

E27, in five sections.

A two-minute orientation for seafarers, inspectors, and engineers who need to understand IACS Unified Requirement E27 without reading the standard. For decisions, talk to an advisor.

— § 01 · WHAT A CBS IS

A Computer-Based System is any shipboard technology that runs software.

That includes anything on the vessel that processes data or connects to other systems — from the propulsion controller to the voyage data recorder to the cargo management workstation. UR E27 applies to every CBS installed on SOLAS vessels contracted for construction on or after 1 July 2024.

— § 02 · THE THREE CATEGORIES

Category is set by the consequence of cyber compromise — not by how the system is built.

<p>I</p> <p>Non-essential</p> <p>Loss or compromise would not affect operational or safety functions.</p> <hr/> <p>EXAMPLE</p> <p>Crew entertainment server.</p>	<p>II</p> <p>Operationally important</p> <p>Loss or compromise could degrade, but not immediately endanger, vessel operation.</p> <hr/> <p>EXAMPLE</p> <p>Cargo management system on a tanker.</p>	<p>III</p> <p>Safety-critical</p> <p>Loss or compromise could lead to dangerous or catastrophic consequences.</p> <hr/> <p>EXAMPLE</p> <p>Propulsion or steering control system.</p>
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— § 03 · THE 30/41 SPLIT

UR E27 § 4 contains 41 security requirements. Exposure decides whether your CBS meets 30 or all 41.

30 / 41

Thirty baseline requirements apply to any CBS in scope. The **remaining eleven** are triggered when the CBS connects to an untrusted network — a shore-side link, a wireless interface, or an uncontrolled USB port. Category does not reduce the count; it raises the evidentiary bar on every requirement met.

— § 04 · TWO APPROVAL PATHWAYS

Type Approval or Plan Approval. Pick by volume.

Both pathways demonstrate the same five evidence artefacts — CBS Description, Network Architecture Diagram, Hardening Guide, Security Test Procedures, and Risk Assessment. The difference is who carries the certificate, and how often.

PATHWAY	WHAT IT IS	PICK IT WHEN
Type Approval PRODUCT-LEVEL	One-time certification of the product by a classification society. The certificate attaches to the CBS and is reused across vessels without re-certification.	Your product ships to more than a handful of vessels and you want a competitive advantage on shipyard tenders.
	— COST (USD) \$75K – 300K _{one-time}	— TIMELINE 3 – 8 months _{once}
Plan Approval VESSEL-SPECIFIC	Per-project approval of the CBS as integrated into a specific newbuild. Evidence is submitted, reviewed, and approved for that hull only; the process repeats on the next contract.	You ship to one or two vessels, cannot finalise the architecture before the first contract, or the CBS is heavily vessel-customised.
	— COST (USD) \$25K – 75K _{per vessel}	— TIMELINE 2 – 9 months _{per vessel}

Rule of thumb — break-even between the two pathways falls at three to five vessels. Beyond five vessels, Type Approval is almost always the cheaper route.

— § 05 · WHERE TO NEXT

— NEXT STEP

Assess your product's pathway in a fixed two-week engagement.

A fixed-fee Pathway Assessment tells you which route fits, what evidence you already have, and what you need to produce — with every finding cited to a UR clause. Typical turnaround is ten working days.

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