

ILNAS Breakfast "New Standardization Commission "Cloud & Data" and new ANS TIC"

Introduction

24 April 2025



Jean-Philippe HUMBERT - Deputy Director, ILNAS

ILNAS Presentation of ILNAS

- ILNAS

- Public administration under the authority of the Minister of the Economy, SME, Energy and Tourism
- Creation: Law of May 20, 2008
- Legislation in force: amended Law of July 4, 2014 reorganizing ILNAS
- Total staff: 64 (April 2025)
- o ISO 9001:2015 certification



- National Standards Body (OLN)
 - Composed of 7 persons
 - Close collaboration with the E.I.G. ANEC-N



ANEC – Agency for standardization and knowledge-based economy ILN4S

- Creation: October 4, 2010
- Status: Economic Interest Group (EIG)



- **Objectives:** Promotion, awareness raising and training, applied research in the field of standardization and metrology in order to support companies' competitiveness in Luxembourg
- Human resources: 8 persons, including 4 employees in the standardization department (April -2025)
- **Partners**:



CHÉ DE LUXEMBOURG







Support for the implementation of the Luxembourg standardization strategy

ILNAS Luxembourg standardization strategy 2024-2030

Technical standardization "Inclusive tool for performance and excellence to serve the economy"





Identification of trans-sectoral standardization interactions

ILN4S Luxembourg's policy on ICT technical standardization





https://portail-qualite.public.lu/content/dam/qualite/publications/normalisation/2022/policy-on-ict-technical-standardization-2022-2025.pdf

ILNAS Promoting the ICT technical standardization to the market

Standards Analysis





2024-2025 - Standards Analysis

Content

- Standardization context of the related sectors
- Presentation of European (CEN,CLC, ETSI) and international (ISO, IEC) technical committees active in the related sectors (distributed among subsectors relevant for the national economy)
- Offer guidance to national stakeholders for a potential future involvement in the standardization development process





Updated annually (twice a year for ICT)

Reinforcing the valorization and the involvement regarding ICT technical

ILNAS

standardization

ISO/IEC JTC 1



Reinforcing the valorization and the involvement regarding ICT technical

standardization

ISO/IEC JTC 1

ILNAS



ightarrow 67 national delegates registered in ISO/IEC JTC 1 (92 in total for the ICT sector)





Reinforcing the valorization and the involvement regarding ICT technical

standardization

ETSI



ILNAS

TECHNICAL COMMITTEES



INDUSTRY SPECIFICATION GROUPS



SOFTWARE DEVELOPMENT GROUPS



Reinforcing the valorization and the involvement regarding ICT technical ILNAS standardization ETSI ETSI **13 ETSI members in Luxembourg** Ranked 16th among the 63 countries with ETSI members your satellite compar 1990 ILN4S \bigcirc 0 1994 **FBCONSULTING ANEC OQ TECHNOLOGY** 2006 sense **IEE** 2008 2009 aws **Post** Technologies 2012 2015 2019 2020 2022 securityandtrust.lu Nowina

SISVEL

Reinforcing the valorization and the involvement regarding ICT technical standardization

National Standardization Commissions (ILNAS/NSCs)



ILNAS/NSC 01 – Cybersecurity (34 national delegates) ISO/IEC JTC 1/SC 27 ISO/IEC JTC 1/WG 13 CEN/CLC JTC 13



ILNAS/NSC 02 – Conformity (12 national delegates) ISO/CASCO CEN/CLC JTC 1



ILNAS/NSC 03 – Quantum Technologies (9 national delegates) IEC/ISO JTC 3 CEN/CLC JTC 22



ILNAS/NSC 04 – Artificial Intelligence (23 national delegates) ISO/IEC JTC 1/SC 42 CEN/CLC JTC 21



ILNAS/NSC 05 – Cloud and Data (6 national delegates) ISO/IEC JTC 1/SC 38 CEN/CLC JTC 25

Research program "Technical Standardisation for Trustworthy ICT, Aerospace, and Construction" (2021-2024)

