

D3.3 – Results of SAFERtec Assurance Framework Testing

Executive Summary

This deliverable constitutes a major step in the SAFERtec project as it runs the SAF and provides realistic feedbacks on the capacity of the framework to reach the targeted assurance level.

Firstly, the deliverable describes the methodologies and tools used by audit and evaluation experts to validate the implementation of the SAF-derived Security Functional Requirements on the corresponding Targets Of Evaluation earlier developed in WP4. Then the evaluation activities performed on the TOEs are presented with their results and the relevant anomalies found. A broad set of evaluation tasks have been performed:

- Security target evaluation
- Specification evaluation
- Guidance evaluation
- Vulnerability analysis

Project limitation prevented us from exhaustively covering the full list of evaluation tasks while the considered tasks (i.e., see above) have been carried-out up to a certain depth. However, in line with the WP objectives ("to provide enough evidence of the SAF suitability"), a number of iterations have been performed to reach a sufficient level of inputs for the relevant evaluation tasks taking into account constraints (such as our partial STs definitions or our specification documents that identify TOEs' functions, described in the STs, only where they are used). More precisely, two rounds of evaluation are presented. A first set of STs has been defined to run a first reference assurance assessment. Then, based on system-level testing (see D5.2) and risk analysis updates, a set of updated STs has been defined in order to extend security requirements and run a second assurance assessment phase; the SAF adaptation capabilities to security requirements (and ST) changes were thus assessed.

Additionally, refinements and modifications of the SAFERtec Protection Profiles are presented in this deliverable, as a result of their continuous review that included discussions and communications with experts and relevant fora.

Along these lines, this deliverable concludes the WP3 as it assesses the work done in this work package and refines it in order to improve the final result of the project i.e., the SAFERtec Assurance Framework. The methodology used in this deliverable is meant to be re-applied each time a new Security Functional Requirement is added into the SAF to cover vulnerabilities from existing or new threats. That is the only way to maintain an Assurance Framework up-to-date regarding emerging threats and potential progress in other similar Security Assurance initiatives.