

# This is a **Guide** about the **EU Cyber Resilience Act.**



## About the project

This white paper has been designed and developed in the context of the 'EcoCyber' project, carried out within the SERICS Extended Partnership, a national initiative under the MUR National Recovery and Resilience Plan funded by the European Union Next Generation EU.

The project 'EcoCyber – Risk Management for Future Cyber-Physical Ecosystems' is devoted to advancing innovative technical and legal solutions and methods **to leverage the opportunities offered by cyber-physical systems while addressing the relevant connected challenges** (e.g., cyber threats and vulnerabilities).

In particular, **this work has been conducted by the research teams from two Work Packages of EcoCyber**: WP 2 (Solutions for the design and testing of secure smart components) and WP 4 (Rules for the future society), integrating therefore technical and legal aspects.

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## Methodology

The Guide was developed through an innovative, multidisciplinary methodology that integrates **legal design principles** with **technical expertise in cybersecurity and information technology**.

The project team, comprising an EU cybersecurity law expert, a legal design specialist, and an engineer specialized in Operational Technology (OT) security, adopted the **design thinking process** as its operational framework.

This approach, structured around the phases of needs analysis, ideation, prototyping, and validation, enabled the systematic integration of legal, technical, and communicative perspectives into a single, coherent workflow.

➡ The result is **a Guide that translates the CRA's regulatory complexity into accessible, operational, and legally sound content, supporting consistent and effective application across professional and organizational contexts.**

### Design thinking process



#### Research

Identification of user needs through structured interviews and data analysis, leading to the creation of representative user profiles.



#### Definition & Ideation

Translation of insights into concrete design solutions using collaborative methods to organize CRA content into a clear, usable structure.



#### Prototyping

Development of an interactive visual-textual document that simplifies regulatory and technical requirements.



#### User Testing

Evaluation of the prototype by professionals from various fields; feedback informs revisions and improvements.



#### Refinement & Launch

Final adjustments based on testing results and publication of the completed Guide.

# What is the focus of the Guide

## Cyber Resilience Act

- Chapter I **Arts. 1-12** → General provisions
- II **Arts. 13-26** → **Obligations of economic operators** and provisions in relation to **free and open-source software**
- III **Arts. 27-34** → **Conformity of the PDEs**
- IV Arts. 35-51 → Notification of conformity assessment bodies
- V Arts. 52-60 → Market surveillance and enforcement
- VI Arts. 61-62 → Delegated powers and committee procedure
- VII **Arts. 63-65** → Confidentiality and penalties
- VIII **Arts. 66-71** → Transitional and final provisions

Commission  
Implementing Regulation  
(EU) 2025/2392

Technical description of important and critical products

Commission FAQ  
December 2025

## Scope of the Project

The Cyber Resilience Act (CRA) is structured into eight Chapters and several Annexes.

**This project focuses specifically on Chapters I to III and Chapter VII**, which addresses penalties.

These sections are identified as the **most relevant** and **operationally significant for the end users** of the Guide, who are directly involved in applying the Regulation.

For this reason, **others provisions**, such as Arts. 1,9,10,33,34 **have not been integrated, as they were not regarded as a priority for this Guide.**

Consequently, the pages that follow do not necessarily adhere to the numerical order of the Regulation's articles but are **organised according to a logical structure that highlights the conceptual connections** between the selected provisions.

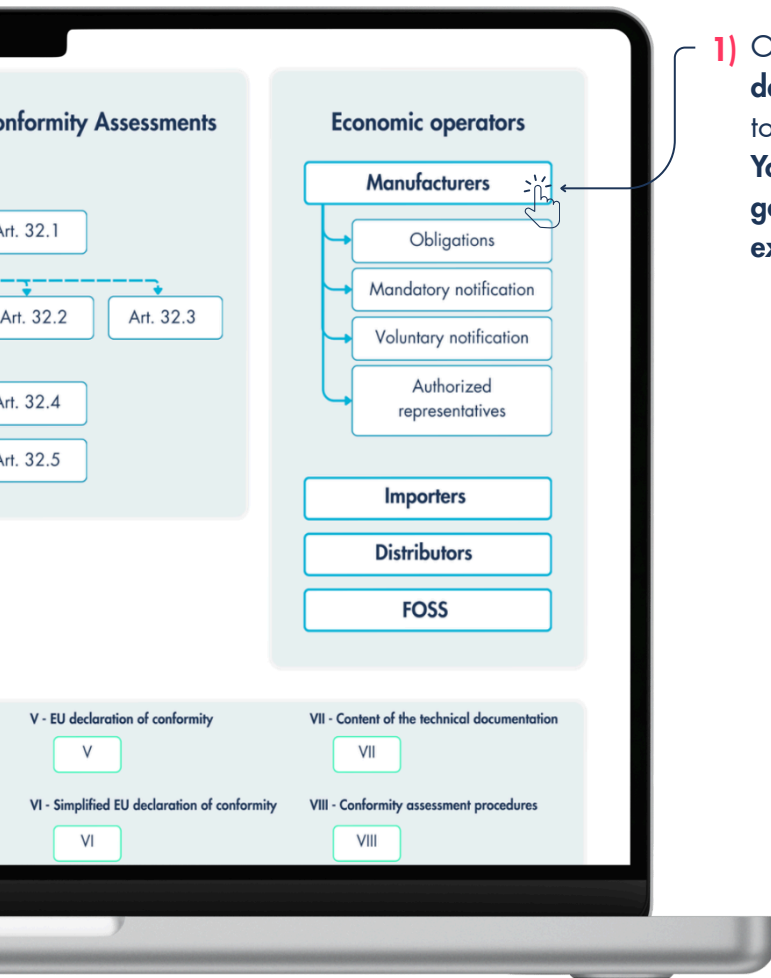
**Additional helpful information** for assisting stakeholders in implementing the CRA **has also been integrated alongside the official text of the Regulation.**

## How to use this document

This Guide is designed to be interactive and easy to navigate.

Colored sections and visual markers help users move quickly between related topics and access information that appears in different parts of the document.

By clicking on these sections, you can jump directly to the relevant content without losing the overall context.



- 1) On the next page, you will find the **dashboard**, a kind of map of all the topics covered in this Guide. **You can click on any specific topic to go directly to the page where it is explained.**

- 2) In this bar, you will find the **specific topic of the Article explained** in the visual boards.

- 3) Use this button to **return to the dashboard**.

- 4) Use this button to **go back** to the last page you viewed.

- 5) By clicking on one of these boxes, you will be directed to the **page containing the detailed explanation of the referenced topic**.

- 6) This icon  indicates information taken from the **European Commission's FAQs** and provides interpretative guidance. **When you hover over it, a popup will appear** with additional details.

- 7) The number of **the Article or section covered** in this section is shown below.



This is a dashboard: click on the section you want to explore further

### General

- Timing
- Penalties

### Products

- PDEs in scope
  - Default
  - Important
  - Critical
  - FOSS
- High-risk AI systems
- PDEs **out** of scope
- Requirements

### Conformity Assessments

- Technical documentation
  - Art. 32.1
  - Art. 32.2
  - Art. 32.3
  - Art. 32.4
  - Art. 32.5
- Presumption of conformity
- EU declaration of conformity
- CE marking

### Economic operators

- Manufacturers
  - Obligations
  - Mandatory notification
  - Voluntary notification
  - Authorized representatives
- Importers
- Distributors
- FOSS
  - Stewards
  - Security attestation

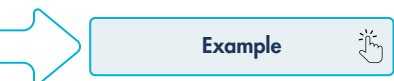
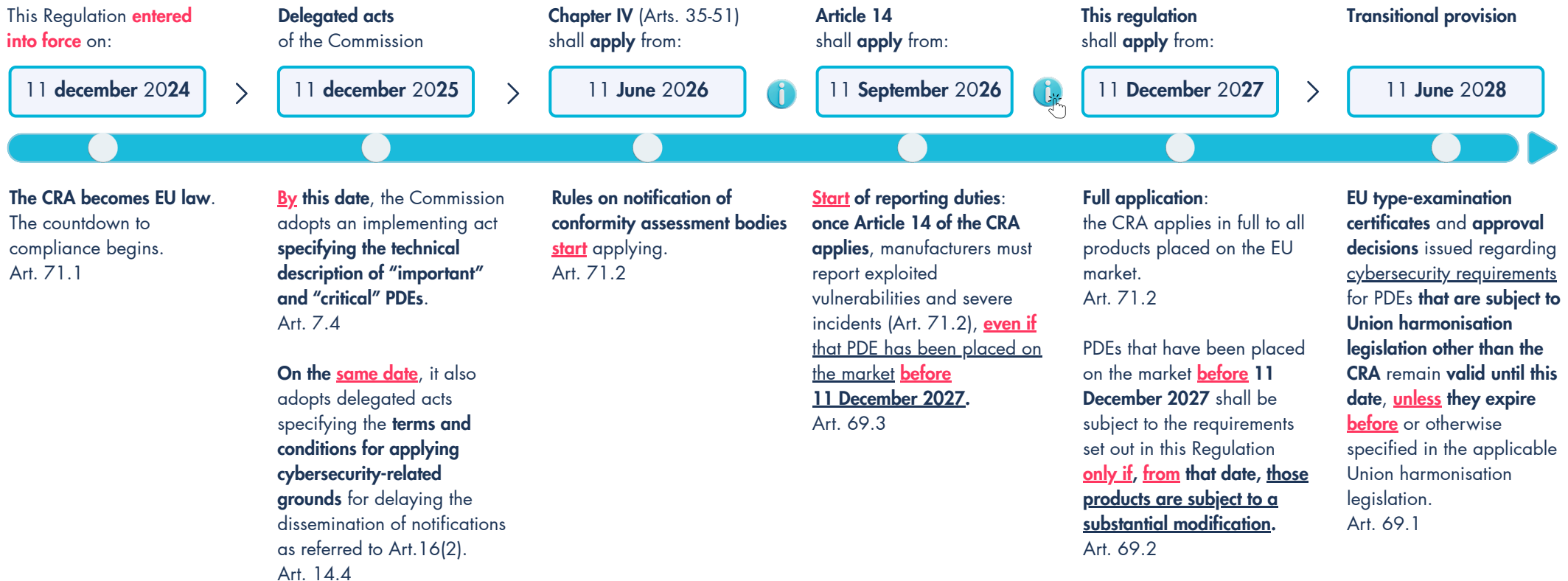
### Annex

I - Essential cybersecurity requirements <ul style="list-style-type: none"><li><a href="#">I_part 1</a></li><li><a href="#">I_part 2</a></li></ul>	III - Important PDEs <ul style="list-style-type: none"><li><a href="#">III_class 1</a></li><li><a href="#">III_class 2</a></li></ul>	V - EU declaration of conformity <ul style="list-style-type: none"><li><a href="#">V</a></li></ul>	VII - Content of the technical documentation <ul style="list-style-type: none"><li><a href="#">VII</a></li></ul>
II - Information and instructions to the user <ul style="list-style-type: none"><li><a href="#">II</a></li></ul>	IV - Critical PDEs <ul style="list-style-type: none"><li><a href="#">IV</a></li></ul>	VI - Simplified EU declaration of conformity <ul style="list-style-type: none"><li><a href="#">VI</a></li></ul>	VIII - Conformity assessment procedures <ul style="list-style-type: none"><li><a href="#">VIII</a></li></ul>



This timeline highlights key dates expressly set out in the text of the Cyber Resilience Act (CRA).

Each date marks a specific step in the gradual implementation of the CRA framework - from its entry into force to its full legal application across the EU market. They represent important milestones for manufacturers, importers, distributors, and technical professionals to consider in **planning and maintaining compliance** with the Regulation.







'**Economic operator**' which means the manufacturer, the authorised representative, the importer, the distributor, or **other natural or legal person who is subject to obligations** in relation to the manufacture of products with digital elements (PDEs) or to the making available of PDEs on the market in accordance with this Regulation.

Art. 3(12)

Art. 23: Identification of economic operators

**Manufacturer**

**Importer**

**Distributor**

**Open-source software developer**

**Authorised representative**

means a natural or legal person who develops or manufactures PDEs or has PDEs designed, developed or manufactured, and markets them under its name or trademark, whether for payment, monetisation or free of charge.  
Art. 3.13

means a natural or legal person established in the Union who places on the market a PDEs that bears the name or trademark of a natural or legal person established outside the Union.  
Art. 3.16

means a natural or legal person in the supply chain, other than the manufacturer or the importer, that makes a PDEs available on the Union market without affecting its properties.  
Art. 3.17

means a legal person, other than a manufacturer, that has the purpose or objective of systematically providing support on a sustained basis for the development of specific PDEs, qualifying as free and open-source software and intended for commercial activities, and that ensures the viability of those products.  
Art. 3.14

means a natural or legal person established within the Union who has received a written mandate from a manufacturer to act on its behalf in relation to specified tasks.  
Art. 3.15.

21 An importer or distributor is considered to be a manufacturer, **where** they place a PDEs on the market

- **under its name or trademark, or**
- carry out a **substantial modification** of a PDEs **already** placed on the market.

And they shall be **subject to Arts. 13 and 14.**

**Art.13**  
Obligations of manufacturers

**Art.14**  
Reporting obligations of manufacturers

22 A natural or legal person (other than the manufacturer, the importer or the distributor) is considered to be a manufacturer, **where** it carries out a **substantial modification** of a PDEs **and** makes that product **available on the market.**

That person shall be **subject to the obligations set out in Arts. 13 and 14**

- for the **part of the PDEs that is affected by the substantial modification or,**
- if the substantial modification has an **impact on the cybersecurity** of the PDEs **as a whole, for the entire product.**



2.1

This Regulation **applies** to **products with digital elements (PDEs)**, made available on the market, the **intended purpose** or **reasonably foreseeable use** of which includes a direct or **indirect**  **logical** or  **physical** data connection to a device or network.

This Regulation **does not apply** to the following PDEs, as they are **already** covered by existing sectoral legislation ensuring a level of cybersecurity protection at least **equivalent** to the one afforded by the CRA:

Key term: making available on the market 

2.2, 3, 4, 5, 6 and 7

Excluded product category	Relevant legal act
<b>2(a)</b> Medical devices	 Regulation (EU) 2017/745 (Medical Devices Regulation)
<b>2(b)</b> In vitro diagnostic medical devices	 Regulation (EU) 2017/746 (In Vitro Diagnostic Medical Devices Regulation)
<b>2(c)</b> Motor vehicles, systems, and components	 Regulation (EU) 2019/2144 (Vehicle Type-Approval and General Safety Regulation)
<b>3</b> Products <b>certified</b> under aviation safety rules	 Regulation (EU) 2018/1139 (Civil Aviation Safety Regulation)
<b>4</b> Marine equipment	 Directive 2014/90/EU (Marine Equipment Directive)
<b>5</b> PDEs covered by other Union rules	 If those rules <b>already set</b> cybersecurity requirements that <b>address all or part of the same risks</b> as those covered by the CRA in <b>Annex I</b> , <b>and if</b> that legislation <b>ensures an equal or higher level of protection</b> , the application of the CRA <b>may</b> be <b>limited or excluded</b> for such products.   <b>The European Commission has the power to adopt delegated acts to specify:</b> <ul style="list-style-type: none"> <li>• <b>whether</b> such <u>limitation or exclusion is necessary</u>;</li> <li>• the <u>products</u> and <u>rules</u> concerned; as well as</li> <li>• the <u>scope</u> of the limitation, if relevant.</li> </ul>
<b>6</b> Spare parts that are made available on the market to <b>replace identical components in PDEs</b> <b>and</b> that are <b>manufactured according to the same specifications as the components that they are intended to replace</b> .	
<b>7</b> Products developed or modified <b>exclusively</b> for national security or defence purposes, <b>or</b> specifically designed to process classified information.	



2.1

This Regulation **applies** to **products with digital elements (PDEs)** made available on the market, the **intended purpose** or **reasonably foreseeable use** of which includes a direct or **indirect** **logical** or **physical** data connection to a device or network.

➔ In addition, this Regulation **does not apply** to:

Key term: **making available on the market**

3; recital 18

## Excluded product category

## Relevant legal provisions

**8** **Non-monetised Free and Open-Source Software (FOSS)**

➔ **Recital 18 CRA:**  
only **Free and Open-Source Software (FOSS)** **made available on the market**, and therefore **supplied for distribution or use in the course of a commercial activity, should fall within the scope of this Regulation.** [...] FOSS that **are not monetised** by their manufacturers should not be considered to be a commercial activity.

**Art. 3(14):**

**'open-Source Software steward'** means **a legal person, other than a manufacturer**, that has the purpose or objective of systematically **providing support** on a sustained basis for the development of specific PDEs, **qualifying as FOSS** and intended for **commercial activities**, and that ensures the viability of those products.

**Art. 3(22):**

**'making available on the market'** means the **supply of a PDEs for distribution or use on the Union market in the course of a commercial activity**, whether in return for payment or free of charge.

recital 12

**9** **Services**

➔ **Recital 12 CRA:**  
as the **Directive (EU) 2022/2555 (NIS2)** **already applies** to cloud computing services and cloud service models such as Software as a Service (SaaS), Platform as a Service (PaaS) or Infrastructure as a Service (IaaS).

↳ **Eg.** websites that do not support the functionality of a PDE; cloud services designed and developed outside the responsibility of a manufacturer of a PDE.

Key term: **Free and open-source software**



2.1

This Regulation **applies** to **products with digital elements (PDEs)**, made available on the market, the **intended purpose** or **reasonably foreseeable use** of which includes a direct or **indirect** **logical** or **physical** data connection to a device or network.

3.1

'Product with digital elements' means a **software or hardware** product and **its remote data processing solutions**, including software or hardware components being placed on the market separately.

Key term: **Software**

Key term: **Hardware**

## Hardware:

- smartphones,
- laptops,
- "smart appliances" (e.g., smart speakers),
- network equipment (e.g., routers),
- CPUs,
- more foundational components,
- consumer devices,
- complex devices,
- etc.

## Software, including so-called non-embedded software:

- operating systems,
- computer games,
- word processing,
- mobile apps,
- anti-virus,
- software libraries,
- password managers,
- a program that can be downloaded via a website,
- firmware or software meant to be embedded into hardware devices,
- etc.

3.2

'Remote data processing' means data processing at a distance for which the software is designed and developed by the manufacturer, or under the responsibility of the manufacturer, and **the absence of which would prevent the product with digital elements from performing one of its functions**.

## Recital 11

'This approach ensures that PDEs are secured in their entirety, **irrespective of whether data is processed or stored locally** on the user's device or **remotely by the manufacturer**, in so far as processing or storage at a distance is **necessary for a PDE to perform its functions**.

- **Eg.** a mobile application requires access to an application programming interface or to a database provided by means of a service developed by the manufacturer. In such a case, the service falls within the scope of this Regulation as a remote data processing solution (recital 11);
- **Eg.** cloud-enabled functionalities provided by a manufacturer of smart home devices that enable users to control the device at a distance fall within the scope of the CRA (recital 12);
- **Eg.** websites that do not support the functionality of a PDE, or cloud services designed and developed outside the responsibility of a manufacturer of a PDE do not fall within the scope of the CRA (recital 12).

26.2(a)

The Commission will publish **guidance to facilitate CRA's implementation**, in particular, with regard to the notion of remote data processing solutions.



4

Member States **shall not impede**, for the matters covered by this Regulation, **the making available on the market of PDEs** which comply with this Regulation.




At trade fairs, exhibitions, demonstrations or similar events, Member States **shall not prevent** the presentation or use of a PDEs which **does not comply** with this Regulation, including its prototypes, provided that

- the product is presented with a **visible sign** clearly indicating that it does not comply with this Regulation **and** that it is not to be made available on the market until it does so.



Member States **shall not prevent** the making available on the market of unfinished software which **does not comply** with this Regulation, provided that

- the software is made available only for a limited period required for **testing purposes**; 
- with a **visible sign** clearly indicating that it does not comply with this Regulation **and** that it will not be available on the market for purposes other than testing.

→ If a product is considered a **safety component** under Union harmonisation legislation other than this Regulation, **the exception** allowing the distribution of unfinished software for testing purposes **does not apply**.

5

This Regulation **shall not prevent** Member States from subjecting PDEs to **additional cybersecurity requirements** for the procurement or use of those products for **specific purposes**, including where those products are procured or used for national security or defence purposes, **provided that**

- such requirements are consistent with Member States' obligations laid down in Union law, and
- that they are necessary and proportionate for the achievement of those purposes.