Research program "Technical Standardisation for Trustworthy ICT, Aerospace, and Construction" (2021-2024) in collaboration with the University of Luxembourg



https://ilnas-snt.uni.lu/

Research program "Technical Standardisation for Trustworthy and Sustainable ICT, Construction and Aerospace" (2025-2028)

Research program "Technical Standardisation for Trustworthy and Sustainable ICT, Construction and Aerospace" (2025-2028) in collaboration with the University of Luxembourg



Artificial Intelligence



Sustainable Development



Quantum Technologies



People-centered-design

Resistance to natural disasters



Aerospace



White Papers & Technical Reports ILNAS

2020-2024 - ILNAS Research activities



Master MTECH (third promotion)

Master MTECH – ILNAS in collaboration with the University of Luxembourg and the Chamber of Employees



OF THE GRAND DUCHY OF LUXEMBOURG Ministry of the Economy



STAY INFORMED ABOUT ILNAS ACTIVITIES

→ Portail qualité:

www.portail-qualite.lu



→ ILNAS e-shop: https://ilnas.services-publics.lu/



Newsletters: <u>https://portail-</u> <u>qualite.public.lu/fr/support/newsletter.html</u>

Social Networks:





ILNAS Breakfast "New Standardization Commission "Cloud & Data" and new ANS TIC"

Presentation of the April 2025 edition of the Standards Analysis ICT Sector – Luxembourg

24 April 2025

Nicolas DOMENJOUD – Responsible ICT & Technical Standardization, ILNAS



ILNAS What is this document?



A main outcome of Project 1

"Drawing up a yearly national standards analysis for the Smart Secure ICT sector"

- Baseline resource
- Actionable, practical information
- Freely available online

Twice a year, actually Spring and Autumn



Main information

A single-document resource of technical standardization committees covering the overall ICT sector



Purpose

To help you identify quickly and efficiently those SDOs and committees relevant to your business

What aims?

- Sources of technical standards that might impact you
- Identify committees connected to your business within which participating might by of interest



An overview of ICT standardization overall



- Budding technologies (and their security) → Budding committees in standardization...
 BUT ALSO
- Maintenance of standards, and contributions to standards projects, in "classic" topics



Generalities on standardization

- Quick overviews of ISO, IEC, ITU-T, CEN, CENELEC, ETSI
- Definitions and purpose of standardization (World Trade Organization, European legislation)

A presentation of the main national actors

- ILNAS, your national standards body
- ANEC GIE, in support of ILNAS for the promotion and standardization...
 ...and the delivery of services!

Your standardization partners in Luxembourg

ILNAS

ILNAS Content - Chapter 2: ICT Subsectors definition

Technical committees of interest broken down by subsectors

- Sub-sectors inspired by the European Commission's Rolling Plan for ICT technical standardization, which defines the most important standardization initiatives and actions supporting EU policies
 - The Rolling Plan 2025 identifies around 260 actions grouped into 40 technological or application domains under 5 thematic areas: foundational drivers, key enablers, societal challenges, innovation for the single market and sustainable growth







ILNAS Content Chapter 2: Subsectors



Content - Chapter 3: ICT Sector Standards Watch – Technical Committee's

ILNAS ID-cards



11 standardization committees

- ILNAS/NSC 05 Cloud and Data
- ISO/IEC JTC 1/SC 38 Cloud Computing and Distributed Platforms
- CEN/CLC JTC 25 Data management, Dataspaces, Cloud and Edge
- ETSI/TC DATA Data Solutions
- CEN/TC 468 Preservation of digital content

