

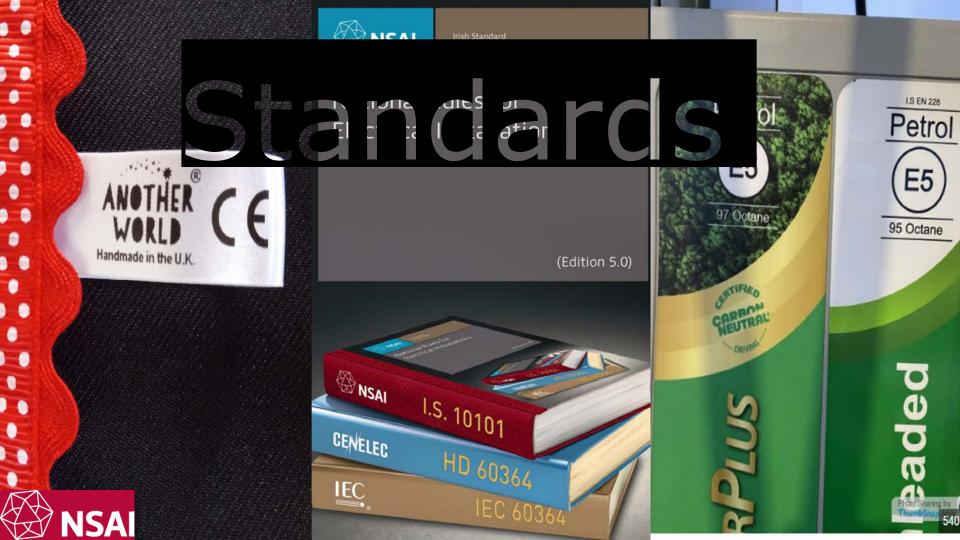
Overview of Standards





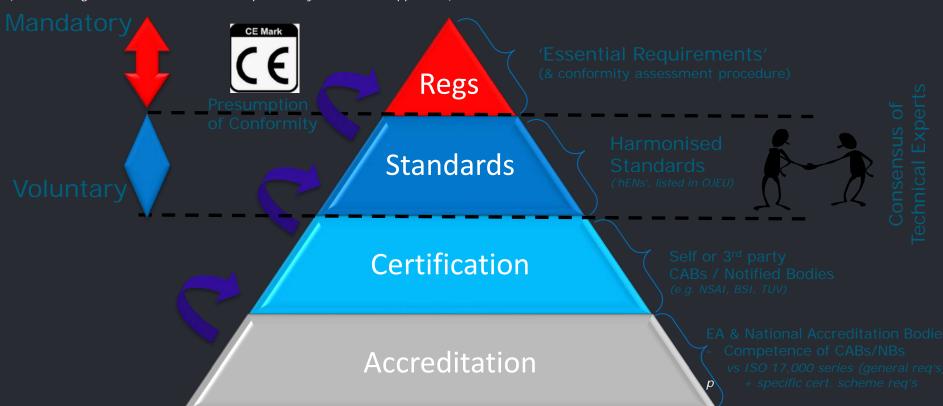
A Standard...

- 'Standard' means a technical specification, adopted by a recognized standardization body, for repeated or continuous application, with which compliance is not compulsory.
- European regulation on standardization (1025/2012)



Links between Regulations, Standards & Certification

(EU 'New Legislative Framework', NLF – previously called 'new approach')







Declaration of Conformity

Declaration: A formal statement

Conformity: Compliance with standards or regulations

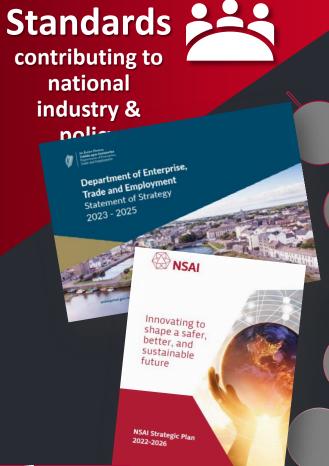
D Declaration of conformity C € MìF





Planed initiative Welliubiled by the European Commission as potential registative initiative

