

Journée Mondiale de la Normalisation World Standards Day

14.10
2022



INTERVENANTS



Dr. Jean-Philippe HUMBERT
Adjoint à la Direction
ILNAS



M. Jérôme HOEROLD
Responsble de département
ILNAS/OLN



M. Nicolas DOMENJOUR
Responsable
secteur « TIC & Normalisation »
ILNAS/OLN

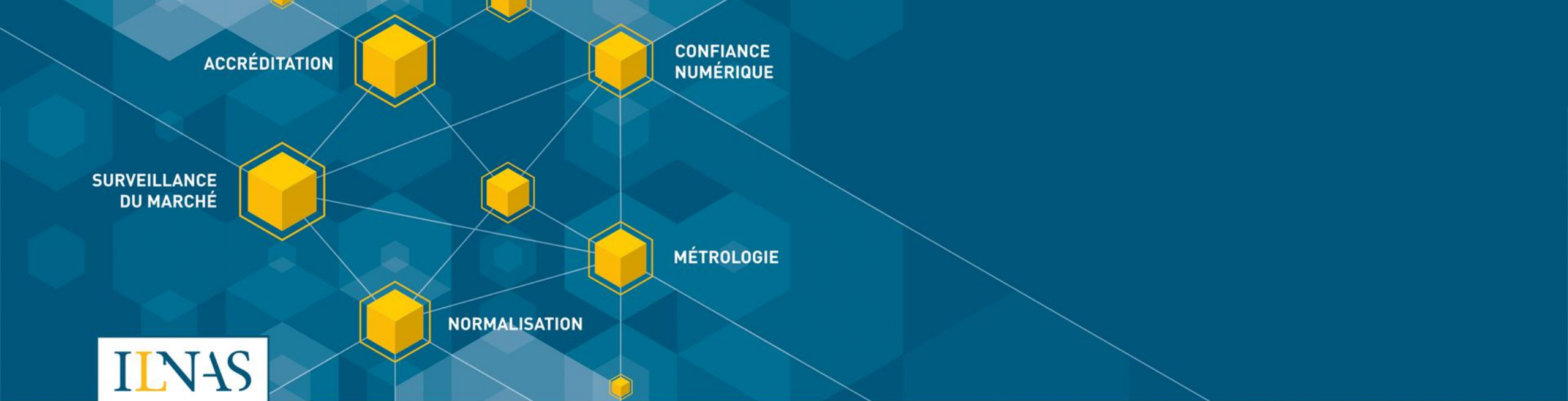


Mme Anika LEY
Gestionnaire de projets
ILNAS/OLN



Campagne 2022 – ISO – IEC – ITU | Objectifs de développement durable (ODD)





National standardization strategy 2020-2030

14th October 2022

Dr. Jean-Philippe Humbert
Adjoint à la Direction - ILNAS



I - INTRODUCTION OF ILNAS

II - NATIONAL STANDARDIZATION STRATEGY 2020-2030

Pillar 1 – Use of relevant technical standards

Pillar 2 – Involvement in the standardization process

Pillar 3 – Active participation of the NSB in the European and international standardization organizations

Pillar 4 – Development of research and education about standardization

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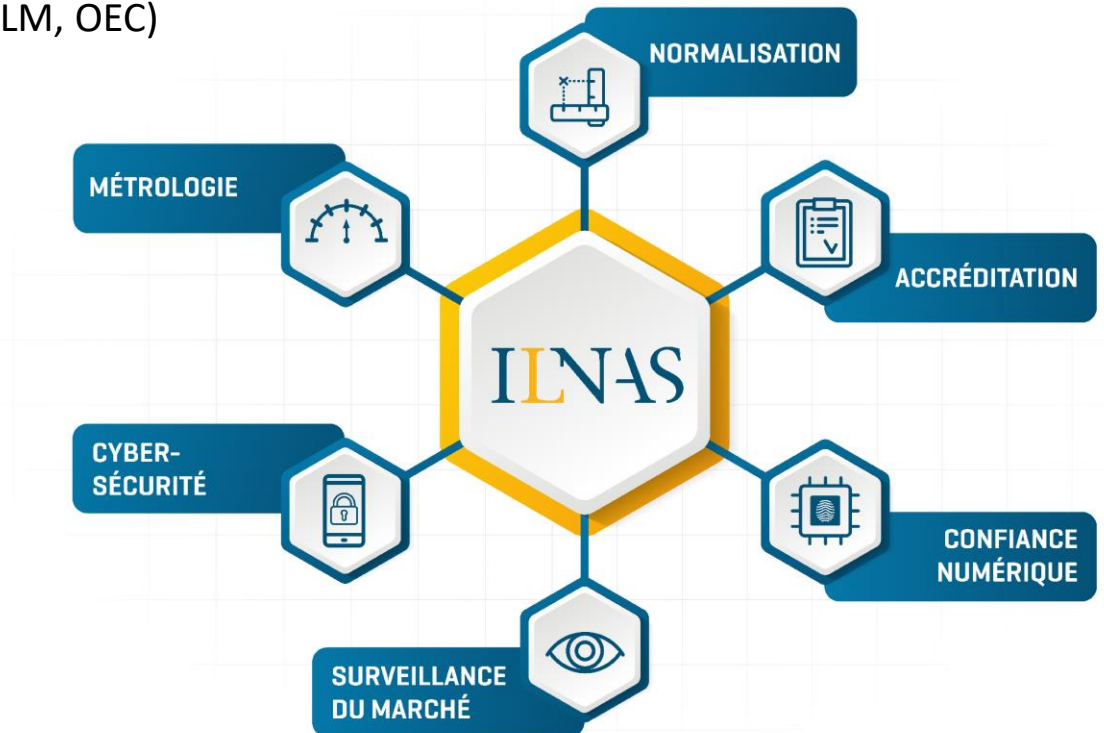


- ILNAS

- Public administration under the authority of the Minister of the Economy
- Created by the amended Law of July 4, 2014
- Total staff: 58 (October 2022)
- ISO 9001:2015 certification (Budget and administration department, OLN, Digital Trust department, Market surveillance department, BLM, OEC)

- National Standards Body

- Composed of 6 persons
- Close collaboration with the E.I.G. ANEC-N





- **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:** 10 persons, including 4 employees in the standardization department (October 2022)
- **Partners:**



LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Économie

ILNAS



CHAMBRE
DES METIERS
Luxembourg



➔ Support for the implementation of the Luxembourg standardization strategy

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Technical standardization

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



→ Strategy signed by the Minister of the Economy of Luxembourg

PERFORMANCE



Pillar 1 – Use of relevant technical standards



Pillar 2 – Involvement in the standardization process

EXCELLENCE



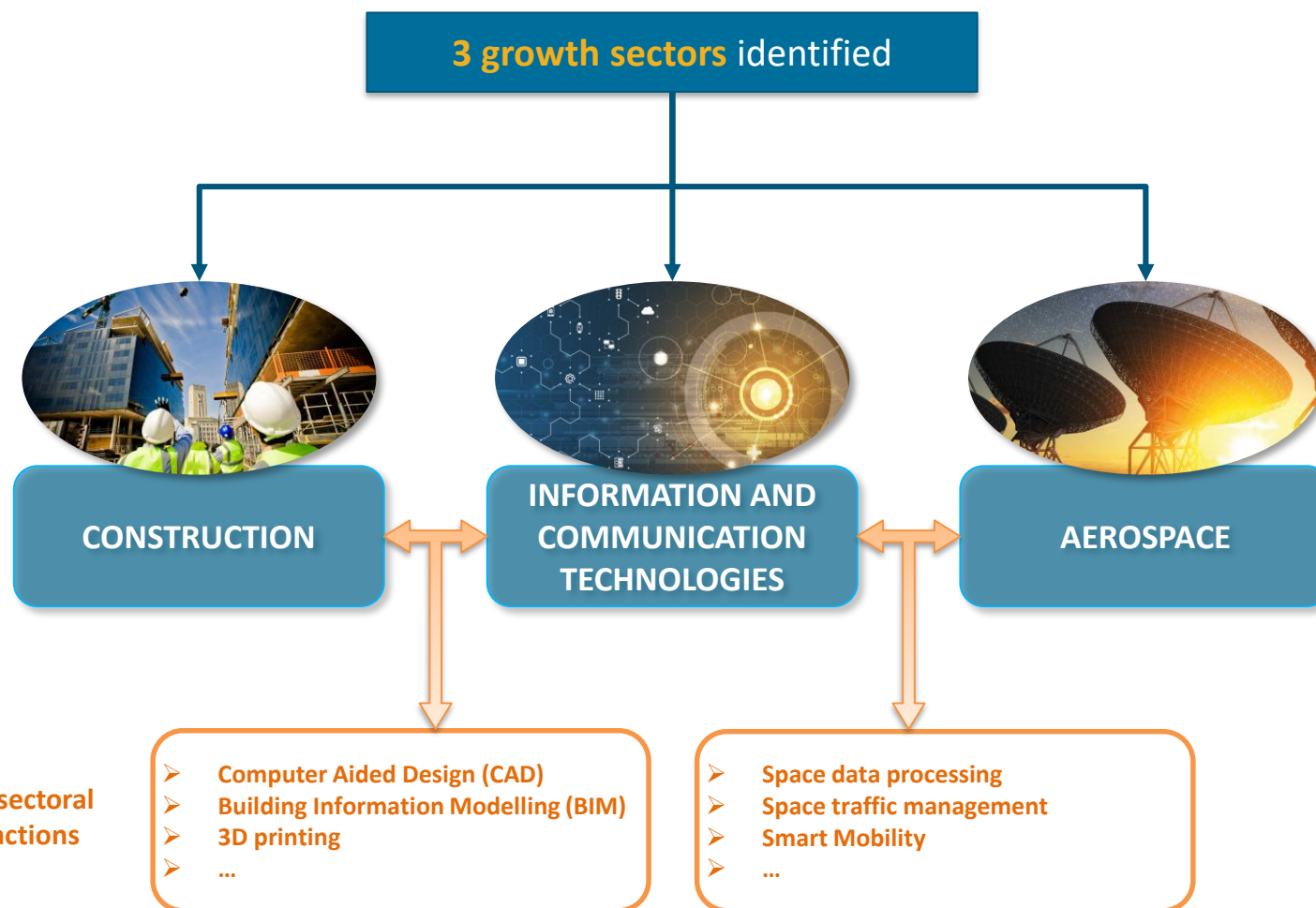
Pillar 3 – Active participation of the NSB in the European and international standardization organizations



Pillar 4 – Development of research and education about standardization

Technical standardization

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



“Foster and strengthen the national ICT sector involvement in standardization work”



1

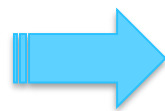
Promoting the ICT technical standardization to the market

2

Reinforcing the valorization and the involvement regarding ICT technical standardization

3

Supporting and strengthening the Education about Standardization and the related research activities



Policies for the Construction and Aerospace sectors are based on similar lead projects

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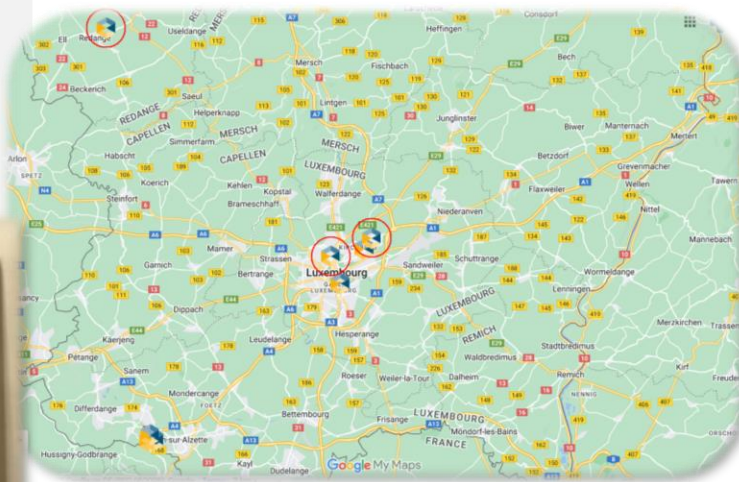
Pillar 2 – Involvement in the standardization process

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3 new reading stations for standards (9 in total)

- ✓ Atert-Lycée Redange
- ✓ Chambre des métiers
- ✓ Lycée des Arts et Métiers



6 awareness videos to promote the use of standards

- ✓ Network security
- ✓ Cloud Computing
- ✓ Building Information Modelling
- ✓ Space debris
- ✓ ...



2020 → +29% of sales compared to 2019

2021 → +26% of sales compared to 2020

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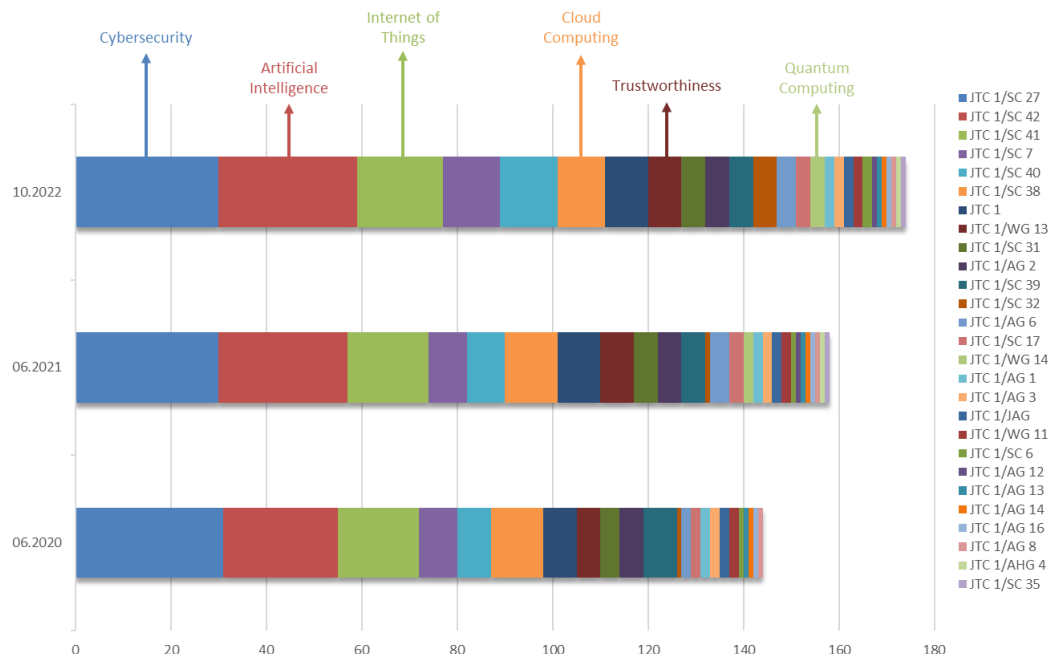
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2021

