

Executive Summary

The objective of SAFERtec is to design and validate a flexible security assurance framework for Connected Vehicles. Towards that end, WP4 develops and integrates the ‘connected vehicle system’ to enable the framework’s adoption and validation. The aim of this deliverable is to:

- (1) present the work carried out within WP4 for the set-up of a prototype of the Connected Vehicle System (i.e., the reference vehicle system for the project), with particular emphasis on the integration of the system components;
- (2) report all relevant aspects of the validation and testing phase conducted for checking that the reference vehicle system is working as expected, thus enabling the SAFERtec framework’s adoption and validation in a practical and real context.

The reference connected vehicle system implemented in WP4 and documented in this deliverable has been: first (i) envisioned and designed in the Task T4.1 “Connected Vehicle System specification” (documented in the deliverable D4.1 “Specification of Connected Vehicle System”), according to the use-case requirements identified in the WP2 “Reference Modeling and Requirements” (documented, in particular, in the deliverable D2.1 “Connected Vehicle Use Cases”); and then (ii) implemented along the project tasks: T4.2 “V2X HW & SW module”, T4.3 “Implementation of RSU system (Component/System Level)”, and T4.4 “Implementation of 3rd Party Applications and Services” (documented in the deliverable D4.2 “Modules and Applications of Connected Vehicle”).

The herein presented implementation of the reference Connected Vehicle System will be mainly considered in the following project tasks:

- T3.3 “Assurance Framework Testing and Refinement” (to be described in the D3.3 “Results of SAFERtec Assurance Framework Testing”) of WP3 “Assurance Framework”;
- T5.3 “Composite Evaluation”, (to be described in the deliverable D5.4 “Composite Evaluation of SAFERtec Assurance Framework”) of WP5 “Assurance Framework Evaluation”.

The reported implementation of the connected vehicle system, hence, will provide the means towards adoption, testing and evaluation of the SAFERtec assurance framework.

Finally, two comments on the importance of the presented work in this deliverable are the following:

- We have paid particular importance on the consideration and inclusion of recommendations of security controls coming from the SAFERtec modelling work (WP2); that serves the purposes of coherence across the various project outcomes.
- We have collected and processed feedback from relevant stakeholders pointing to interesting directions regarding the implementation of (future) Connected Vehicle Systems.