Research & Innovation	Industrial Policy	Connectivity	Data & Privacy	IPR	Cybersecurity	Law Enforcement	Trust & Safety	E-commerce & Consumer Protection	Competition	Media	Finance
Digital Europe Programme Regulation, (EU) 2021/694	Recovery and Resilience Facility Regulation, (EU) 2021/241	Frequency Bands Directive, (EEC) 1987/372	General Data Protection Regulation (GDPR), (EU) 2016/679	Database Directive, (EC) 1996/9	Regulation for a Cybersecurity Act, (EU) 2019/881	Law Enforcement Directive, (EU) 2016/680	Product Liability Directive (PLD), (EEC) 1985/374, 2022/0302(COD)	Unfair Contract Terms Directive (UCTD), (EEC) 1993/13	Technology Transfer Block Exemption, IECI 2014/316	Satellite and Cable I Directive, (EEC) 1993/83	Common VAT system, (EC) 2006/112, 2022/0407(CNS)
Horizon Europe Regulation, (EU) 2021/695, (EU) 2021/764	InvestEU Programme Regulation, (EU) 2021/523	Radio Spectrum Decision, (EC) 2002/676	Regulation to protect personal data processed by EU institutions, bodies, offices and agencies, (EU) 2018/1725	Community Design Directive, JECI 2002/6, 2022/0391(COD)	Regulation to establish a European Cybersecurity Competence Centre, IEUI 2021/887	Directive on combating fraud and counterfeiting of non-cash means of payment, IEU 2019/713	European Standardization Regulation, IEU) 2012/1025	E-commerce Directive, (EC) 2000/31	Company Law Directive, (EU) 2017/1132, 2023/0089(COD)	Information Society Directive, (EC) 2001/29	Payment Service Directive 2 (PSD2), (EU) 2015/2366 2023/0209(COD)
Regulation on a pillot gime distributed ledger tech. market, (EU) 2022/858	Connecting Europe Facility Regulation, (EU) 2021/1153	Broadband Cost Reduction Directive, (EU) 2014/61. 2023/0046(COD)	Regulation on the free flow of non-personal data, (EU) 2018/1807	Enforcement Directive (IPR), (EC) 2004/48	NIS 2 Directive, IEUI 2022/2555	Regulation on terrorist content online, (EU) 2021/784	Radio Equipment Directive (RED), (EU) 2014/53	Unfair Commercial Practices Directive (UCPD), (EC) 2005/29	Market Surveillance Regulation, (EU) 2019/1020	Audio-visual Media Services Directive (AVMSD), (EU) 2010/13	Digital Operational Resilience Act (DORA Regulation), (EU) 2022/2554
	Regulation on High Performance Computing Joint Undertaking, (EU) 2021/1173	Open internet Access Regulation, (EU) 2015/2120	Open Data Directive (PSI), (EU) 2019/1024	Directive on the protection of trade secrets, [EU] 2016/943	Information Security Regulation, 2022/0084(COD)	Temporary CSAM Regulation, (EUI 2021/1232, 2022/0155(COD)	eiDAS Regulation, (EU) 2014/910, 2021/0136(COD)	Directive on Consumer Rights (CRD), (EU) 2011/83	P2B Regulation, IEU) 2019/1150	Portability Regulation, IEU) 2017/1128	Crypto-assets Regulation (MICA), (EU) 2023/1114
	Regulation on Joint Undertakings under Horizon Europe, IEU) 2021/2085, 2022/0033(NLE)	European Electronic Communications Code Directive (EECC), IEUI 2018/1972	Data Governance Act (DGA Regulation), (EU) 2022/868	Standard essential patents, 2023/0133(COD)	Cybersecurity Regulation, 2022/0085(COD)	E-evidence Regulation, 2018/0108(COD)	Regulation for a Single Digital Gateway, (EU) 2018/1724	e-invoicing Directive, (EU) 2014/55	Vertical Block Exemption Regulation (VBER), IEUI 2022/720	Satellite and Cable II Directive, IEUI 2019/789	Digital euro, 2023/0212 (COD)
	Decision on a path to the Digital Decade, IEU) 2022/2481	Roaming Regulation, (EU) 2022/612	ePrivacy Regulation, 2017/0003(COD)	Design Directive, 2022/0392/CODI	Cyber Resilience Act, 2022/0272/CODI	Digitalization of travel documents	General Product Safety Regulation, (EU) 2023/988	Geo-Blocking Regulation, (EU) 2018/302	Digital Market Act (DMA Regulation), (EU) 2022/1925	Copyright Directive, IEUI 2019/790	Financial Data Access Regulation, 2023/0205 (COD)
	European Chips Act (Regulation), 2022/0032(COD)	Regulation on the Union Secure Connectivity Programme, IEUI 2023/588	European Data Act (Regulation), 2022/0047(COD)	Compulsory licensing of patents, 2023/0129(COD)	Cyber Solidarity Act (Regulation), 2023/0109(COD)		Machinery Regulation, (EU) 2023/1230	Digital content Directive, (EU) 2019/770	Regulation on distortive foreign subsidies, (EU) 2022/2560	European Media Freedom Act, 2022/0277/CODI	Payment Services Regulation, 2023/0210(COD)
	European critical raw materials act (Regulation), 2023/0079/CODI	.eu top-level domain Regulation, .EUI 2019/517	European Health Data Space (Regulation), 2022/0140(COD)			•	Al Act (Regulation), 2021/0106/COD)	Directive on certain aspects concerning contracts for the sale of goods, (EU) 2019/771	Horizontal Block Exemption Regulations (HBER), (EU) 2023/1066, (EU) 2023/1067		Revision of the late payments Directive
	Establishing the Strategic Technologies for Europe Platform (STEP), 2023/0199(COD)	New radio spectrum policy programme (RSPP 2.0)	Regulation on data collection for short-term rental, 2022/0358(COD)				Eco-design Regulation, 2022/0095/CODI	Digital Services Act (DSA Regulation), (EU) 2022/2065	Platform Work Directive, 2021/0414(COD)		
		Telecoms Act / Fair Share Initiative	Harmonization of GDPR enforcement 2023/0202(COD)				Al Liability Directive, 2022/0303(COD)	Right to repair Directive, 2023/0083(COD)	Single Market Emergency Instrument (SMEI), 2022/0278(COD)		
ØN!	SAI		Interoperable Europe Act, 2022/0379(COD)					Political Advertising Regulation, 2021/0381(COD)			



