ISO AND IN-CAR NAVIGATION

As the car navigation industry has grown so has incompatibility between navigation systems and the databases that store important location information. Additionally, there is a need to more easily develop navigation system applications. ISO (International Organization for Standardization) is contributing solutions to those issues with an International Standard for a navigation system application programming interface (API).

Car navigation systems use map databases to give precise driving directions, or to determine the vehicle’s location and provide information about nearby points of interest, such as restaurants and hotels. Some newer systems can also receive and display information on traffic congestion and suggest alternate routes.

ISO 17267:2009, Intelligent transport systems – Navigation systems – Application programming interface (API), will help facilitate the interoperability between navigation systems and map databases by providing an interface that will make information accessible and retrievable as well as assist developers of navigation systems.

The new standard describes what data may be retrieved from a database, defines the interface for access and specifies a set of navigation function calls. It also describes the design of the API and gives examples of its intended use. Furthermore, it specifies the criteria used to determine if a data access library is in accordance with the standard.

“Having an API that defines the methods that navigation system software developers may use to select a travel destination, request a route to a destination, display the planned path, and guide a traveller to a destination will improve the efficiency of the development of navigation systems,” said Carl Stephen Smyth, Project Leader of the group in ISO technical committee ISO/TC 204, Intelligent transport systems, that developed the new standard.

While ISO 17267:2009 is primarily targeted at self-contained in-vehicle systems, it is expected to be usable by other applications that use map data results in essentially the same way. For example, it may be usable in a client/server environment and/or by distributed navigation systems and location-based services without further specialization.
ISO 17267:2009 is not restricted to physical media and is independent of any underlying physical storage format.

ISO 17267:2009, Intelligent transport systems – Navigation systems – Application programming interface (API), was developed by ISO technical committee ISO/TC 204, Intelligent transport systems, and is available from ISO national member institutes. It may also be obtained directly from the ISO Central Secretariat, price 224 Swiss francs, through the ISO Store or by contacting the Marketing, Communication and Information department.