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Kibernetska varnost (CYBER) - CRA - Zahteve za kibernetsko varnost za programsko opremo, ki išče, odstranjuje ali daje zlonamerno programsko opremo v karanteno

Cyber Security (CYBER) - CRA - Cybersecurity requirements for software that searches for, removes, or quarantines malicious software

Sample Document

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**Cyber Security (CYBER);
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Cybersecurity requirements for software that searches for,
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Foreword

This draft Harmonised European Standard (EN) has been produced by ETSI Technical Committee Cyber Security (CYBER), and is now submitted for the combined Public Enquiry and Vote phase of the ETSI Standardisation Request deliverable Approval Procedure (SRdAP).

The present document has been prepared under the Commission's standardisation request C(2025) 618 final [i.3] to provide one voluntary means of conforming to the requirements of Regulation (EU) 2024/2847 of the European Parliament and of the Council of 23 October 2024 on horizontal cybersecurity requirements for products with digital elements and amending Regulations (EU) 168/2013 and (EU) 2019/1020 and Directive (EU) 2020/1828 (Cyber Resilience Act) (CRA) [i.1].

Once the present document is cited in the Official Journal of the European Union under that Regulation, compliance with the normative clauses of the present document given in Table A.1 confers, within the limits of the scope of the present document, a presumption of conformity with the corresponding requirements of that Regulation and associated EFTA regulations.

Proposed national transposition dates	
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Modal verbs terminology

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Introduction

The present document defines cybersecurity requirements for products with digital elements (product) whose intended purpose is to search for, remove, or quarantine malicious software or code. These products are intended to protect a protected system against malicious software or code that can compromise its confidentiality, integrity, or availability.

The present document is part of a broader group of vertical standards developed to support the Cyber Resilience Act (CRA) [i.1] and should not be considered a standalone resource. Users are expected to consult it in conjunction with the CRA itself [i.1], the associated legal guidance [i.13], as well as relevant horizontal and neighbouring vertical standards cited in clause 2, such as prEN 40000-1-1 [i.4], prEN 40000-1-2 [i.5], prEN 40000-1-3 [i.6], and prEN 40000-1-4 [i.7]. Material already addressed in those sources is not repeated in the present document.

The present document provides the technical cybersecurity requirements for the products in scope, following a risk-based approach in support of the Cyber Resilience Act (CRA) [i.1]. The technical cybersecurity requirements are thereby proportionate to the intended purpose, reasonably foreseeable use, deployment context, and threat exposure of the products.

Clause 4 does not contain technical requirements; it describes the product context that is considered for the application of the present document.

Clause 4 also defines Use Cases (UCs) that represent the main deployment scenarios reflecting the intended purpose and reasonably foreseeable use of the product, which serve as the basis for identifying relevant cybersecurity risks.

Clause 5 specifies technical cybersecurity requirements for the product to mitigate the identified risks, including their applicability conditions.

Clause 6 specifies the assessment criteria and compliance verification procedures with the requirements of clause 5.

Annex A maps the technical requirements of the present document with the essential requirements of the CRA [i.1] regulation.

Annex B informs about the methodology used to assess the security risks of the products in their context.

Annex C informs the possible relationship between the product in the present document and other possible vertical products and their corresponding CRA-related harmonised standards.

Annex G presents further information on guidance for the application of the present document.

Annex K supports the definition of the cryptographic requirements and assessment criteria used by the present document.

Annex R provides supplementary requirements and assessment provisions where a product relies on Remote Data Processing Solutions (RDPS) for the provision or support of one or more product functions.

1 Scope

The present document specifies technical requirements and corresponding assessment criteria for software products with digital elements that detect or search for malicious software or code on a device, or remove or quarantine such software or code to prevent or mitigate system infection related to cybersecurity. The products with digital elements in scope, thereafter "the product":

- are specified within the "technical description" of the "category of product" number "4" by the Commission Implementing Regulation (EU) 2025/2392 [i.2] as:
 - "Software products with digital elements, typically referred to as antivirus or antimalware, that detect or search for malicious software or code on devices, or remove or quarantine such software or code, in order to maintain the integrity, confidentiality, or availability of such devices.

In the context of this category of products, malicious software means software containing malicious features or capabilities that can cause harm directly or indirectly to the user and/or the computer system, such as viruses, worms, ransomware, spyware and trojans.

This category includes but is not limited to software that detects or searches for malicious software in real-time or manually, rootkit detection and rescue disks with the core functionality of searching, removing or quarantining malicious software."

- are only covered within the product context described in clause 4.

