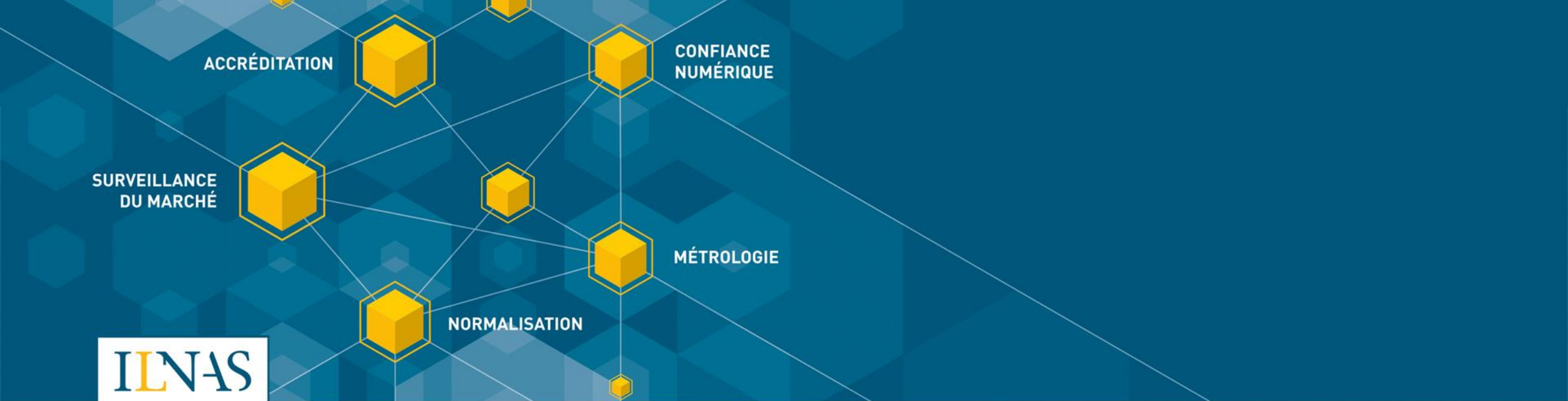# Afterwork ILNAS Delegates

Tuesday, 26th March 2024
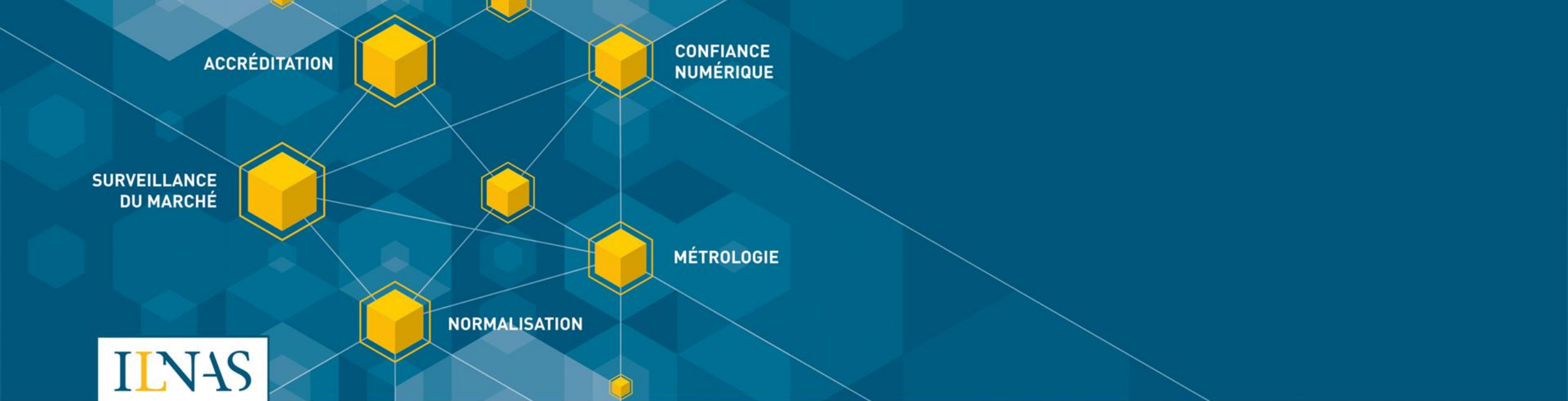
# Introductory remarks