DIGITAL

ARTIFICIAL
INTELLIGENCE

MANUFACTURING

MEDTECH

INNOVATION







Standard types



Fundamental Terminology, conventions, signs, symbols



Test methods and analytical methods



Specifications for products, services, systems, performance



Organization and management system standards



Benefits of Standards





Trade Assistance

Standards assist trade by eliminating technical barriers, promoting interoperability of products and services, and promoting new technologies and good practices, spreading knowledge.

Safety & Protection

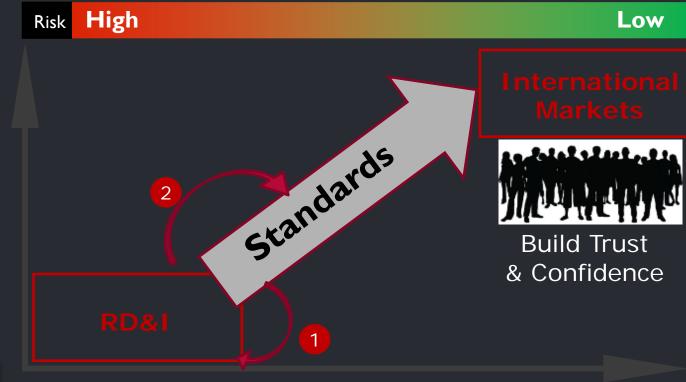
Standards increase the safety of products and protect health, the environment, and the consumer.



Why Standards Help Bridge the Innovation Gap for Impact @ Global Scale

De-risk & Accelerate Technology-Product-Service Development, Adoption & Scaling via International Standards

Scale





Market / Technology Readiness Level



AGV Robotic Standards

ISO 3691-4:2023 — Industrial trucks — Safety requirements and verification Part 4: Driverless industrial trucks and their systems

provides guidelines for manufacturers and operators to ensure the safe operation of these vehicles.

ISO 12100:2010 — Safety of machinery — General principles for design — Risk assessment and risk reduction

provides a systematic approach to identifying potential hazards associated with AGVs and their use, and then implementing measures to mitigate those risks.



Industrial robotic Standards

ISO 10218-1:2025 Robotics — Safety requirements Part 1: Industrial robots

establishes guidelines for the safety requirements specific to industrial robots, addressing them as partly completed machinery.

