HECTOS

Harmonized Evaluation, Certification and Testing Of Security products

D2.2 – Overview of existing certification approaches and common description method

EXECUTIVE PUBLISHABLE SUMMARY

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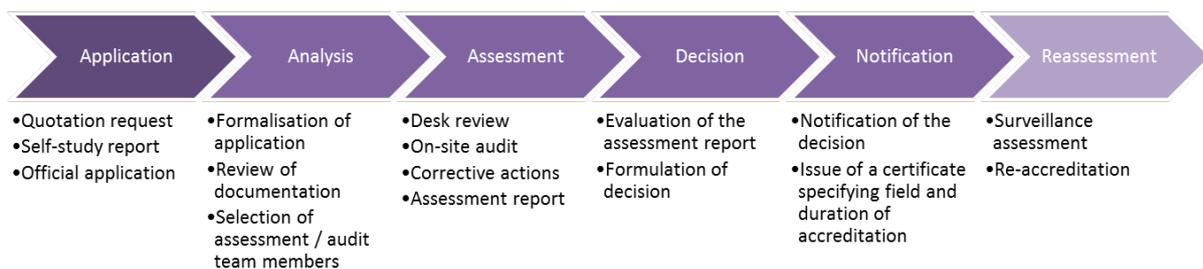|	
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Executive Summary

HECTOS is an EU FP7 security research project that is exploring the issue that there are very few test, evaluation and certification procedures in Europe for physical security products that are mutually recognized by different Member States. As pointed out in the EC Communication on Security Industrial Policy, this leads to fragmentation of the market, with negative impacts on both suppliers and users. HECTOS will identify mechanisms to evaluate the performance of security products, as well as compliance with interoperability, regulatory, ethical, privacy and other requirements. The project will develop elements for a roadmap for the development of new harmonised product certification schemes.

In order to support the development of a harmonized evaluation and certification approach, the task from which the results are described in this report aimed to provide an a categorized list of evaluation and certification schemes that are used in the area of physical security products, on European and national level.

There are some for HECTOS relevant studies (SECERCA, CRISP, CREATIF, ERNCIP, NDE, EC initiatives) which have recently finished are are still running. For the development of harmonised product certification schemes, HECTOS could use the results of these studies or cooperate with the project teams. These studies and their high level results are shortly described.

Furthermore, the standards developed by the ISO/CASCO committee are intended to make conformity assessment activities as uniform as possible across industries and across the world. Amongst other things, this reduces the need for duplication of testing when importing or exporting, thus facilitating global trade. Consequently, these standards, designated as ISO/IEC 17000 series, are most relevant for HECTOS and are summarized as well.

Finally, since accreditation provides the authoritative statement of the technical competence of conformity assessment bodies, and is therefore important for a harmonised evaluation and certification approach, the European accreditation framework, based on Regulation EC (No) 765/2008, and the typical accreditation process is also described in this deliverable.

Application	Analysis	Assessment	Decision	Notification	Reassessment
•Quotation request •Self-study report •Official application	•Formalisation of application •Review of documentation •Selection of assessment / audit team members	•Desk review •On-site audit •Corrective actions •Assessment report	•Evaluation of the assessment report •Formulation of decision	•Notification of the decision •Issue of a certificate specifying field and duration of accreditation	•Surveillance assessment •Re-accreditation

Since physical security conformity testing methods are typically product based, a product categorisation has been used as the main discriminator for the evaluation and certification schemes described in this deliverable. However, security related *legislation*, which can be considered in many occasions as the requirements against which conformity testing is done, is mostly application based and addresses hence the customers and end-users of security products. Therefore, an application focus has been applied as well to categorize the evaluation and certification schemes adequately.

The actual overview of 20 evaluation and certification schemes is based on a small, but assumingly representative part of the European countries (mainly driven by the geographical composition of the consortium) and the Unites States and is not intended to be exhaustive in

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that all European evaluation and certification schemes for all physical security products are included.It also includes approaches that already take some steps towards harmonization of E&C schemes, like for example EFSG and Keymark, and the guidelines on certification schemes presented in ISO/IEC 17067. In addition, five interesting examples of E&C schemes outside the scope of physical security products are added which may provide interesting elements for the harmonization of the E&C schemes for physical security products.

The overview is reasonably complete in its coverage of physical security products, although some clear differences have emerged: no schemes have been found for Security Lighting and CBRN detection products. For Explosives & Weapon only one schemes is used and moreover for a very specific application area (ECAC CEP - Aviation Security). Furthermore, only a very limited number of schemes (one or two) are found for Vehicle Barriers and Biometrics. On the other hand many schemes (over 10) exist for Building components and for Locks. One explanaition for the differences in the number of found schemes is of course the market share of certain product categories (e.g. for Vehicle Barriers is a much smaller market compared to Locks).

Each of the E&C schemes is described in a structured way, based on *scheme elements*. This way, both clarity and details are provided at the same time. The scheme elements cover most of the elements from ISO/IEC 17067 but not all, and moreover different element names are used. A first comparison is done in this report by combining scheme elements into five main groups:

Framework	Testing	Test results	Quality control	Availability and acceptance
• Type of approach • Request procedure • Allocation procedure • Approval procedure • Publication of outcome	• Types of test method • Adversarial testing • Type of outcome • Multiple performance grades	• Statistical test approach • Repeatability between tests labs • Applicability supplier self-testing • Re-use of evaluation results	• Accreditation • Evaluation QMS of supplier • Certificate validity • Periodic assessment	• Test method availability • Requirements availability • Geographical scope • External acceptance • Active since

Although not all the elements are known or relevant for all schemes, it is concluded that the set of elements defined in this deliverable is a comprehensive set, enabling an objective comparison of the schemes and thus identifying the most useful elements to be considered for inclusion in a harmonised scheme.

Since the focus of the survey is on the E&C schemes rather than on the performance test method, the range and types of product attributes that are evaluated in the differet schemes are not listed. It is recommended that the analysis of the E&C schemes in WP3 assesses what 'performance' means for each product category (or type if appropriate).