

Radio Frequency Identification (RFID); Coordinated ESO response to Phase 1 of EU Mandate M436



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ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
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Contents

Intellectual Property Rights	6
Foreword.....	6
1 Scope	7
2 References	7
2.1 Normative references	8
2.2 Informative references.....	8
3 Definitions and abbreviations.....	11
3.1 Definitions.....	11
3.2 Abbreviations	13
4 Summary of findings and recommendations.....	13
4.1 Overview of findings.....	13
4.2 Clarification of definition of RFID.....	14
4.3 Summary of standardisation gaps.....	15
4.3.1 General principles.....	15
4.3.2 Standards to provide greater consumer awareness.....	15
4.3.3 Standards in the privacy domain (excluding PIA)	15
4.3.4 PIA standards.....	16
4.3.5 RFID Penetration testing standards	16
4.3.6 Standards in the security domain	16
4.4 Gaps in current standards	17
4.4.1 Overview	17
4.4.1.1 Summary of main gaps.....	18
4.4.2 Gantt chart for addressing gaps in Phase 2 of M/436	18
5 Addressing consumer aspects.....	21
5.1 Awareness	21
5.2 Personal data security.....	21
5.3 Data Protection Requirements.....	22
5.3.1 Purpose	22
5.3.2 Deactivation.....	22
5.3.3 Consent	22
5.3.4 Personal data record access and data correction	23
5.4 Accessibility of applications and consumer information.....	23
6 The RFID ecosystem	23
6.1 Overview	23
6.2 Types of RFID Tags.....	24
6.3 RFID Tag Characteristics	24
6.4 Stakeholders	25
6.5 Open and closed system applications	25
6.6 RFID and IoT	26
7 Analysis in support of recommendations	26
7.1 RFID system architecture	26
7.2 RFID system and privacy	27
7.2.1 Modelling the role of RFID in privacy	28
7.3 Principles for handling personal data in RFID systems.....	31
7.4 Role of Privacy Enhancing Technologies (PETs)	35
8 Data Protection, Privacy and Security Objectives and Requirements.....	36
8.1 Distinguishing objectives and requirements	36
8.2 Data protection and privacy objectives	36
8.3 Statement of objectives for Security.....	38
9 Privacy and Data Protection Impact Assessment (PIA) outline	39
9.1 State of the art and standardization gaps	39

9.2	Role of the PIA.....	40
9.3	Overview of RFID-related features with an impact on privacy.....	41
9.4	RFID PIA Framework.....	42
9.5	PIA Methodology Requirements.....	42
9.5.1	Assets and the RFID PIA.....	43
9.5.2	Scope of the PIA.....	43
9.5.3	General methodological requirements.....	44
9.5.4	Data Protection and Privacy requirements of the RFID PIA.....	44
9.5.4.1	Data protection requirements.....	44
9.5.4.2	Data protection requirements.....	45
9.5.4.3	Emerging issues and requirements related to emerging or future applications, technologies, and other issues.....	46
10	RFID Penetration (PEN) Testing Outline.....	46
10.1	PEN testing standards and methodologies.....	47
10.2	RFID PEN testing standardization roadmap.....	48
10.3	PEN testing requirements and method outline.....	48
11	Common European RFID Emblem and Sign.....	49
12	Environmental aspects of RFID tags and components.....	49
12.1	Health and safety considerations.....	49
12.2	RFID hardware end of life considerations.....	50
12.3	Data end of life considerations.....	50
Annex A:	Summary of status of RFID standardization.....	51
Annex B:	Summary of tag capabilities.....	53
B.1	Command set.....	53
B.2	Security functionality.....	53
B.2.1	Tag embedded capabilities.....	53
Annex C:	Summary of risk assessment of RFID systems.....	56
C.1	Security analysis and requirements derivation.....	56
C.2	Weaknesses and threats in RFID systems.....	57
C.2.1	Privacy and Data Protection (DPP) related threats.....	58
C.2.1.1	Identify theft.....	58
C.2.1.2	Profiling.....	58
C.2.1.3	Data linkability.....	58
C.2.1.4	Tracking.....	58
C.2.1.5	Exclusion of the data subject from the data processing process due to disabling of RFID tag.....	58
C.2.1.6	Procedures/instructions not followed leading to tags being used past end of purpose.....	58
C.2.1.7	Large-scale and/or inappropriate data mining and/or surveillance.....	58
C.2.1.8	Non-compliance with data protection legislation.....	59
C.2.2	Security threats.....	59
C.2.2.1	Denial-of-Service attack.....	59
C.2.2.2	Collision attack.....	59
C.2.2.3	De-synchronization.....	59
C.2.2.4	Replay.....	59
C.2.2.5	Man-in-the-middle attack.....	59
C.2.2.6	Theft.....	60
C.2.2.7	Unauthorised access to/deletion/modification of data (in tags, interrogators, backend system).....	60
C.2.2.8	Cloning of credentials and tags (RFID related).....	60
C.2.2.9	Worms, viruses and malicious code.....	60
C.2.2.10	Side channel attack.....	60
C.2.2.11	Masquerade.....	61
C.2.2.12	Traffic analysis/scan/probe.....	61
C.2.2.13	RF eavesdropping.....	61
C.3	Summary of vulnerabilities in RFID systems.....	61