ISO/IEC JTC 1/S CLOUD COMPU	C 38 TING AND DISTRIBUTED PLATFOR	RMS					
GENERAL INFORMATION							
Creation date	2009	Secretariat	ANSI (United States)			
Chairperson	Dr. Anish Karmarkar Committee Manager Mr. Bill Ash						
Scope	Standardization in the areas of cloud Computing and Distributed Platforms including: - Foundational concepts and technologies; Operational issues; Interactions among Cloud Computing systems and with other distributed systems. SC 38 serves as the focus, proponent, and systems integration entity on Cloud Computing, Distributed Platforms, and the application of these technologies. SC 38 provides guidance to JTC 1, IEC, ISO and other entities developing standards in these areas.						
Structure	AG 1 Stakeholder engagement AG 2 JTC 1/SC 38 Officers group AG 5 Long-term strategy AG 6 Collaboration with CEN-CENELEC/JTC 25 CAG Chair's Advisory group CG 1 Liaison coordination group for JTC 1/SC 27 CG 2 Liaison coordination group for JTC 1/SC 41 Liaison coordination group for JTC 1/SC 42 CG 4 Liaison coordination group for JTC 1/SC 7 CG 5 Liaison coordination group for JTC 1/SC 7 CG 5 Liaison coordination group for JTC 1/SC 7 S 5 Stakeholders considerations						
	WG 6 Data, interoperability and portability						
Webpage	https://www.iso.org/committee/6013	55.html					
	STANDARDIZ	ATION WORK					
Published standards	29	Projects	15				
	INTERNATIONAL MEMBERS A	ND NATIONAL IN	VOLVEMENT				
P-Members	28 participating	members (includin	g Luxembourg)				
O-Members	25	observing member	ers				
Luxembourg's involvement	<u>Note:</u> National participation in ISO/IEC JTC 1/SC 38 is done via ILNAS' National Standardization Commission NSC 05 "Cloud and Data", which centralizes and coordinates Luxembourg experts' work in this field.						

Content - Chapter 3: ICT Sector Standards Watch – Technical Committee's

ID-cards

ILNAS



- ISO/IEC JTC 1/SC 24 Computer graphics, image processing and environmental data representation
- ISO/IEC JTC 1/SC 42 Artificial Intelligence
- CEN/CLC JTC 21 Artificial Intelligence
- ETSI/TC SAI Securing Artificial Intelligence
- .

ILNAS Content - Chapter 3: ICT Sector Standards Watch - Other information

Also, some information on:

- ITU-T Study Groups
- **o** ETSI Industry Specification Groups
- CEN/CENELEC Workshops

WS	TITLE AND LINK	RELATED SUBSECTOR(S)
CEN/CLC/WS DSO	Digital sovereignty	Digital Trust: Cybersecurity, Network and Information security, Trustworthiness, and Privacy protection
CEN/CLC/WS SEP2	Industry Best Practices and an Industry Code of Conduct for Licensing of Standard Essential Patents in the field of 5G and Internet of Things	Internet of Things Telecommunications and Networking, and Emergency Telecommunication
CEN/CLC/WS AADSF	Age Appropriate Digital Services Framework	Accessibility of ICT Products and Services
CEN/CLC/WS INACHUS	Urban search and rescue (USaR) robotic platform technical and procedural interoperability	Robotics and Autonomous Systems
CEN/CLC/WS Monsoon	Predictive management of data intensive industrial processes	Artificial Intelligence and (Big) Data Digitisation of European Industry: Smart Manufacturing
CEN/CLC/WS SEP-IoT	Workshop on Best Practices and a Code of Conduct for Licensing Industry Standard Essential Patents in 5G and the Internet of Things (IoT), including the Industrial Internet	Internet of Things Telecommunications and Networking, and Emergency Telecommunication
CEN/CLC/WS ZONeSEC	Interoperability of security systems for the surveillance of widezones	Digital Trust: Cybersecurity, Network and Information security, Trustworthiness, and Privacy protection
CEN/CLC/WS WiseGRID	Reference model for distribution application for microgrids	Smart Grids and Smart Metering, Efficient Energy Use
CEN/CLC/WS EFPFInterOp	European Connected Factory Platform for Agile Manufacturing Interoperability	
CEN/CLC/WS ZDMterm	Zero Defects in Digital Manufacturing Terminology	Digitisation of European Industry:
CEN/WS Smart-CE- Marking	Smart CE marking for the construction industry	Smart wanulacturing
CEN/WS TDT	Trusted Data Transaction	Digital Trust: Cybersecurity, Network and Information security, Trustworthiness, and Privacy protection