- 299 national delegates in standardization (+9% compared to 2020)
- 1.065 registrations in technical committees in total



Example of the ICT sector

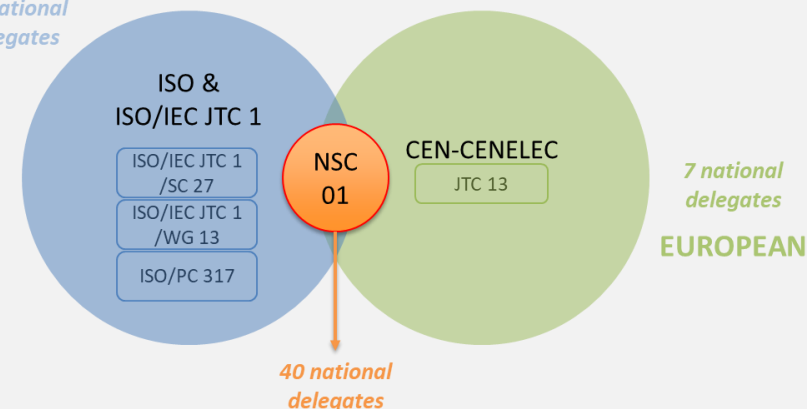
- ✓ 77 national delegates in October 2022
- ✓ 363 registrations in October 2022

Creation of National Standardization Commissions

- ✓ NSC 01 “Cybersecurity” in 2021
- ✓ NSC 02 “Conformity” in 2022

INTERNATIONAL

36 national delegates



- Avoid fragmentation of the work at national level
- Improve national participation in European standards projects
- Remove complexities for national experts participating in multiple technical committees from different SDOs

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Participation in SDOs **General Assemblies** to represent Luxembourg's interests

- ✓ CEN-CENELEC
- ✓ ISO
- ✓ IEC

Luxembourg plans to host the **CEN-CENELEC General Assembly 2025**



Active participation in **strategic technical committees**

- ✓ National Presidency ISO/IEC JTC 1
- ✓ Participation in multiple Technical Committees



Organization of **International Meetings**

- ✓ ISO/IEC JTC 1/SC 27/WG 5 in October 2022



Launch of the **National Policy "ISO CASCO" 2022-2030 in 2022**

- ✓ Presidency of NSC 02 "Conformity"
- ✓ Publication of a report on Management System Standards

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Research program “Technical Standardisation for Trusted Use in the Field of Smart ICT” (2017-2020) in collaboration with the University of Luxembourg

The University of Luxembourg and ILNAS are strengthening their collaboration in the field of Smart ICT and standardization. A ceremony was held on May 17, 2017 at the Ministry of Economy to formally conclude the partnership.



In the rear row, from left to right: Jean-Philippe Humbert, Pascal Bouvry, Paul Heuschling, Yves Elsen, Björn Ottersten;
In the front row, from left to right: Ludwig Neyses, Francine Closener, Jean-Marie Reiff

The Smart-ICT Team

Nader Samir

- PhD Candidate
- Since 1.10.2017
- Industrial experience in UAVs

Prof. Pascal Bouvry

- Principal Investigator
- Project coordination
- PhD supervision

Saharnaz Dilmaghani

- PhD Candidate
- Since 01.03.2018
- Standardization experience

Matthias Brust

- Postdoc
- Project support

Chao Liu

- PhD Candidate
- Since 15.10.2017
- Cloud Computing



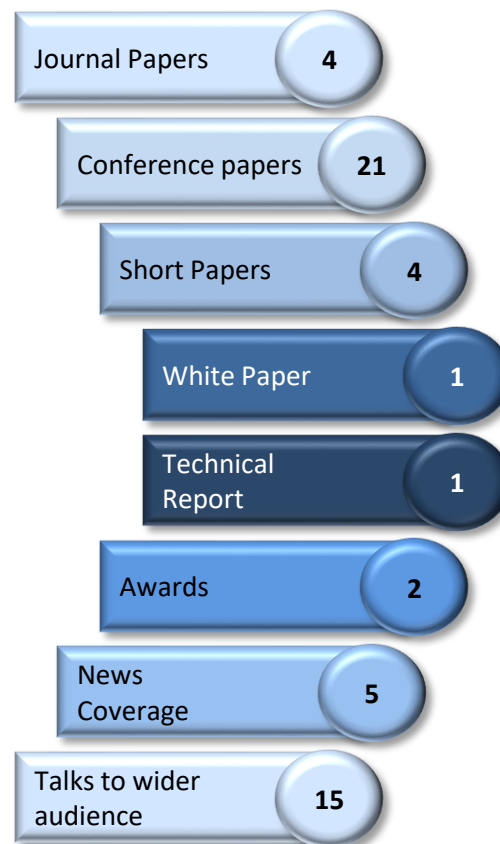
10/2018 - White Paper “DATA PROTECTION AND PRIVACY IN SMART ICT - SCIENTIFIC RESEARCH AND TECHNICAL STANDARDIZATION”



IS Day 2019 - Information Security Awards
Security Project of the Year: Snt – ILNAS



10/2019 - Technical Reports “SMART ICT: GAP ANALYSIS BETWEEN SCIENTIFIC RESEARCH AND TECHNICAL STANDARDIZATION”



Recent updates

- Dr. Saharnaz Dilmaghani

- Winner of the 'Young Researcher' category of the CEN and CENELEC Standards+Innovation Awards (October 2021)
- PhD thesis defended in Q1 2022 ("*On Trustworthy AI and Localized Complex Network Analytics*")