ISO 10218-2:2025 Robotics — Safety requirements Part 2: Industrial robot applications and robot cells

specifies requirements for the safety of industrial robot applications and robot cells. It addresses the integration, commissioning, operation, maintenance, and decommissioning of robots within industrial settings.



Personal Care Robotic Standards

ISO 13482:2014 -- Robots and robotic devices - Safety requirements for personal care robots

specifies requirements and guidelines for the inherently safe design, protective measures, and information for use of personal care robots



Medical Robotic Standards

IEC 80601-2-77:2019/Amd 1:2023 Medical electrical equipment — Part 2-77: Particular requirements for the basic safety and essential performance of robotically assisted surgical equipment

covers the basic safety and essential performance of robotically assisted surgical equipment (RASE) and robotically assisted surgical systems (RASS)

≻Resources



Code Of Practice on Standardisation

Develop a standardization policy

Consider standardization in the career development plans

Provide for education and training on standardisation

Make Technology Transfer Offices fit for standardization

Develop an indicator and evaluation system







Sectoral Study of Standards in Manufacturing

LINK



Introduction to NSAI/TC 49/SC 2 & standardization of for Additive Manufacturing







HSbooster.eu TRAINING ACADEMY

For beginner users

Start Learning

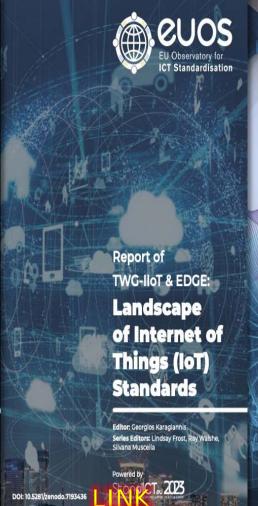
For intermediate users

Explore Now

For advanced users

Level up











Landscape of **Digital Product Passport Standards**

EU Observatory for

ICT Standardisation

Editors: Jens Gayko, Benjamin Helfritz Series Editors: Lindsay Frost, Ray Walshe, Silvana Muscella

DOI Number: 10.5281/zenodo.7728381



Report of TWG Digital Twin: Landscape of **Digital Twin Standards**

Editors: Antonio Kung, Claude Baudoin, Karim Tobich Series Editors: Lindsay Frost, Ray Walshe,

Powered by

Standle Teu 2023 DOI Number: 10.5281/zenodo.655691



Data Sets

Irelands open data portal - <u>Data.gov.ie</u>



European Open data Portal - The official portal for European data | data.europa.eu

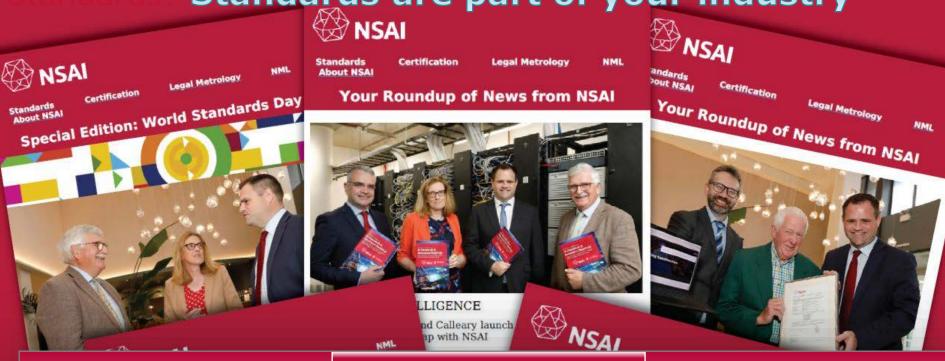


EU Hubs for data - Datasets Catalog - EUHubs4Data



→ NSAI.ie/ezine ←

Handards? Standards are part of your industry



You can see the Standards as they develop

You can be part of the Standard as it develops National Standard Bodies are here to help you

03

>Summary





Summary Slide

- 1. Standardize to Simplify: Embracing established standards streamlines research processes.
- 2. Consistent Compliance: Aligning with industry standards ensures data accuracy and comparability.
- **3. Influential Impact:** Enhancing credibility and reproducibility through standardized methods drives stronger research outcomes.



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