

Towards Standardization of Vehicle Tracking Systems

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Key words:

SUMMARY

With the increasing global demand for security, identification of people and assets and the merging of nations directive into unions, expansion and complexity of transport networks, raises the demand for Automatic Vehicle Location Systems (AVL). Many commercial companies around the world are offering different solutions with numerous concepts and technologies. More and more AVL is becoming a basic component of any vehicle. Hence the need to set the “new” industry standards. The components of such systems are GPS receiver, communication network and mapping part. The aim of this paper is to try to negotiate the methods of achieving a universally uniform system. The study is based on the Dubai Municipality’s experience in establishing a uniform AVL system for the Dubai Emirate.

The aim of the study is to explore the areas required for standardization. These standards are to assure the compatibility and interoperability between the different AVL systems around the world, to allow in-vehicle units to communicate with other software and mapping applications. Areas for standardization may include: maps format, GPS, messages format, application software and in-vehicle unit functionalities. Standardizing this technology will have great positive impact in the security aspects and also in the economical side.

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