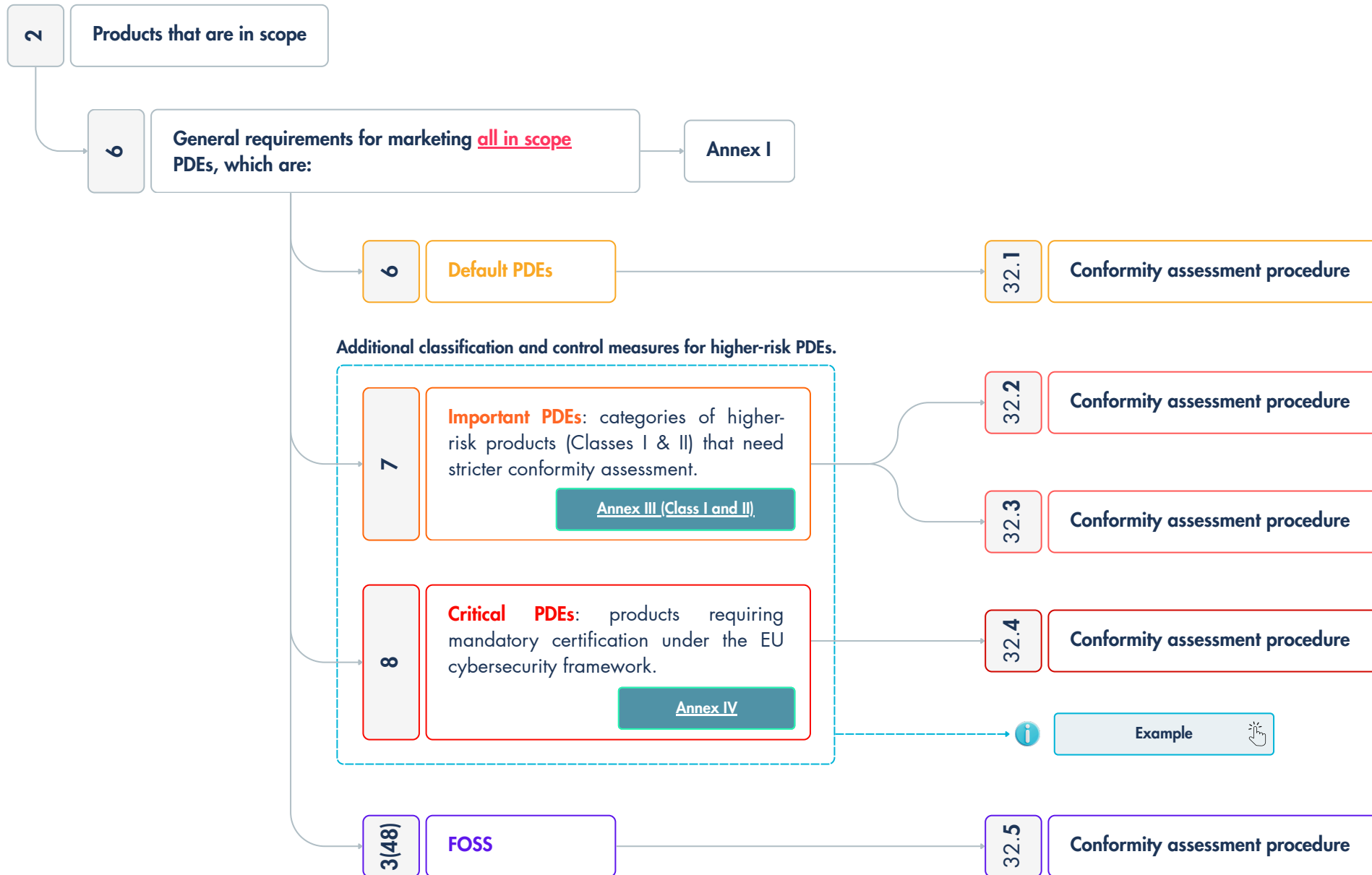
When PDEs falling within the scope of this Regulation are procured, Member States must take into account **whether** those products comply with:

- the **essential cybersecurity requirements** set out in Annex I,
- including the manufacturer's **ability to handle vulnerabilities effectively**.



This assessment must form part of the procurement process, **without affecting the application of Directives 2014/24/EU and 2014/25/EU**.







6

PDEs shall be made available on the market **only where:**

(a) they meet the essential cybersecurity requirements set out in Part I of Annex I, **provided that**

- they are properly installed, maintained, used **for their intended purpose or under conditions which can reasonably be foreseen, and,**
- where applicable, the necessary security updates have been installed; **and**

(b) the processes put in place by the manufacturer **comply with the essential cybersecurity requirements** set out in Part II of Annex I, ensuring continuous security management throughout the product lifecycle.

[Annex I, part 1](#)

[Annex I, part 2](#)

The CRA defines **what must be achieved** - secure design, development, and maintenance - **but not how to achieve it.**

To bridge this gap, our framework connects each CRA obligation with:

- 1) **Activities & principles** – the main security practices required by the Regulation (e.g. risk assessment, threat modelling, secure development);
- 2) **Technologies & tools** – operational instruments that help implement these practices (for example, STRIDE Threat Modelling or OWASP Threat Dragon);
- 3) **Standards & best practices** – internationally recognised references such as ISO/IEC 27002, ISA/IEC 62443-4-2, and ETSI EN 303 645, which provide structure and assurance.

↩ This **three-layered approach** turns the legal text of Art. 6 and Annex I into actionable guidance that can be directly integrated into product development and compliance workflows.



Legal Notice

Technical Notice  
(Technologies)

Technical Notice  
(Standards)



Part I

Part II

point 1

PDEs shall be designed, developed and produced in such a way that they ensure an **appropriate** level of cybersecurity based on the risks.

point 2

On the basis of the risk assessment referred to in Article 13(2) **and where applicable**, PDEs shall:

- (a) be made available on the market without known exploitable vulnerabilities;
- (b) be made available on the market with a secure by default configuration, unless otherwise agreed between manufacturer and business user in relation to a tailor-made PDEs, including the possibility to reset the product to its original state;
- (c) ensure that vulnerabilities can be addressed through security updates, including, where applicable, through automatic security updates that are installed within an appropriate timeframe enabled as a default setting, with a clear and easy-to-use opt-out mechanism, through the notification of available updates to users, and the option to temporarily postpone them;
- (d) ensure protection from unauthorised access by appropriate control mechanisms, including but not limited to authentication, identity or access management systems, and report on possible unauthorised access;
- (e) protect the confidentiality of stored, transmitted or otherwise processed data, personal or other, such as by encrypting relevant data at rest or in transit by state of the art mechanisms, and by using other technical means;
- (f) protect the integrity of stored, transmitted or otherwise processed data, personal or other, commands, programs and configuration against any manipulation or modification not authorised by the user, and report on corruptions;
- (g) process only data, personal or other, that are adequate, relevant and limited to what is necessary in relation to the intended purpose of the PDEs (data minimisation);
- (h) protect the availability of essential and basic functions, also after an incident, including through resilience and mitigation measures against denial-of-service attacks;
- (i) minimise the negative impact by the products themselves or connected devices on the availability of services provided by other devices or networks;
- (j) be designed, developed and produced to limit attack surfaces, including external interfaces;
- (k) be designed, developed and produced to reduce the impact of an incident using appropriate exploitation mitigation mechanisms and techniques;
- (l) provide security related information by recording and monitoring relevant internal activity, including the access to or modification of data, services or functions, with an opt-out mechanism for the user;
- (m) provide the possibility for users to securely and easily remove on a permanent basis all data and settings and, where such data can be transferred to other products or systems, ensure that this is done in a secure manner.



## Annex I, part I, point 1

PDEs shall be designed, developed and produced in such a way that they ensure an **appropriate** level of cybersecurity based on the risks.

### Guidance: ENISA sub requirements

- A cybersecurity risk analysis should be conducted and monitored during the complete lifecycle of the product;
- Cybersecurity should be taken into account in every step of the product creation (e.g. secure coding, security by design principles, etc.).

Activities & principles	A1. Cybersecurity risk analysis	A2. Threat modelling	A3. Secure Coding Practices	A50. Secure Development Lifecycle (SDL)
Technologies & tools		T1. Threat Modelling frameworks e.g. STRIDE, MITRE ATT&CK		T5. CI/CD automation tools e.g. GitHub actions, Jenkins
Standards, guidelines & best practices	S1. ISO/IEC 27005		S2. OWASP SAMM for secure process lifecycle of software	
	S3. ISA/IEC 62443 3-2 (OT)		S40. OWASP Secure Coding Practices Checklist	S34. ISO/IEC 27034
	S63. NIST SP 800-30		S64. SEI CERT Coding Standards	S65. NIST SP 800-218
	S4/5/6. ISO/IEC 27002 (IT) – ISA/IEC 62443-4-2 (OT) – ETSI EN 303 645 (IoT)			



## Annex I, part I, point 2(a)

On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:  
**(a) be made available on the market without known exploitable vulnerabilities.**

Example



### Guidance: ENISA sub requirements

- A vulnerability assessment should be performed against the digital elements of a product;
- Known exploitable vulnerabilities shall be fixed before the release of the product.


<b>Activities &amp; principles</b>	A4/5. <b>Vulnerability assessment and Penetration Testing</b>	A6. <b>CI/CD Security Integration</b>	A7. <b>Regular CVE scanning and tracking</b>
<b>Technologies &amp; tools</b>	T2. <b>Software Composition Analysis (SCA)</b> e.g. OWASP Dependency Check]	T5. <b>CI/CD automation tools</b> e.g. GitHub actions, Jenkins	T6. <b>CVE databases</b>
	T3. <b>Static Application Security Testing (SAST)</b> various tools for each language		T56. <b>Threat Intelligence platforms</b> e.g. MISP, OpenCTI
	T4. <b>Dynamic Application Security Testing (DAST)</b> e.g. OWASP Zap		
<b>Standards, guidelines &amp; best practices</b>	S7. ITU-TX.1214		
	S8. ISO/IEC 18045 (CC)		
	S41. NIST SP 800-115		
	S42. Penetration Testing Framework		
	S6. ETSI EN 303 645 (IoT)		






## Annex I, part I, point 2(b)

On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:

(b) be made available on the market with a **secure by default configuration**, unless otherwise agreed between manufacturer and business user in relation to a tailor-made PDEs, including the **possibility to reset** the product to its original state. 

### Guidance: ENISA sub requirements

- In case default configurations foresee an initial/default credential, the same should use a complex and randomly chosen password, different for each product;
- In case default configurations cover cybersecurity items, they should adopt a reasonable level of security for each item;
- The default configuration should be placed in a non-erasable memory;
- A function to reset the product configuration to the default one should be implemented.

<b>Activities &amp; principles</b>	<b>A8. Secure-by-Default Configuration</b> focus on default credentials	<b>A9. Secure Factory Reset Function implementation</b>	<b>A10. Least Functionality principle</b> focus on default configuration
<b>Technologies &amp; tools</b>	<b>T7. Configuration Management Tools</b>		
	<b>T8. Key Lifecycle Management Systems</b> e.g. Vault by Hasicorp	<b>T9. Physical hard-reset buttons</b>	<b>T57. Baseline and Configuration assessment tools</b> e.g. OpenSCAP 
	<b>T57. Baseline and Configuration assessment tools</b> e.g. OpenSCAP	<b>T58. Secure Data Erasure &amp; Wiping Tools</b>	
	<b>T10. TPM (trusted platform module)</b>		
	<b>S9. ISO/IEC 18031</b>		
<b>Standards, guidelines &amp; best practices</b>	<b>S10. CIS Benchmarks</b>		
	<b>S4/5/6. ISO/IEC 27002 (IT) – ISA/IEC 62443-4-2 (OT) – ETSI EN 303 645 (IoT)</b>		



## Annex I, part I, point 2(c)

On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:

(c) ensure that vulnerabilities can be addressed through security updates, including, where applicable, through automatic security updates that are installed within an appropriate timeframe enabled as a default setting, with a clear and easy-to-use opt-out mechanism, through the notification of available updates to users, and the option to temporarily postpone them.

### Guidance: ENISA sub requirements

- The company distributing a product or service should provide timely security updates for the software components of the product/service for a reasonable amount of time;
- A function to automatically check the presence of updates and install them, or notify the user of their presence, should be implemented, and where applicable this should be the default initial configuration;
- A product should provide a secure mechanism to install/implement updates;
- The company distributing a product should notify the user on the availability of updates.

Activities & principles	A35. Secure Update management	A36. Secure Update implementation	A37. Automatic Update Checking
Technologies & tools	T40. Update Frameworks e.g. Libostree		
	T41. Code signing with PKI e.g. X.509 certificates	T42. Alerting mechanism	
Standards, guidelines & best practices	S28. ISO/IEC 30111		
	S29. IEC/ISA 62443 2-1 (OT)		
	S4/5/6. ISO/IEC 27002 (IT) – ISA/IEC 62443-4-2 (OT) – ETSI EN 303 645 (IoT)		




## Annex I, part I, point 2(d)

On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:

(d) **ensure protection** from unauthorised access by appropriate **control mechanisms**, including **but not limited to** authentication, identity or access management systems, and **report** on possible **unauthorised access**.

### Guidance: ENISA sub requirements

- An appropriate authentication and authorisation system shall be implemented according to the product nature and identified risks;
- The access to personal/protected data and to administration/configuration functions should be granted only to authenticated and authorised users;
- In accordance with the nature of the product and to the relevant risks identified in the risk analysis, physical unauthorized access should be forbidden.

<b>Activities &amp; principles</b>	A51. Authentication enforcement	A11. Authorization enforcement	A12. POLP (Principle of Least Privilege)	A14. Hardware Anti - tampering hardening
<b>Technologies &amp; tools</b>	T60. Multi-Factor Authentication (MFA)	T11. RBAC/MAC/DAC/ABAC models 		T10. TPM (for hardware boot and component validation)
	T61/10. Hardware authenticators and TPM			
	T13. IAM (Identity Access Management) Platforms (e.g. Keycloak)			
	T59. Privileged Access Management (PAM) tools			
	T62. Zero Trust framework			
<b>Standards, guidelines &amp; best practices</b>	S11. ISO/IEC 9798 (1 - 6)			
	S43. NIST SP 800-63	S43. NIST SP 800-63		
	S44. ISO/IEC 29115			
	S12. ISO/IEC 24760 (1-3)			
	S13. ISO/IEC 29146			
	S4/5/6. ISO/IEC 27002 (IT) – ISA/IEC 62443-4-2 (OT) – ETSI EN 303 645 (IoT)			



## Annex I, part I, point 2(e)

On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:

(e) **protect the confidentiality of stored, transmitted or otherwise processed data, personal or other**, such as by encrypting relevant data at rest or in transit by state of the art mechanisms, and by using other technical means.

### Guidance: ENISA sub requirements

- Data stored in a product's internal memory should be encrypted at rest using current non-deprecated technology;
- Transmission protocols used to send/receive data should support encrypted communications and enable them by default;
- The product should implement symmetric or asymmetric encryption schemes (including PKIs) deprecated technology to ensure that confidentiality of exchanged data is protected.

Activities & principles	A15. Data encryption at rest	A16. Data encryption in transit	A17. Key management and rotation
Technologies & tools	T14. Data encryption algorithms (e.g. AES 256) and libraries (e.g. OpenSSL)		T15. Public Key Infrastructures for keys certification
	T63. Storage-level encryption e.g. LUKS, BitLocker	T16. Secure communication protocols (Transport and Application layer) [TLS, HTTPS]	T8. Key Lifecycle Management Systems e.g. Vault by Hashicorp
	T64. Filesystem-level encryption e.g. fscrypt	T66. Network Layer Encryption (VPN & IPsec)	T10. TPM (focus on key storage)
	T65. Database encryption (TDE and field level)		
Standards, guidelines & best practices	S47. NIST SP 800-111	S48. NIST SP 800-77	S49. NIST SP 800-57
	S14. ISO/IEC 18033 (1-7)		
	S15. OWASP Cryptographic Storage Guidelines	S16. ITU-T X.805	S9. ISO/IEC 18031
	S4/5/6. ISO/IEC 27002 (IT) – ISA/IEC 62443-4-2 (OT) – ETSI EN 303 645 (IoT)		



## Annex I, part I, point 2(f)

On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:

(f) **protect the integrity** of stored, transmitted or otherwise processed **data**, personal or other, **commands, programs and configuration** against any manipulation or modification not authorised by the user, **and report on corruptions**.

### Guidance: ENISA sub requirements

- Integrity of data, programs and configurations stored in the product's internal memory should be ensured using current non-deprecated technology, e.g. hashing;
- Transmission protocols used to send/receive data should support ways to ensure it is possible to spot data alteration during the transmission (e.g. MACs);
- The product should implement symmetric or asymmetric encryption schemes (including PKIs) to ensure that the integrity of exchanged data is protected;
- A product should perform self-test to verify integrity of relevant code/information (e.g. firmware).

Activities & principles	A18. Hashing and message validation	A19. Self-integrity control	A15/A16. Data encryption at rest and in transit	A17. Key management and rotation
Technologies & tools	T18. Cryptographic Hash Algorithms and Libraries e.g. SHA-256, OpenSSL	T19. File and System Integrity Monitoring tools e.g. AIDE, Wazuh)	T14. Data encryption algorithms with integrity enforcement via AEAD or MAC	T15. Public key Infrastructures
	T20. Message Authentication Codes e.g. MACs/HMACs		T16/66. Secure communication protocols (with digital hashing) e.g. IPsec con ESP/AH	T8. Key Lifecycle Management Systems e.g. Vault by Hashicorp
Standards, guidelines & best practices	S45. ISO/IEC 10118			S49. NIST SP 800-57
	S17. ISO/IEC 9796		S14. ISO/IEC 18033 (1-7)	S9. ISO/IEC 18031
	S18. ISO/IEC 9797			
	S4/5/6. ISO/IEC 27002 (IT) – ISA/IEC 62443-4-2 (OT) – ETSI EN 303 645 (IoT)			





## Annex I, part I, point 2(g)

On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:

**(g) process only data, personal or other, that are adequate, relevant and limited to what is necessary in relation to the intended purpose of the PDEs (data minimisation).**

### Guidance: ENISA sub requirements

In general, refer to GDPR best practices, such as:

- it should not be asked to the user the provision of data that is not strictly necessary to the execution of the task or service requested;
- data no longer needed should be deleted without delay.

Activities & principles	A20. Data minimisation	A21. Data lifecycle policies implementation	A22. Privacy-By-Design principles
Technologies & tools	T21. Data flow mapping tools e.g. Apache Atlas	T67. Data Loss Prevention tools e.g. OpenDLP	T23. Data anonymization tools e.g. ARX
	T22. GDPR-aligned SDKs and frameworks e.g. IAB Europe TCF SDK		
	T24. Privacy Information Management System (PIMS)		
Standards, guidelines & best practices	S19. ISO/IEC 27701:2019 – Extension to ISO/IEC 27001 and 27002 for Privacy Information Management		
	S50. ISO/IEC 29100		
	S52. ENISA Guidelines on Data Protection Engineering		
	S53. ISO/IEC 27555	S54. ISO/IEC 31700	
	S55. ISO/IEC 27550		



## Annex I, part I, point 2(h)


On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:

(h) **protect the availability of essential and basic functions, also after an incident**, including through resilience and mitigation measures against denial-of-service attacks.

### Guidance: ENISA sub requirements

The product should be hardened against attacks, like for instance distributed denial of service attacks, by implementing, among other things, the following measures if appropriate:

- reverse proxies network segmentation;
- load balancing;
- rate limiting;
- redundancy and high availability solutions;
- backup sites;
- disaster recovery plans;
- minimize offered services.

