

CRA for Device Makers

Applicability for Components, Devices, and Systems

Carlos Serratos

NXP – Security Certification Expert

GlobalPlatform – Chairman SESIP Ecosystem Adoption WG

globalplatform.org

Agenda

- What's the CRA
- CRA Principles
- CRA Conformance
- CRA & Automotive
- Key takeaways

What is the Cyber Resilience Act (CRA)

Scope: Europe

Goal: *“To harmonise cybersecurity requirements for products with digital elements in all Member States”*

Horizontal regulation, touching:

- RED
- NIS2 for critical infrastructure
- AI Act for AI
- eIDAS for wallets/eIDs
- GDPR for data protection
- Liability Act
- Safety Act
- Machinery Directive
- Cybersecurity Act

Mandatory for CE mark from December 2027:

Access to the EU market

Penalties:

For non-complying essential requirements, it can amount to **€15 million or 2.5% of the annual turnover**, whichever is higher.

Applicability

Finished products with digital elements (SW/HW), **except products that have an existing European regulation in place:**

- Ground Transportation
- Air transportation
- Medical for human and in-vitro diagnostic

Commercial Software

HW/SW subcomponents, including MCUs, MPUs, Crypto Processors and Secure Elements used in **ANY** application, including those above

CRA principles

If it's "smart", maybe it is not

It applies to every "connected" vertical and application
(minus medical & automotive systems and vehicles)



CRA principles

If it's "smart", maybe it is not

It applies to every "connected" vertical and application
(minus medical & automotive systems and vehicles)

**"Everything" is a potential
backdoor**

It applies to any HW and SW
End devices, components, and
remote services alike



CRA principles

If it's "smart", maybe it is not

It applies to every "connected" vertical and application
(minus medical & automotive systems and vehicles)

"Everything" is a potential backdoor

It applies to any HW and SW
End devices, components, and
remote services alike

Risk first, and last

Documented risk-based decisions
User guidance
Secure technology and processes



CRA principles

If it's "smart", maybe it is not

It applies to every "connected" vertical and application
(minus medical & automotive systems and vehicles)

"Everything" is a potential backdoor

It applies to any HW and SW
End devices, components, and
remote services alike

Risk first, and last

Documented risk-based decisions
User guidance
Secure technology and processes

Risk is contextual

Security problems might have
several solutions (SOTA)



CRA principles

If it's "smart", maybe it is not

It applies to every "connected" vertical and application
(minus medical & automotive systems and vehicles)

"Everything" is a potential backdoor

It applies to any HW and SW
End devices, components, and
remote services alike

Risk first, and last

Documented risk-based decisions
User guidance
Secure technology and processes

Security is not a one-off

Vulnerability management
Support period & Surveillance

Risk is contextual

Security problems might have
several solutions (SOTA)



CRA principles

If it's "smart", maybe it is not

It applies to every "connected" vertical and application
(minus medical & automotive systems and vehicles)

"Everything" is a potential backdoor

It applies to any HW and SW
End devices, components, and
remote services alike

Risk first, and last

Documented risk-based decisions
User guidance
Secure technology and processes

Security is not a one-off

Vulnerability management
Support period & Surveillance

Risk is contextual

Security problems might have
several solutions (SOTA)

You can never be 100% sure

Secure supply chains,
Beyond secure products, secure
suppliers



CRA principles

If it's "smart", maybe it is not

It applies to every "connected" vertical and application
(minus medical & automotive systems and vehicles)

"Everything" is a potential backdoor

It applies to any HW and SW
End devices, components, and
remote services alike

Risk first, and last

Documented risk-based decisions
User guidance
Secure technology and processes

Security is not a one-off

Vulnerability management
Support period & Surveillance

Risk is contextual

Security problems might have
several solutions (SOTA)