Jean-Philippe Humbert
Deputy Director
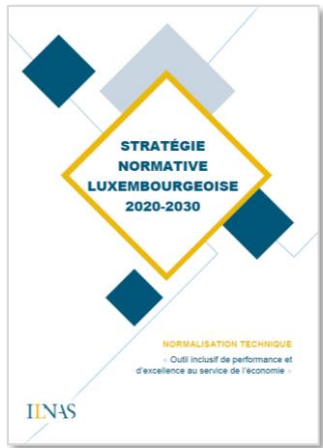
# OLN – Latest developments

Jérôme Hoerold
Head of standardisation department

A. National standardisation strategy 2020-2030

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



**3 growth sectors** identified

**CONSTRUCTION**

**INFORMATION AND COMMUNICATION TECHNOLOGIES**

**AEROSPACE**

**CONFORMITY**

**SUSTAINABILITY**

**Identification of trans-sectoral standardization interactions**

- ➤ **Computer Aided Design (CAD)**
- ➤ **Building Information Modelling (BIM)**
- ➤ **3D printing**
- ➤ **...**

- ➤ **Space data processing**
- ➤ **Space traffic management**
- ➤ **Smart Mobility**
- ➤ **...**

B. Reinforcement of the OLN team

**Dr. Lucas CICERO**

- Joined ILNAS in December 2022

- Key responsibilities:
  - o Sector manager "Aerospace & Standardisation" and "ISO/CASCO"
  - o Coordinator of the new domain "Sustainability & Standardisation"

**Ms Victoria MLETZAK**

- Joined ILNAS in September 2023

- Key responsibilities:
  - o Sector manager "Construction & Standardisation"
  - o Project manager "Gender Responsive Standards"

From September 2023, ILNAS/OLN has an in-house sector manager for each growth sector identified in the national standardziation strategy.

C.  ILNAS e-shop – New functionalities

**Dynamic search function**

-   Live: Introduced in February 2024

-   Objective: A powerful tool which allows to fine-tune search results step by step

-   Search criteria's:
    -   o   Status of the standard
    -   o   Publisher
    -   o   Edition / Reference date
    -   o   Linked European Directive
    -   o   Technical Committee
    -   o   ICS Code
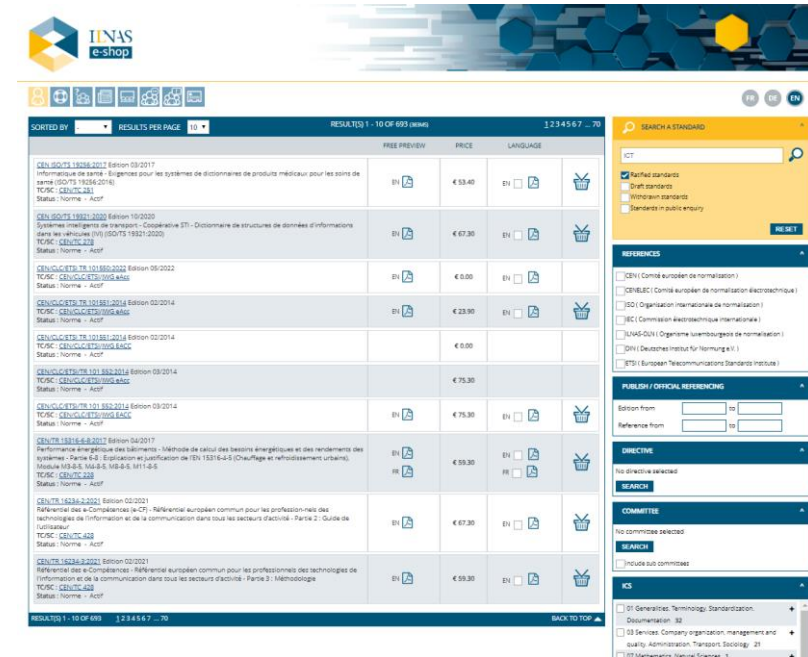
**Notification system**

-   Currently under development: will go live shortly

-   Objective: Stay informed about updates related to standards which are of a particular interest to you

