PRESERVE Fact Sheet

Project Acronym: PRESERVE
Project Title: Preparing Secure Vehicle-to-X Communication Systems
Project Reference: FP7-ICT-2009-6.2, Grant agreement No: 269994, Project Type: STREP
Project Duration: 48 months from 01.01.2011 – 31.12.2014
Web: http://www.preserve-project.eu/

Project Mission

Design, implement, and test a secure and scalable V2X Security Subsystem for realistic deployment scenarios.

Project Abstract

Cooperative ITS and V2X communication promise a new age of safer, more efficient, and more comfortable road traffic. However, this promise can only be fulfilled if those systems are designed and implemented in a secure way where they cannot be abused by malicious attackers and where the personal data that they process is not subject to abuse and privacy violations.

The goal of PRESERVE (Preparing Secure Vehicle-to-X Communication Systems) is to bring secure and privacy-protected V2X communication closer to reality by providing and field testing a security and privacy subsystem for V2X systems. PRESERVE will combine and extend results from earlier research projects, integrating and developing them to a pre-deployment stage by enhancing scalability, reducing the cost level, and addressing open deployment issues. It aims at providing comprehensive protection ranging from the vehicle sensors, through the on-board network and V2V/V2I communication, to the receiving application. As a result, PRESERVE will present a complete, scalable, and cost-efficient V2X security subsystem that is close-to-market and will be provided to other FOT projects and interested parties for ongoing testing.

Field operational testing will investigate a number of important scalability and feasibility issues. Further, the V2X security subsystem will also be provided to other projects to jointly investigate integration and performance in larger fleets of vehicles. Another strategic objective of PRESERVE is to contribute to on-going harmonization and standardization efforts at the European level.

Preserve Objectives

1. Create an integrated V2X Security Architecture (VSA) and design, implement, and test a close-to-market implementation termed V2X Security Subsystem (VSS).
2. Prove that the performance and cost requirements for the VSS arising in current FOTs and future product deployments can be met by the VSS, especially by building a security ASIC for V2X.
3. Provide a ready-to-use VSS implementation and support to FOTs and interested parties so that a close-to-market security solution can be deployed as part of such activities.
4. Solve open deployment and technical issues hindering standardization and product pre-development.

Project Partners

University of Twente (coordinator), The Netherlands
Escrypt GmbH (SME), Germany
Fraunhofer SIT, Germany
Kungliga Tekniska Hoegskolan (KTH), Sweden
Renault, France
Trialog (SME), France

Advisory Board

Audi
BMW
Daimler
Denso
Infineon
Volkswagen

Supporting Partners

sim^{TD}
CAMP VSC-3 Consortium (US)

Budget

Total: 5.438 M€
EC Funding: 3.850 M€
Resources: 391 man months

Contact (Coordinator)

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