Table 1: ITU study groups

ISG	TITLE AND LINK	RELATED SUBSECTOR(S)
RF	Augmented Reality Framework	
DM	European Common information sharing environment service and Data Model	Artificial Intelligence and (Big) Data
м	Cross-cutting Context Information Management	Smart Cities and Communities, and Buildings
NI	Experiential Networked Intelligence	Telecommunications and Networking, and Emergency Telecommunication
5G	5th Generation Fixed Network	Telecommunications and Networking, and Emergency Telecommunication
AC	Integrated Sensing And Communications	Telecommunications and Networking, and Emergency Telecommunication
AT	Multiple Access Techniques	Telecommunications and Networking, and Emergency Telecommunication
EC	Multi-access Edge Computing	Internet of Things
FV	Network Functions Virtualisation	Telecommunications and Networking, and Emergency Telecommunication
EU	Operational energy Efficiency for Users	ICT Environmental Impact: Green ICT
DL	Permissioned Distributed Ledger	Blockchain and Distributed Ledger Technologies
KD	Quantum Key Distribution	Digital Trust: Cybersecurity, Network and Information security, Trustworthiness, and Privacy protection
IS	Reconfigurable Intelligent Surfaces	Telecommunications and Networking, and Emergency Telecommunication
lz	TeraHertz technology	Telecommunications and Networking,
SM	Zero-touch network and Service Management	and Emergency Telecommunication



ILNAS Content - Chapter 4: Opportunities for the National Market

Details on ILNAS and ANEC GIE products and services, related especially to ICT

• Information dissemination

- Market meetings
- News items in standardization
- Standards watch service
- Consulting and purchasing standards
 - Reading stations
 - e-Shop
- Getting involved in standards development
 - Public enquiry commenting
 - Becoming a delegate in standardization
- Research and education
 - White papers and technical reports
 - General and technical training sessions





ILNAS Breakfast "New Standardization Commission "Cloud & Data" and new ANS TIC"

Overview of data standardization

24 April 2025

Nicolas DOMENJOUD – Responsible ICT & Technical Standardization, ILNAS





ILNAS The EU strategy for data and the complex EU regulatory ecosystem

	Aim	Data Covered	Regulated Actors
Data Act	Ensure FAIRNESS in the allocation of data value among the actors of the data economy	Private sector data, personal and non- personal data, and co-generated (IoT) data	Businesses, public sector bodies, cloud and other data processing service providers
Digital Markets Act	Tackle imbalances caused by the MARKET POWER of gatekeepers	Personal data and private sector data held by online platforms and originating from the users	Cloud and other data processing service providers, large data platforms
Data Governance Act	Ensure TRUST in data transactions	Public and private non-personal data, and personal data voluntarily made available by data holders	Data intermediation service providers, public sector bodies, (Recognised) Data Altruism Organisations
Open Data Directive	Promote use of OPEN DATA	Data in an open format that can be freely used, re-used and shared by anyone for any purpose	Public sector bodies, bodies governed by public law, public undertakings, universities
Free Flow of Data	Ensure FREE FLOW OF DATA other than personal data within the Union	Non-personal data	Member States, competent authorities, professional users
GDPR	Ensures a high-level of DATA PROTECTION and free flow of personal data in the Union	Personal data	Data controller, data processor, data subject, DPO, supervisory authorities, EDPB
Vertical legislation	Promote a competitive market according to SECTOR-SPECIFIC rules where necessary, e.g. automotive	Personal and non-personal data	Individuals and private and public sector bodies

- Main objectives of the Regulation (EU) 2023/2854 (Data Act)
 - Ensure fair access to data for businesses, consumers, and public administrations
 - Empower users to control and benefit from the data generated by their connected devices
 - Facilitate data sharing across sectors to boost innovation and economic growth
 - Protect personal data while promoting transparency and legal certainty in data usage
 - Support public sector access to private sector data for emergency response and public interest

ILNAS The EU strategy for data – Standardization overview



Source: European Commission

ILNAS Standardization in support of the Data Act

Technical standardization A support for complying with the EU regulatory ecosystem



Can be used by manufacturers, other economic operators and conformity assessment bodies to demonstrate that their product, service or process complies with relevant EU legislation