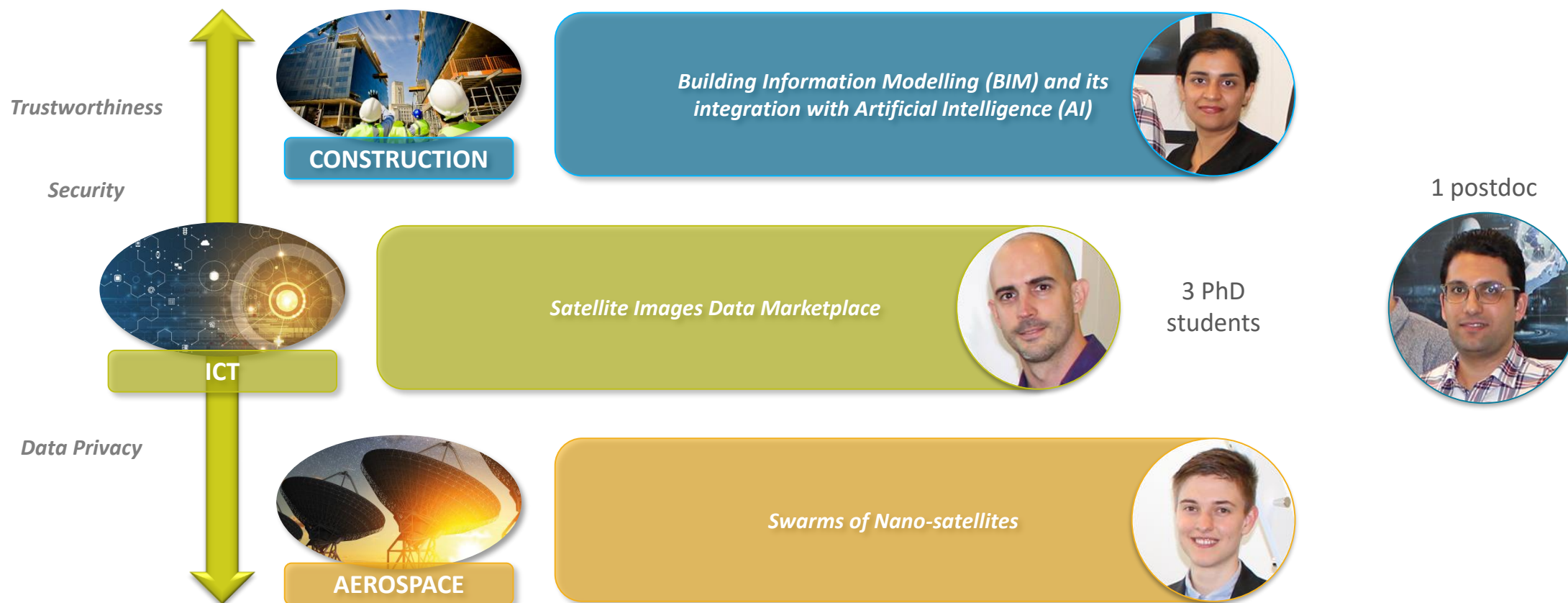


- Dr. Nader Samir Labib

- PhD thesis defended in Q4 2021 ("*A Distributed Unmanned Aerial Vehicles Traffic - Management System*")



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



2020-2022 - ILNAS Research activities

1 White Paper
published

**ARTIFICIAL
INTELLIGENCE**

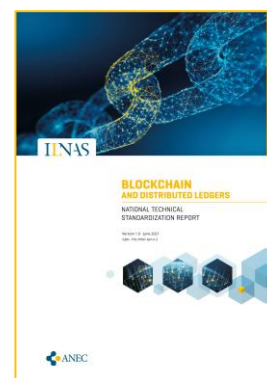
*Technology
review*

*Economic
overview*

Challenges

*Technical
Standardization*

...



BLOCKCHAIN

INTERNET OF
THINGS

CLOUD
COMPUTING

MSS

4 National Technical
Standardization Reports
published

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

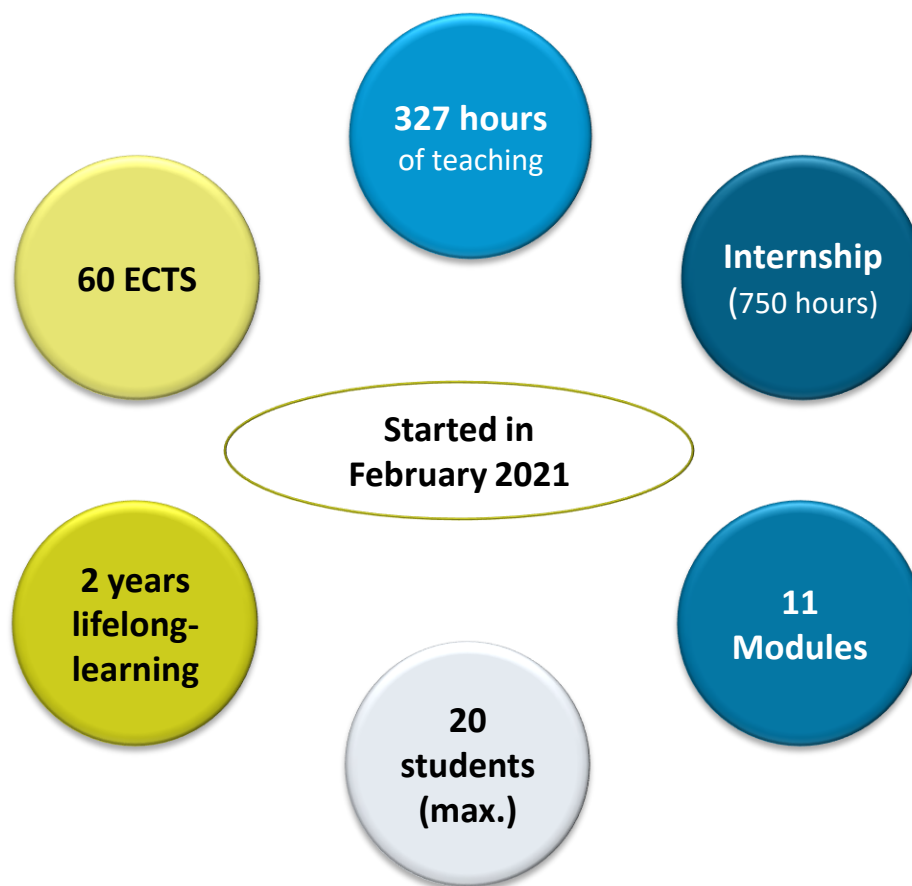
STANDARDISATION	ECTS
Smart Secure ICT and Innovation	1
Technical Standardisation	3
TOTAL	4

SMART ICT	ECTS
Smart ICT Technologies I	5
Smart ICT Technologies II	5
TOTAL	10

DIGITAL TRUST FOR SMART ICT	ECTS
Security for Smart ICT I	2
Security for Smart ICT II	3
Trust Architectures for Smart ICT	4
TOTAL	9

TECHNOPRENEURSHIP	ECTS
Management of Business and Technical Innovation	3
Digital Intelligence	2
Legal Aspects	2
TOTAL	7

MASTER THESIS	ECTS
Master Thesis	30
TOTAL	30



With the support of:

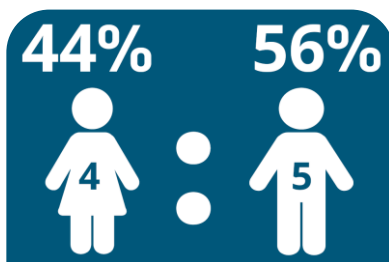


THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURG
Ministry of the Economy