-   Select the standards you want to monitor and define the criteria's on which the notifications (e-mails) are based on

-   Modify your notifications in your personal user account on the ILNAS e-shop

**ILNAS** *"Standardisation & Innovation Award"*

- Objective: Identify and promote best practices related to the usage of standards in innovative projects

- In 2022, the award has been won by ArcelorMittal for their project *"High strength steels for the design of steel structures"*



**Creation of National Standardisation Commissions (NSC)**

- Objective: Regroup international technical committees which are working on a specific topic in one NSC

- NSCs currently existing:
    o ILNAS/NSC 01 – Cybersecurity
    o ILNAS/NSC 02 – Conformity
    o ILNAS/NSC 03 – Quantum Computing

    CEN/CLC JTC 22 *"Quantum technologies"*
    ISO/IEC JTC 3 *"Quantum technologies"*
    ISO/IEC JTC 1/WG 14 *"Quantum Information Technology"*

- NSCs currently being developed:
    o NSC on Artificial Intelligence
    o NSC related to the Construction sector
    o NSC related to the Aerospace sector
    o More to follow…

# ICT sector

Nicolas Domenjoud
Responsible « ICT & Technical Standardization »

→ 87 national delegates in standardization representing 49 national organizations

**2024** → 199 technical committees/working groups with national delegates (INT + EU)

→ 13 ETSI national members

Creation of **National Standardization Commissions**

- ✓ NSC 01 "Cybersecurity" in 2021
- ✓ NSC 03 "Quantum Technologies" in 2024
- ✓ NSC 0X "Artificial Intelligence" (planned in 2024)

Involvement of the NSB in **International ICT Standardization**

- ✓ Presidency of the NMC ISO/IEC JTC 1
- ✓ National HoD in ETSI General Assemblies
- ✓ LU representative in the MSP on ICT standardisation
- ✓ Sherpa Digital in the High Level Forum on EU standardisation
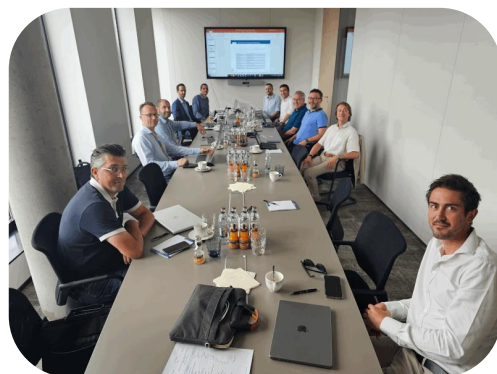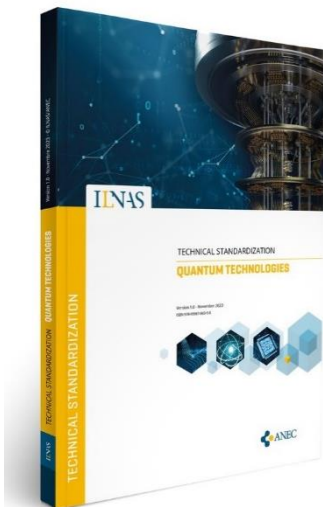
**National Committee ILNAS/TC 108**

Telecommunications – Vertical cabling techniques in residential and mixed-use buildings

B. Promotion of ICT technical standardization – Recent publications

## Technical report on Quantum Technologies

➢ An overview of Quantum Technologies and related standardization developments
➢ Basis for the creation of the NSC 03

## Technical sheets

➢ Blockchain and distributed ledgers
➢ Cloud Computing
➢ Digital Twin
➢ ICT for education and learning
➢ Quantum technology
➢ Secure Internet of Things
➢ Security and privacy in Cloud Computing
➢ Trustworthy Artificial Intelligence
➢ Health Informatics

## Standards analysis ICT

➢ Overview of national, European and international technical committees that develop and publish standards for the ICT sector, updated annually
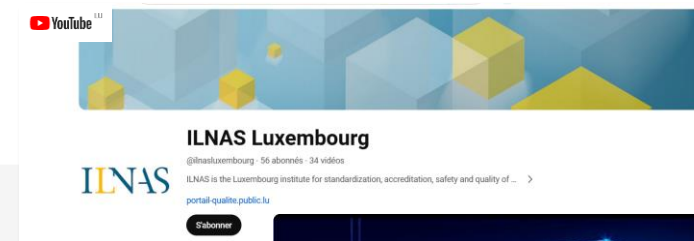
## Videos on ICT Technical standardization

