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nSHIELD

new embedded Systems arcHItecturE for multi-Layer Dependable solutions

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D8.4 Build Secure Embedded Systems with nSHIELD v1

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PU	Public	Х	
PP	Restricted to other programme participants (including the Commission Services)		
RE	Restricted to a group specified by the consortium (including the Commission Services)		
CO	Confidential, only for members of the consortium (including the Commission Services)		



Document Authors and Approvals							
Auth	ors	Data	Cianatura				
Name	Company	Date	Signature				
Roberto Uribeetxeberria	MGEP	2012-09-28					
Review	ed by						
Name Company							
Approv	ed by						
Name	Company						

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Please refer to the Glossary document, which is common for all the deliverables in nSHIELD.





1 Introduction

This document presents an overview of the main challenges that the nSHIELD project addresses as well as the results achieved so far. The final purpose is to reflect in a non-technical manner the necessity of a new approach to guarantee security, privacy and dependability in embedded systems and its advantages with respect to the existing approaches.

The public and free nature of the document pursues the widest possible awareness of the lack an efficient solution for security, privacy and dependability in embedded systems and to disseminate the proposed nSHIELD framework.

The main target stakeholders of the "D8.4 Build Secure Embedded Systems with nSHIELD" report are the managerial personnel of:

- Standardisation bodies
- Certification entities
- Embedded systems suppliers, installers and service providers
- Security solution providers
- Content providers
- Methodology/tool providers
- Educational institutions
- Local Authorities & National/Regional Public Bodies
- Clients and users (citizens)

This document will be updated in a yearly basis to better reflect the evolution of the work carried out by the consortium. It will be completed once the results and deliverables are consolidated after the annual review. The current report includes results from September 2011 to September 2012.

2 Why security, privacy and dependability are a must in embedded systems

3 Why existing approaches are not sufficient

3.1 Add-on vs. Built-in approaches



3.2 Atomistic vs. Holistic approaches

4 What does nSHIELD offer?

- 4.1 The nSHIELD approach
- 4.2 Advantages of nSHIELD approach

5 Current status and next steps of the project

- 5.1 Summary of results obtained during this period
- 5.2 Actions planned for the next periods

References