ILNAS Standardization in support of the Data Act – ILNAS role



Source: European Commission

ILNAS Standardization in support of the Data Act – Article 33

Data Act: Chapter VIII - Interoperability - Essential Requirements

- Article 33: Essential requirements regarding the interoperability of data, data sharing, and common European data spaces
- Article 34: Interoperability for the purposes of in-parallel use of data processing services
- Article 35: Interoperability of data processing services
- Article 36: Essential requirements regarding smart contracts for executing data sharing agreements

1. Participants in data spaces that offer data or data services to other participants shall comply with the following essential requirements (...):

(a) the dataset content, use restrictions, licences, data collection methodology, data quality and uncertainty shall be sufficiently described, (...) to allow the recipient to find, access and use the data;

(b) the data structures, data formats, vocabularies, classification schemes, taxonomies and code lists, where available, shall be described in a publicly available and consistent manner;

(c) the technical means to access the data (...) shall be sufficiently described to enable automatic access and transmission of data between parties (...)

(d) where applicable, the means to enable the interoperability of tools for automating the execution of data sharing agreements, such as smart contracts shall be provided.

3. The participants in data spaces that offer data or data services to other participants in data spaces which meet the harmonised standards or parts thereof (...) shall be presumed to be in conformity with the essential requirements (...)

4. The Commission shall, pursuant to Article 10 of Regulation (EU) No 1025/2012, request one or more European standardisation organisations to draft harmonised standards that satisfy the essential requirements laid down in paragraph 1 of this Article.

ILNAS Standardization in support of the Data Act – Article 33

-

- Final draft Standardization Request on European Trusted Data Framework addresses Article 33 (<u>https://ec.europa.eu/docsroom/documents/62854</u>)
 - 7 European standardization deliverables to be developed by CEN, CENELEC and ETSI

	R eference information	Deadline for the adoption by the ESOs
1.	Harmonised standards on Trusted Data Transactions	1 June 2026
	Part 1: Terminology, concepts and mechanisms	
2.	Harmonised standards on Trusted Data Transactions	1 November 2026
	Part 2: Trustworthiness requirements	
3.	Harmonised standards on Trusted Data Transactions	1 May 2027
	Part 3: Interoperability requirements	
4.	Technical specification(s) on a data catalogue implementation framework	1 March 2026
5.	Technical specification(s) on an implementation framework for semantic assets	1 September 2026
6.	European standard on a quality framework for internal data governance	1 March 2027
7.	Technical specification(s) on a maturity model for Common European Data Spaces	1 September 2026

	Reference information	Deadline for the adoption by the ESOs		
1.	Harmonised standards on Trusted Data Transactions Part 1: Terminology, concepts and mechanisms	1 June 2026		
2.	Harmonised standards on Trusted Data Transactions Part 2: Trustworthiness requirements	1 November 2026	-	Potentially allocated to CEN/CLC JTC 25
3.	Harmonised standards on Trusted Data Transactions Part 3: Interoperability requirements	1 May 2027	-	
4.	Technical specification(s) on a data catalogue implementation framework	1 March 2026		
5.	Technical specification(s) on an implementation framework for semantic assets	1 September 2026		ETSI/TC DATA
6.	European standard on a quality framework for internal data governance	1 March 2027		Detertially allocated to CEN/CLC ITC 25
7.	Technical specification(s) on a maturity model for Common European Data Spaces	1 September 2026		Potentially allocated to CEN/CLC JTC 25

	Reference information	Deadline for the adoption by the ES	Os	
1.	Harmonised standards on Trusted Data Transactions Part 1: Terminology, concepts and mechanisms	1 June 2026		JTC 25 NWIP based on CWA 18125:2024 'Trusted Data Transaction-part 1'
2.	Harmonised standards on Trusted Data Transactions Part 2: Trustworthiness requirements	1 November 2026		JTC 25 NWIP based on prCWA 'Trusted Data Transaction-part 2', projected DAV:2025-05-09
3.	Harmonised standards on Trusted Data Transactions Part 3: Interoperability requirements	1 May 2027		JTC 25 NWIP based on DSSC Data Spaces Support Centre deliverables (Liaison request
4.	Technical specification(s) on a data catalogue implementation framework	1 March 2026		approved by JTC 25)
5.	Technical specification(s) on an implementation framework for semantic assets	1 September 2026		
6.	European standard on a quality framework for internal data governance	1 March 2027		SEMIC action has developed documents
7.	Technical specification(s) on a maturity model for Common European Data Spaces	1 September 2026		DSSC has produced a basis in its Blueprint



