondary maps) be used to reach the best possible assessment of the caller’s location. While several of the new classes of service reference advanced location methods and varied levels of dispatchable location quality, validating location provided on ALI is advisable.
**New Wireless CoS – WDL2, WDL1, WCVC:** Three advanced location wireless classes of service are being added to identify instances where the wireless carrier is reporting civic address oriented location information for the call on ALI, **NOT** the traditional cell sector information. Cell sector locations will continue to be used in ALI displays that have the WPH1 or WPH2 classes of service.

**WDL2**
- Wireless 9-1-1 call.
- Civic oriented data (address and sub-address location where appropriate).
- Includes traditional Wireless Phase II (WPH2) geodetic data, the X, Y and uncertainty associated with the caller’s location (where available).
- When this CoS is used, it indicates the civic oriented data is expected to meet the highest quality level criteria to be “dispatchable.” It indicates that the location, including sub-address location within the building (if applicable), is very close to the caller’s location.

**WDL1**
- Wireless 9-1-1 call.
- Civic oriented data (address and building zone where appropriate).
- Includes traditional WPH2 geodetic data, the X, Y and uncertainty data associated with the caller’s location (where available).
- When this CoS is used, it indicates the civic oriented data is expected to meet the medium-quality level criteria to be “dispatchable” by building zone (if applicable), but also indicates a less detailed location than WDL2.

**WCVC**
- Wireless 9-1-1 call.
- Civic oriented data (address).
- Includes traditional WPH2 geodetic data, the X, Y and uncertainty data associated with the caller’s location (where available).
- When this CoS is used, it indicates the civic oriented data is not expected to meet the criteria to be “dispatchable” by either building zone (WDL1) or sub-address location (WDL2).

**New VoIP CoS – VNOM:** One voice over internet protocol class of service is being added to identify instances where the subscriber service is nomadic (movable).

**VNOM**
- Voice over internet protocol telephone service.
- It is movable – usually a telephone service installed on a portable computer -- which can be taken with the subscriber (e.g. Vonage, Ooma, MagicJack).
Recommendations on how to program interfaces to map off the new classes of service:

PSAP CAD, mapping, and CPE maintenance providers should be provided the following guidelines on how to program ALI interface systems. Refer to the training video (or PowerPoint) for further information.

Remember the deadline is Dec. 16. This is the date that Minnesota database providers will deliver the four new classes of service when seen from the telecom service providers. If systems are not updated by this date, and a new class of service is presented in an ALI, it may not map as desired.

<table>
<thead>
<tr>
<th>Class of Service</th>
<th>Code</th>
<th>ALI Format</th>
<th>Mapping Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>RESD</td>
<td>Wireline</td>
<td>Civic Address</td>
</tr>
<tr>
<td>Wireless Phase II</td>
<td>WPH2</td>
<td>Wireless</td>
<td>Coordinates</td>
</tr>
<tr>
<td>Telematics</td>
<td>TLMA, TELM</td>
<td>Wireless</td>
<td>Coordinates</td>
</tr>
<tr>
<td>Wireless E911 Civic Address</td>
<td>WCVC</td>
<td>Wireless</td>
<td>Coordinates</td>
</tr>
<tr>
<td>Wireless E911 Dispatchable Location 1</td>
<td>WDL1</td>
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<td>Coordinates</td>
</tr>
<tr>
<td>Wireless E911 Dispatchable Location 2</td>
<td>WLD2</td>
<td>Wireless</td>
<td>Coordinates</td>
</tr>
<tr>
<td>VoIP</td>
<td>VOIP</td>
<td>Wireless or Wireline*</td>
<td>Coordinates</td>
</tr>
<tr>
<td>VoIP Nomadic</td>
<td>VNOM</td>
<td>Wireless</td>
<td>Coordinates</td>
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<tr>
<td>Text</td>
<td>TEXT</td>
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<td>CPE Dependent</td>
</tr>
</tbody>
</table>

Please reach out to your SECB NG9-1-1 Committee representatives or Emergency Communication Networks (ECN) staff with any questions.

Respectfully,

Darlene Pankonie
Chair, NG9-1-1 Committee
Statewide Emergency Communications Board