<b>Activities &amp; principles</b>	A23/A24. <b>System Resilience and High availability</b>	A25/A52. <b>Disaster Recovery and Business Continuity</b>	A10/A26. <b>Attack surface reduction</b> (e.g. Least Functionality principle) <b>and Network protection</b>
<b>Technologies &amp; tools</b>	T25. <b>Storage redundancy technologies</b> e.g. RAID		T27. <b>Rate limiters and DDoS mitigation systems</b> e.g. Cloudflare 
	T29. <b>Load Balancers</b> e.g. HAProxy	T26. <b>Backup tools</b> e.g. BorgBackup, Restic	T28. <b>VLANs, zoning and network segmentation techniques</b>
	T68. <b>Database replication</b> e.g. PostgreSQL Streaming Replication		T70. <b>Firewalls</b> e.g. PfSense
	T69. <b>Disaster recovery orchestration tools</b> e.g. Ansible AWX orchestration		
<b>Standards, guidelines &amp; best practices</b>	S24. NIST SP 800-160 Vol. 2		S20. ISO/IEC 27033 (parts 3,4)
	S21. ISO/IEC 22301		
	S4/5/6. ISO/IEC 27002 (IT) – ISA/IEC 62443-4-2 (OT) – ETSI EN 303 645 (IoT)		



## Annex I, part I, point 2(i)

On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:

(i) **minimise the negative impact** by the products themselves or connected devices on the availability of services provided by other devices or networks.

### Guidance: ENISA sub requirements

- The product should limit outgoing network connections to what is strictly needed;
- The product should implement measures such as timeouts and exception handling to avoid generating multiple requests to a busy/not responsive service.

<b>Activities &amp; principles</b>	A10. <b>Least Functionality principle</b>	A27. <b>Resource usage limiting</b>	A26. <b>Network protection (focus on outgoing connections)</b>
<b>Technologies &amp; tools</b>	T3. <b>SAST (Static Application Security Testing) [focus on exit-point analysis]</b>	T29. <b>Timeouts and exception handling functionalities</b>	T30. <b>Network behaviour analysis tools (Suricata, Zeek)</b>
	T57. <b>Baseline and Configuration assessment tools e.g. OpenSCAP</b>	T27. <b>Rate limiters (focus on outgoing traffic)</b>	
			T70. <b>Firewalls (focus on connection whitelisting) e.g. Nftables</b>
<b>Standards, guidelines &amp; best practices</b>	S4/5/6. <b>ISO/IEC 27002 (IT) – ISA/IEC 62443-4-2 (OT) – ETSI EN 303 645 (IoT)</b>		S20. <b>ISO/IEC 27033 (parts 3,4)</b>



## Annex I, part I, point 2(j)

**On the basis of the risk assessment** referred to in Article 13.2 **and where applicable, PDEs shall:**  
**(j) be designed, developed and produced to limit attack surfaces**, including external interfaces.

### Guidance: ENISA sub requirements

- The product's hardware design should limit all the connections and interfaces that are not strictly required for performing the various tasks the product is expected to do;
- If required by a risk assessment, a physical product should include tamper-resistant features;
- The product/service should have all not essential network ports closed as a default configuration;
- Software present in digital product should be designed to avoid having unnecessary entry points (e.g. API) open and available for external unauthorised callers.

<b>Activities &amp; principles</b>	A10. Least Functionality principle	A30. Surface minimisation	A14. Hardware Anti-tampering hardening
<b>Technologies &amp; tools</b>	T32. Port scanning tools e.g. Nmap, netstat		T33. Anti-tamper physical measures
	T3. SAST (Static Application Security Testing) for entry-point analysis		T10. TPM (for hardware boot validation)
<b>Standards, guidelines &amp; best practices</b>	T57. Baseline and Configuration assessment tools e.g. OpenSCAP	T70. Firewalls (for ingoing traffic) e.g. Nftables	
	S4/5/6. ISO/IEC 27002 (IT) – ISA/IEC 62443-4-2 (OT) – ETSI EN 303 645 (IoT)		



## Annex I, part I, point 2(k)

On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:

**(k) be designed, developed and produced to reduce the impact of an incident** using appropriate exploitation mitigation mechanisms and techniques.

### Guidance: ENISA sub requirements

- The product should be designed in a way that gaining unauthorised access to a function or data does not automatically lead to a complete access to all product's functions and data (defence in depth principles);
- Sensitive data stored in a product's internal memory should be encrypted at rest;
- The product should not store data that is not relevant or necessary to perform its tasks (data minimisation).

Activities & principles	A31. Defence-in-Depth principles	A32/A12. Privilege separation and POLP	A20. Data minimisation	A15. Data encryption at rest
Technologies & tools	T10/T31. TPM and Secure boot [for Hardware-level defence layer]	T59. Privileged Access Management (PAM) tools	T22. GDPR-aligned SDKs and frameworks e.g. IAB Europe TCF SDK	T63/64/65. Storage, Filesystem and Database level encryption for data-level defence layer
	T70. T11. RBAC/MAC/DAC/ABAC models (for OS-level defence layer)			T14. Data encryption algorithms (e.g. AES 256) and libraries (e.g. OpenSSL)
	T70. Web Application Firewalls e.g. Modsecurity [for application-level defence layer]			
	T72. Memory Protection and Exploit Mitigations mechanism e.g. NX, ASLR [for OS-level defence layer]			
Standards, guidelines & best practices	S18. ISO/IEC 9797		S50. ISO/IEC 29100	
			S51. ISO/IEC 29151	
	S25. NIST SP 800-53 rev.5 – Security and Privacy Controls			
S4. ISO/IEC 27002 (IT)				



## Annex I, part I, point 2(I)

On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:

(I) **provide security related information by recording and monitoring relevant internal activity**, including the access to or modification of data, services or functions, with an opt-out mechanism for the user.

### Guidance: ENISA sub requirements

- A product should contain a log of cybersecurity related events;
- Access or modification of data, services or functions should be logged;
- Such log should be accessible to the privileged user;
- Logs should be protected from unauthorised modification or corruption.

Activities & principles	A13. Logging and Auditing	A34. Log rotation and retention	A33. Access Monitoring
Technologies & tools	T37. System and Application Logging mechanism (e.g. rsyslog)	T39. System Log Management tools (e.g. logrotate)	T38. Host-based intrusion Detection systems (HIDS) [e.g. Wazuh]
	T12. Centralised Log Collection and Aggregation Systems (e.g. Elastic Stack)		
	T34. Security Information and Event Management (SIEM) [e.g. Elastic Security]		
Standards, guidelines & best practices	S26. ISO/IEC 13888		
	S27. NIST SP 800-92		
	S4/5/6. ISO/IEC 27002 (IT) – ISA/IEC 62443-4-2 (OT) – ETSI EN 303 645 (IoT)		



## Annex I, part I, point 2(m)

On the basis of the risk assessment referred to in Article 13.2 and where applicable, PDEs shall:

(m) provide the possibility for users to securely and easily remove on a permanent basis all data and settings and, **where** such data can be transferred to other products or systems, ensure that this is done in a secure manner.

### Guidance: ENISA sub requirements

- data no longer needed should be deleted without delay.

Activities & principles	A21. Data lifecycle policies implementation
Technologies & tools	T58. Secure Data Erasure & Wiping Tools
Standards, guidelines & best practices	S53. ISO/IEC 27555
	S66. NIST SP 80088 Rev.2



Part I

Part II

## Manufacturers of the PDE shall:

- (1) identify and document vulnerabilities and components contained in PDE, including by drawing up a software bill of materials in a commonly used and machine-readable format covering at the very least the top-level dependencies of the products;
- (2) in relation to the risks posed to PDE, address and remediate vulnerabilities without delay, including by providing security updates; where technically feasible, new security updates shall be provided separately from functionality updates;
- (3) apply effective and regular tests and reviews of the security of the PDE;
- (4) once a security update has been made available, share and publicly disclose information about fixed vulnerabilities, including a description of the vulnerabilities, information allowing users to identify the PDE affected, the impacts of the vulnerabilities, their severity and clear and accessible information helping users to remediate the vulnerabilities; in duly justified cases, where manufacturers consider the security risks of publication to outweigh the security benefits, they may delay making public information regarding a fixed vulnerability until after users have been given the possibility to apply the relevant patch;
- (5) put in place and enforce a policy on coordinated vulnerability disclosure;
- (6) take measures to facilitate the sharing of information about potential vulnerabilities in their pde as well as in third party components contained in that product, including by providing a contact address for the reporting of the vulnerabilities discovered in the PDE;
- (7) provide for mechanisms to securely distribute updates for PDE to ensure that vulnerabilities are fixed or mitigated in a timely manner and, where applicable for security updates, in an automatic manner;
- (8) ensure that, where security updates are available to address identified security issues, they are disseminated without delay and, unless otherwise agreed between a manufacturer and a business user in relation to a tailor-made PDE, free of charge, accompanied by advisory messages providing users with the relevant information, including on potential action to be taken.





## Annex I, part II, point 1

### Manufacturers of the PDE shall:

**(1) identify and document vulnerabilities and components contained in PDE, including by drawing up a software bill of materials in a commonly used and machine-readable format covering at the very least the top-level dependencies of the products.**

#### Guidance: ENISA sub requirements

- A monitoring of the cybersecurity status of the overall supply chain for the acquisition of the necessary components incorporated in the product should be put in place;
- All libraries and external components used in the software part of a product, including their version number should be listed in a Software Bill of Material (SBOM) available to the user;
- Such Software bill of materials (SBOM) should be compliant to the relevant standards (e.g., ISO/IEC 5921:2021 also known as SPDX [2] or CycloneDX [4] standard).

Activities & principles	A38. Software Bill of Materials (SBOM) definition	A39. Software supply chain mapping	A7. Regular CVE scanning and tracking
	T43. SBOM frameworks (e.g. SPDX, CycloneDX)		T6. CVE databases
Technologies & tools	T35. SBOM validation tools e.g. ACN BOM module	T3. SAST (focus on software mapping analysis) e.g. OWASP Dependency-Track	T56. Threat Intelligence platforms e.g. MISP, OpenCTI
	S30. ISO/IEC 5962	S31. ISO/IEC 27036 1-3	T5. CI/CD automation tools (e.g. GitHub actions, Jenkins) [for vulnerability identification]
Standards, guidelines & best practices	S22. ECMA-424 (CycloneDX)	S56. SLSA (Supply-chain Levels for Software Artifacts) Framework	
	S23. NTIA SBOM Minimum Elements		



## Annex I, part II, point 2

### Manufacturers of the PDE shall:

**(2) in relation to the risks posed to PDE, address and remediate vulnerabilities without delay, including by providing security updates; where technically feasible, new security updates shall be provided separately from functionality updates.**

#### Guidance: ENISA sub requirements

- In case vulnerabilities are found they should be classified in accordance with standard severity metrics (e.g. CVSS);
- Vulnerabilities that can be directly fixed by the company should be fixed without delay, in accordance to their severity and the posed risks;
- In case a vulnerability is found in a software component of a product (including libraries and third party components), an update should be prepared and distributed as soon as possible;
- The company developing a product or service should be subscribed to updates coming from CERTs and cybersecurity organisations and analyse them in order to spot vulnerabilities in their products;
- The company developing a product or service should remain updated on the release of new versions of the libraries or third party software components included in their products/services and update the relative software whenever such new version includes a security update.

Activities & principles	A40. Vulnerability classification and prioritization	A7. Regular CVE scanning and tracking	A35. Secure Update management (with a focus also on third-party software)
	T44. FIRST CVSS (Common Vulnerability Scoring System)	T6. CVE databases	T40. Update Frameworks (e.g. libostree)
Technologies & tools	T46. FIRST EPSS (Exploit Prediction Scoring System)	T56. Threat Intelligence platforms e.g. MISP, OpenCTI	T41. Code signing with PKI e.g. X.509 certificates
	T71. Vulnerability management platforms (with scoring support) e.g. DefectDojo	T47. CERT feeds (e.g. national and international entities)	T45. Patch and update orchestrator systems (e.g. Windows Server Update Services*)
		T5. CI/CD automation tools e.g. GitHub actions, Jenkins	
Standards, guidelines & best practices		S32. ISO/IEC 29147	S28. ISO/IEC 30111
	S4. ISO/IEC 27002 (IT)		



## Annex I, part II, point 3

### Manufacturers of the PDE shall:

**(3) apply effective and regular tests and reviews of the security of the PDE.**

#### Guidance: ENISA sub requirements

- Periodic vulnerability assessment should be executed, especially towards those components that present the highest risk;
- When developing or maintaining software components, automatic tests should be executed whenever a new commit/build/version is prepared, if possible, using Continuous Integration/Continuous Deployment (CI/CD) techniques;
- A risk assessment should be re-evaluated whenever there is a significant change in one of the dimensions analysed (new threats, new vulnerabilities, etc.) or a new product release.

<b>Activities &amp; principles</b>	A4/5. <b>Vulnerability assessment and Penetration Testing</b>	A43/6. <b>Security testing integration in CI/CD pipeline</b>
<b>Technologies &amp; tools</b>	T2. <b>Software Composition Analysis (SCA)</b> e.g. OWASP Dependency-Check	T5. <b>CI/CD automation tools</b> (focus on automatic testing) e.g. GitHub actions, Jenkins
	<b>T3. Static Application Security Testing (SAST)</b> [various tools for each language]	
	<b>T4. Dynamic Application Security Testing (DAST)</b> [e.g. OWASP Zap]	
<b>Standards, guidelines &amp; best practices</b>	S7. ITU-TX.1214	S34. ISO/IEC 27034
	S8. ISO/IEC 18045 (CC)	S2. OWASP SAMM
	S41. NIST SP 800-115	S35. ISO/IEC 29119
	S42. Penetration Testing Framework	
	S4. ISO/IEC 27002 (IT)	



## Annex I, part II, point 4

### Manufacturers of the PDE shall:

- (4) once a security update has been made available, share and publicly disclose information about fixed vulnerabilities, including a description of the vulnerabilities, information allowing users to identify the PDE affected, the impacts of the vulnerabilities, their severity and clear and accessible information helping users to remediate the vulnerabilities; in duly justified cases, where manufacturers consider the security risks of publication to outweigh the security benefits, they may delay making public information regarding a fixed vulnerability until after users have been given the possibility to apply the relevant patch.

#### Guidance: ENISA sub requirements

- New CVE indicators should be publicly released and disseminated as soon as the relative security update has been released or implemented.

Activities & principles	A28. Security Advisory and Vulnerability Disclosure Management
Technologies & tools	T49. Vulnerability disclosure platforms e.g. CERT platform
	T54. Common Security Advisory Framework (CSAF) and related tools
	T50. Notification and Communication tools e.g. mailing systems, notification APIs
Standards, guidelines & best practices	S57. OASIS CSAF Standard
	S32. ISO/IEC 29147
	S28. ISO/IEC 30111



## Annex I, part II, point 5

**Manufacturers of the PDE shall:**

**(5) put in place and enforce a policy on coordinated vulnerability disclosure.**

**Guidance: ENISA sub requirements**

- The company should adopt and enforce the CVD policy.

<b>Activities &amp; principles</b>	A46. Coordinated Vulnerability Disclosure (CVD) policy definition
<b>Technologies &amp; tools</b>	T54. Common Security Advisory Framework (CSAF) and related tools
	T50. Notification and Communication tools (focus on disclosure)
<b>Standards, guidelines &amp; best practices</b>	S32. ISO/IEC 29147
	S28. ISO/IEC 30111
	S36. ENISA Good Practice Guide on Coordinated Vulnerability Disclosure
	S38. ETSI TR 103 838
	S39. ISO/IEC TR 5895



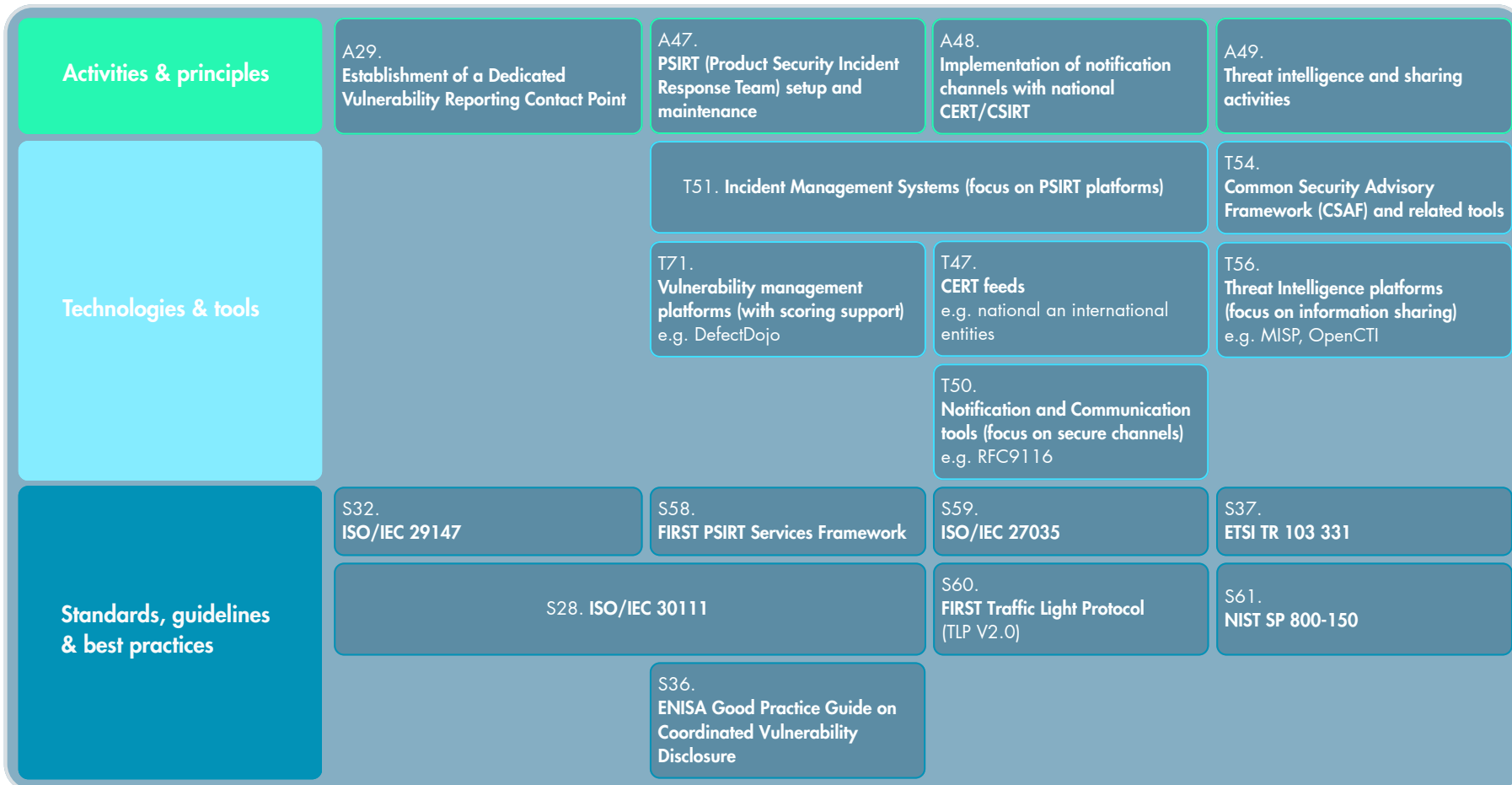
## Annex I, part II, point 6

### Manufacturers of the PDE shall:

**(6) take measures to facilitate the sharing of information about potential vulnerabilities in their pde as well as in third party components contained in that product, including by providing a contact address for the reporting of the vulnerabilities discovered in the PDE.**

#### Guidance: ENISA sub requirements

- The company distributing a product/service should have a contact point specifically advertised to collect information related to vulnerabilities found in their products/services. If the company has one, this contact point should be the company's PSIRT;
- The company distributing a product/service should inform any relevant authority (e.g. national CERT/CSIRT) about how they can be reached in a timely manner for reasons related to the handling of vulnerabilities.





## Annex I, part II, point 7

### Manufacturers of the PDE shall:

**(7) provide for mechanisms to securely distribute updates for PDE to ensure that vulnerabilities are fixed or mitigated in a timely manner and, where applicable for security updates, in an automatic manner.**

#### Guidance: ENISA sub requirements

- Security updates should be digitally signed using a Code Signing Certificate to ensure the identity of the issuer;
- Hashes of the updates should be made publicly available with instructions on how to verify them.