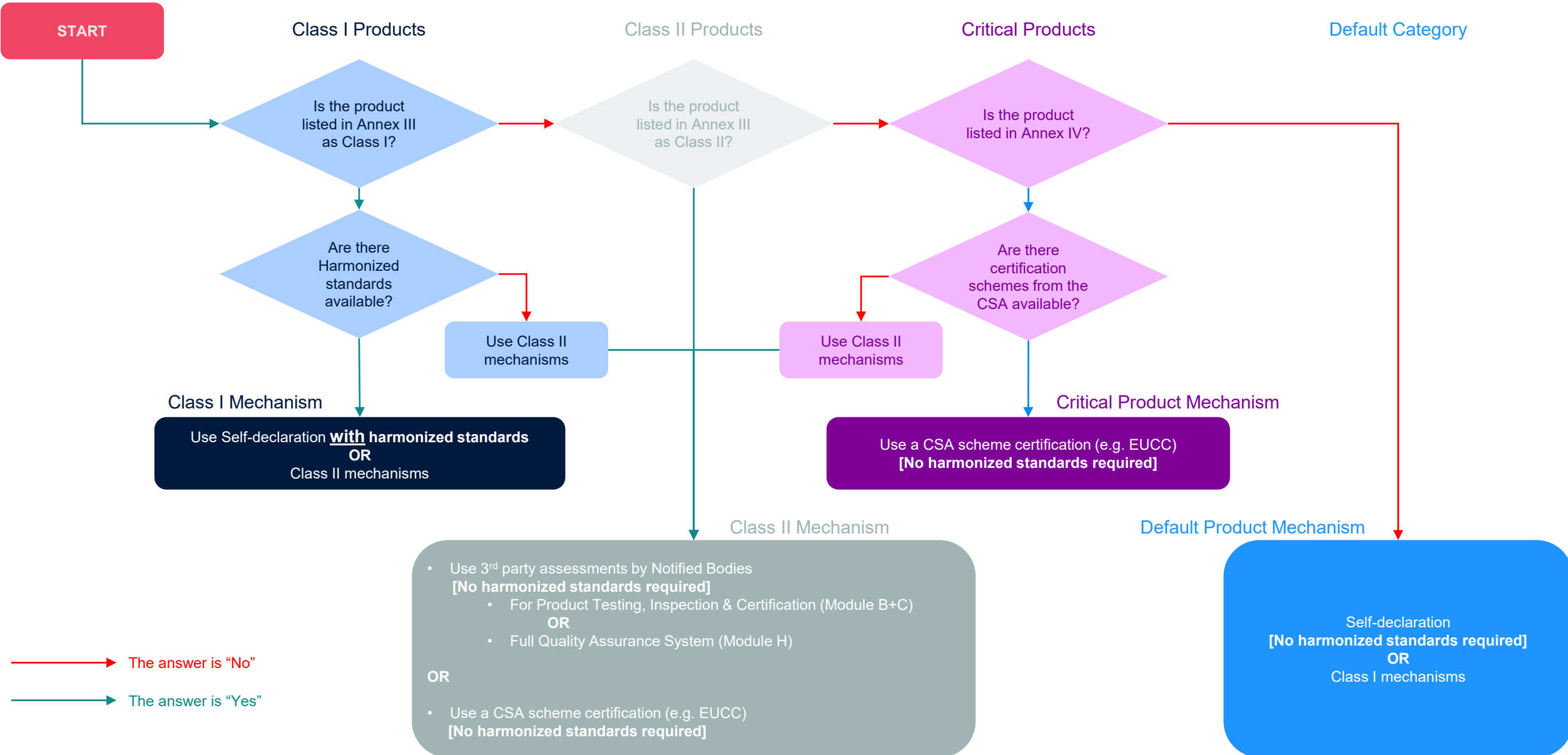
Trust, and verify

Different conformance
mechanisms for products based
on impact

You can never be 100% sure

Secure supply chains,
Beyond secure products, secure
suppliers



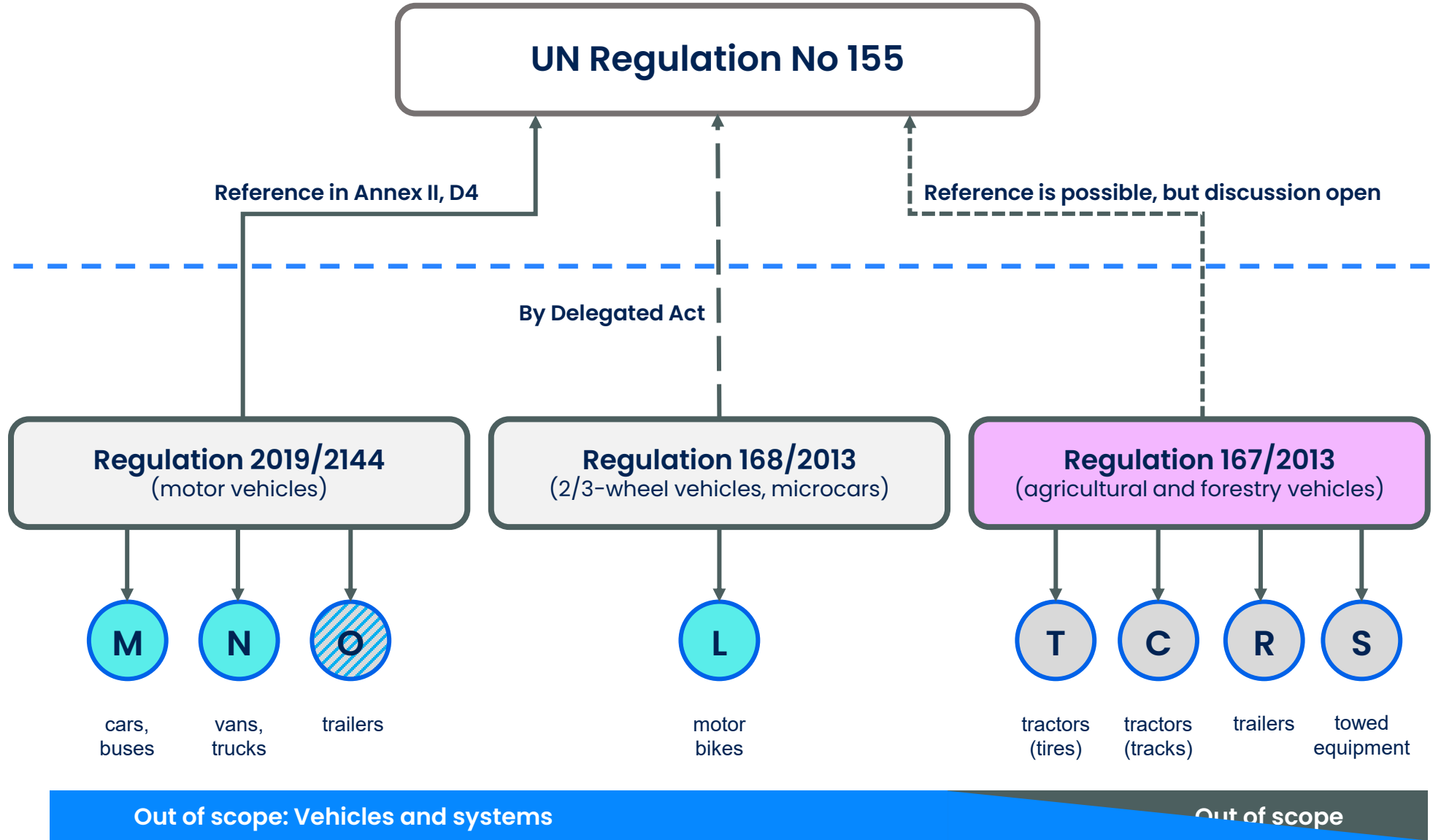




Type approval
(homologation)

Vehicle
Categories

CRA



ISO 21434

ISO 24882

X Vehicle Category that must follow UN R155

The most important element from the CRA: If there is something you need to remember...

- The CRA doesn't mandate compulsory or mandatory functionality
- Manufacturers "own" the risk, the obligation to mitigate the risk, and communicate it to the users
- The conformance Classes only represent the conformance mechanisms: there is no basic, minimum, or entry-level security, even in the default category
- The essential requirements are the baseline that needs to be addressed. It doesn't mean it needs to be implemented
 - What and how is implemented is up to the manufacturer but always, always, always: **risk-based (documented) decisions**





Global Platform®

The standard for
secure digital services
and devices

→ globalplatform.org