SAFESPOT INTEGRATED PROJECT - IST-4-026963-IP

DELIVERABLE

SP5 – COSSIB – Cooperative Safety Systems Infrastructure Based

Application algorithms

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Task No.	T5.4.2	**Task Title**	**Road-side application implementation**
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EXECUTIVE SUMMARY

The present document is an **accompanying report** to the algorithms that have been implemented for the infrastructure-based applications. The software with the algorithms constitutes the actual deliverable for the COSSIB applications. The SAFESPOT Infrastructure-based applications are:

- Speed Alert
- Hazard & Incident Warning
- Intelligent Cooperative Intersection Safety
- Road Departure
- Safety Margin for Assistance and Emergency Vehicles

This document is intended also as a reference for non-COSSIB partners to understand the logic of the application and the details of their functionalities.

Following the specifications provided in the previous work package (WP5.3); this document provides a general description of the main implemented algorithms of each of the COSSIB applications. Additionally, two common blocks are implemented to support the distribution of COSSIB warning messages to the Human-Machine Interfaces in the infrastructure and in the vehicle. These common blocks are:

- Application Coordinator
- Message Manager

In order to describe the different algorithms of the applications, UML diagrams, pieces of code, Doxygene documentation and screenshots of the applications are used.

All COSSIB applications have been implemented following the SAFESPOT general architecture. Since all applications require sensors, rely on information stored in the LDM and send warnings through the VANET, an important collaboration with other subprojects has been constantly carried out. Furthermore, within the COSSIB subproject, task forces were created to provide common solutions to common needs. This is the case of the Application Coordinator and the Message Manager modules which were designed, specified and implemented in teamwork.