➢ Videos published regularly on ICT technical standardization
   ✓ Container Technology
   ✓ Intelligent Transport Systems (to be published soon)

C. Agenda

## Trainings

✓ **05/06/2024** – Awareness session - Standardization in the ICT sector

✓ **07/05/2024** – Training - Standards for Interoperability and Portability in Cloud Computing

✓ **27/06/2024** – Training - AI Standards watch: standards relevant to the proposed AI Act

✓ **26/09/2024** – Training - Quantum technologies and technical standardization

✓ **05/12/2024** – Training - Workshop: Artificial intelligence and technical standardization

## Events

✓ **25/04/2024** – Breakfast ILNAS/ETSI (including the presentation of the new version of the ANS TIC)

✓ **End of April 2024** – Meeting of the NSC 03 "Quantum Technologies" (open to the public) to prepare the kick-off meeting of ISO/IEC JTC 3
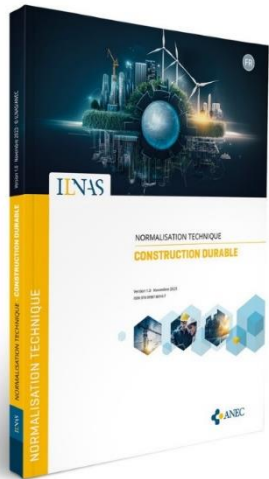
# Construction sector

Victoria Mletzak
Responsible « Construction & Standardisation »

**Technical report on sustainable construction**

- ➤ An overview of the normative situation in the construction sector in the context of sustainable development,
- ➤ Published in November 2023,
- ➤ Available in English and French.

**Standards analysis construction**

- ➤ Overview of national, European and international technical committees that develop and publish standards for the construction sector,
- ➤ Updated annually: last update in March 2024,
- ➤ Available in English and French.

**Technical sheets**

- ➤ Acoustics,
- ➤ BIM,
- ➤ Circular Economy,
- ➤ Eurocodes,
- ➤ Timber Structures,
- ➤ Sustainable Construction,
- ➤ Smart Cities,
- ➤ Welding.

## Smart Cities

- **ISO/IEC JTC 1/WG 11** : Smart Cities
- **ISO/TC 268** : Sustainable Cities and Communities
- **ISO/TC 268/SC 1** : Smart Community Infrastructures
- **ISO/TC 268/SC 2** : Sustainable Cities and Communities - Sustainable Mobility and Transportation
- **ITU-T/SG 5** : Environment, EMF & circular economy
- **ITU-T/SG 20** : IoT, smart cities & communities
- **CEN/TC 465** : Sustainable Cities and Communities
- **ETSI/ISG CIM** : Cross cutting Context Information Management

## Construction & Renovation

- **ISO/TC 59/SC 17** : Buildings and civil engineering works - Sustainability
- **ISO/TC 163** : Thermal performance and energy use in the built environment
- **ISO/TC 205** : Building environment design (WG 2, WG3)
- **ISO/TC 71/SC 8** : Environmental management for concrete and concrete structures
- **CEN/TC 88** : Thermal insulating materials and products
- **CEN/TC 89** : Thermal performance of buildings and building components
- **CEN/TC 156/WG 21** : Energy performance calculation of ventilation and cooling system
- **CLC/TC 205** : Home and Building Electronic Systems (HBES)
- **CEN/TC 350** : Sustainability of construction works
- **CEN/TC 371** : Energy performance of buildings
- **CEN/TC 104/WG 19 :** Concrete and related products - Decarbonisation, resource efficiency and sustainability

