

SAFESPOT INTEGRATED PROJECT - IST-4-026963-IP**DELIVERABLE****SP3 – SINTECH – Innovative Technologies****Positioning Specifications**

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Workpackage No.	WP3	Workpackage Title	Specification
Task No.	3.3.2	Task Title	Specification of innovative technologies for Positioning
Authors (per company, if more than one company provide it together)		Heiko Cramer, Robin Schubert, Norman Mattern TUC	
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1. EXECUTIVE SUMMARY

The objective of WP3 is to derive the system specifications from the previous defined user needs and requirements. In general, the specification WP is contains the specifications of all three Technical Tasks of SINTECH (Vehicular Ad hoc networks, Positioning and Local Dynamic Maps). But, in contrast to the finished deliverables, in WP3 a specification deliverable will be compiled for every technology separately.

This deliverable is based on the User Needs and Requirements. Additionally, the requirements of the Positioning Technology were defined in WP2. The main source for the requirements for Positioning was the requirements definition of SP4 (SCOVA). In this application oriented sub-project, scenarios have been proposed and the accuracy needed for the positioning technology has been derived from these scenarios. The requirements have been mapped to the previously defined “bottom-up” requirements of SP3 (SINTECH) in a separate deliverable, referred to as “Consolidation Report of User Needs and Requirements for Positioning, Local Dynamic Maps and Vehicular Ad Hoc Networks” (D3.2.3).

In parallel, a deliverable with the name “Mapping Report of known Technologies for Positioning, Local Dynamic Maps and Vehicle Ad Hoc Networks” (D3.3.1) has been prepared in WP3. Before specifying the technologies for SAVESPOT, this step was needed to map the requirements of the different WPs on adequate state-of-the-art technologies.

In this deliverable we elaborate on three main topics of the specification process for the Positioning Technology:

System Specification: The overall system is specified first. This includes the description of the general idea for the improvement of the accuracy of the estimated vehicles position. In the following, the technical bases of different sub technologies are described and specified.

Hardware Specification: The common used hardware as well as the specific hardware for every sub-technology is specified. The level of detail of the specifications for the sub-technologies depends strongly on whether a technology requires the development of hardware components or not.

Software Specification: The third main topic of this deliverable is the specification of the software. This mainly includes the specifications of interfaces between positioning modules and interfaces to other modules inside the SAFESPOT architecture.

This deliverable does not include a detailed description of the developed algorithms. The description of algorithms is included in the deliverable Algorithmic and Simulation Results (D3.4.1) together with the simulation results.