Activities & principles	A36. Secure Update implementation (focus on secure distribution)
Technologies & tools	T41. Code signing with PKI e.g. X.509 certificates
	T40. Update Frameworks (e.g. libostree)
Standards, guidelines & best practices	S62. The Update Framework (TUF)



## Annex I, part II, point 8

### Manufacturers of the PDE shall:

**(8) ensure that, where security updates are available to address identified security issues, they are disseminated without delay and, unless otherwise agreed between a manufacturer and a business user in relation to a tailor-made PDE, free of charge, accompanied by advisory messages providing users with the relevant information, including on potential action to be taken.**

#### Guidance: ENISA sub requirements

- Users should be made aware of the existence of security updates either via automatic distribution, popup, newsletter, etc;
- This notice should contain information about the fixed issues and instructions on how to apply;
- Security updates should be released free of charge.

Activities & principles	A41. Timely Release and Free Distribution of Security Updates
Technologies & tools	T50. Notification and Communication tools (focus on update notification) e.g. mailing systems, notification APIs
	T40. Update Frameworks (e.g. libostree)
Standards, guidelines & best practices	S4. ISO/IEC 27002 (IT)





7.1

PDEs which have the **core functionality of a product category set out in Annex III** shall be considered to be **important PDEs** and shall be **subject to the conformity assessment procedures** referred to in **Article 32(2) and (3)**.

Art. 32.2 and 3

## Annex III - Class I

- 1 **Identity management systems** and **privileged access management software and hardware**, including authentication and access control readers, including biometric readers;
- 2 Standalone and embedded **browsers**;
- 3 **Password managers**;
- 4 **Software that searches for, removes, or quarantines malicious software**;
- 5 PDEs with the function of virtual private network (**VPN**);
- 6 **Network management systems**;
- 7 Security information and event management (**SIEM**) **systems**;
- 8 **Boot managers**;
- 9 **Public key infrastructure and digital certificate issuance software**;
- 10 **Physical and virtual network interfaces**;
- 11 **Operating systems**;
- 12 **Routers, modems** intended for the connection to the internet, and switches;
- 13 **Microprocessors** with security-related functionalities;
- 14 **Microcontrollers** with security-related functionalities;
- 15 Application specific integrated circuits (**ASIC**) and field-programmable gate arrays (**FPGA**) with security-related functionalities;
- 16 **Smart home** general purpose virtual assistants;
- 17 **Smart home products with security functionalities**, including smart door locks, security cameras, baby monitoring systems and alarm systems;
- 18 **Internet connected toys** covered by Directive 2009/48/EC **that have social interactive features** (e.g. speaking or filming) **or that have location tracking features**;
- 19 **Personal wearable products to be worn or placed on a human body that have a health monitoring** (such as tracking) purpose and to which Regulation (EU) 2017/745 or (EU) No 2017/746 do not apply, **or personal wearable products that are intended for the use by and for children**.

## Annex III - Class II

- 1 **Hypervisors and container runtime systems** that support virtualised execution of operating systems and similar environments;
- 2 **Firewalls, intrusion detection and prevention systems**;
- 3 Tamper-resistant **microcontrollers**.
- 4 Tamper-resistant **microprocessors**;



If a PDE that has the core functionality of a product category set out in Annex III **is integrated into another product**, this does not automatically mean that the entire final product must go through the same conformity assessment procedures described in Article 32(2) and (3).



7.4: By 11 December 2025, the Commission adopts an **implementing act** specifying the technical description of the categories of PDEs under classes I and II as set out in Annex III.



7.1

PDEs that have the core functionality of a product category set out in [Annex III](#) shall be considered to be **important PDEs** and shall be subject to the conformity assessment procedures referred to in [Article 32\(2\)](#) and [\(3\)](#).

7.2

Products that are into classes I and II as set out in Annex III, must meet **at least one** of the following criteria:

**(a) the PDE primarily performs functions that are critical to the cybersecurity of other products, networks or services**, for example, functions such as:

- securing authentication and access;
- intrusion prevention and detection;
- end-point security; or
- network protection.

**(b) the PDE performs a function that, if compromised, could pose a significant risk of adverse effects** because of its intensity and its ability to disrupt, control, or cause damage to a large number of other products, or to the health, safety, or security of its users through direct manipulation.

For example, such functions may include:

- central system functions,
- network management;
- configuration control;
- virtualisation; or
- the processing of personal data.



**By defining objective criteria, the Regulation creates a risk-based classification system.**

This approach ensures that cybersecurity obligations are proportionate: **products whose vulnerabilities, if exploited, could result in more severe consequences or broader systemic effects are subject to stricter conformity assessment procedures.**

Annex III - Class I



[Art. 32.2](#)  
Conformity assessment procedures

Annex III - Class II



[Art. 32.3](#)  
Conformity assessment procedures



The Commission has the power to update Annex III by means of delegated acts.

This means the Commission may:

- add a new product category within each class (I or II) and define it clearly;
- move an existing product category from one class to another; or
- remove a product category from the list.



When doing so, the Commission shall take into account:

- the cybersecurity functions of the products; and
- the level of cybersecurity risk they pose, according to the criteria above.



The delegated acts shall, where appropriate, provide for a minimum transitional period of 12 months, before the relevant conformity assessment procedures as referred to in Article 32(2) and (3) start applying, unless a shorter transitional period is justified on imperative grounds of urgency.



∞

PDEs that have the core functionality of a product category set out in **Annex IV** shall be considered to be **critical PDEs**. **Where no delegated acts** determining which critical PDE is required to obtain a European cybersecurity certificate **have been adopted**, they shall be subject to the conformity assessment procedure referred to in Article 32(3).

Annex IV

- 1 **Hardware Devices with Security Boxes;**
- 2 **Smart meter gateways** within smart metering systems as defined in Article 2, point (23) of Directive (EU) 2019/944 **and other devices for advanced security purposes**, including for secure cryptoprocessing;
- 3 **Smartcards or similar devices, including secure elements.**



The Commission has the power to **adopt delegated acts** to determine which PDEs listed in Annex IV **must obtain a European cybersecurity certificate**.

Before adopting such delegated acts, the Commission must:

- 1 carry out an **assessment of the potential market impact** of the envisaged measures, **and**
- 2 carry out **consultations with relevant stakeholders**.

These delegated acts must:

- 1 **specify the required assurance level** that shall be proportionate to the level of cybersecurity risk associated with the PDEs; **and**
- 2 **take account of their intended purpose**, including the critical dependency on them by essential entities as referred to in Article 3(1) of Directive (EU) 2022/2555.

**Where NO** delegated acts have been adopted:

critical PDEs shall be subject to the conformity assessment procedures referred to in Article 32(3).

**Where delegated acts** have been adopted:

they shall provide for a **minimum transitional period** of **6 months**, **unless** a shorter transitional period is justified for imperative reasons of urgency.



The Commission has this power because critical products have a **higher level of cybersecurity risk** than default products.

For this reason, they are required to obtain a certificate that proves compliance.

This certification:

- 1) must be at an assurance level of **at least "substantial"**;
- 2) must be obtained under a **European cybersecurity certification scheme** established by Regulation (EU) 2019/881 (Cybersecurity Act);



This applies only if an EU cybersecurity certification scheme for those types of products **already exists under Regulation (EU) 2019/881 and is available for manufacturers to use**.

- 3) **demonstrates compliance with the essential cybersecurity requirements** described in Annex I, either fully or in part.

8.1



∞

PDEs that have the core functionality of a product category set out in [Annex IV](#) shall be considered to be **critical** PDEs. **Where no delegated acts** determining which critical PDE is required to obtain a European cybersecurity certificate **have been adopted**, they shall be subject to the conformity assessment procedure referred to in Article 32(3).

Annex IV

- 1 **Hardware Devices with Security Boxes;**
- 2 **Smart meter gateways** within smart metering systems as defined in Article 2, point (23) of Directive (EU) 2019/944 **and other devices for advanced security purposes**, including for secure cryptoprocessing;
- 3 **Smartcards or similar devices, including secure elements.**



The Commission has the power to adopt **delegated acts to amend Annex IV by adding or withdrawing categories** of critical PDEs.

↳ **Before** adopting such delegated acts, the Commission must:

- 1 carry out an **assessment of the potential market impact** of the envisaged measures, **and**
- 2 carry out **consultations** with relevant **stakeholders**.

↳ **When** determining such categories of critical PDEs and the required assurance level, the Commission must:

- 1 take into account the 2 **criteria** referred to in **Article 7(2); and**
- 2 **ensure that the categories of PDEs meet at least one** of the following criteria:
  - (a) **essential entities** (as defined in the Art. 3, NIS 2 Directive) **critically depend on that PDEs category; or**
  - (b) **incidents and exploited vulnerabilities** concerning that category could lead to **serious disruptions of critical supply chains** across the internal market.

**Where delegated acts have been adopted:**

they shall provide for a **minimum transitional period** of **6 months**, **unless** a shorter transitional period is justified for imperative reasons of urgency.

8.2

7.4



**On 28 November 2025, the Commission adopted the Implementing Regulation (EU) 2025/2392** specifying the technical description of the categories of important and critical PDEs.



11

Chapter III, Section 1, Chapters V and VII, and Chapters IX to XI of Regulation (EU) 2023/988 shall **apply to PDEs with respect to aspects and risks or categories of risks that are not covered by this Regulation**

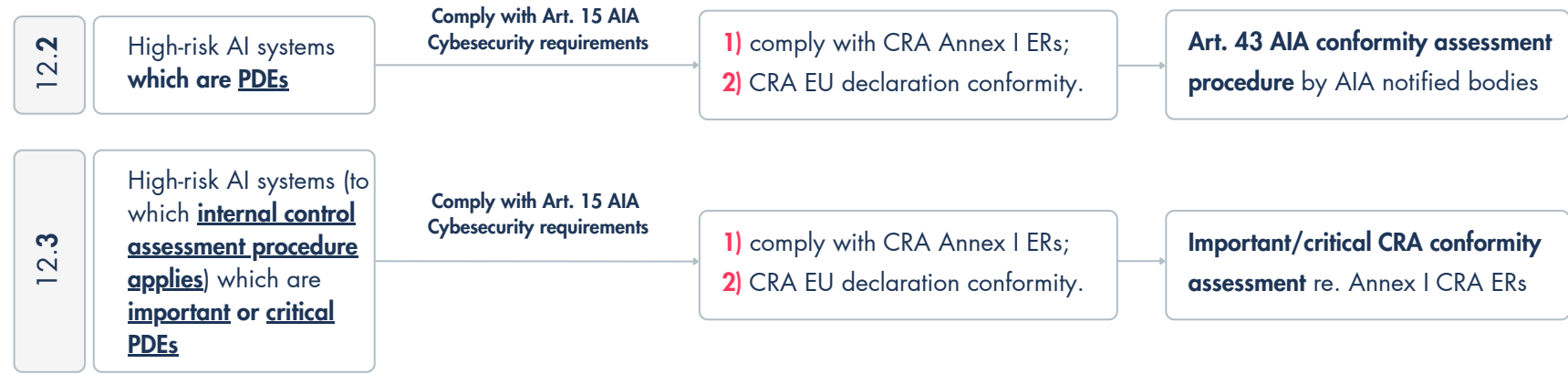
↪ **where** those products are not subject to specific safety requirements laid down in other 'Union harmonisation legislation'.

**When is a high-risk AI system - that is also a PDEs under the CRA - considered to be compliant with AIA cybersecurity rules?**

12

If a PDEs is classified as **high-risk AI system**, it is considered to be **compliant with the AI Act's Art. 15 cybersecurity requirements** if:

- (a) **It meets the essential cybersecurity requirements** in Annex I, Part I of the CRA;
- (b) **The manufacturer's internal processes comply** with the essential cybersecurity requirements set out in Part II of Annex I of the CRA;
- (c) **This cybersecurity level required by Art. 15 AIA is declared** in the EU declaration of conformity issued under the CRA.



This article explains the interplay between the CRA and the AI Act with particular regard to the conformity assessment procedure **PDEs classified as high-risk AI systems** must follow.



Article 13 consists of twenty-five paragraphs. To make its content clearer, this section groups the related obligations according to the **three main phases of the product lifecycle**, therefore **showing exactly when each obligation must be fulfilled by manufacturers** and how these requirements interconnect throughout the process.

Under the light-blue bar "**During all these stages**," you will find the obligations that **manufacturers must comply with at all times**, regardless of the phase of the product lifecycle.

⇒ To fully understand Article 13, always refer to the specific lifecycle phase in which each obligation is placed.

### Planning, design, development, production

- (13.1,2,3) **The cybersecurity risk assessment**;
- (13.5 and 6) **Vulnerabilities** - Table 1;
- (13.8) **How to determine the support period** - Table 1;
- (13.8) **How to determine the support period** - Table 2;
- (13.12) **Product compliance management**.

### Delivery on the market

- (13.4) **The cybersecurity risk assessment**;
- (13.8) **Vulnerabilities** - Table 2;
- (13.21 and 24) **Corrective measures**;
- (13.15-16-19) **Manufacturers' information obligations towards users** - Table 1;
- (13.17-18-20-23) **Manufacturers' information obligations towards users** - Table 2.

### Maintenance

- (13.3,7) **The cybersecurity risk assessment**;
- (13.8) **Vulnerabilities** - Table 2;
- (13.9) **Security update**;
- (13.10 and 11) **Versions**;
- (13.21 and 24) **Corrective measures**;
- (13.15-16-19) **Manufacturers' information obligations towards users** - Table 1;
- (13.17-18-20-23) **Manufacturers' information obligations towards users** - Table 2.

### During all these stages

- (13.2) **The cybersecurity risk assessment**;
- (13.2 and 8) **Vulnerabilities** - Table 2;
- (13.14) **Product compliance management**;
- (13.13-22-23-25) **Manufacturers' information obligations towards authorities**.



Planning, design, development, production

Delivery on the market

Maintenance

13.1

Manufacturers **must design, process, develop and produce** the PDEs in accordance with the essential cybersecurity requirements set out in Part I of Annex I.

[Annex I, part 1](#)

13.2

To do this, manufacturers **must assess the cybersecurity risks of their PDEs.**

13.3

**The cybersecurity risk assessment shall be documented and updated.**

This assessment shall **comprise at least an analysis** of cybersecurity risks **based on:**

- 1) the **intended purpose** of the PDEs;
- 2) the **reasonably foreseeable** use of the PDEs;
- 3) the **conditions of use** of the PDEs, such as the operational environment **or** the assets to be protected;

taking into account **the length of time the product is expected to be in use.**

And it shall **indicate:**

1) **Whether** and, **if so** in what manner:

- the **security requirements** set out in Part I, point (2), of Annex I **are applicable to the relevant PDEs; and**
- **how those requirements are implemented** as informed by the cybersecurity risk assessment.

2) **How** the manufacturer **is to apply:**

- Annex I, part I, point 1: "PDEs shall be designed, developed and produced in such a way that they **ensure an appropriate level of cybersecurity based on the risks**".
- Annex I, part II: the **vulnerability handling requirements**.

[Annex I, part 1](#)

[Annex I, part 2](#)





Delivery on the market

Maintenance

13.4

**Once ready**, the manufacturer shall **include the cybersecurity risk assessment in the technical documentation** required pursuant to Article 31 and Annex VII.

**Art. 31**  
Technical documentation

**!** **Where** certain essential cybersecurity requirements **are not applicable** to the PDEs, the manufacturer shall **include a clear justification** to that effect in that technical documentation. **i**

For PDEs as referred to in Article 12 - **High-risk AI systems** - which are also subject to other Union legal acts, the **cybersecurity risk assessment may** be part of the risk assessment required by those Union legal acts.

**Art. 12**  
High-risk AI systems

13.3

The **cybersecurity risk assessment** - carried out during the red phase - **shall be documented and updated as appropriate during a support period.** **i**

13.7

**Whether:**

**1**  
**relevant cybersecurity aspects**  
concerning the PDEs **are discovered**; or

**2**  
**vulnerabilities** of which they **become aware**; or

**3**  
and **any relevant information provided** by third parties

**i** The **cybersecurity risk assessment** - carried out during the red phase - **shall be documented and updated.**

Example





## During all these stages

13.2

Manufacturers **take the outcome of that assessment** of the cybersecurity risks associated with a PDEs - made during the red phase - **into account during the planning, design, development, production, delivery and maintenance phases** of the PDEs (13.2). 

**With a view to:**



**minimising cybersecurity risks;**



**preventing incidents and minimising their impact,** including in relation to the health and safety of users.



Planning, design, development, production


Delivery on the market

Maintenance

13.5

Manufacturers shall **exercise due diligence when integrating components sourced from third parties** so that those components **do not** compromise the cybersecurity of the PDEs  




**including when integrating components of FOSS** that have **not** been made available on the market in the course of a commercial activity. 

13.6

Upon **identifying a vulnerability** in a component, **including in an open source-component**, which is integrated in the PDEs, manufacturers shall:

- 1) **report the vulnerability** to the person or entity manufacturing or maintaining the component, and
- 2) **address and remediate the vulnerability** in accordance with the vulnerability handling requirements set out in Part II of Annex I.

→ **Where** manufacturers have developed **a software or hardware modification to address the vulnerability** in that component

→ They shall **share the relevant code or documentation** with the person or entity manufacturing or maintaining the component, **where appropriate** in a machine-readable format. 

Annex I, part 2



ECFAQ:

**If the manufacturer of a PDEs is aware that an integrated component contains a vulnerability, but that vulnerability cannot be exploited in its PDEs, that vulnerability is not actively exploited, and therefore it is not subject to mandatory reporting.**

Manufacturers can still notify that vulnerability on a voluntary basis, in accordance with Article 15, and are required to report the vulnerability to the person or entity manufacturing or maintaining the component, in accordance with Article 13(6).



Delivery on the market

Maintenance

13.8

Manufacturers shall **ensure**, when placing a PDEs on the market, and for the support period, **that vulnerabilities of that product, including its components, are handled effectively and in accordance with the essential cybersecurity requirements** set out in Part II of Annex I.

[Annex I, part 2](#)

During all these stages

13.2

Manufacturers shall **systematically document**, in a manner that is proportionate to the nature and the cybersecurity risks:

- **relevant cybersecurity aspects** concerning the PDEs;
- **vulnerabilities** of which they become **aware**;
- and **any relevant information** provided by third parties.

and shall, **where applicable**, update the cybersecurity risk assessment of the products.

13.8(6)

Manufacturers shall have **appropriate policies and procedures**, including coordinated vulnerability disclosure policies, referred to in Part II, point (5), of Annex I



to process and remediate potential vulnerabilities in the PDEs reported from internal or external sources.

Annex I, part 2, point 5

"Manufacturers of PDEs shall **put in place and enforce a policy on coordinated vulnerability disclosure**;"



Planning, design, development, production

Delivery on the market

Maintenance



➔ The support period shall be **at least 5 years**

The customer buys the product

At least 5 years

Support period



Planning, design, development, production

Delivery on the market

Maintenance

Product life-cycle



**Where** the PDEs is expected to be in use for **less than 5 years**, the support period shall correspond to the expected use time.

Example



13.8(3)




## Planning, design, development, production

## Delivery on the market

## Maintenance

13.8(2)

Manufacturers shall **determine the support period** so that it **reflects the length of time during which the product is expected to be in use**, taking into account:

- 1) **reasonable user expectations**;
- 2) the **nature** of the product;
- 3) including its **intended purpose**; as well as
- 4) **relevant Union law** determining the lifetime of PDEs. 

Manufacturers **may also** take into account:

- 5) the support periods of PDEs offering a similar functionality placed on the market by other manufacturers;
- 6) the availability of the operating environment;
- 7) the support periods of integrated components that provide core functions and are sourced from third parties; as well as
- 8) relevant guidance provided by the Dedicated Administrative Cooperation Group (ADCO) established pursuant to Article 52(15) and the Commission.

The **matters** to be taken into account in order to determine the support period **shall be considered in a manner that ensures proportionality**.



13.8(5)

Manufacturers shall include the information that was taken into account to determine the support period of a PDEs in the **technical documentation** as set out in Annex VII.

13.8(5)



The **Commission may** adopt delegated acts by specifying the **minimum support period** for specific product categories **where** the market surveillance data suggests inadequate support periods.