**Standardization deliverables**

CRTI·B

- National standard on the acoustic performance criteria for residential buildings (2022)
- National annexes on concrete in construction (2023)
- National annex to EN 16907-2 for defining soil/rock classes for excavation (in progress)
- National annex to EN 1916 on pipes and fittings in unreinforced concrete, steel fiber-reinforced concrete and reinforced concrete (in progress)
- Revision of the national annexes to EN Eurocodes (planned for 2025)
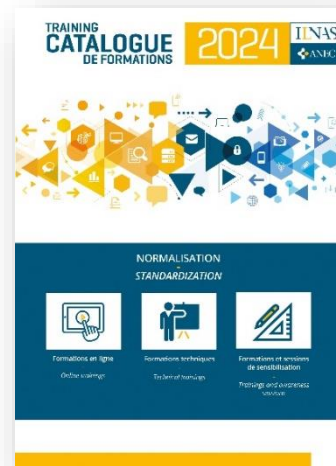


**16 April 2024**
**Technical training**

BIM and technical standardization

**05 November 2024**
**Awareness session**

Sustainable construction and technical standardization

**19 December 2024**
**Awareness session**

Introduction to technical standardization in the construction sector

**New collaboration**

- In order to guarantee continuous improvement of its products and services, and to strengthen Luxembourg's position in the European and international standards context, ILNAS is planning to initiate a collaboration project with Austrian Standards International.

- A comparative analysis and an action plan are currently being finalized. These documents will highlight the strategies and opportunities for a collaboration planned in relation to the construction sector.

**2022-2023:** +108% license sales

**2024:** National network composed of 9 reading stations

**152** national delegates in construction

**UNECE**

### Relaunch of the project "education about standardization" at secondary and higher education levels

- Awareness campaigns on the subject;
- Support and promote education, innovation and research projects in the field;
- Promote the development and use of standards;
- Provide training opportunities for students and recent graduates, such as internships;
- Support students in their standards research.

### Gender Representation

- The **Working Party on Regulatory Cooperation and Standardization Policies** (WP.6 UNECE):
  "encourages regulatory coherence in specific sectors that have a critical impact on sustainable development (…)".

- As a signatory to the declaration on "**Gender-Responsive Standards and Standards Development**" and member of the WP.6, ILNAS is committed to implementing the measures needed to guarantee balanced gender representation:
  - When developing standards,
  - In the content of standards, and
  - In technical committees.

- A **Gender Action Plan** is currently being drawn up, and ILNAS is open to collaborations to raise awareness on the subject.

# Aerospace sector

Lucas Cicero
Project manager

**Standards analysis**

Global overview of the European and international technical committees which develop and publish standards in the space sector. Annual update.
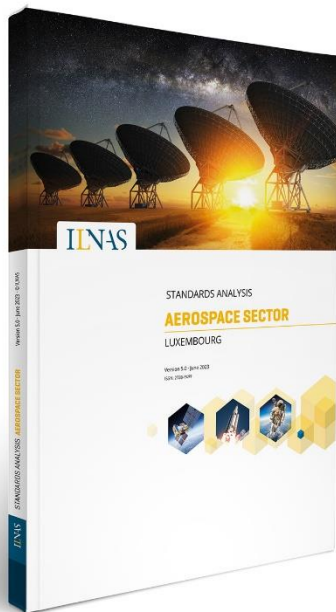


**Organization of the Workshop « Technical Standardization in Space and Cybersecurity »**

**27th June 2023**

Dedicated event to standardization supporting the cybersecurity challenges in the space context.







**Participation to Workshop « Secure Communication via Satellite »**

**25th october 2023**

Contribution to a round-table which focused on the impact of standards on secured satellite communications.