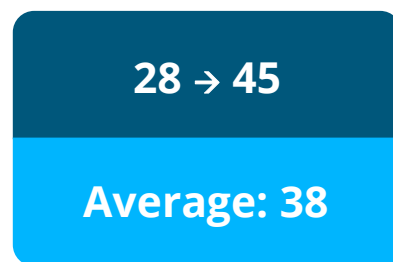


**Master MTECH – ILNAS in collaboration with the University of Luxembourg
and the Chamber of Employees**

WOMEN : MEN



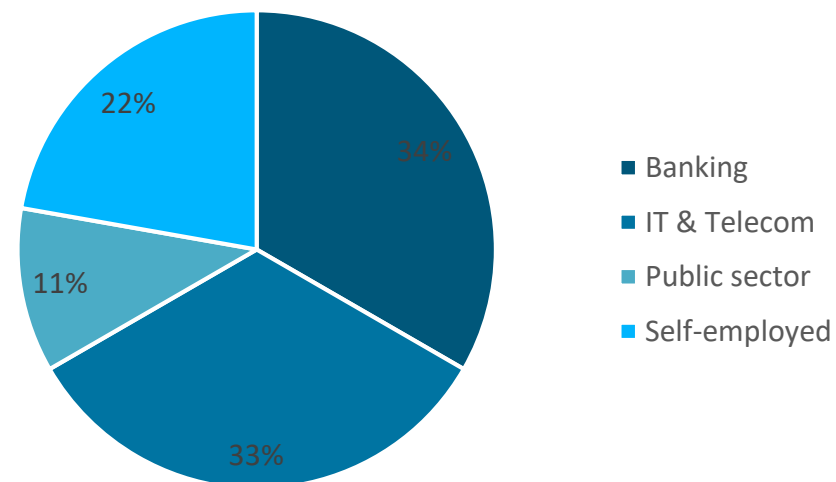
AGE



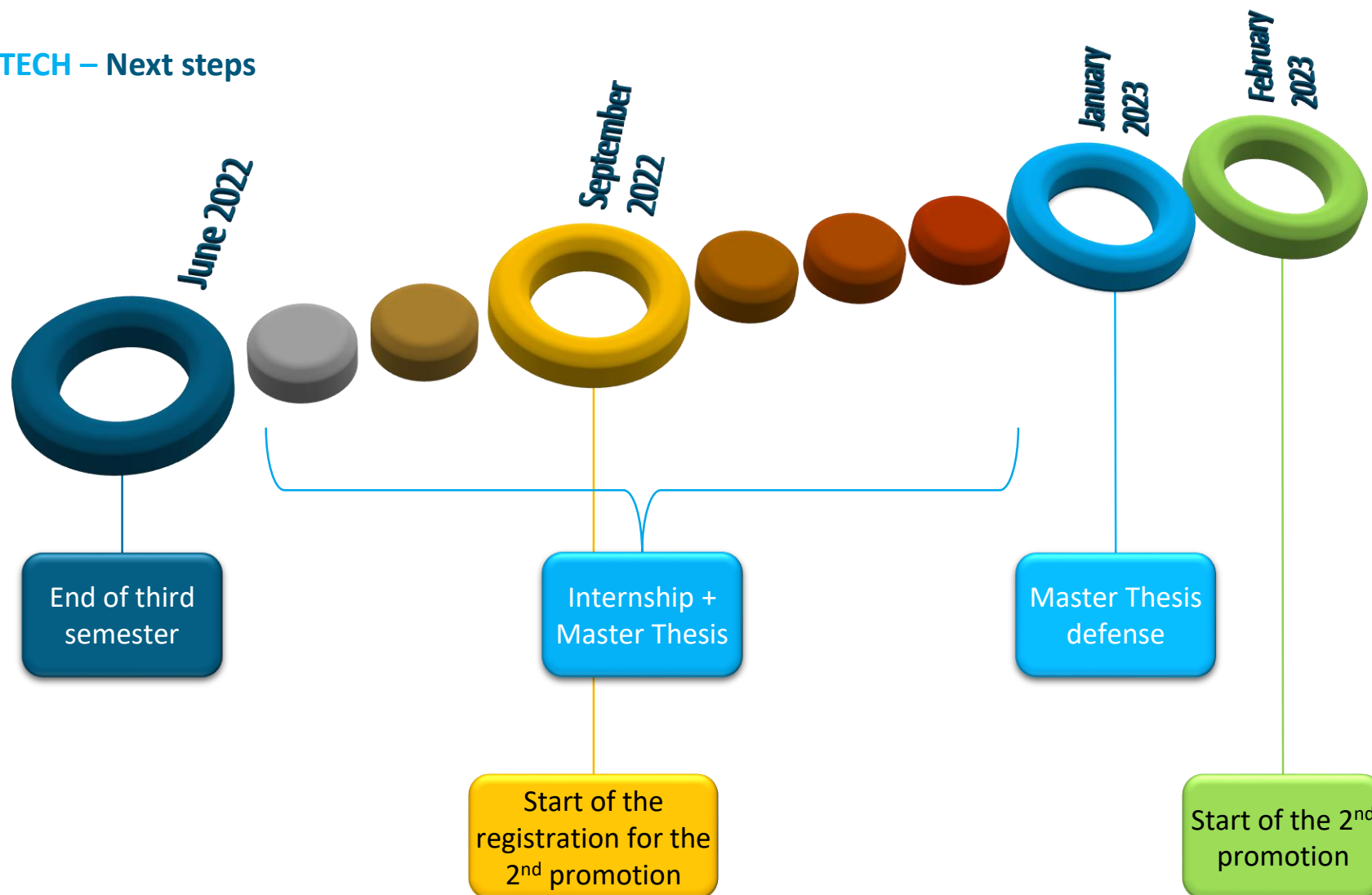
NATIONALITIES

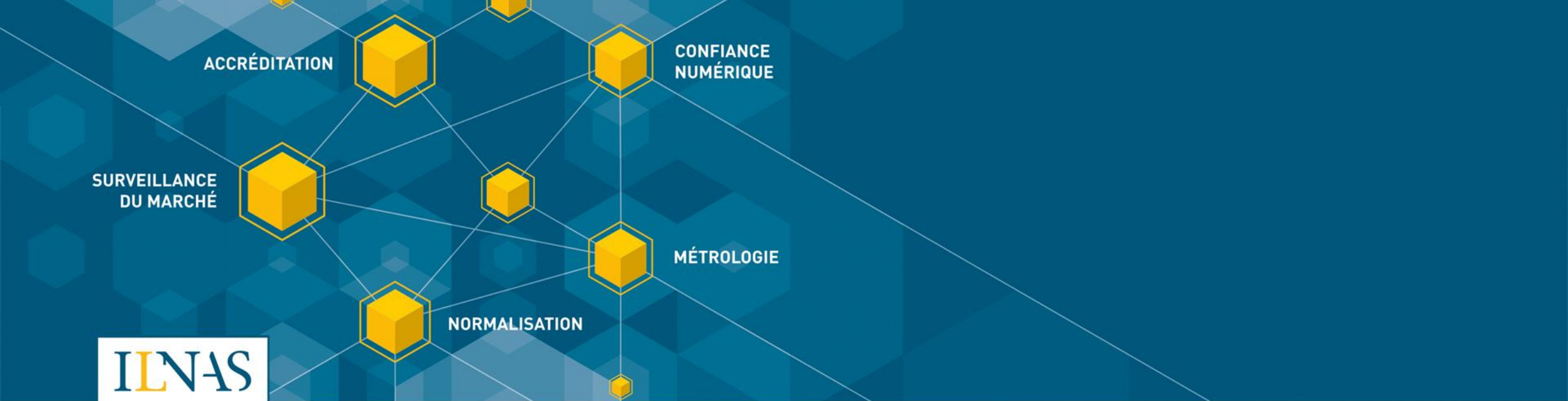


ECONOMIC SECTORS



Master MTECH – Next steps





Présentation de l'Organisme luxembourgeois de normalisation

14th October 2022

Jérôme Hoerold – Chef de département (ILNAS)