Trusted Data Transactions

Harmonised standard consisting of:

Part 1: Terminology, concepts and mechanisms

Part 2: Trustworthiness requirements

Part 3: Interoperability requirements

Enables participants in data spaces to comply with Article 33 (*) of the Data Act

(*) Essential requirements regarding interoperability of data, of data sharing mechanisms and services, as well as of Common European Data Spaces

- The way to make data discoverable (findable), including but not limited to metadata of data content, licences, data collection methodology, data quality and uncertainty.
- 2) The structure of data sharing agreements, enabling to formally record the data usage conditions (licences), data quality conditions, service level agreements, and agreements on monetary or non-monetary compensation.
- The way to describe the technical access to the shared data, to enable to enable automatic access and transmission of data between parties.
- The way to manage usage restrictions of shared data, based on consent and licensing agreements.
- 5) The way to document the data being shared, including but not limited to descriptions of data structures, data formats, vocabularies, classification schemes, taxonomies and code lists.
- 6) The way to ensure observability and auditability of data transactions.

Data catalogue implementation framework

Technical specification(s) defining a framework for standardised catalogue metadata

Supports the findability of data in catalogue services within and across data spaces.

- a) Define the common catalogue metadata, to be applied across all Common European Data Spaces.
- b) Establish rules on the definition of domain-specific catalogue metadata, to be applied in selected Common European Data Spaces.

Semantic assets implementation framework

Technical specification(s) defining a framework for semantic assets (vocabularies, classification schemes, taxonomies, code lists and ontologies) and detailed metadata.

Supports the interpretation and analysis of shared data within and across data spaces.

a) Specify criteria for the selection of semantic assets.

b) Specify methods for the semantic annotation of shared data, the detailed metadata, based on the semantic assets mentioned under point (a).

Quality framework for internal data governance

European standard for the internal data governance of data space participants.

Enables the quality assessment of data governance processes and systems of parties participating in data spaces.

- a) Define best practices for data rights management, including data for which the data space participant is the rights owner, data for which another party is the rights owner, and data obtained via consent.
- b) Define best practices for data quality management.
- c) Ensure that the concept of data spaces is consistently understood and effectively implemented across various contexts, rigorously aligned with the language and intent of the relevant legal texts on European and national level, covering horizontal and vertical legislation.
- d) Address the way to meet domain-specific (non-regulatory) requirements, for example imposed by data spaces.
- e) Be articulated in practical, non-legal language that is accessible to all stakeholders.
- f) Be adapted to the resources available to small and medium sized organisations, by offering simplified processes and templates for easy implementation.

Maturity model for Common European Data Spaces

Technical specification(s) defining a maturity model for Common European Data Spaces

Enables the self-assessment and benchmarking of data sharing initiatives based on a set of standard key performance indicators and a supporting reporting structure.

Aims to establish Common European Data Spaces as a brand or quality label

- a) Enable to evaluate the interoperability of a data space, both internally between the data space participants as well as across data spaces, according to each layer of the European Interoperability Framework.
- b) Enable to evaluate the maturity of a data space in terms of the key features of Common European Data Spaces listed in section 2 of the Staff Working Document on Data Spaces
- c) Enable to evaluate the maturity of the data space in terms of the level of participation and the level of activity.
- d) Provide insight in the different types of value (including societal and environmental) generated through data being shared in the data space, also considering the international dimension (national, EU, non-EU) of data space participants and data flows.