Annex D: RFID Penetration Testing	63
D.1 Short Introduction to PEN testing	63
D.2 PEN testing methodologies and standards	63
Annex E: Summary of requirements and analysis for signs and emblems.....	65
E.1 Requirements specification	65
E.2 RFID Emblem/Logo classified requirements	65
E.2.1 General Requirements Specification	65
E.2.2 Location and Placement	70
E.2.3 Other Requirements.....	72
E.3 RFID Sign classified requirements.....	72
E.3.1 General Requirements Specification	72
E.3.2 Location and Placement	75
E.3.3 Other Requirements.....	76
Annex F: Review of security analysis issues in PIA.....	77
Annex G: Bibliography	82
G.1 Books.....	82
G.2 GRIFS database extract.....	82
G.3 Sign Related Standards.....	89
G.3.1 In development	89
G.3.2 Published	90
G.4 Other references	91
History	93

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[ETSI TR 187 020 V1.1.1 \(2011-05\)](https://standards.iteh.ai/catalog/standards/etsi/1184dc67-4823-4178-af3c-89a5c761c095/etsi-tr-187-020-v1-1-1-2011-05)

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Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN). The present document has been prepared under the coordination of a technical experts group composed of representatives of each of ETSI, CEN and CENELEC and represents the agreed response of the European Standards Organizations (ESOs) to Mandate M/436 on the subject of Radio Frequency Identification Devices (RFID) in relation to data protection, information security and privacy.

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1 Scope

The present document provides the results of the coordinated response of the European Standards Organizations (ESOs) to Phase 1 of EC mandate M436 on the subject of Radio Frequency Identification Devices (RFID) in relation to privacy, data protection and information security.

The present document outlines a standardization roadmap for privacy and security of RFID. The development of the roadmap involved analyses of RFID from a number of perspectives:

- analysis of OECD guidelines [i.17] and relevant data protection;
- analysis of privacy and its link to behaviour;
- analysis of EU directives on data protection and privacy and their implications on RFID;
- review of the role of PETs for RFID (see clause 7); and
- analysis of security threats to RFID and their implications (see Annex C).

The resulting requirements set defines the data protection, privacy and security needs of RFID and was used as input to the standards gaps analysis and the development of requirements to PIA for RFID and RFID PEN testing frameworks. An outline of the PIA framework requirements is given in clause 9.

Overview of the standardization gaps and requirements for RFID PEN testing is given in clause 10. The standardisation gaps analysis and resulting overall RFID standardisation roadmap is given in clause 4.

The present document recommends a plan of activities for Phase 2 of EC Mandate M436 as follows:

- identifies the use of existing technical measures described by standardisation in order to promote confidence and trust (by end users organizations and the general public) in RFID technology and its applications;
- identifies where new technical measures described by standardisation are required in order to promote confidence and trust (by end users organizations and the general public) in RFID technology and its applications. These measures will be developed in the course of phase 2 of the mandate.

In addition the present document describes the results of modelling the role of RFID in privacy and personal data as defined by European Directives alongside a Threat Vulnerability and Risk Analysis (TVRA) of the use of RFID technology and its applications, including the results of a generic and an industry specific Privacy Impact Assessment (a guide to PIA is given in Annex A).

NOTE: Many of the risks identified as part of the present document are equally applicable in other tracking scenarios (e.g. CCTV, car number/licence plate recognition, face recognition, mobile phone cell tracking). Under the terms of the Mandate, the present document covers only those areas in the data acquisition part that are specific to RFID. The other tracking scenarios are included in the work of the Article 29 Data Protection Working Party.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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