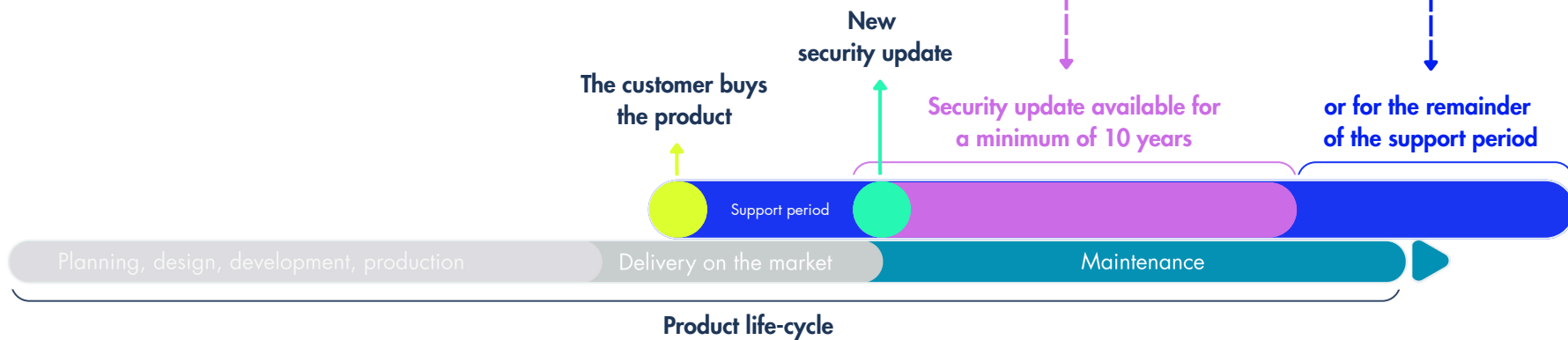
Delivery on the market

Maintenance

Manufacturers shall ensure that **each security update**, as referred to in Part II, point (8), of Annex I, which has been made available to users during the support period, **remains available** after it has been issued:

- for a minimum of 10 years or
- for the remainder of the support period, whichever is longer.

13.9



Annex I, part 2, point 8

“Manufacturers of PDEs shall ensure that **security updates available to address identified security issues** are disseminated:

- **without delay** and,
- **free of charge, accompanied by advisory messages** providing users with the relevant information, **including on potential action to be taken** - **unless otherwise agreed** between a manufacturer and a business user in relation to a tailor-made PDEs”.



Delivery on the market

Maintenance

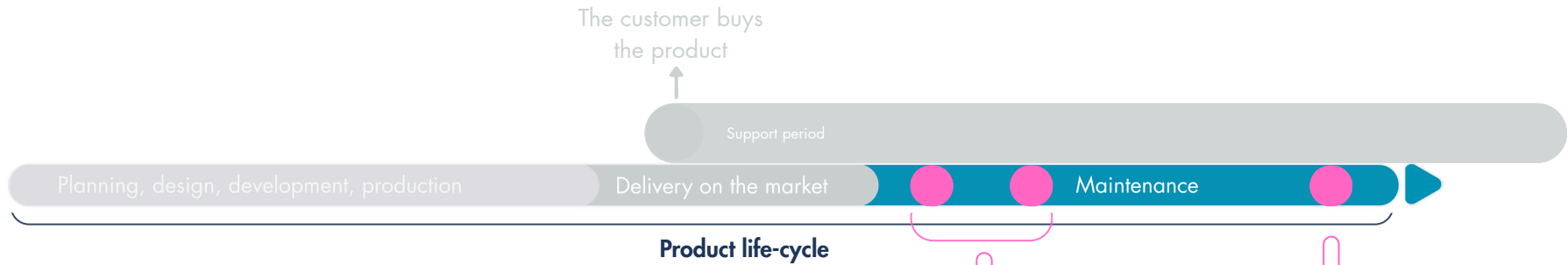
Where a manufacturer has placed **subsequent substantially modified versions** (pink points in the table) of a software product on the market that manufacturer **may ensure compliance with the essential cybersecurity requirement** set out in Part II, point (2), of Annex I **only for the version that it has last placed** on the market

Annex I, part 2, point 2


“Manufacturers of PDEs shall address and remediate vulnerabilities:



- **without delay,**
- **providing security updates,** separately from functionality updates - **where technically feasible”**

13.10



 provided that the **users of the versions that were previously placed on the market have access to the version last placed on the market free of charge and do not incur additional costs** to adjust the hardware and software environment in which they use the original version of that product.


subsequent substantially modified versions of a software previously placed on the market  
 **these may not be compliant with that requirement**

 It is possible to comply with the requirement **only with regard to the latest** substantially modified version  
 Free access to users of the versions that were previously placed on the market

13.11



Manufacturers **may maintain public software archives** enhancing user access to **historical versions**.

 In those cases, **users shall be clearly informed** in an easily accessible manner **about risks** associated with using unsupported software.





Planning, design, development, production

Delivery on the market

Maintenance

13.12

**Before** placing a PDEs on the market, manufacturers shall **draw up the technical documentation** referred to in Article 31.

Art. 31

13.12

Manufacturers shall **carry out the chosen conformity assessment procedures** as referred to in Article 32 or have them carried out.



**Where the conformity assessment procedure demonstrates compliance** of the PDEs with:

- 1) the essential cybersecurity **requirements** set out in Part I of Annex I; **and**
- 2) of the **processes** put in place by the manufacturer with the essential cybersecurity requirements set out in Part II of Annex I.

Manufacturers shall draw up the **EU declaration of conformity** in accordance with Article 28;



**and affix the CE marking** in accordance with Article 30.



Art. 32

Annex I, Part I

Annex I, Part II

Art. 28

Art. 30

During all these stages

13.14



**Manufacturers shall ensure that procedures are in place for PDEs that are part of a series of production to remain in conformity with this Regulation.**

Manufacturers shall **adequately take into account**:

- **changes** in the development and production process or in the design or characteristics of the **PDEs**; **and**
- **changes** in the **harmonised standards**, European cybersecurity certification **schemes** or **common specifications** as referred to in Article 27 by reference to which the conformity of the PDEs is declared or by application of which its conformity is verified.

Art. 27

Art. 13



Delivery on the market

Maintenance

From the placing on the market and for the support period, manufacturers **who know or have reason to believe that:**

- the PDEs **or**
- the processes

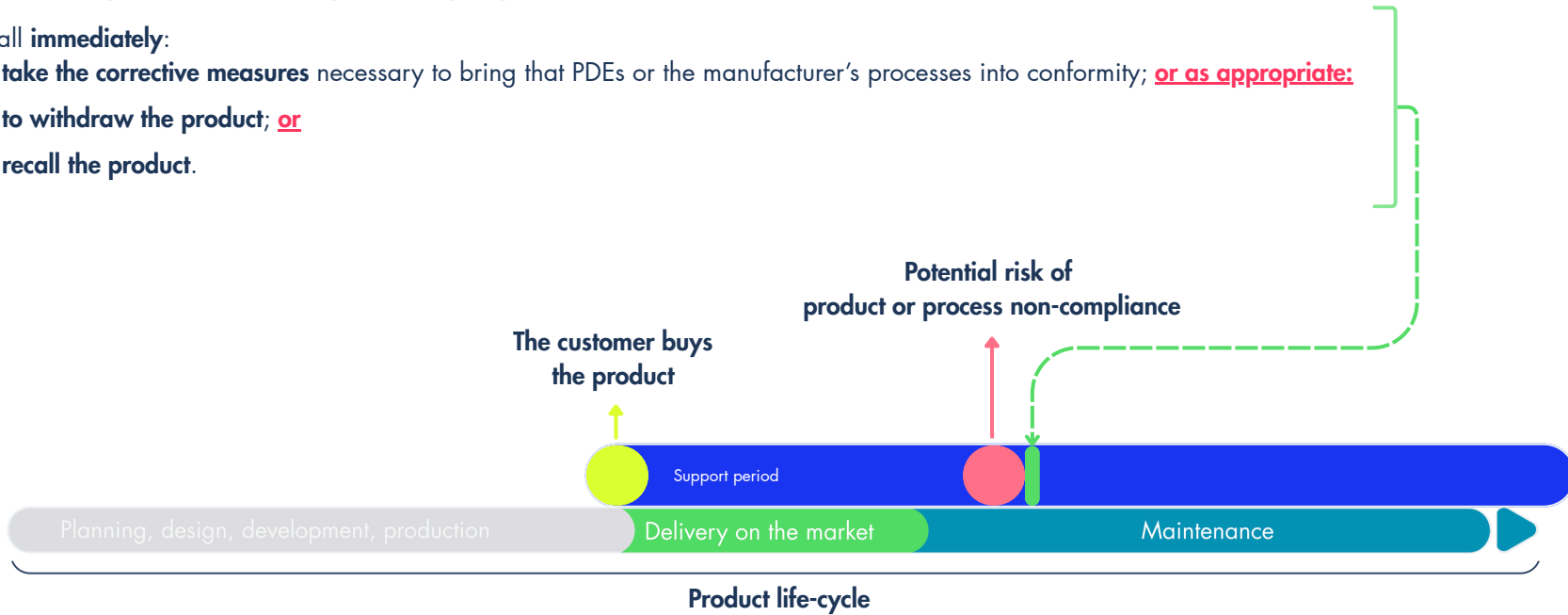
**are not in conformity with the essential cybersecurity requirements** set out in Annex I



shall immediately:

- 1) **take the corrective measures** necessary to bring that PDEs or the manufacturer's processes into conformity; **or as appropriate:**
- 2) **to withdraw the product;** **or**
- 3) **recall the product.**

13.21



Annex I, Part I



During all these stages



**Retention of documentation**

13.13

Manufacturers shall **keep the technical documentation and the EU declaration of conformity at the disposal** of the market surveillance authorities:

- for **at least 10 years** after the PDEs has been placed on the market;
- **or** for the support period, whichever is longer.



**Provision of information and cooperation**

13.22

**Upon a reasoned request from a market surveillance authority**, manufacturers shall **provide** that **authority with all the necessary information and documentation**, in paper or electronic form, **to demonstrate the conformity**:

- of the PDEs, and
- of the processes put in place.

**!** **Also, at the authorities request**, manufacturers shall cooperate with them, on any measures taken to eliminate the cybersecurity risks posed by the PDEs which they have placed on the market.

13.25

Market surveillance authorities **may request** manufacturers **of specific categories of PDEs** to provide the **relevant SBOMs**, to understand what software (including open-source) their products depend on. The information is collected and analyzed at EU level in **an anonymous and aggregated way**.



**Manufacturer's cessation of operations**

13.23

A manufacturer that ceases its operations, and, because it is not able to comply with this Regulation, shall **inform the users** of the relevant PDEs of the impending cessation of operations.

- !** **before** the cessation of operations takes effect;
- !** **by any means available, and to the extent possible.**

13.24



The Commission **may** specify the **format and elements** of the Software Bill Of Materials - SBOM referred to in Part II, point (1), of Annex I.

Annex I, Part 2, point 1



Delivery on the market

Maintenance



**Product identification**

13.15

The PDEs must bear elements allowing their identification:

1. a type;
2. batch, **or** serial number, **or** other identification elements;

**or where that is not possible**, that information is provided on their packaging or in a document accompanying the PDEs.



**Support period**

13.19

The end date of the support period - **at least** the month and the year - **must be clearly and understandably specified at the time of purchase in an easily accessible manner.**

- ! **Where applicable**, this date must be clearly and understandably specified:
  - on the PDEs,
  - its packaging, **or** by digital means.

**Where technically feasible** in light of the nature of the PDEs

↪ manufacturers shall **display a notification to users** informing them that their PDEs has **reached the end of its support period.**

Art. 13.8



**Manufacturer identification**

13.16

Manufacturers shall **indicate contact details**:

1. the name;
2. registered trade name **or** registered trademark of the manufacturer; **and**
3. the postal address;
4. email address **or** other digital contact details;
5. **where applicable**, the website where the manufacturer can be contacted

↪ on the PDEs;

↪ on its packaging **or** in a document accompanying the PDEs;

↪ **Also**, in the information and instructions to the user set out in Annex II.

! In a language which can be **easily understood.**



Delivery on the market

Maintenance



User instructions

The PDEs are accompanied by the information and instructions to the user set out in Annex II.

! They shall be in paper or electronic form, in an easily understandable language. They shall be **clear** and **legible**.

✓ They shall allow for:

- the secure installation,
- operation and
- use of PDEs.

Manufacturers shall **keep** the information and instructions **at the disposal**:

- for **at least 10 years after** the PDEs has been placed on the market; **or**
- for the **support period**, whichever is longer.

↪ **Where** the information and instructions are provided **online**, manufacturers shall ensure that they are **accessible**, **user-friendly** and **available online** for the **same period**.

13.18

User contact and support

Manufacturers shall **designate a single point of contact**. It must be:

- 1) easily identifiable by the users; **and**
- 2) included in the information and instructions to the user set out in Annex II.

✓ to enable users to **communicate directly and rapidly with them**; and

✓ to facilitate **reporting on vulnerabilities** of the PDEs.

✓ to **allow users to choose their preferred means of communication** and shall **not limit such means to automated tools**.

13.17

EU declaration of conformity

Manufacturers shall **provide the PDEs with a copy**:

- of the **EU declaration of conformity**, **or**
- a **simplified EU declaration of conformity**.

! If manufacturers provide a simplified declaration, it **must show the exact web address of the full declaration**.

13.20

Manufacturer's cessation of operations

A manufacturer that ceases its operations, and, because **it is not able to comply** with this Regulation, shall **inform the users** of the relevant PDEs **of the impending cessation of operations**.

! **before** the cessation of operations takes effect;

- ! • **by any means available**, **and**
- **to the extent possible**.

13.23



## Article 14



## Mandatory reporting

- (Art. 14.1-2-6) **Reporting exploited vulnerabilities;**
- ( Art. 14.3-4-5-6) **Reporting severe security incident;**
- (Art. 14.7) **The coordinating CSIRT;**
- (Art. 14.8) **Informing users.**

## Article 15



## Voluntary reporting

- (Art. 15.1,2,3) **Voluntary reporting of cybersecurity issues** - Table 1;
- (Art. 15.4,5) **Voluntary reporting of cybersecurity issues** - Table 2;
- (Art.14.1,3 - 15.1,2 - 16.1 - 14.7) **How mandatory and voluntary notifications are handled** - Table 1.

## Article 16

Single reporting platform and exceptional circumstances

- (Art.16.2 - 16.3) **How mandatory and voluntary notifications are handled** - Table 2;
- (Art. 16.2) **Exceptional circumstances: dissemination delayed or limited** - Table 1;
- (Art. 16.2) **Exceptional circumstances: dissemination delayed or limited** - Table 2;
- (Art. 16.6) **Exceptional circumstances: dissemination delayed or limited** - Table 3.

14.9



By **11 December 2025**: the Commission adopts delegated acts specifying **when the dissemination of notifications can be delayed on cybersecurity grounds.**

14.10



The Commission **may**, by means of implementing acts, **specify further the format and procedures of the notifications.**



14.1

If a manufacturer becomes aware of an **actively exploited vulnerability** contained in the PDEs, it must notify it simultaneously to:

- the CSIRT designated as coordinator of the Member State where the manufacturer has its **main establishment** in the Union, **and**
- ENISA.

↪ using the single reporting platform.

Art. 16  
Single Reporting Platform

14.2

So, from the moment a manufacturer becomes aware of an actively exploited **i** vulnerability, it must:

**A) in any event within 24 hours** ↪ send an **early warning notification** indicating, **where applicable**, the **Member States** in which the manufacturer is aware that its **PDEs is available** on the market;

**B) in any event within 72 hours** ↪ submit a **vulnerability notification**, which shall provide:

1. general information, **as available**, about the PDEs;
2. the general **nature of the exploit** and of the **vulnerability**;
3. **any corrective or mitigating measures taken**; **i** and
4. **corrective or mitigating measures that users can take**; and
5. where applicable, an **indication of the sensitivity of that information**.

**C) no later than 14 days after a corrective or mitigating measure is available** ↪ submit a **final report** including **at least** the following:

- a **description of the vulnerability**, including its severity and impact;
- where available, **information concerning any malicious actor** that has exploited or that is exploiting the vulnerability;
- **details about the security update or other corrective measures** that have been made available to remedy the vulnerability.

The manufacturer must provide the required information as soon as it becomes available.

**!** The deadlines of 24 hours, 72 hours and 14 days represent the **latest** possible time limits.

14.6

**D) If necessary and if requested by the CSIRT designated as coordinator** ↪ provide an **intermediate report on relevant status updates** about the actively exploited vulnerability of the PDEs.



14.3

If a manufacturer **becomes aware** of **any severe incident** having an **impact on the security** of the PDEs, it must notify it **simultaneously** to:

- the CSIRT designated as coordinator of the Member State where the manufacturer has its main establishment in the Union, **and**
- ENISA.

⇒ using the single reporting platform.

Art. 14.5

Definition of severe incident

Art. 16

Single Reporting Platform

14.4

So, from the moment a manufacturer becomes aware of **any severe incident** having an impact on the security of the PDEs, it must:

A) **in any event** within 24 hours ⇒ send an **early warning notification** indicating:

- **at least**, whether the incident is **suspected of being caused by unlawful or malicious acts**;
- **where applicable**, the **Member States** in which the manufacturer is **aware** that its **PDEs is available** on the market.

B) **in any event** within 72 hours ⇒ submit a **incident notification**, which shall provide:

1. general information, where available, about the **nature of the incident**;
2. an initial **assessment** of the incident; as well as any
3. **corrective or mitigating measures taken**, and
4. **corrective or mitigating measures that users can take**,
5. where applicable, an indication of the sensitivity of that information.

C) **If the incident notification has been submitted, then within 1 month** ⇒ submit a **final report** including **at least** the following:

- a **detailed description of the incident**, including its severity and impact;
- the type of threat or root cause that is likely to have triggered the incident;
- applied and ongoing mitigation measures.

The manufacturer must provide the required information **as soon as it becomes available**.

! The deadlines of 24 hours, 72 hours and 1 month represent the **latest** possible time limits.

14.6

D) **If necessary and if requested by the CSIRT designated as coordinator** ⇒ provide an **intermediate report on relevant status updates** about the severe incident having an impact on the security of the PDEs.





The manufacturer becomes aware of the vulnerability

Within 14 days after a fix  
Final report

Within 72h  
Vulnerability notification

Within 24h  
Early warning

The customer buys the product

Maintenance

Within 24h  
Early warning

Within 72h  
Incident notification

The manufacturer becomes aware of the severe incident

Within 1 month after the incident notification  
Final report

14.9



By 11 December 2025: the Commission adopts delegated acts specifying when the dissemination of notifications can be delayed on cybersecurity grounds.

14.10



The Commission **may**, by means of implementing acts, specify further the format and procedures of the notifications.



**All notifications** (about vulnerabilities or severe incidents) **must** be submitted via the single reporting platform, using one of the electronic notification end-points of that platform.

The notification must be submitted to:

- ↪ the **CSIRT designated as coordinator** of the Member State where the manufacturer has its **main establishment** in the Union.
- ↪ **at the same time**, the notification is made accessible to ENISA.

### How to determine the coordinating CSIRT

A manufacturer has its main establishment in the Member State **where decisions on the cybersecurity of the PDEs are predominantly taken**.

#### ! If such a Member State cannot be determined

- ↪ the main establishment shall be considered to be in the Member State where the manufacturer has the establishment with the **highest number of employees** in the Union.

#### ! If a manufacturer has no main establishment in the Union

↪ then it must submit the notification to the coordinating CSIRT of the **Member State determined** in this order of priority:

- The Member State of the **authorised representative** with the highest number of its PDEs.
- The Member State of the **importer** placing on the market the highest number of its PDEs.
- The Member State of the **distributor** making available on the market the highest number of its PDEs;
- The Member State in which the **highest number of users** of its PDEs are located. A manufacturer **may submit** notifications related to **any** subsequent actively exploited vulnerability **or** severe incident to the same CSIRT designated as coordinator to which it first reported.

- ↪ Once the manufacturer has chosen a CSIRT under point (d), it **may use** the same CSIRT for **future** notifications.

Art. 16  
Single Reporting Platform

Art. 18  
Authorised Representative



If a manufacturer **becomes aware** of an **actively exploited vulnerability** **or** a **severe incident** having an **impact** on the security of the PDEs, it **must inform** about the vulnerability or incident

- **the impacted users, and**
- **where appropriate all users.**

**Where necessary**, the manufacturer also provides instructions on **any risk mitigation and corrective measures** that the users can deploy to mitigate the impact of that vulnerability or incident, in a structured, machine-readable format.