The present document covers those products to demonstrate compliance with essential cybersecurity requirements in the Regulation (EU) 2024/2847 [i.1], Annex I, Part I under the conditions identified in Annex A.

The present document specifies technical characteristics and methods of assessment for Antivirus/Antimalware products.

2 References

2.1 Normative 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 referenced document (including any amendments) applies.

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The following referenced documents are necessary for the application of the present document.

- [1] [ENISA Report 1747792503](#) (version 2 - April 2025): "European Cybersecurity Certification Group Sub-group on Cryptography Agreed Cryptographic Mechanisms".
- [2] [IETF-IRTF RFC 7748](#) (Version 11 - January 2016): "Elliptic Curves for Security".
- [3] [IETF-IRTF RFC 8032](#) (Version 08 - January 2017): "Edwards-Curve Digital Signature Algorithm (EdDSA)".
- [4] [NIST FIPS 186-5](#) (Version 5 - February 2023): "Digital Signature Standard (DSS)".
- [5] [IETF-IRTF RFC 9106](#) (Version 14 - September 2021): "Argon2 Memory-Hard Function for Password Hashing and Proof-of-Work Applications".
- [6] [IETF RFC 7914](#) (Version 5 - August 2016): "The scrypt Password-Based Key Derivation Function".

- [7] [IETF-IRTF RFC 8439](#) (Version 4 - June 2018): "ChaCha20 and Poly1305 for IETF Protocols".

2.2 Informative references

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- [i.1] [Regulation \(EU\) 2024/2847](#) of the European Parliament and of the Council of 23 October 2024 on horizontal cybersecurity requirements for products with digital elements and amending Regulations (EU) No 168/2013 and (EU) 2019/1020 and Directive (EU) 2020/1828 (Cyber Resilience Act).
- [i.2] [Commission Implementing Regulation \(EU\) 2025/2392](#) of 28 November 2025 on the technical description of the categories of important and critical products with digital elements pursuant to Regulation (EU) 2024/2847 of the European Parliament and of the Council.
- [i.3] [Standardisation request M/606 - C\(2025\)618](#): "Commission Implementing decision of 3.2.2025 on a standardisation request to the European Committee for Standardisation (CEN), the European Committee for Electrotechnical Standardisation (Cenelec) and the European Telecommunications Standards Institute (ETSI) as regards products with digital elements in support of Regulation (EU) 2024/2847 of the European Parliament and of the Council of 23 October 2024 on horizontal cybersecurity requirements for products with digital elements and amending Regulations (EU) No 168/2013 and (EU) 2019/1020 and Directive (EU) 2020/1828 (Cyber Resilience Act)".
- [i.4] prEN 40000-1-1: "Cybersecurity requirements for products with digital elements - Vocabulary" (produced by CEN CENELEC).

NOTE: Version and date to be added upon its publication by CEN CENELEC.

- [i.5] prEN 40000-1-2: "Cybersecurity requirements for products with digital elements - Part 1-2: Principles, product risk management, and lifecycle activities" (produced by CEN CENELEC)".

NOTE: Version and date to be added upon its publication by CEN CENELEC.

- [i.6] prEN 40000-1-3: "Cybersecurity requirements for products with digital elements - Part 1-3: Vulnerability handling" (produced by CEN CENELEC).

NOTE: Version and date to be added upon its publication by CEN CENELEC.

- [i.7] prEN 40000-1-4: "Cybersecurity requirements for products with digital elements - Part 1-4: Security controls - Generic security requirements" (produced by CEN CENELEC).

NOTE: Version and date to be added upon its publication by CEN CENELEC.

- [i.8] ETSI EN 304 626: "CYBER; CRA; Cybersecurity requirements for operating systems".

NOTE: Version and date to be added upon its publication by ETSI.

- [i.9] ETSI EN 304 636: "Cyber Security (CYBER); CRA; Cybersecurity requirements for firewalls, intrusion detection and/or prevention systems".

NOTE: Version and date to be added upon its publication by ETSI.

- [i.10] ETSI EN 304 622: "Cyber Security (CYBER); CRA; Cybersecurity requirements for Security information and event management (SIEM) systems".

NOTE: Version and date to be added upon its publication by ETSI.

- [i.11] ETSI EN 304 623: "Cyber Security (CYBER); CRA; Cybersecurity requirements for boot managers".

NOTE: Version and date to be added upon its publication by ETSI.