**Luxembourg participation to space standardization**

- **10 national participations to** international technical committees related to space domain.
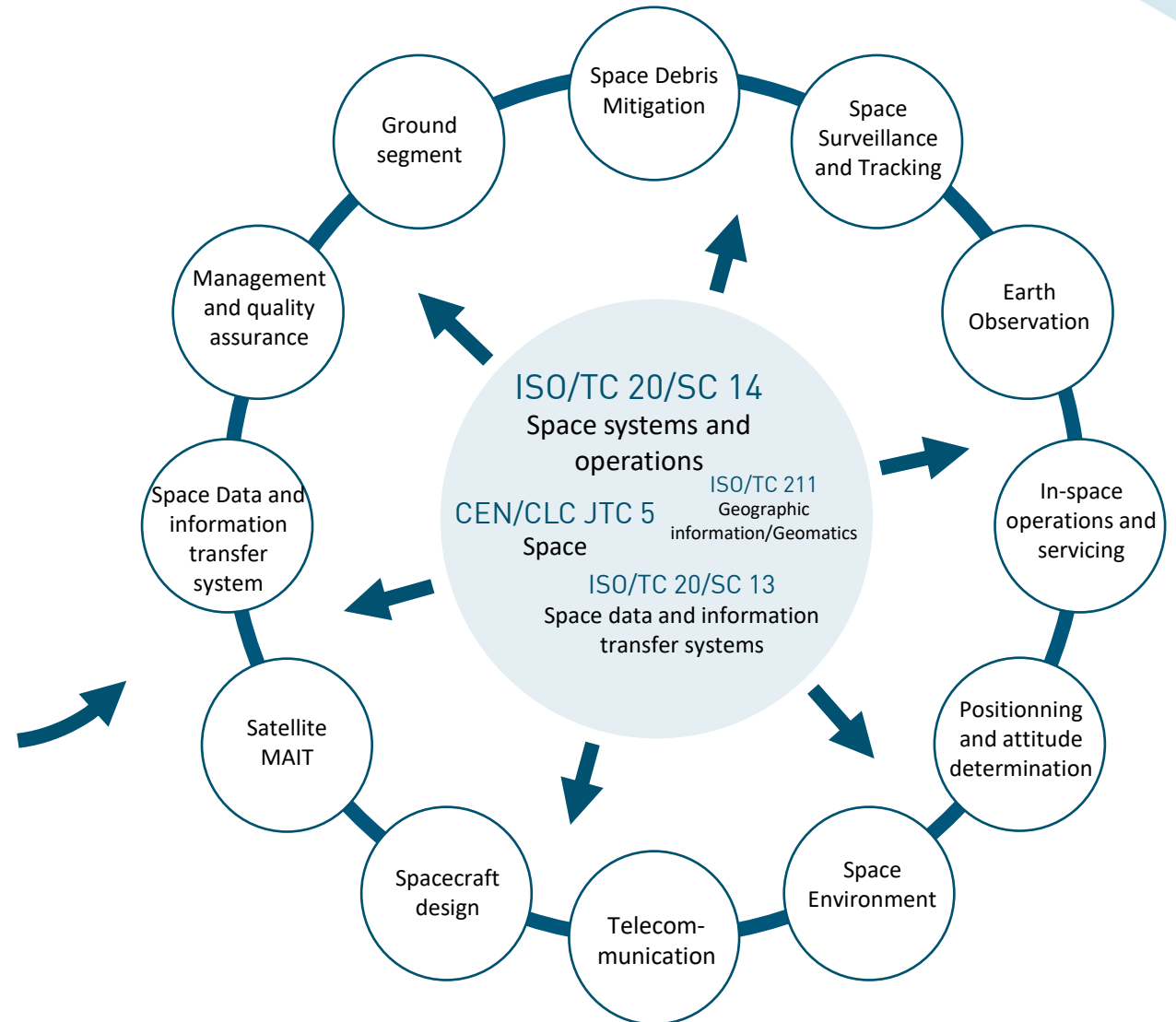
- Plenary sessions of the main technical committees are followed by ILNAS.

**Set-up of National Standardization Committees « Space »**

European and international technical committees covered a broad areas of topics

➤ Delegates' expertise can not cover all the different domains addressed by the technical committees

➤ **Set-up of national standardization commissions with narrower topics**

Ground segment

Space Debris Mitigation

Space Surveillance and Tracking

Management and quality assurance

Earth Observation

ISO/TC 20/SC 14
Space systems and operations

ISO/TC 211
Geographic information/Geomatics

CEN/CLC JTC 5
Space

ISO/TC 20/SC 13
Space data and information transfer systems

In-space operations and servicing

Space Data and information transfer system

Positionning and attitude determination

Satellite MAIT

Space Environment

Spacecraft design

Telecom-munication

### Change in development paradigm

The increase of satellites in orbit caused by *New Space* approach engendered a need of coordination.

### New objectives

- Mars and Moon exploration
- Exploration and utilization of space ressources
- Inhabitation of Moon

### A new legal framework

With the future publication of the European Space Law, legal requirements will have to be fulfilled

# Standardization

**20th November 2024
Informative session**

## Introduction to standardization in space domain

SAVE THE DATE!