**!** **Where the manufacturer fails to inform the users of PDEs in a timely manner**, the notified CSIRTs designated as coordinators **may provide** such information to the users.



15.1, 2 and 3

- Manufacturers
- Legal persons other than the manufacturer
- Natural persons other than the manufacturer

**may** notify on a voluntary basis

through the single reporting platform

OR

The CSIRT designated as coordinator

It **may** prioritise the processing of mandatory notifications over voluntary notifications.

ENISA

The CSIRT designated as coordinator **or** ENISA shall process the notifications in accordance with the procedure laid down in Article 16.

Art. 16

1. **any vulnerability** contained in a PDEs;
2. **cyber threats** that could affect the risk profile of a PDEs;
3. **any incident** having an impact on the security of the PDEs;
4. **near misses** that could have resulted in such an incident.

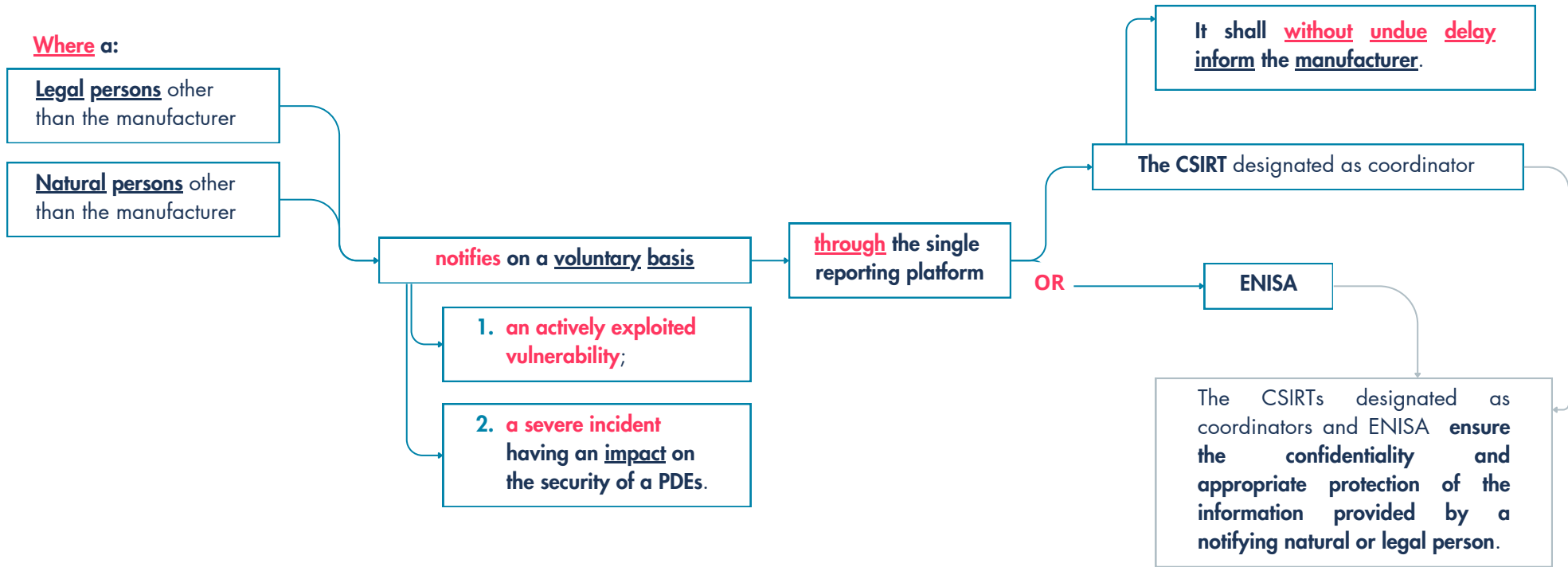
14.10



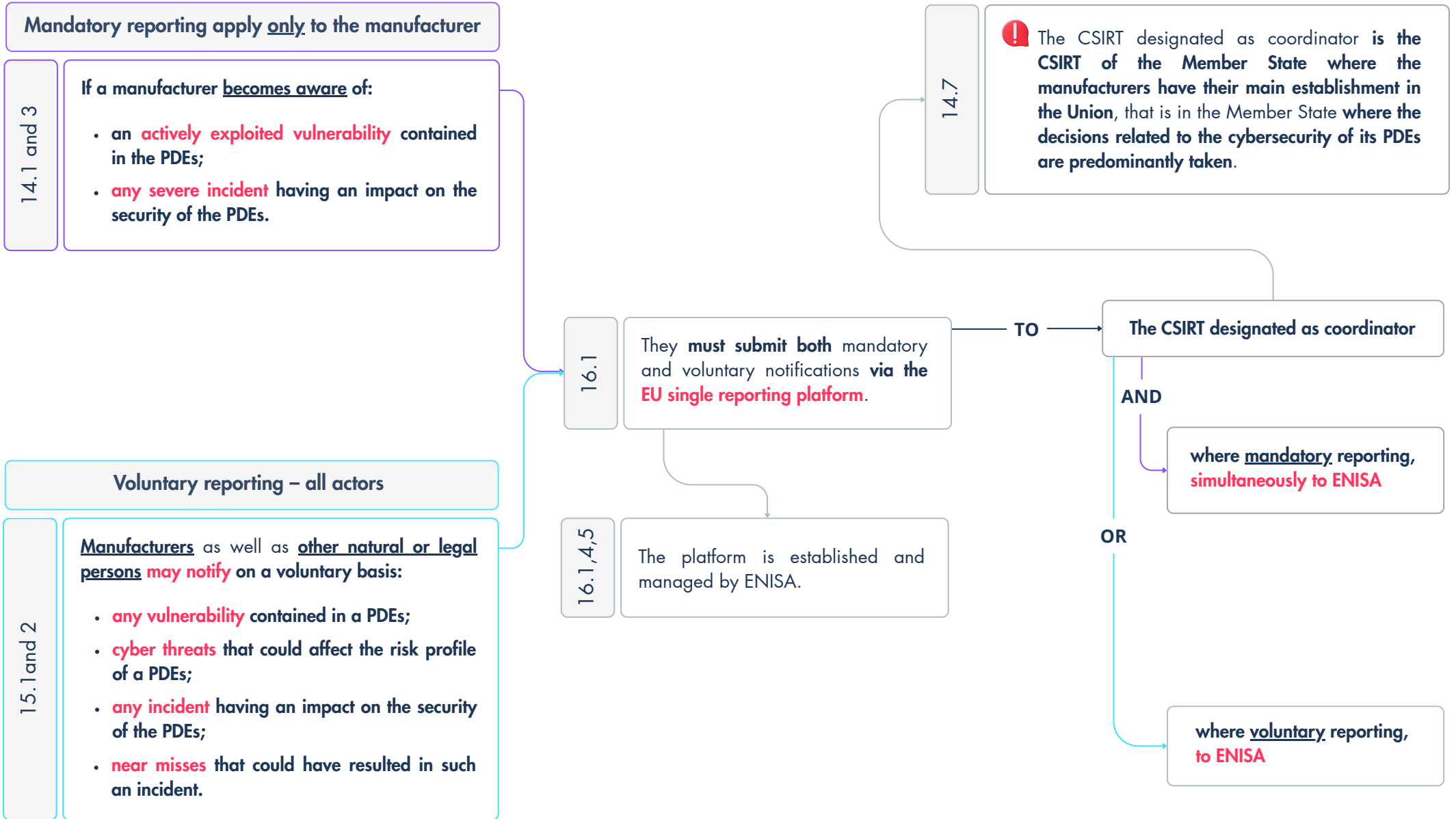
The Commission **may**, by means of implementing acts, **specify further the format and procedures of the notifications.**

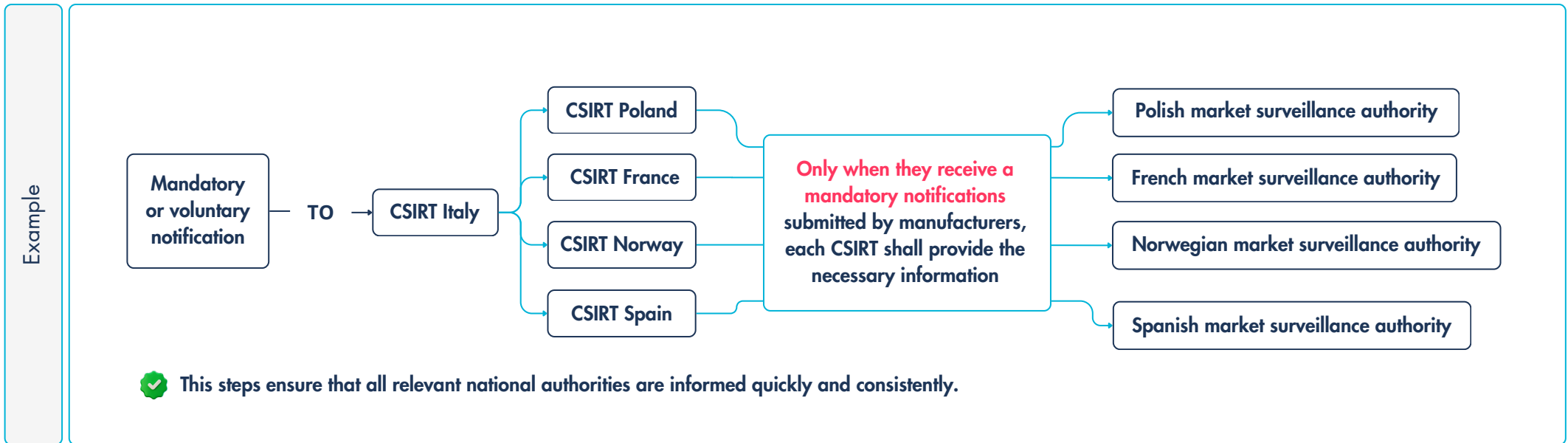
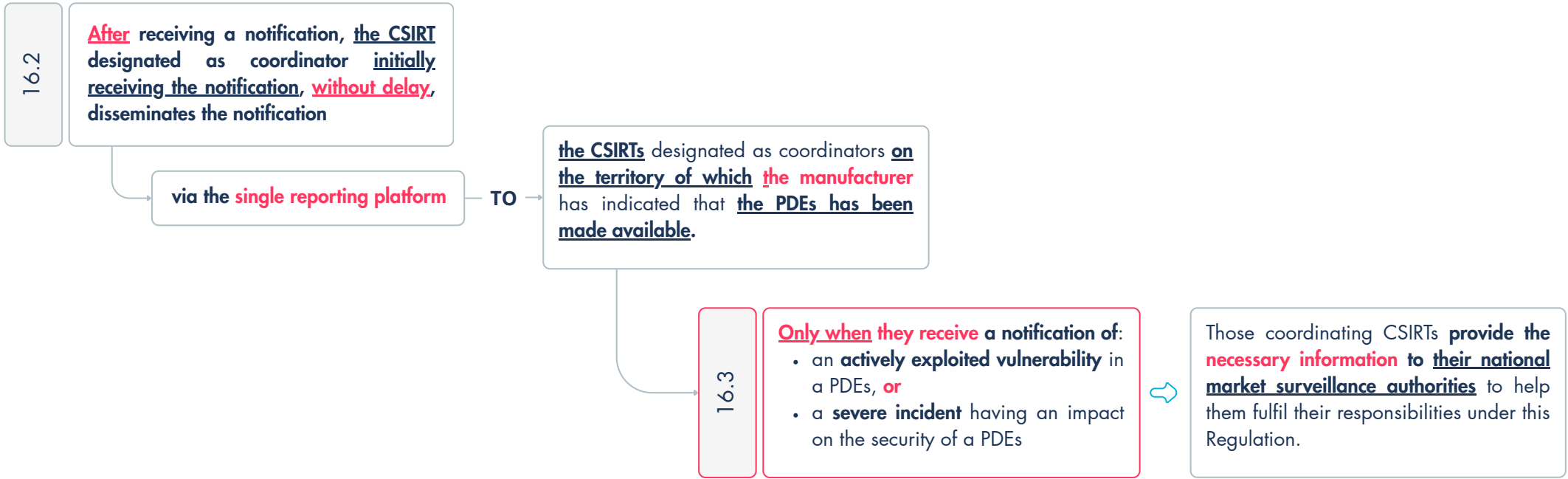


15.4 and 5



**!** If natural or legal persons report voluntarily, they will not have any additional obligations because of that report. They will only be subject to the same obligations they would have had even without submitting it, without prejudice to the prevention, investigation, detection and prosecution of criminal offences.







⇒ Standard rule: the CSIRT that first receives a notification must disseminate it immediately to the other CSIRTs through the EU reporting platform.

**BUT**

A manufacturer **may** request the CSIRT designated as coordinator - that is the one that first receives the notification - to delay the dissemination of that notification.

The manufacturer can make such a request **when**:

- The vulnerability is **already being managed** under a coordinated vulnerability disclosure process; or
- The information is **highly sensitive**, and immediate sharing could create or worsen cybersecurity risks.

This request can be made **only for**:

- specific cybersecurity-related reasons, **and**
- as long as strictly necessary to avoid further risks.

**After receiving the request**, the CSIRT designated as coordinator **may** decide to withholding a notification but **only if** it finds the reasons **justified**. In that case, the CSIRT must:

- **immediately inform ENISA** of its decision;
- provide a justification for withholding the notification; **and**
- indicate when the notification will be shared according to the normal dissemination procedure.





↪ Standard rule: the CSIRT that first receives a notification must disseminate it immediately to the other CSIRTs through the EU reporting platform.

**BUT**

The manufacturer **may indicate** in its notification that:

- 1) the **vulnerability** has been **actively exploited by a malicious actor and**, based on available information, **the exploit has occurred only** in the Member State of the CSIRT that received the notification;
- 2) **immediate dissemination** of the notification **would likely reveal information** that could harm the essential interests of that Member State; **or**
- 3) **dissemination would itself create an imminent and serious cybersecurity risk.**

In such cases, **the CSIRT** designated as coordinator **does not share** the full notification immediately.

↪ **Once the exceptional circumstances no longer apply**, the CSIRT designated as coordinator **must send** the complete notification to ENISA **and** to the other CSIRTs concerned.

**Instead**, it provides to ENISA **only** limited information, namely:

- A)** that a **notification** has been **submitted by the manufacturer**;
- B)** **general details** about the affected **product**;
- C)** a **summary of the exploit's nature**, **and**
- D)** a **note** stating that security-related grounds have been invoked to delay full dissemination.

↪ **If**, based on the limited information received, **ENISA** believes there is a **systemic risk** for cybersecurity in the EU internal market, it **may** recommend that the CSIRT designated as coordinator **disseminate the full notification** to all CSIRTs and to ENISA itself.



↪ Standard rule: the CSIRT that first receives a notification must disseminate it immediately to the other CSIRTs through the EU reporting platform.

BUT

**If** a CSIRT designated as coordinator becomes aware of an **actively exploited vulnerability** as part of a coordinated vulnerability disclosure (CVD) process, as referred to in Article 12(1) of Directive (EU) 2022/2555, that CSIRT (the one that first received the notification) **may delay** the dissemination of the relevant notification via the single reporting platform.

Such a delay is allowed **only for**:

- cybersecurity-related reasons and only for
- as long as strictly necessary;
- until the parties involved in the coordinated vulnerability disclosure give their consent to share the information.

BUT



This rule **does not prevent** manufacturers from voluntarily notifying the same vulnerability following the procedure set out in this Article.



### No increased liability for reporting

17.4



The mere act of notification in accordance with Arts. 14(1) and (3) or Article 15(1) and (2) shall not subject the notifying natural or legal person to increased liability.

### Public information in case of severe incidents

17.2

#### Where public awareness is necessary

- to prevent or mitigate a severe incident having an impact on the security of the PDEs, **or**
- to handle an ongoing incident, **or**
- where disclosure of the incident is otherwise in the public interest,

the CSIRT designated as coordinator of the relevant Member State **may, after consulting the manufacturer** concerned and, **where appropriate**, in cooperation with ENISA, **inform the public about the incident or require the manufacturer to do so.**

### Updating the European vulnerability database

17.5

**After** a security update or another form of corrective or mitigating measure is available, **ENISA shall, in agreement with the manufacturer** of the PDEs concerned, **add the publicly known vulnerability** notified pursuant to Article 14(1) or Article 15(1) **to the European vulnerability database.**

### Support for manufacturers, especially SMEs

17.6

The CSIRTs designated as coordinators shall provide **helpdesk support** in relation to the reporting obligations pursuant to Article 14 **to manufacturers** and in particular manufacturers that qualify as microenterprises or as small or medium-sized enterprises.

### ENISA's recurring reporting obligation and sharing information with EU-level coordination bodies

17.1 and 3

ENISA **may** share relevant information received through mandatory or voluntary notifications (Arts. 14 and 15) **with EU-CyCLONe, only when** the information is considered useful for the coordinated management of large-scale cybersecurity incidents or crises.

Every 24 months, ENISA shall prepare a **technical report on emerging trends regarding to cybersecurity risks in PDEs.**

**This report is based on notifications received** under Arts. 14(1),(3) and 15(1),(2) **and is submitted to the NIS Cooperation Group.**

The first report shall be submitted within 24 months from the date when the reporting obligations under Article 14(1),(3) start to apply.



↪ A manufacturer **may**, by a **written mandate**, appoint an authorised representative.

**BUT**

The obligations laid down in Article 13(1) to (11), Article 13(12), first subparagraph, and Article 13(14) shall not form part of the authorised representative's mandate.



An authorised representative performs the tasks specified in the **mandate received** from the manufacturer.

The authorised representative provides a copy of the mandate **when** market surveillance authorities **request it**.

The **mandate** must **allow** the authorised representative to do **at least** the following:

**(a) Keep documents available**

The authorised representative must **keep**:

- the **EU Declaration of Conformity** (Art. 28);
- the **technical documentation** (Art. 31)

**at the disposal** of the market surveillance authorities for **at least 10 years after** the PDEs has been placed on the market **or for the support period**, whichever is longer.

**(b) Provide information and documentation on request**

**If** a market surveillance authority makes a **reasoned request**, the authorised representative must provide **all information and documentation necessary to demonstrate the conformity** of the PDEs.

**(c) Cooperate to remove risks**

The authorised representative must **cooperate with market surveillance authorities, at their request, on any action needed to eliminate the cybersecurity risks posed by the PDEs** covered by the authorised representative's mandate.

Therefore, the authorised representative is not required to:

- 13.1 > ensure secure design, development, production;
- 13.2 > perform or oversee the product's cybersecurity risk assessment;
- 13.3 > update or maintain risk-assessment documentation;
- 13.4 > update or maintain risk-assessment documentation;
- 13.5 > perform due-diligence checks on integrated components;
- 13.6 > manage or fix vulnerabilities in integrated components;
- 13.7 > maintain cybersecurity logs or documentation;
- 13.8 > define support periods or run vulnerability-handling processes;
- 13.9 > ensure long-term availability of security updates;
- 13.10 > manage update versioning or update policies;
- 13.11 > maintain public software repositories or issue related warnings;
- 13.12(1) > prepare the technical file nor conduct conformity assessment;
- 13.14 > manage production conformity or process updates.



Before placing a PDEs on the market

PDEs placed on the market

Post

19.2

**Before placing a PDEs on the market, importers shall ensure that:**

- ✓ (a) the manufacturer has carried out the appropriate conformity assessment procedures (Art. 32);
- ✓ (b) the manufacturer has drawn up the technical documentation;
- ✓ (c) the PDEs:
  - 1) bears the **CE marking** (Art. 30); **and**
  - 2) is accompanied by the **EU declaration of conformity** (Art. 13.20); **and**
  - 3) is accompanied by the **information and instructions to the user** set out in Annex II, in a language easily understood by users and market surveillance authorities;
- ✓ (d) the manufacturer has complied with requirements set out in Arts. **13(15),(16)** and **(19)**.

⇒ Importers shall be able to provide the documents necessary to demonstrate fulfilment of these obligations.

[Art. 32](#)

[Art. 30](#)

[Art. 13.20](#)

[Arts. 13\(15\),\(16\),\(19\)](#)  
Manufacturer's information obligations towards users

19.3

! **Where** an importer **considers or has reason to believe that:**

- a PDEs, **or**
- the **processes** put in place by the manufacturer

⇒ **are not in conformity** with this Regulation ⇒ The importer shall **not place the PDEs on the market until** the product or the processes put in place by the manufacturer have been brought into **conformity**.