- [i.12] [Directive \(EU\) 2022/2555](#) of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive). .
- [i.13] EC: "[Commission CRA draft legal guidance](#)".
- [i.14] ISO/IEC 27005: "Information cybersecurity, cybersecurity and privacy protection — Guidance on managing information cybersecurity risks".
- [i.15] [BSI TR-02102-1](#) (Version: 2026-01 - January 2026): "Cryptographic Mechanisms: Recommendations and Key Lengths".
- [i.16] [IETF-IRTF draft-irtf-cfrg-aegis-aead-18](#) (Version 18 - October 2025): "The AEGIS Family of Authenticated Encryption Algorithms".
- [i.17] Conference Paper (Version 1.1 - August 2013): "[AEGIS: A Fast Authenticate Encryption Algorithm](#)".

3 Definition of terms, symbols and abbreviations

3.1 Terms

For the purposes of the present document, the terms given in Regulation (EU) 2024/2847 [i.1], prEN 40000-1-1 [i.4] and the following apply:

antivirus/antimalware: software product whose essential function(s) is searching, detecting, removing, or quarantining malicious software or code

cryptographic item: cryptographic algorithm, primitive, scheme, protocol, protocol profile, cipher suite, mode of operation, construction or parameter set used to provide or support a cryptographic property

NOTE: A cryptographic item can be specified at different levels of abstraction. For example, AES is a cryptographic primitive, AES-GCM is a mode of operation / authenticated encryption construction, TLS 1.3 is a protocol, a TLS 1.3 restricted cipher-suite profile is a protocol profile, and TLS_AES_128_GCM_SHA256 is a cipher suite.

cryptographic mechanism: security-related procedure using cryptography

NOTE 1: The term "cryptographic mechanism" is used in Annex K as an umbrella term covering the categories used in the ECCG Agreed Cryptographic Mechanisms (ACM) catalogue [1], including cryptographic algorithms, primitives, schemes, protocols, protocol profiles, cipher suites, modes of operation, constructions and parameter sets.

NOTE 2: The terms "cryptographic primitive", "cryptographic construction", "cryptographic scheme" and "cryptographic protocol" are used consistently with the ACM catalogue [1].

NOTE 3: A cryptographic mechanism can be specified at different levels of abstraction. For example, AES is a cryptographic primitive, AES-GCM is a mode of operation / authenticated encryption construction, TLS 1.3 is a protocol, a TLS 1.3 restricted cipher-suite profile is a protocol profile, and TLS_AES_128_GCM_SHA256 is a cipher suite.

cryptographic property: property provided or supported by a cryptographic mechanism

NOTE 1: Cryptographic properties include, for example, confidentiality, integrity, authenticity, entity authentication, message authentication, key establishment, key confirmation, replay protection, collision resistance, second-preimage resistance, pre-image resistance, signature unforgeability, non-repudiation, forward secrecy and password-verifier protection. Where relevant, a cryptographic property can be expressed using a formal cryptographic notion, for example IND-CPA, IND-CCA, IND-CCA2, EUF-CMA, SUF-CMA or authenticated key exchange security.

NOTE 2: A cryptographic property is distinct from a product-level technical requirement, although it can support such a requirement. For example, a secure communication requirement can rely on cryptographic properties such as confidentiality, integrity and authentication.

detection rules update: malware signatures, heuristic rules, detection database

heuristic analysis: detection method based on rule- or behaviour-based analysis used to identify potentially malicious software or code not matching known signatures

interoperability: need to support interoperability with identified systems, deployments or operational environments that require use of specific cryptographic items which may not comply with the state-of-the-art in the domain

known exploitable vulnerabilities: Exploitable vulnerability as defined in [i.1] Article 3 point (41) that it is known.

malware software (malware): software designed with malicious intent that can disrupt, damage, or gain unauthorised access

multi-factor authentication: cybersecurity process requiring users to provide two or more verification factors to gain access to an account or application

personal data: As defined in [i.1] Article 3 point (47).

principle of least privilege: every user, process, service, and component gets only the minimum access (permissions, data, time, and network reach) needed to do its job with the goal to shrink attack surface and limit blast radius if something is compromised

NOTE: This definition is given in prEN 40000-1-1 [i.4].

protected system: PwDE, system or environment on which the antivirus/antimalware

quarantine: isolation of suspected malicious software or code to prevent execution or interaction with the protected system

security update: software patch addressing a product vulnerability

signature-based detection: detection method based on comparison with known patterns or signatures of malicious software or code

update mechanism: process used to retrieve, verify, and apply updates to signatures, detection logic, or related cybersecurity components

virus: type of malware specifically designed to self-replicate by injecting its own code into other programs code files

3.2 Symbols

Void.

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

3GPP	3 rd Generation Partnership Project
AAC	Authentication and Access Control
ACM	Agreed Cryptographic Mechanisms