

**Information Technology Bulletin  
Commonwealth of Pennsylvania  
Governor's Office of Administration/Office for Information Technology**

<b>ITB Number:</b>	<b>ITB-APP009</b>	
<b>ITB Title:</b>	<b>Automatic Vehicle Location (AVL) Technology Standard</b>	
<b>Issued by:</b>	<b>Deputy Secretary for Information Technology</b>	
<b>Date Issued:</b>	<b>October 16, 2008</b>	<b>Date Revised: October 25, 2010</b>
<b>Domain:</b>	<b>Application</b>	
<b>Discipline:</b>	<b>Automatic Vehicle Location</b>	
<b>Technology Area:</b>	<b>Radio/Geospatial Technologies</b>	
<b>Revision History</b>	<b>Description:</b>	
<b>Date:</b>		
<b>10/25/2010</b>	<b>ITB Refresh</b>	

**Abstract:**

The purpose of this Information Technology Bulletin (ITB) is to establish enterprise-wide standards and guidance for Automatic Vehicle Location (AVL).

AVL provides identification and monitoring of vehicle locations. Both Geospatial and Radio technologies are available to achieve AVL, including radio and satellite triangulation, global positioning systems (GPSs), Geospatial Information Systems (GISs) server software and infrastructure, and Web mapping capabilities. The product standards referenced in this ITB support each of these options.

**General:**

This ITB applies to all departments, boards, commissions and councils under the governor's jurisdiction (agencies). Agencies not under the governor's jurisdiction are encouraged to follow this policy to ensure they develop and implement applications that facilitate enterprise-wide interoperability and standardization.

**Policy:**

Commonwealth agencies requiring an AVL solution are to use the technology standards named in STD-APP009A - *AVL Global Positioning Product Standards*, STD-APP009B - *AVL Geospatial Infrastructure Product Standards*, and STD-APP009C - *AVL Presentation Layer Product Standards*.

These technologies specifically address the following:

- In-Vehicle Hardware - Configuration, installation, and implementation of GPSs within Commonwealth vehicles.
- GIS Server Infrastructure – leveraging the Commonwealth’s existing Geospatial Enterprise Server Architecture as the shared services GIS infrastructure when new hardware, databases, or geospatial software implementations are required to support agency AVL needs.
- Data Architecture – leveraging the Commonwealth’s existing enterprise GIS database as the shared services GIS data architecture and source of record for data sharing needs.

- Web Application Viewer – leveraging the Commonwealth’s existing implementation of Geospatial Analysis Threats and Incident Reports (GATIR) as one of the standard GIS Web mapping applications, while also providing options for thin-client Web application viewer access.

The M/A-COM OpenSky 800 MHz radio platform currently has a significant installation base in the Commonwealth. Agencies are to use the Commonwealth-owned network and their OpenSky GPS-enabled subscriber base as its primary option for an AVL/GPS source and radio carrier network when implementing AVL solutions subject to meeting agency business requirements.

GIS Software technology standards for purposes other than AVL are named in ITB-INFGT001, *Geospatial Information Systems*.

**Refresh Schedule:**

All standards identified in this ITB are subject to periodic review and possible revision, or upon request by the Enterprise Architecture Standards Committee (EASC).

**Exemption from This Policy:**

In the event an agency chooses to seek an exemption, for reasons such as the need to comply with requirements for a federally mandated system, a request for waiver may be submitted via the Community of Practice Procurement and Architectural Review (COPPAR) process. Requests are to be entered into the COPPAR Tool located at [WWW.COPPAR.STATE.PA.US](http://WWW.COPPAR.STATE.PA.US). Agency CIO approval is required. Contact your agency [CoP Planner](#) for further details or assistance.

**Questions:**

Questions regarding this policy are to be directed to [ra-oaitb@state.pa.us](mailto:ra-oaitb@state.pa.us).

**Policy Supplements:**

- [STD-APP009A](#) - AVL Global Positioning Product Standards
- [STD-APP009B](#) - AVL Geospatial Infrastructure Product Standards
- [STD-APP009C](#) - AVL Presentation Layer Product Standards

**References:**

[ITB-INFGT001](#): Geospatial Information Systems