ILNAS Standardization in support of the Data Act – Article 35

Data Act: Chapter VIII – Interoperability - Essential Requirements

- Article 33: Essential requirements regarding the interoperability of data, data sharing, and common European data spaces
- Article 34: Interoperability for the purposes of in-parallel use of data processing services
- Article 35: Interoperability of data processing services
- Article 36: Essential requirements regarding smart contracts for executing data sharing agreements



ILNAS Standardization in support of the Data Act – Article 35



The Commission may launch a new request for harmonised standards, which...

aim at:

- Interoperability between different services of the same service type (i.e. the standard would be specific to an individual service type)
- Portability of digital assets
- Functional equivalence

address:

- Cloud interoperability aspects (transport, syntactic, semantic, behavioural, policy)
- Cloud data portability aspects (syntactic, semantic, policy)
- Cloud application aspects (syntactic, instruction, metadata, behavioural, policy)

Source: European Commission

Technical standardization A support for complying with the EU regulatory ecosystem

CEN/CLC JTC 25 DATA MANAGEMENT, DATASPACES, CLOUD AND EDGE						
GENERAL INFORMATION						
Creation date	2024	Secretariat	UNI (Italy)			
Chairperson	Mr. DiplInf. Sebastian Steinbuß	Secretary	Ms. Helen Carnevale	•		
Scope	Standardisation in the area of data management, dataspaces, cloud and edge, including: - data governance, data quality and data lifecycle management; - interoperability, portability and switch ability; - organizational frameworks and methodologies, including IT management systems; - processes and products evaluation schemes; - smart technology, objects, distributed computing devices, data services. WG 1 Advisory group WG 2 Dataspaces					
	WG 3 Data management and governance WG 4 Cloud & Edge https://cloud.ac.com/doc/main/state/2005/7/00000000000000000000000000000000					
Webpage F27AE97B5DBDA9B990D3DAF8BD63366						
	STANDARDIZA	ATION WORK				
Published standards	0 Projects 6					
	INTERNATIONAL MEMBERS A	ND NATIONAL IN	VOLVEMENT			
Members	34 men	nbers of CEN/CEN	NELEC			
Luxembourg's involvement	<u>Note:</u> National participation in CEN/CLC JTC 25 is done via ILNAS' National Standardization Commission NSC 05 "Cloud and Data", which centralizes and coordinates Luxembourg experts' work in this field.					

The initial focus of the Committee's Work Programme is to support the standardization needs of EU regulations that are either already in place or under development, as part of the European Data Strategy. A key example is the harmonized standard on "interoperability" required by the EU Data Act to facilitate exchanges between different data spaces.

ILNAS/NSC 05 "Cloud and Data"





National Standardization Commission – ILNAS/NSC 05 "Cloud and Data"

24/04/2025, Rim DOUKHA, ANEC GIE





Context

- The data economy is a major driver of innovation, economic growth, and competitiveness across Europe
- To unlock its full potential, the EU adopted the Data Act, aiming to:
 - o Ensure a fair and secure use of data
 - o Strengthen user rights and data access
 - Promote trust in data-sharing environments

The Role of Technical Standardization

- Ensures interoperability, security, and trust in digital technologies
- Facilitates compliance with regulations like the Data Act
- Supports innovation by providing common technical frameworks
- Helps small and large actors compete on equal footing

Why ILNAS/NSC 05 Matters

- A new national standardization commission to:
 - o Align Luxembourg's efforts with European priorities
 - Enable stakeholders to contribute to European and international standards
 - Ensure national stakeholders are aware of ongoing standardization activities





Creation of a one-stop shop for Cloud and Data standardization

- National experts can register within a single NSC to access all relevant standardization committees and projects
- Pooling of efforts for better collaboration and consistency
- Stronger participation in European standardization projects





CEN/CLC /JTC 25 "Data management, Dataspaces, Cloud and Edge "

Scope:

Standardization in the area of data management, dataspaces, cloud and edge, including:

- data governance, data quality and data lifecycle management;
- interoperability, portability and switch ability;
- organizational frameworks and methodologies, including IT management systems;
- processes and products evaluation schemes;
- smart technology, objects, distributed computing devices, data services.



Example of published standards:

ISO/IEC 19944-1:2020, Cloud computing and distributed platforms - Data flow, data categories and data use - Part 1: Fundamentals

• Abstract:

This standard defines the fundamentals of data flows in cloud computing and distributed platforms involving connected devices. It presents a comprehensive data taxonomy, clarifies the types and movements of data between devices, cloud services, and users, and considers the legal, technical, and policy implications. It serves cloud service providers, customers, users, and any stakeholders engaged in managing or governing data flows.