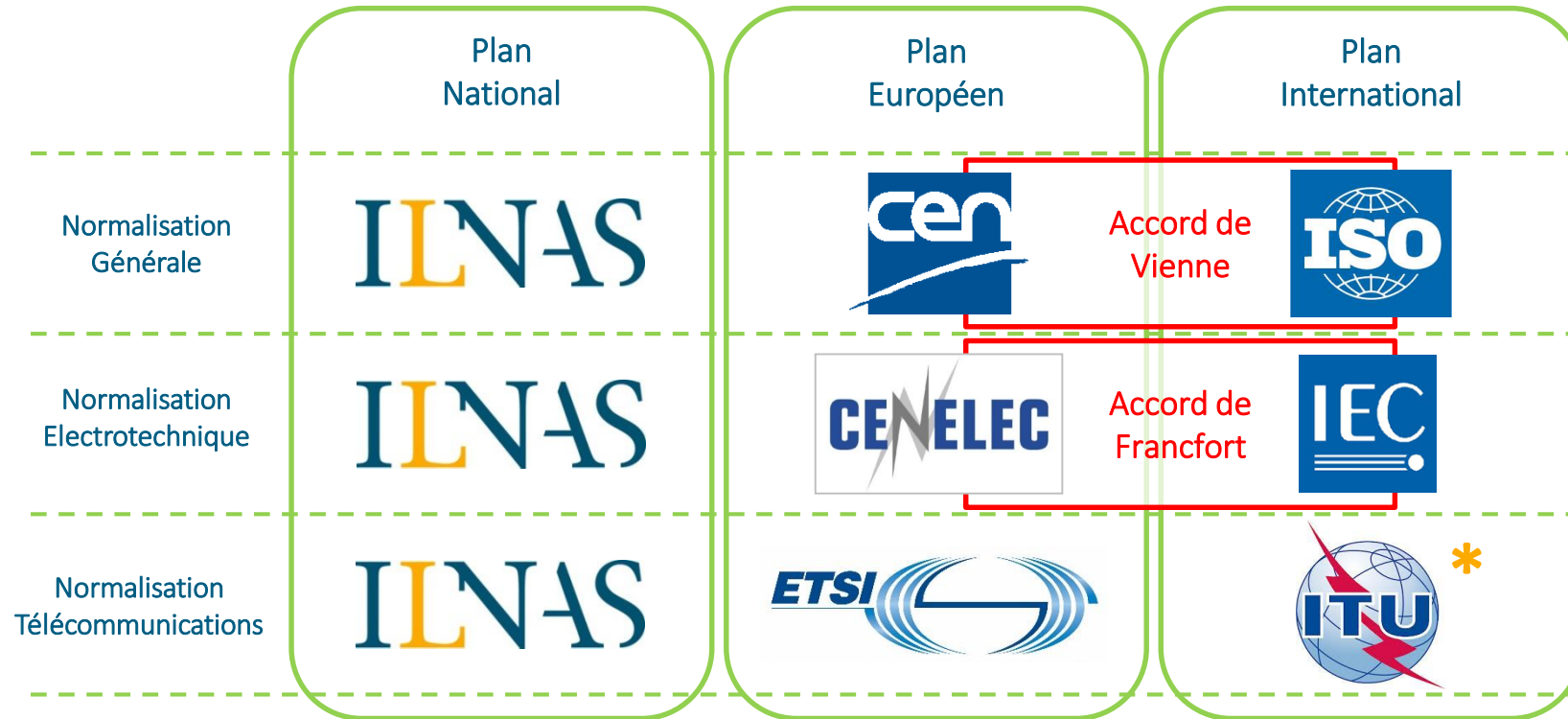
➤ Création de documents normatifs nationaux

- Annexes nationales aux Eurocodes (2011 et 2019)
- Annexe nationale sur le Diesel d'hiver (2013 et 2019)
- Création d'un bureau national de normalisation dans le domaine de la construction (2015)
- Norme nationale sur la surface habitable (2016)
- Norme nationale relative à la sécurité de l'information dans le cadre de l'accréditation des laboratoires (2020)
- Norme nationale sur les missions de contrôle technique des bâtiments (2021)
- Norme nationale sur les critères de performance acoustique pour les bâtiments d'habitation (2022)
- Norme nationale relative à l'archivage électronique (2022)
- Annexes nationales sur le béton (en cours)

➤ Création d'une culture normative au Luxembourg

- Master « Technopreneuship », en collaboration avec l'Université du Luxembourg (Support du GIE ANEC-N)
- Programme de recherche en collaboration avec l'Université du Luxembourg
- Promouvoir la normalisation au Luxembourg (Newsletter, portail-qualite.lu, Linkedin, événements, ...)
- Formation continue dans le domaine de la normalisation et sensibilisations au sein des lycées





* ITU-T

➤ Participer à la création de normes européennes et internationales

- Ouvert aux acteurs socio-économiques du Luxembourg
- Inscription gratuite
- Formations gratuites offertes aux experts

➤ Représentation du Luxembourg au niveau européen et international

- Participation au « Committee on Standards » de la Commission européenne
- Participation aux assemblées générales, bureaux techniques et groupes de travail spécifiques du CEN, CENELEC, ETSI, ISO et IEC



➤ **Comment participer à l'élaboration de normes nationales, européennes ou internationales ?**

- 1) Enquête publique d'un projet de norme
- 2) Participation active au sein d'un comité technique



« Celui qui fait la norme fait le marché! »

- Naviguer vers l'ILNAS e-shop (<https://ilnas.services-publics.lu>) pour communiquer votre avis sur un projet de norme qui se trouve au stade de l'enquête publique.

BIENVENUE SUR L'E-SHOP DE L'ILNAS !

Les normes nationales (ILNAS, DIN), européennes (EN) et internationales (ISO, IEC) sont à votre portée !

ILNAS vous offre la possibilité de rechercher et d'acheter des normes nationales, européennes et internationales élaborées et adoptées par les organisations de normalisation, à savoir : ILNAS, DIN, CEN, CENELEC, ETSI, ISO et IEC. Le catalogue en ligne vous donne accès aux normes publiées et aux projets de norme ainsi qu'aux versions antérieures.

Un accès en lecture seule est offert [gratuitement à plusieurs endroits](#) au Luxembourg.

RECHERCHER UNE NORME

☐ Normes ratifiées ☐ Projets de norme ☐ Normes annulées ☒ Normes en enquête publique

RECHERCHE AVANCÉE

Comment rechercher des normes ? Comment acheter des normes ? Comment recevoir des normes ?