Conformity assessment sector
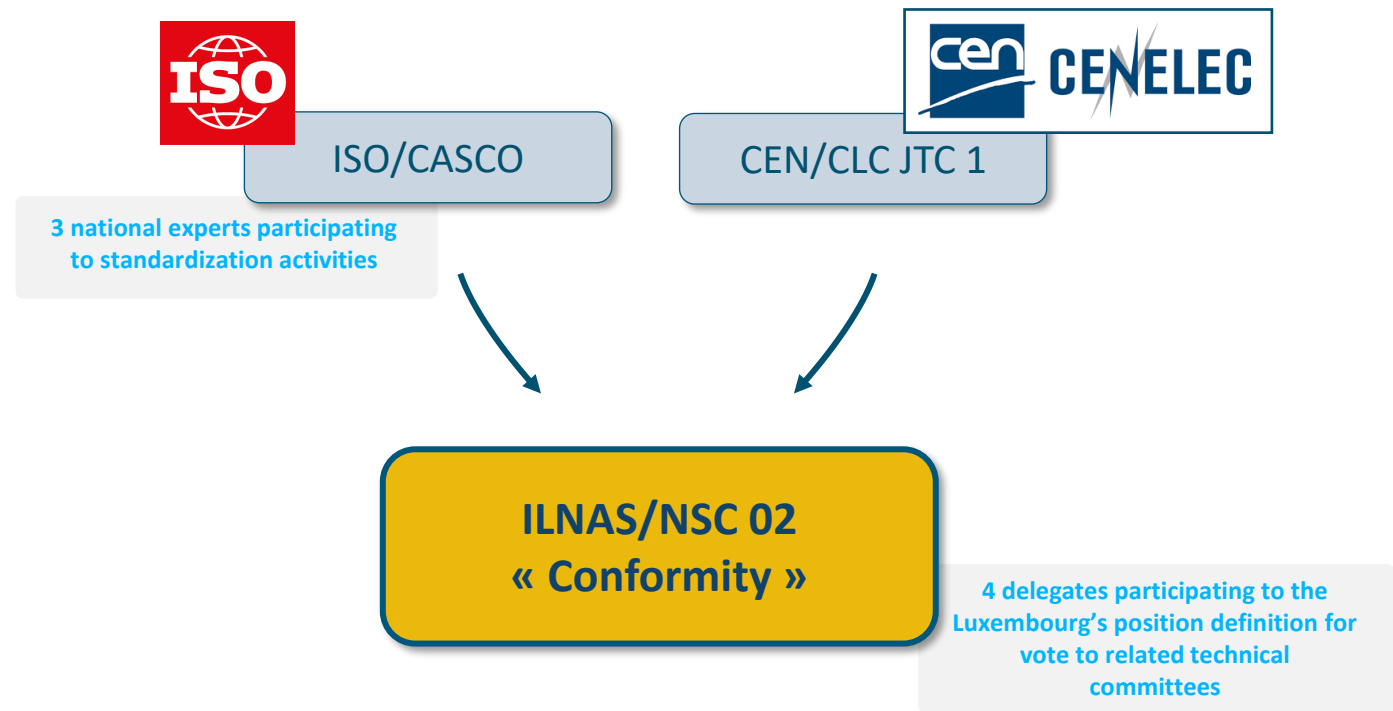
A. National context

**National standardization policy**
**« CASCO » 2022-2030**

The policy defines the different objectives related to the standardization activities of conformity assessment standardization

Politique normative nationale
« ISO CASCO » 2022-2030

ILNAS

**National Standardization Commission**
**ILNAS/NSC 02 « Conformity »**

Creation of a *forum* to discuss standardization activities and to take national consensual decision for European and international ballots

ISO/CASCO

CEN/CLC JTC 1

**3 national experts participating to standardization activities**

**ILNAS/NSC 02**
**« Conformity »**

**4 delegates participating to the Luxembourg's position definition for vote to related technical committees**

B. Events

## Informative session following beginning of revision activities of ISO/IEC 17020
**25th January 2023**

**2 registered experts**

## Consultative session for the systematic review of ISO/IEC 17025:2017 standard
**15th February 2023**

**Standard confirmed**

## Consultative session for the systematic review of ISO/IEC 17011:2017 standard
**2nd March 2023**

**Standard confirmed**

## Organization of a breakfast - introduction to conformity assessment
**25th May 2023**

Presentation of the different activities/actors contributing to the chain of trustworthiness related to conformity assessment