! **Where** the PDEs presents a **significant cybersecurity risk** ⇒ The importer shall **inform**, to that effect:

- **the manufacturer and**
- **the market surveillance authorities.**

! **Where** an importer has reason to believe that a PDEs **may present a significant cybersecurity risk in light of non-technical risk factors** ⇒ The importer shall **inform the market surveillance authorities** to that effect.

⇒ **Upon receipt of such information**, the market surveillance authorities shall **follow the procedures** referred to in Art. 54(2).

**Art. 19**



PDEs placed on the market Post

19.1 Importers shall **place** on the market **only** those PDEs that:

- 1) **comply with the essential cybersecurity requirements** set out in Part I of Annex I; **and**
- 2) **where** the processes put in place by the manufacturer **comply with the essential cybersecurity requirements** set out in Part II of Annex I.

Annex I, Part I

Annex I, Part II

19.5 **!** Importers who **know or have reason to believe** that a PDEs which they have **placed on the market is not** in conformity shall **immediately**:

- **take the corrective measures** necessary to ensure that the PDEs is brought into conformity with this Regulation, **or**
- to **withdraw or recall the product, if appropriate**.

**!** **Upon becoming aware** of a vulnerability in the PDEs

- ↳ importers shall **inform the manufacturer without undue delay** about that vulnerability.

**!** **Where** the PDEs presents a significant cybersecurity risk

- ↳ importers shall **immediately inform the market surveillance authorities of the Member States** in which they have made the PDEs available on the market to that effect, **giving details**, in particular:
  - of non-compliance, **and**
  - of **any** corrective measures taken.

19.6 Importers shall, for **at least 10 years after** the PDEs has been placed on the market **or** for the support period, **whichever is longer**,

- keep a **copy** of the EU declaration of conformity **at the disposal of market surveillance authorities and**
- ensure that the technical documentation **can be made available** to those authorities, **upon request**.

19.7 **Further to a reasoned request** from a market surveillance authority

- ↳ the importers shall provide it with **all information and documentation** necessary to demonstrate conformity of the PDEs with Part I and Part II of Annex I:
  - in paper or electronic form;
  - in a language that can be easily understood by that authority.

**At its request**, importers shall cooperate with the authority, on **any** measures taken to eliminate cybersecurity risks posed by a PDEs they have placed on the market.

19.8 **!** **Where** the importer of a PDEs becomes aware that the manufacturer of that product **has ceased its operations and**, as result, **is not able to comply** with the obligations laid down in this Regulation

- ↳ The importer shall **inform**
  - **the relevant market surveillance authorities** about this situation,
  - **as well as**, by any means available and to the **extent possible**, **the users** of the PDEs placed on the market.



19.4

Importers shall indicate the following on the PDEs, **or** on its packaging, **or** in a document accompanying the PDEs:

1. **name**;
2. **registered trade name** or **registered trademark**;
3. **postal address**;
4. **email address** or other digital contact;
5. and, **where applicable**, the **website** where they can be contacted.



The contact details shall be in a **language easily understood** by **users** and **market surveillance authorities**.





## Before placing a PDEs on the market

## PDEs placed on the market

## Post

20.2

**Before** making a PDEs available on the market, distributors shall **verify that**:

- ✓ (a) the PDEs bears the **CE marking**;
- ✓ (b) the **manufacturer and** the **importer**:
  - **have complied with the obligations** set out in Arts. **13(15),(16),(18),(19)** and **(20)**.
  - **have complied with the obligations set out in Art. 19(4)** relating to the importer's contact details **and have provided all necessary documents** to the distributor.

Arts. 13(15),(16),(19)  
Manufacturer's  
information obligations  
towards users

Arts. 13(18) and (20)  
Manufacturer's  
information obligations  
towards users

Art. 19.4

20.3

! **Where** a distributor **considers or** has reason to believe, **on the basis of information in its possession**, that

- a PDEs, **or**
- the **processes** put in place by the manufacturer **are not in conformity** with the essential cybersecurity requirements set out in Annex I

→ The distributor shall **not make the PDEs available on the market until** the product or the processes put in place by the manufacturer have been brought into **conformity**.

! **Where** the PDEs poses a **significant cybersecurity risk**

→ The distributor shall **inform, without undue delay,** to that effect:

- the **manufacturer and**
- the **market surveillance authorities**.





PDEs placed on the market	Post
<p>20.1</p> <p><b>!</b> <u>When</u> making a PDEs available on the market, <u>distributors</u> shall <b>act with due care</b> in relation to the requirements set out in this Regulation.</p>	<p><b>Further to a reasoned request</b> from a market surveillance authority</p> <p><u>distributors</u> shall <b>provide all information and documentation</b> necessary to demonstrate conformity of the PDEs and the processes put in place by its manufacturer with this Regulation</p> <ul style="list-style-type: none"> <li>• in paper or electronic form;</li> <li>• in a language that can be easily understood by that authority.</li> </ul> <p><b>At its request</b>, <u>distributors</u> shall cooperate with the authority, on <b>any measures taken to eliminate cybersecurity risks posed by a PDEs</b> which they have made available on the market.</p>
<p>20.4</p> <p><b>!</b> <u>Distributors who know or have reason to believe, on the basis of information in their possession</u>, that</p> <ul style="list-style-type: none"> <li>• a PDEs, which they have made available on the market, <b>or</b></li> <li>• the <b>processes</b> put in place by its manufacturer</li> </ul> <p>are <b>not</b> in conformity with this Regulation</p> <p>↳ They shall make sure that</p> <ul style="list-style-type: none"> <li>• the <b>corrective measures</b> necessary to bring that PDEs or the processes put in place by its manufacturer into conformity <b>or</b></li> <li>• to <b>withdraw or recall the product, if appropriate, are taken.</b></li> </ul> <p><b>!</b> <u>Upon becoming aware of a vulnerability</u> in the PDEs</p> <p>↳ <u>distributors</u> shall <b>inform the manufacturer without undue delay</b> about that vulnerability.</p> <p><b>!</b> <u>Where</u> the PDEs presents a significant cybersecurity risk</p> <p>↳ <u>distributors</u> shall <b>immediately inform the market surveillance authorities</b> of the Member States in which they have made the PDEs available on the market to that effect, <b>giving details</b>, in particular:</p> <ul style="list-style-type: none"> <li>• of the non-compliance, <b>and</b></li> <li>• of <b>any</b> corrective measures taken.</li> </ul>	<p>20.5</p> <p>20.6</p> <p><b>!</b> <u>Where</u> the <u>distributor</u> of a PDEs becomes aware, <u>on the basis of information in its possession</u>, that the <b>manufacturer</b> of that product has ceased its operations and, as result, <b>is not able to comply</b> with the obligations laid down in this Regulation</p> <p>↳ the <u>distributor</u> shall <b>inform, without undue delay</b>,</p> <ul style="list-style-type: none"> <li>• <b>the relevant market surveillance authorities</b> about this situation,</li> <li>• <b>as well as</b>, by <u>any means</u> available and to the <u>extent possible</u>, <b>the users</b> of the PDEs placed on the market.</li> </ul>



! **Only** to the extent it is **made available on the market**, that is, supplied for distribution or use in the course of a commercial activity (recital 18):

## The cybersecurity policy

24.1

Open-source software stewards shall put in place and document in a **verifiable manner** a cybersecurity policy to

- 1) foster the **development** of a **secure** FOSS PDEs
- 2) as well as an **effective handling of vulnerabilities** by the developers of that product.

That policy shall:

- 3) **foster the voluntary reporting of vulnerabilities** as laid down in Art. 15 by the developers of that product; and
- 4) take into account **the specific nature** of the open-source software steward; and
- 5) take into account the **legal and organisational arrangements** to which it is subject.

That policy shall, in particular, include aspects related to:

- 6) **documenting, addressing and remediating vulnerabilities**; and
- 7) **promote the sharing of information** concerning discovered vulnerabilities within the open-source community.

## Duty to supply documentation

24.2

**Further to a reasoned request from a market surveillance authority**, open-source software stewards shall provide that authority with the **documentation**

- in a language which can be easily understood by that authority;
- in paper or electronic form.

Art. 15  
Voluntary reporting

## Cooperation with market surveillance authorities

24.2

Open-source software stewards shall cooperate with the market surveillance authorities, **at their request**, with a view to mitigating the **cybersecurity risks** posed by a PDEs qualifying as free and open-source software.

## Duty to notify actively exploited vulnerabilities and severe incidents

24.3

! The obligation to notify **any actively exploited vulnerability** (Art. 14.1) applies to OSS stewards to the extent that they are involved in the development of the PDEs.

! The obligation to notify any severe incident (Art. 14.3) and to notify users (Art. 14.8) applies to OSS stewards to the extent that severe incidents **affect network and information systems** provided by the OSS stewards for the development of such PDEs.

Art. 14.1

Art. 14.3

Art. 14.8

Art. 24



25

To facilitate the due diligence obligation set out in Art. 13.5, regarding manufacturers that integrate FOSS components in their PDEs



the Commission is empowered to adopt delegated acts



by establishing **voluntary security attestation programmes** allowing

- the developers; or
- users of PDEs qualifying as FOSS;
- as well as **other third parties**

to assess the conformity of such products with all or certain essential cybersecurity requirements or other obligations laid down in this Regulation.

26,1 and 2(a)

To facilitate implementation and ensure the consistency of such implementation



the Commission shall publish guidance to assist economic operators in applying this Regulation, with a particular focus on facilitating compliance by microenterprises and small and medium-sized enterprises.



**Where** it intends to provide guidance, the Commission shall address **at least** the following aspects:

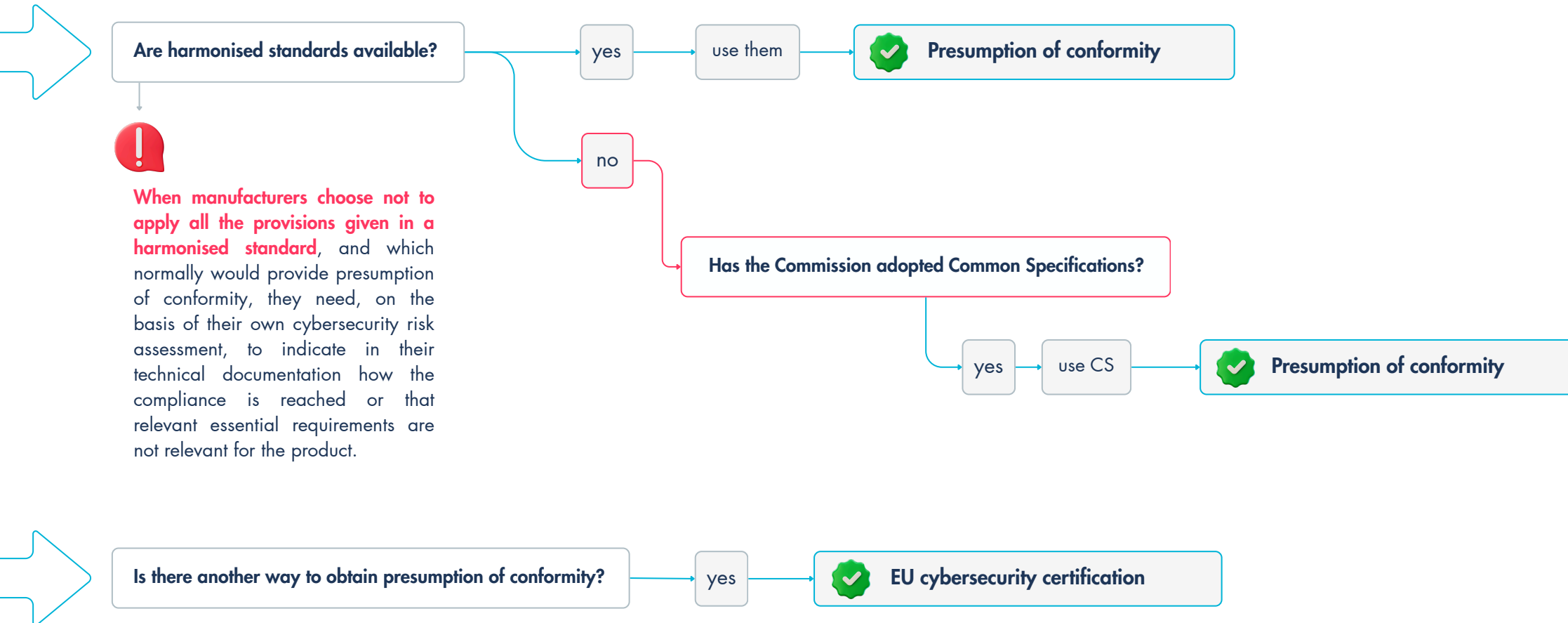
- a) the scope (particularly re. **remote data processing solutions and FOSS**);
- b) application of support periods;
- c) compliance of PDEs under the CRA and other related Union legal acts;
- d) concept of substantial modification



Under Article 6, both the **PDEs** and the **processes** put in place by the manufacturer **must comply with the essential cybersecurity requirements** set out in Annex I. To facilitate the demonstration of compliance, **Article 27 provides several simplified conformity mechanisms**.

**!** The **presumption of conformity is a facilitation tool, not an obligation**.

Manufacturers **may** still choose to demonstrate compliance by other means, **without relying** on harmonised standards or EU cybersecurity certification schemes.





## Use harmonised standards

27.1

PDEs and processes put in place by the manufacturer **which are in conformity with harmonised standards or parts thereof**, the references of which have been published in the Official Journal of the European Union, **are presumed to be in conformity** with the essential cybersecurity requirements set out in Annex I covered by those standards or parts thereof.

## What if harmonised standards do not exist? Use Common Specifications

27.2 and 5

If harmonised standards are **not expected to be published within a reasonable period**, the Commission **may adopt implementing acts establishing common specifications** covering technical requirements that provide a means to comply with the essential cybersecurity requirements.

PDEs and processes put in place by the manufacturer **which are in conformity with the common specifications established by implementing acts are presumed to be in conformity** with the essential cybersecurity requirements set out in Annex I covered by those common specifications or parts thereof.

27.6 and 7

### ! What happens when harmonised standards become available later?

When a reference of a **harmonised standard is published** in the Official Journal of the European Union, **the Commission shall repeal the implementing acts** or parts thereof which cover the same essential cybersecurity requirements as those covered by that harmonised standard.

### ! What if a Member State believes a Common Specification is insufficient?

Where a Member State considers that a **common specification does not entirely satisfy the essential cybersecurity requirements** set out in Annex I, **it shall inform the Commission**. The Commission **may**, if appropriate, **amend the implementing act** establishing the common specification in question.



Is there **another way to obtain presumption of conformity**? Yes: **EU cybersecurity certification**

27.8 and 9

PDEs and processes put in place by the manufacturer for which an **EU statement of conformity or certificate** has been issued under a **European Cybersecurity Certification Scheme - ECCS** (Regulation (EU) 2019/881) **are presumed to be in conformity** with the essential cybersecurity requirements set out in Annex I covered by those standards.

↳ The issuance of a certification under a ECCS with assurance level **substantial** or **high** eliminates the obligations to carry out a **third-party conformity assessment** for the corresponding requirements, as set out in Article 32(2), points (a) and (b), and Article 32(3), points (a) and (b).

! **The Commission specifies the ECCS** - via delegated acts - **that can be used to demonstrate conformity of PEDs** with the essential cybersecurity requirements or parts thereof.

[Art. 32.2 and 3](#)



28.1 and 2

Manufacturers draw up the EU declaration of conformity  in accordance with Art. 13.12

↪ The EU declaration of conformity shall:


- 1) states that the fulfilment of the essential cybersecurity requirements set out in Annex I has been demonstrated;
- 2) has the model structure set out in Annex V;
- 3) contains the elements specified in the relevant conformity assessment procedures in Annex VIII;
- 4) shall be made available in the languages required by the Member State in which the PDEs is placed or made available on the market;
- 5) and shall be updated as appropriate.

Art.13.12


Annex I

Annex VIII

28.4

 By drawing up the EU declaration of conformity, the manufacturer shall assume responsibility for the compliance of the PDEs.


28.3

 **Where** a PDEs is subject to more than one Union legal act requiring an EU declaration of conformity

↪ a single EU declaration of conformity shall be drawn up in respect of all such Union legal acts.

↳ That declaration shall contain the identification of the Union legal acts concerned, including their publication references.

28.5

 The Commission is empowered to adopt delegated acts to add elements to the minimum content of the EU declaration of conformity set out in Annex V to take account of technological developments.

## ANNEX V EU DECLARATION OF CONFORMITY

The EU declaration of conformity referred to in Article 28, shall contain all of the following information:

1. **Name and type** and any additional information enabling the unique identification of the product with digital elements;
2. **Manufacturer details:** name and address of the manufacturer or its authorised representative;
3. **Provider's responsibility statement:** a statement that the EU declaration of conformity is issued under the sole responsibility of the provider;
4. **Identification of the declared object** (identification of the product with digital elements allowing traceability, which may include a photograph, where appropriate);
5. **Compliance statement:** a statement that the object of the declaration described above is in conformity with the relevant Union harmonisation legislation;
6. **References** to any relevant harmonised standards used or any other common specification or cybersecurity certification in relation to which conformity is declared;
7. Where applicable, the name and number of the notified body, a description of the conformity assessment procedure performed and identification of the certificate issued;

Additional information:

**Signed for** and on behalf of:

(place and date of issue):

(name, function) (signature):



28.2

The **simplified** EU declaration of conformity referred to in Art. 13.20

- 1) has the **model structure** set out in **Annex VI**;
- 2) shall be made **available in the languages required by the Member State in which the PDEs is placed or made available** on the market.

[Art. 13.20](#)

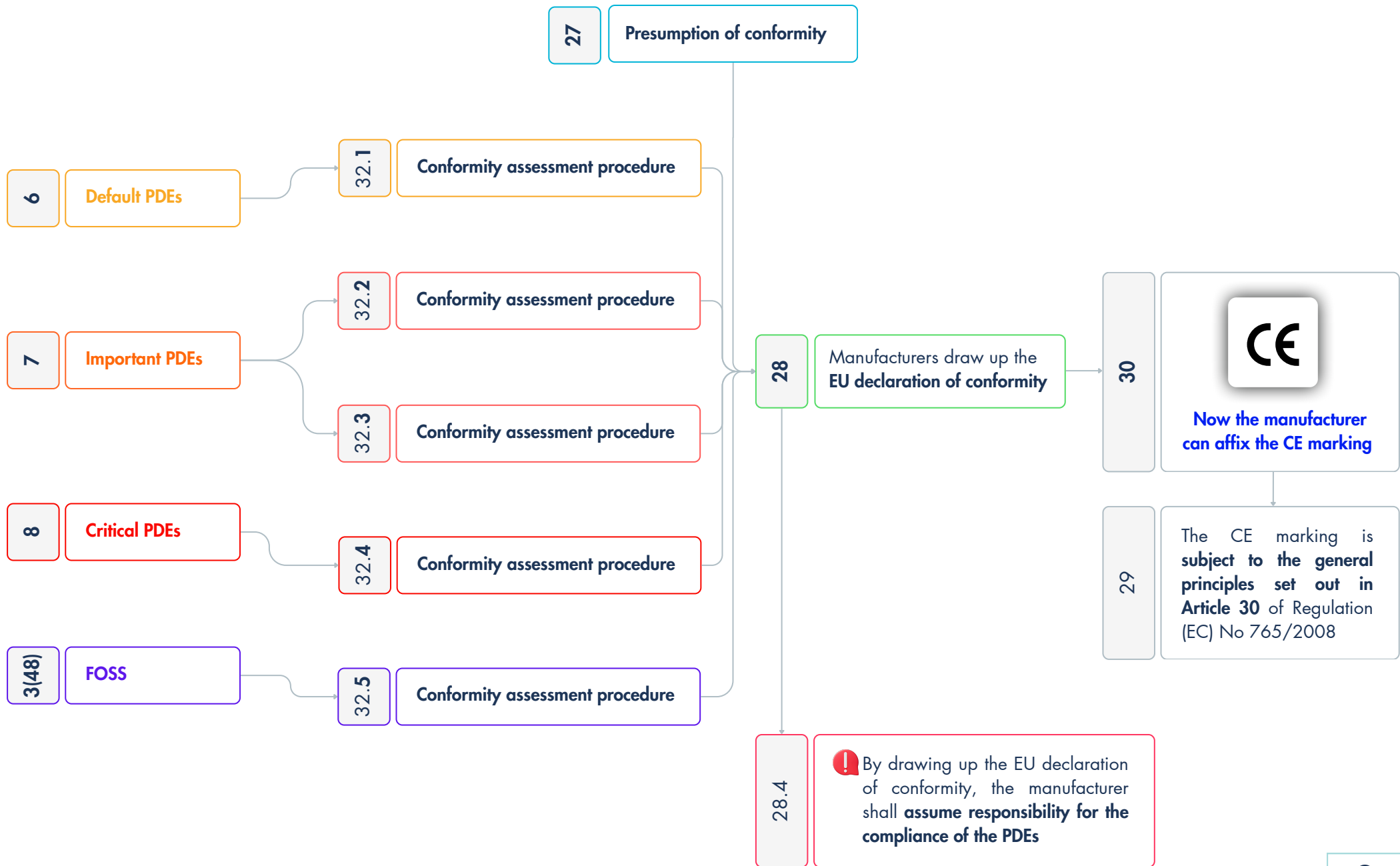
### ANNEX VI SIMPLIFIED EU DECLARATION OF CONFORMITY

The simplified EU declaration of conformity referred to in Article 13(20) shall be provided as follows:

Hereby, ... [name of manufacturer] declares that the product with digital elements type ... [designation of type of product with digital element] is in compliance with Regulation (EU) 2024/2847.