ISO/IEC 19944-2:2022, Cloud computing and distributed platforms - Data flow, data categories and data use -Part 2: Guidance on application and extensibility

• Abstract:

This document provides guidance on the application of the taxonomy and use statements from ISO/IEC 19944-1 in real world scenarios, and how to develop extensions to the data taxonomy, data processing and use categories and data use statements.



Example of ongoing projects:

ISO/IEC AWI 10822-2, Cloud computing - Multi-cloud management

Abstract

This document provides an overview of identity management in a multi-cloud environment. It extends the existing cloud computing reference architecture in ISO/IEC 22123-3 to describe an identity management in a multi-cloud environment.

ISO/IEC AWI 11034, Information technology - Cloud computing - Trustworthiness in cloud computing

Abstract

This document provides an overview, frameworks, and concepts for Trustworthiness in cloud computing.

ISO/IEC CD 20151, Information technology - Cloud computing and distributed platforms - Dataspace concepts and characteristics

Abstract

This document provides the foundational concepts and essential characteristics of dataspaces. This document is applicable to all organizations.



Ongoing Projects Initiated within JTC 25 based on the standardization request on Data Interoperability and Trust

Context:

In response to the European Commission's Standardization Request, JTC 25 has launched several projects aimed at supporting trusted data sharing, interoperability, and governance across sectors.

Examples of Ongoing Projects:

- Implementation Framework for Trusted Ontologies and Data Models
- Trusted Data Transactions
- Quality Assessment of Internal Data Governance Processes
- Maturity Assessment of Common European Data Spaces
- Cloud Computing Switching and Interoperability in a European Context





Why to get involved in standards' development?

- Collaborate to defend common interests
- Learn about your competitors and their positions in meetings
- Promote your organization and your skills at national, European and international levels
- Access drafts standards and influence their content based on your know-how
- Propose new standards projects
- Increase your knowledge regarding the state of the art in standardization of your core business
- Anticipate the evolution of your activity sector's good practices
- Integrate strategic network of national, European or international experts





Who can participate?

- Open to all socio-economic actors in Luxembourg
- Costs of participation?
 - Registration is free-of-charge
- How to register?
 - Registration is done using ILNAS/OLN/F001a form (Initial registration) or ILNAS/OLN/F001b form (Additional registration)
 - Upon receipt of the duly completed and signed registration form, it will be submitted to the "Standardization Management Committee" for approval

Registry of Experts (Mars 2025)

- 325 experts are registered
- 1062 registrations in technical committees

	Nombre d'inscriptions aux comités t	Nombre d'inscriptions aux comités techniques :					
	ILNAS/OLN	130					
	CEN	287					
	CENELEC	12					
	CEN/CLC	56					
	CEN/CLC/ETSI	4					
	ECISS	0					
	ISO/IEC	262					
	ISO	299					
	IEC	9					
	Total	1062					
	Nombre de personnes inscrites : 3	45					
1, av du Swing - L-4367	Belvaux - Tél. : (+352) 24 77 43 40 - Fax : (+352) 24 7	9 43 40 - Email : normalisation@ilnas.etat.lu - www.g	oortail-qualite.lu				





ILNAS/NSC 05 "Cloud and Data" – Key Takeaways

- Centralized platform for participating in cloud and data standardization
- Better alignment with European and international priorities
- Stronger national voice in shaping future standards
- Early access to key developments and networking with experts
- Open to all socio-economic actors in Luxembourg

> Join the ILNAS/NSC 05 as a national delegate to

- Contribute to current projects
- Influence upcoming standards
- Help shape standards aligned with the EU Data Act, supporting interoperability and trusted data sharing
- Propose new initiatives





Stay informed about the activities of ILNAS

Portail qualité:

www.portail-qualite.lu



ILNAS e-shop:

https://ilnas.services-publics.lu/



Standardization Newsletter:

https://portail-qualite.public.lu/fr/support/newsletter.html



ILNAS

Southlane Tower I · 1, avenue du Swing · L-4367 Belvaux Tel. : (+352) 24 77 43 - 40 · Fax : (+352) 24 79 43 - 40 E-mail: normalisation@ilnas.etat.lu

www.portail-qualite.lu