**1 delegate registered**

C. Short- and mid-term standardization activities

**Future domains of conformity assessment activities**

## Environmental informations

## Cybersecurity

## Digitalization

**On-going development**

ISO/IEC 17020

ISO/IEC 17067.2

ISO/IEC 17024

ISO/IEC 17035

**Consultative session for the systematic review of ISO/IEC 17065:2012 standard**

**18th April 2023**

SAVE THE DATE!

INTERNATIONAL STANDARD

ISO/IEC 17065

First edition
2012-09-15

Reviewed and confirmed in 2018

**Conformity assessment — Requirements for bodies certifying products, processes and services**

*Évaluation de la conformité — Exigences pour les organismes certifiant les produits, les procédés et les services*

**09 April 2024 Training**

*Normalisation et législation* (FR)

**03 October 2024 Training**

Standardization and conformity (EN)

TRAINING CATALOGUE DE FORMATIONS 2024 ILNAS

NORMALISATION STANDARDIZATION

Sustainability sector

A. Climatic change and standardization

### Environmental concerns

Sustainable development has become a crucial issue for the entire international community in order to meet the challenges of climate change and environmental degradation



### Usage of standards

"*The standards provide a solid base on which innovation can thrive and are essential tools to help governments, industry and consumers contribute to the achievement of every one of the SDGs*" (ISO)

B. Standardization development of the sector in Luxembourg
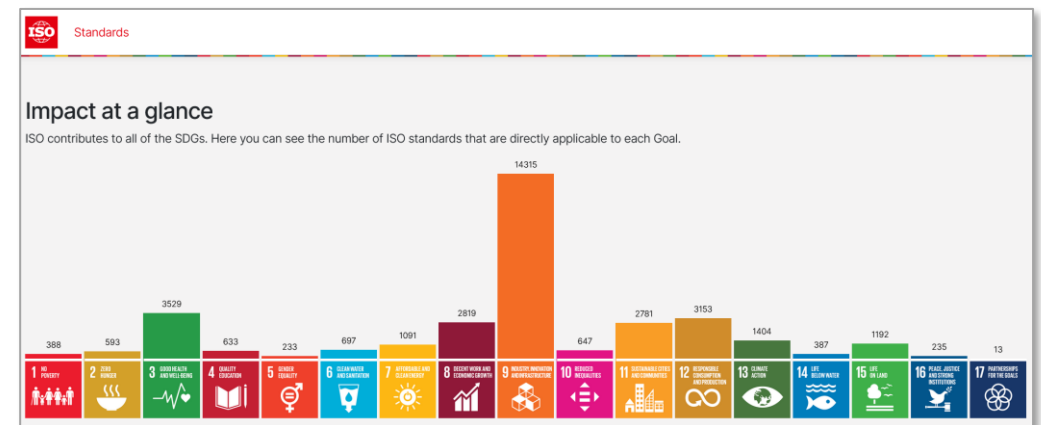
## Development of a new domain

Following a preliminary analysis, activities related to sustainability have been initiated by ILNAS in October 2023, in collaboration of EIG ANEC (standardization department).

## Active follow-up of technical committees

The technical committees related to the sub-domains identified by ILNAS and the ministry of the Economy are monitored in order to define and propose relevant services in-line with the national strategies and market needs.

**5 November 2024**
**Training**

*Construction durable et normalisation technique* (FR)

**28 November 2024**
**Training**

Technical standards on Hydrogen technologies (EN)

### 60 technical committees currently followed

CEN CENELEC ETSI ISO IEC ITU

| Circular economy | e-Waste | Smart mobility | Renewable energy - Hydrogen | Sustainable construction and renovation | Smart cities |
|---|---|---|---|---|---|

| ICT energy efficiency and Green ICT | High performance computing | Air quality | Eco-design, production and materials | Sustainable production and consumption |
|---|---|---|---|---|

SUSTAINABLE DEVELOPMENT GOALS