Deux possibilités vous sont offertes :

- Recherche simple : il vous suffit d'entrer le numéro de référence ou un mot-clé contenu dans le titre des normes
- Recherche avancée : elle vous permet d'élargir votre recherche par différents critères :
 - Libellé
 - Organisme de normalisation
 - Comité technique
 - Domaine (code ICS : Classification internationale pour les normes)
 - Directive
 - Date d'édition

FR DE EN

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PARTICIPEZ À LA NORMALISATION

COMMENTER UNE NORME EN ENQUÊTE PUBLIQUE

ORGANISMES DE NORMALISATION

RÉSULTATS DE LA RECHERCHE [RETOURNER AU FORMULAIRE DE RECHERCHE](#)

TRIÉ PAR - RÉSULTATS PAR PAGE 10 RÉSULTAT(S) 1 - 10 DES 548 1 2 3 4 5 ... 55

APERÇU PARTIEL GRATUIT	PRIX	LANGUE	
prEN 13138-1 Edition 09/2019 ⓘ Aides à la flottabilité pour l'apprentissage de la natation - Partie 1: Exigences de sécurité et méthodes d'essai pour les aides à la flottabilité portées au corps TC/SC : CEN/TC 162 Statut : Projet - Actif Vous pouvez commenter ce projet de norme	FR DE EN	€ 0.00	FR ☐ DE ☐ EN ☐
ETSI EN 302 208 V3.3.0 (2020-05) Edition 05/2020 ⓘ Radio Frequency Identification Equipment operating in the band 865 MHz to 868 MHz with power levels up to 2 W and in the band 915 MHz to 921 MHz with power levels up to 4 W; Harmonised Standard for access to radio spectrum TC/SC : ERM TG34 Statut : Projet - Actif Vous pouvez commenter ce projet de norme	EN	€ 0.00	EN ☐
EN 61850-5:2013/prA1:2020 Edition 10/2020 ⓘ Réseaux et systèmes de communication pour l'automatisation des systèmes électriques - Partie 5: Exigences de			

FR DE EN

- ☒ LOGIN
- RECHERCHER UNE NORME
- AIDE
- ENQUÊTE DE SATISFACTION
- NEWSLETTER
- OFFRE DE FORMATION CONTINUE GRATUITE "NORMALISATION"
- PARTICIPEZ À LA NORMALISATION
- COMMENTER UNE NORME EN ENQUÊTE PUBLIQUE
- ORGANISMES DE NORMALISATION

Pourquoi participer ?

- Appartenance à un réseau d'experts
- Anticiper les normes futures et les développements au sein du secteur
- Possibilité d'émettre des votes tout en représentant le Luxembourg

Qui peut participer ?

- Tout acteur socio-économique du Luxembourg avec certaine expertise

Coûts de la participation ?

- Participation gratuite au Luxembourg

Registre des experts (Septembre 2022)

- 299 experts inscrits
- 1065 inscriptions dans les comités techniques

Registre national des délégués en normalisation - Septembre 2022

Nombre d'inscriptions aux comités techniques :

ILNAS/OLN	75
CEN	240
CENELEC	12
CEN/CLC	48
CEN/CLC/ETSI	2
ECISS	0
ISO/IEC	371
ISO	304
IEC	13
Total	1065

Nombre de personnes inscrites : 299



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mercredi 28 septembre 2022

Approuvé par Jérôme HOEROLD

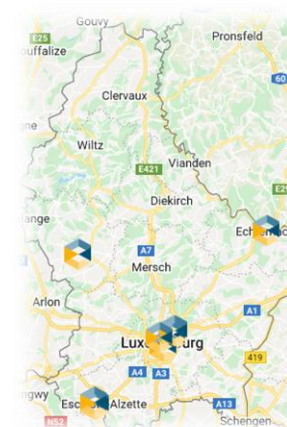
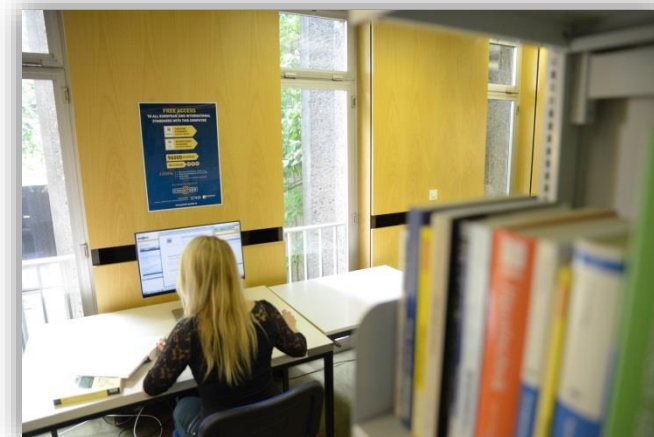
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3.1 Catalogue de normes de l'ILNAS

- 82 normes nationales
 - +79.000 normes européennes du CEN, CENELEC et ETSI
 - +72.000 normes internationales de l'ISO et IEC
 - +48.000 Normes DIN
- Plus de **200.000 documents normatifs** disponibles à des prix compétitifs
 - Format : électronique
 - Langue : Français, Allemand et Anglais
 - Enquête publique: documents gratuits



- Toutes les normes EN (CEN, CENELEC et ETSI), ISO, IEC et ILNAS peuvent être consultées gratuitement sur les stations de lecture ILNAS
- Localisation :
 - 1) **Université du Luxembourg (Campus Kirchberg)**
 - 2) **Chambre des métiers**
 - 3) **Securitymadein.lu (sur RDV)**
 - 4) **Lycée des Arts et Métiers**
 - 5) **Lifelong Learning Center**
 - 6) **ILNAS (sur RDV)**
 - 7) **LIST (Belvaux)**
 - 8) **Administration communale de la ville d'Echternach**
 - 9) **Atert-Lycée Redange**



Afin d'exploiter au mieux les avantages liées à la normalisation, l'ILNAS offre, en collaboration avec le GIE ANEC-N, les produits et services suivants aux acteurs socio-économiques nationaux :

- Diffusion de l'information normative
- Formation continue en normalisation
- Veille normative ciblée
- Analyse normative sectorielle (Secteurs « porteurs »)



Portail qualité www.portail-qualite.lu



PORTAIL-QUALITE.LU
QUALITE-SECURITE-CONFORMITE
UNE INITIATIVE DE ILNAS

Sécurité et Santé | Métrologie | Accréditation et Notification | Confiance numérique | Normes et Normalisation | Propriété intellectuelle | Libre circulation et surveillance du marché

Répondez à l'enquête de l'ILNAS sur les TIC émergentes et les besoins normatifs associés

Internet of Things : retour sur la septième réunion plénière du sous-comité technique ISO/IEC JTC 1/SC 41

[Update 25/06/2020] Mise à jour gratuite des normes et aux dispositifs de protection pour aider à combattre COVID-19

Le comité technique international de normalisation ISO/IEC JTC 1, dédié à la normalisation des TIC, organise chaque année une enquête sur les TIC émergentes afin d'identifier les besoins normatifs qui y sont associés et d'initier les travaux normatifs requis par le marché au plus tôt. Dans ce cadre, l'ILNAS organise une consultation nationale pour obtenir l'avis des parties prenantes nationales.