The full text of the EU declaration of conformity is available at the following internet address: ...







32

Manufacturers **carry out the chosen conformity assessment procedure.**

28

Manufacturers shall draw up the EU declaration of conformity in accordance with Art. 28.

29

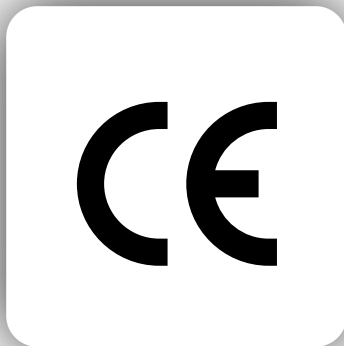
**and** affix the CE marking, which is subject to the general principles set out in Article 30 of Regulation (EC) No 765/2008.

Before placing a PDEs on the market

PDEs placed on the market

Post

30.1-2 and 3



The CE marking shall be:

- 1) affixed **before** the PDEs is placed on the market;
- 2) It **may** be followed by a pictogram **or any other mark** indicating a special cybersecurity risk **or use** set out in the implementing acts referred to in Art. 30.6;
- 3) affixed visibly, legibly and indelibly to the PDE;

- ! **Where** that is not possible or not warranted on account of the **nature** of the PDEs, it shall be **affixed**
  - to the **packaging**, **and**
  - to the **EU declaration of conformity** (Art. 28) accompanying the PDEs.

**Software:**

For PDEs which are in the form of **software**, the CE marking shall be **affixed either**

- to the **EU declaration of conformity** (Art. 28), **or**
- **on the website** accompanying the software product.  
In the latter case, the relevant section of the website shall be **easily and directly accessible to consumers**.

- ! On account of the **nature of the PDEs**:
  - the **height of the CE marking** affixed to the PDEs **may** be lower than 5 mm, provided that it remains **visible and legible**.

Art. 30.6

Art. 28



Art. 30



30.4

**Where a notified body is involved in the conformity assessment procedure** based on full quality assurance (module H - Art. 32).



The CE marking shall be **followed by the identification number** of that body.

The identification number of the notified body shall be **affixed**

- **by the body itself; or**
- **under its instructions, by the manufacturer or the manufacturer's authorised representative.**

30.5

**Member States shall**

- **build upon existing mechanisms** to ensure correct application of the regime governing the CE marking, **and**
- **shall take appropriate action** in the event of **improper use** of that marking.

**!** **Where** the PDEs is subject to Union harmonisation legislation, other than the CRA, **which also provides for the affixing of the CE marking**



The CE marking **shall indicate that the product also fulfils the requirements** set out in such other Union harmonisation legislation.

30.6



The Commission **may, by means of implementing acts, lay down technical specifications** for

- labels;
- pictograms;
- or any other marks related to the security of the PDEs;
- their support periods;
- and mechanisms to promote their use and to increase public awareness about the security of PDEs.

When preparing the draft implementing acts, **the Commission shall consult relevant stakeholders.**



Before placing a PDEs on the market

PDEs placed on the market

Support period

31.2

The technical documentation shall be

- drawn up **before** the PDEs is placed on the market, and
- **continuously updated**, where appropriate, **at least** during the support period.

31.1

The technical documentation shall

- contain all relevant data or details of the means used by the manufacturer to ensure that the PDEs and the processes put in place by the manufacturer **comply** with the essential cybersecurity requirements set out in Annex I;

 It shall **at least** contain the elements set out in Annex VII

31.5



The Commission is empowered to adopt **delegated acts** by adding elements to be included in the technical documentation set out in Annex VII to take account of technological developments, as well as developments encountered in the implementation process of this Regulation.

31.4

The technical documentation **and** correspondence relating to **any** conformity assessment procedure shall be drawn up

- in an official language of the Member State in which the notified body is established **or**
- in a language acceptable to that body.

31.3

For PDEs as referred to in Art. 12, which are also subject to other Union legal acts which provide for technical documentation,

- ↳ a **single** set of technical documentation shall be drawn up containing the information referred to in Annex VII **and** the information required by those Union legal acts.

Art. 12



Depending on the classification of the product, **the manufacturer** demonstrates conformity with the essential cybersecurity requirements by using the following procedures:

Annex VIII

## Default PDE

32.1

For all default PDEs, **the manufacturer is free to choose any** of the following 4 conformity assessment procedures:

Procedure type:

(a) **Module A** (self-assessment),  
**Internal control procedure**  
(Annex VIII, Part I)

(b) **Modules B + C**  
**EU-type examination (B)** and  
**internal production control (C)**  
(Annex VIII, Parts II–III)

(c) **Module H**  
**Full quality assurance**  
(Annex VIII, Parts IV)

(d) **Where available and applicable**  
**European cybersecurity certification scheme**  
(Article 27.9)

## Important PDE - Class I

32.2

- **Where** the manufacturer has **not applied or has only partly applied**, harmonised standards, common specifications, or a European cybersecurity certification scheme at assurance level **at least** “**substantial**”;
- **or where such standards, specifications or certification schemes do not exist**, then the manufacturer **must undergo conformity assessment involving a third-party**:

(a) **Modules B + C**  
**EU-type examination (B)**  
followed by **internal production control (C)**  
(Annex VIII, Parts II–III)

(b) **Module H**  
**Full quality assurance**  
(Annex VIII, Parts IV)

## Important PDE - Class II

32.3

For Class II important products, **the conformity assessment must always involve a third-party**:

(a) **Modules B + C**  
**EU-type examination (B)**  
followed by **internal production control (C)**  
(Annex VIII, Parts II–III)

(b) **Module H**  
**Full quality assurance**  
(Annex VIII, Parts IV)

(c) **Where available and applicable**  
**European cybersecurity certification scheme** at assurance level **at least** ‘**substantial**’  
(Article 27.9)

Key term: harmonised standard





## Critical PDE

The manufacturer demonstrates conformity with the essential cybersecurity requirements by using **one** of the following 2 procedures:

(a) Obtaining a **European cybersecurity certification** in accordance with **Article 8.1**

→ **Article 8.1 grants the Commission the power to adopt delegated acts** that can make European cybersecurity certification (ECCS) **mandatory** for certain categories of critical PDEs.

**To activate the certification requirement under Article 8.1, all of the following conditions must be met:**

- 1 **An EU cybersecurity certification scheme exists** and it must have been adopted under the Cybersecurity Act (Regulation EU 2019/881).
- 2 The **scheme covers the critical products listed in Annex IV**;
- 3 The Commission has adopted a **delegated act mandating the use of that scheme** for those products;
- 4 The delegated act **specifies the required assurance level**, which must be **at least "substantial"** and **proportionate** to the cybersecurity risk associated with the product.

Art. 8

(b) **Where no delegated acts are adopted, the manufacturer must follow any of the procedures in Article 32(3)** (Modules B + C or H):

**Modules B + C**  
EU-type examination (B) followed by **internal production control** (C) (Annex VIII, Parts II–III)

**Module H**  
**Full quality assurance** (Annex VIII, Parts IV)

**Where available and applicable**  
**European cybersecurity certification scheme** at assurance level **at least 'substantial'** (Article 27(9))

32.4

## FOSS PDE

Manufacturers of products that qualify as **free and open-source software** and **fall under the categories of Annex III** (i.e. **Important PDEs**) demonstrate conformity by using **one** of the procedures:

(a) **Module A** (self-assessment).  
**Internal control procedure**  
(Annex VIII, Part I)

(b) **Modules B + C**  
**EU-type examination** (B) and **internal production control** (C)  
(Annex VIII, Parts II–III)

(c) **Module H**  
**Full quality assurance**  
(Annex VIII, Parts IV)

(d) **Where available and applicable**  
**European cybersecurity certification scheme**  
(Article 27(9))

**In all cases**, the technical documentation referred to in Article 31 must be made publicly available **at the time of the placing on the market** of those products.

32.5



Depending on the classification of the product and the application of harmonised standards or certification, **the manufacturer** demonstrates conformity with the essential cybersecurity requirements by using **one** of the following procedures:

Procedures	Type of assessment	Made by	Effect
Module A	Conformity based on <b>internal control</b>	Manufacturer ❌ No notified bodies	The <b>manufacturer</b> 1. <b>verifies</b> that the PDEs complies with the essential requirements of the CRA; <b>and</b> 2. <b>declares</b> compliance under <b>its sole responsibility</b> .
Module B+C	EU-type examination	Manufacturer ⓘ Notified bodies	1. The <b>manufacturer verifies</b> that the PDEs complies with the essential requirements of the CRA; 2. a <b>notified body examines</b> the design and development of the product; <b>and</b> 3. the <b>manufacturer declares</b> compliance.
Module B+C	Conformity based on <b>full quality assurance</b>	Manufacturer Notified bodies	1. The <b>manufacturer implements a full quality control system</b> that ensures that the products subject to this system comply with the essential requirements of the CRA in both the design and the production phases; 2. a <b>notified body assesses</b> the overall performance of the quality control system, including periodical tests and checks; 3. The <b>manufacturer declares</b> compliance with the CRA requirements before placing the products on the market.



Procedures	Type of assessment	Made by	Effect
Module A	Conformity based on <b>internal control</b>	Manufacturer	The <b>manufacturer</b> 1. <b>verifies</b> that the PDEs complies with the essential requirements of the CRA; <b>and</b> 2. <b>declares</b> compliance on <b>its sole responsibility</b> .
		 No notified bodies	

Products

The following categories of products are allowed to use module A:

- **Default category:** all PDEs that do not have the core functionality of a category of important or critical products;
- **Important PDEs of class I**, if harmonised standards have been applied in accordance with Article 32(2);
- **Important PDEs of class I or II**, if they are **FOSS** provided that the technical documentation is made available to the public, in accordance with Article 32(5).

Activities

The manufacturer has to perform the following **activities**:

- 1) **Implement the necessary cybersecurity mitigation measures** in the product following the risk assessment;
- 2) **Verify** (via testing or other mechanism) **that the product complies to the relevant essential requirements of the CRA**;
- 3) **Draw up the technical documentation**;
- 4) Where the manufacturer can demonstrate that the PDEs complies with the essential requirements, **affix the CE marking, draw up and sign a declaration of conformity**;
- 5) **Ensure that the production of the different units of the PDEs does not alter the compliance with the CRA essential requirements.**





Procedures	Type of assessment	Made by	Effect
Module B+C	EU-type examination	Manufacturer	1. The <b>manufacturer</b> <b>verifies</b> that the PDEs complies with the essential requirements of the CRA; 2. a <b>notified body</b> <b>examines</b> the design and development of the product; <b>and</b> 3. the <b>manufacturer</b> <b>declares</b> compliance.
		Notified bodies	

Products

The manufacturer **can** undertake a conformity assessment procedure based on module B+C for all categories of products covered by the CRA.

**!** Module B+C or H are **mandatory** in the following cases: 

- **Important PDEs of class I** if harmonised standards have **not** been applied (or only in part), in accordance with Article 32(2);
- **Important products of class II**;
- **Critical products** [**unless** the use of a European cybersecurity certification scheme is made mandatory in the future in accordance with Article 8(1)].



The manufacturer and the notified body have to perform **the following activities**:

The manufacturer

- 1) **implements the necessary cybersecurity mitigation measures** in the product following the risk assessment;
- 2) **tests the product** in order to verify that it complies with the relevant essential requirements of the CRA;
- 3) **draws up the technical documentation**;
- 4) The notified body **assesses the design of the product**, based on its technical documentation, **and one specimen or sample**.

**!** The notified body **does not only** carry out a documentation-based assessment, but it additionally performs the necessary tests, either itself or via an external laboratory. The manufacturer might need to be involved in those tests.

Once the notified body concludes that the product is compliant with the CRA, it issues an EU-type certificate, which is **valid for a certain period of time**, as defined by the notified body.

- 5) Once the manufacturer obtains the EU-type certificate, it affixes the CE marking (together with NANDO number of the body), draws up and signs a declaration of conformity;
- 6) The manufacturer ensures that the production of the different units of the product **does not alter** the compliance with the CRA essential requirements, as laid down in point 2 of module C.

**!** **Only one notified body** participates in this procedure and examines the whole product and all relevant essential requirements.

**!** The production phase is **not** assessed by the notified body. In other words, the manufacturer **cannot justify** that a product whose design is compliant with the CRA is not, in the practice, compliant because of a defect in the production process.

**!** **Substantial modifications** of the product **require a new assessment** by the same or a different notified body, that might lead to a potential revision of the issued EU-type certificate.

**Other modifications that do not affect the compliance** with the CRA requirements **are not subject to reassessment** by the notified body.

**!** In accordance with point 8 of module B, the notified body must carry out **periodic audits** to ensure that the vulnerability handling processes are properly implemented.

**!** Information about EU-type certificates and their revisions has to be shared with other notified bodies and with the notifying authorities, according to point 9 of module B.



Procedures	Type of assessment	Made by	Effect
Module B+C	Conformity based on <b>full quality assurance</b>	Manufacturer	<ol style="list-style-type: none"> <li>1. The <b>manufacturer</b> implements a <b>full quality control system</b> that ensures that the products subject to this system comply with the essential requirements of the CRA in both the design and the production phases;</li> <li>2. a <b>notified body</b> assesses the overall performance of the quality control system, including periodical tests and checks;</li> <li>3. The <b>manufacturer declares</b> compliance with the CRA requirements before placing the products on the market.</li> </ol>
		Notified bodies	

Products

This module might be **particularly considered by manufacturers** that place

- **numerous product types** on the market or
- **products subject to frequent updates,**

since it streamlines the relevant conformity assessment procedures for each new or substantially modified product.

**!** **Module H** might be helpful for manufacturers of important and critical products that place numerous types or models on the market since it provides a **holistic system** that streamlines the conformity assessment.



The manufacturer and the notified body have to perform **the following activities**:

1) The manufacturer implements a full quality control system that covers

- a **certain catalogue of products** and
- **all the relevant manufacturing phases**, from design to production;

**!** **The system can be based on international standards** (for example, ISO 9000 series covering the specificities of the CRA).

The fact that the manufacturer is accredited against the standard ISO 9000 does not automatically entitle it to perform conformity assessment activities under module H, since the involvement of a CRA notified body is needed.

2) The notified body assesses the quality control system as a **whole**, including, among others,

1. the technical design of the covered products,
2. the standards or specifications to be applied (in particular, how the compliance with the essential requirements of the CRA is ensured),
3. the tests to be performed, and
4. the monitoring of the overall system.

The notified body covers the **whole manufacturing process**.

The manufacturer, **based on the quality control system**,

- 3) **implements the necessary cybersecurity mitigation measures** in the PDEs following the risk assessment;
- 4) **tests the product** in order to verify that it complies with the relevant essential requirements of the CRA;
- 5) **draws up the technical documentation**;
- 6) **affixes the CE marking (together with the NANDO number of the notified body)**;
- 7) **draws up and signs a declaration of conformity**;
- 8) **ensures that the production of the different units of the product does not alter** the compliance with the CRA essential requirements.

**!** **Only one notified body** participates in this procedure and examines the **whole** quality control system.

**!** The manufacturer **can** extend the scope of the described quality system to **new** or **substantially modified** products.

The quality system must be updated in order to properly document the new scope, and potential new standards might need to be applied or tests might need to be performed. Nevertheless, **this extension is subject to a new assessment by the same notified body that performed the original assessment**.

**Module H provides a more versatile and flexible framework compared to module B+C**. Hence, the inclusion of new products constitutes a more streamlined process, **since the notified body will only have to assess the potential new standards or tests applicable to the new products**.



64.2

**Non-compliance with**

- **the essential cybersecurity requirements** set out in **Annex I**; and
- **the obligations** set out in Arts. **13** and **14**



shall be subject to **administrative fines** of up to **EUR 15 000 000**

OR

if the offender is an undertaking, **up to 2,5 %** of the its total worldwide annual turnover for the preceding financial year, **whichever is higher.**

64.3

**Non-compliance with the obligations set out in**

- **Arts. 18 to 23**: obligations of other economic operators other than the manufacturer;
- Art. **28**: EU declaration of conformity;
- Art. **30(1) to (4)**: rules concerning the CE marking;
- Art. **31(1) to (4)**: technical documentation;
- Art. **32(1), (2) and (3)**: conformity assessment procedures;
- Art. **33(5)**: simplified technical documentation for microenterprises and small enterprises, including start-ups;
- Art. **39**: notified bodies requirements;
- Art. **41**: subsidiaries of and subcontracting by notified bodies;
- Art. **47**: operational obligations of notified bodies;
- Art. **49**: information obligations of notified bodies;
- Art. **53**: granting Market Surveillance Authorities access to data and documentation.



shall be subject to **administrative fines** of up to **EUR 10 000 000**

OR

if the offender is an undertaking, **up to 2%** of its total worldwide annual turnover for the preceding financial year, **whichever is higher.**



64.4

The supply of **incorrect, incomplete or misleading information** to notified bodies and market surveillance authorities **in reply to a request**



shall be subject to **administrative fines** of up to **EUR 5 000 000**

OR

if the offender is an undertaking, **up to 1 %** of its total worldwide annual turnover for the preceding financial year, **whichever is higher**.

64.9



**Administrative fines may be imposed**, depending on the circumstances of each individual case, **in addition to any other corrective or restrictive measures applied by the market surveillance authorities for the same infringement**.

64.10



**By way of derogation from paragraphs 3 to 9**

The administrative fines shall **not** apply to the following:

- (a) manufacturers that qualify as **microenterprises or small enterprises** with regard to **any** failure to meet the deadline referred to in Art. 14.2, point (a), or Art. 14(4), point (a);
- (b) **any** infringement of this Regulation by **open-source software stewards**.

Art. 14



64.1

Member States shall

- **lay down the rules on penalties** applicable to infringements of this Regulation, and
- **take all measures necessary** to ensure that they are implemented.

! The penalties provided for shall be effective, proportionate and dissuasive.

Member States shall, without delay, **notify the Commission** of those **rules** and **measures**.

and shall notify it, without delay, of **any subsequent amendment** affecting them.

64.8

Depending on the legal system of the Member States, the rules on administrative fines may be applied in such a manner that the fines are imposed by **competent national courts** or other bodies.

! The application of such rules in those Member States shall have an **equivalent effect**.

64.5

When **deciding on the amount of the administrative fine in each individual case**, all relevant circumstances of the specific situation shall be taken into account and due regard shall be given to the following:

- the nature, gravity and duration of the **infringement** and of **its consequences**;
- whether administrative fines have been already applied** by the same or other market surveillance authorities to the same economic operator for a **similar infringement**;
- the **size**, in particular with regard to microenterprises and small and medium sized-enterprises, including start-ups, and the market share of the economic operator committing the infringement.



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