INNOVATION SOLUTION ON INTEROPERABILITY OF ELECTRONIC TOLL COLLECT SYSTEMS IN EUROPEAN UNION

Summary

The paper refers to some problems of the EETS interoperability. DSRC systems are used in the most of European Union members countries (Austria, France, Spain, Italy) based on Dedicated Short Range Communication (microwave band - 5.8 GHz). The different resolution is used the global positioning GPS and wireless communication GSM based systems (the mentioned system has been implemented in Germany, in the future in Czech Republic, Slovakia, Slovenia, UK). The electronic toll collection systems in the European Union member states are not interoperable, therefore European Commission has taken bold steps to address that issue. The first one was Directive 2004/52/EC of the European Parliament and of the Council of 29 April 2004 on the interoperability of electronic road toll systems in the Community. The second was decision to launch Europe's own Galileo system, that is predicted to improve upon both the accuracy and reliability of GPS. On June 26, 2004, the US and EU signed an agreement to coordinate Galileo and GPS. Furthermore the authors present the structure of electronic toll collection system that meets interoperability standards. The most important of its will be OBU (equipped with GPS, GSM and DSRC module - 5.8 GHz), that will be compatible with implemented EETS in EC.

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