Le sous-comité technique ISO/IEC JTC 1/SC 41, dédié à la normalisation dans le domaine de l'Internet des objets (IoT) et des technologies connexes, a tenu sa septième réunion plénière (de manière virtuelle) du 24 au 29 mai 2020. Retour sur les principales décisions prises lors de cette réunion.

La propagation rapide de COVID-19 mondial, appelle à des mesures urgentes, du monde des affaires.

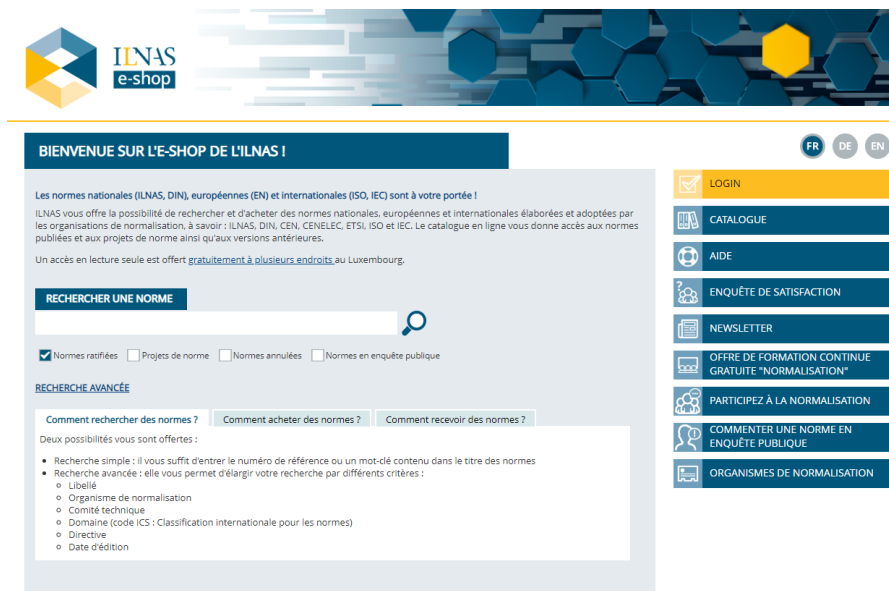
Informez-vous auprès du Point de Contact Produits

Informez-vous sur l'archivage électronique

Vous souhaitez consulter toutes nos actualités ?

[VOIR TOUTES LES ACTUALITES](#)

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ILNAS e-shop

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Organisme luxembourgeois de normalisation

Tel. : (+352) 247 743 40

Fax : (+352) 247 943 40

E-mail : normalisation@ilnas.etat.lu



Technical Standardization: development of the growth sectors

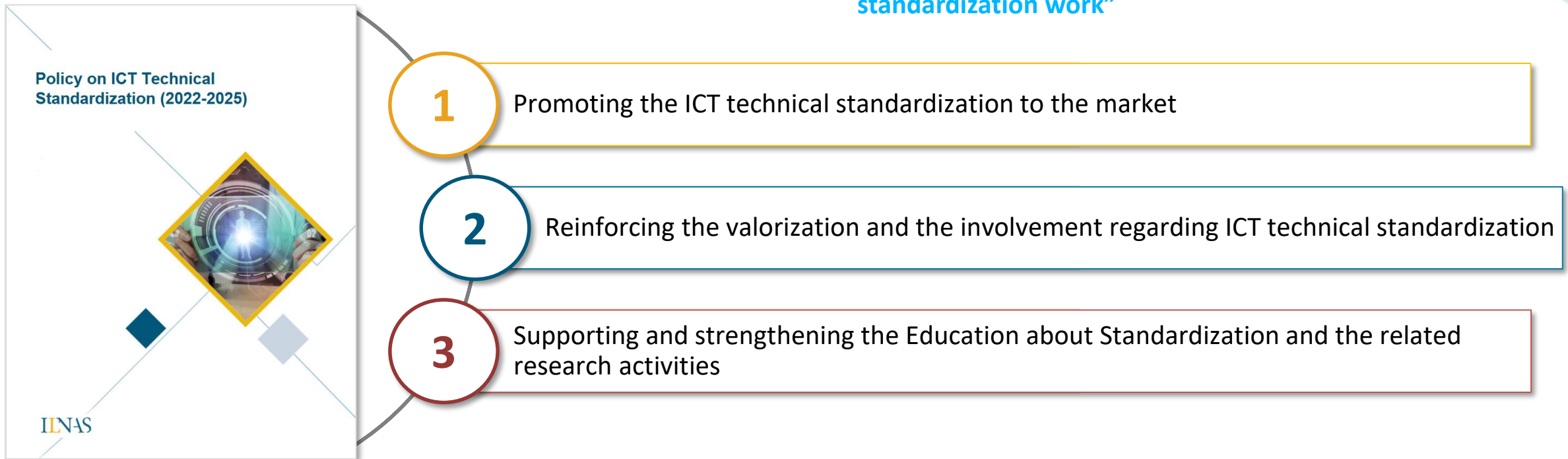
14th October 2022

Mr. Nicolas Domenjoud

Responsable secteur « TIC & Normalisation » - ILNAS/OLN



“Foster and strengthen the national ICT sector involvement in standardization work”



Policies for the Construction and Aerospace sectors are based on similar lead projects

- I - Promoting technical standardization to the market
- II - Reinforcing the valorization and the involvement regarding technical standardization
- III - Supporting and strengthening the Education about Standardization and the related research activities



I - Promoting technical standardization to the market

II - Reinforcing the valorization and the involvement regarding technical standardization

III - Supporting and strengthening the Education about Standardization and the related research activities

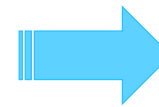


I. Promoting technical standardization to the market

A. Draw up national standards analyses

→ Sector-based technical standardization “Snapshots”

- Economic context / Overview of the sectors
- Generalities on standardization to better understand the context
- A presentation of the main national actors
- Standards watch of the related sector
 - Identification and description of technical standardization committees
 - Mention of the related national representation
- Final report with the results of the above mentioned standards watch and the identified opportunities



Updated annually (twice a year for the ICT sector)

I. Promoting technical standardization to the market

A. Draw up national standards analysis



CONSTRUCTION



<https://gd.lu/6wBmmn>

303 Technical Committees

94 International
204 European
5 National

Building Construction & Civil Engineering

22 TC International
48 TC European
1 TC National



Study & Design

18 TC International
31 TC European
4 TC National



Installation

35 TC International
85 TC European



Completion & Finishing

8 TC International
21 TC European



Safety, Machinery & Equipment

11 TC International
19 TC European

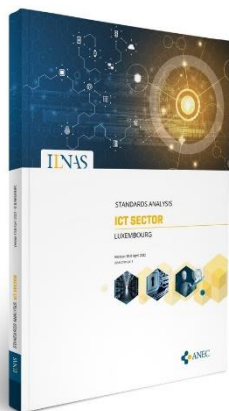
I. Promoting technical standardization to the market

A. Draw up national standards analysis

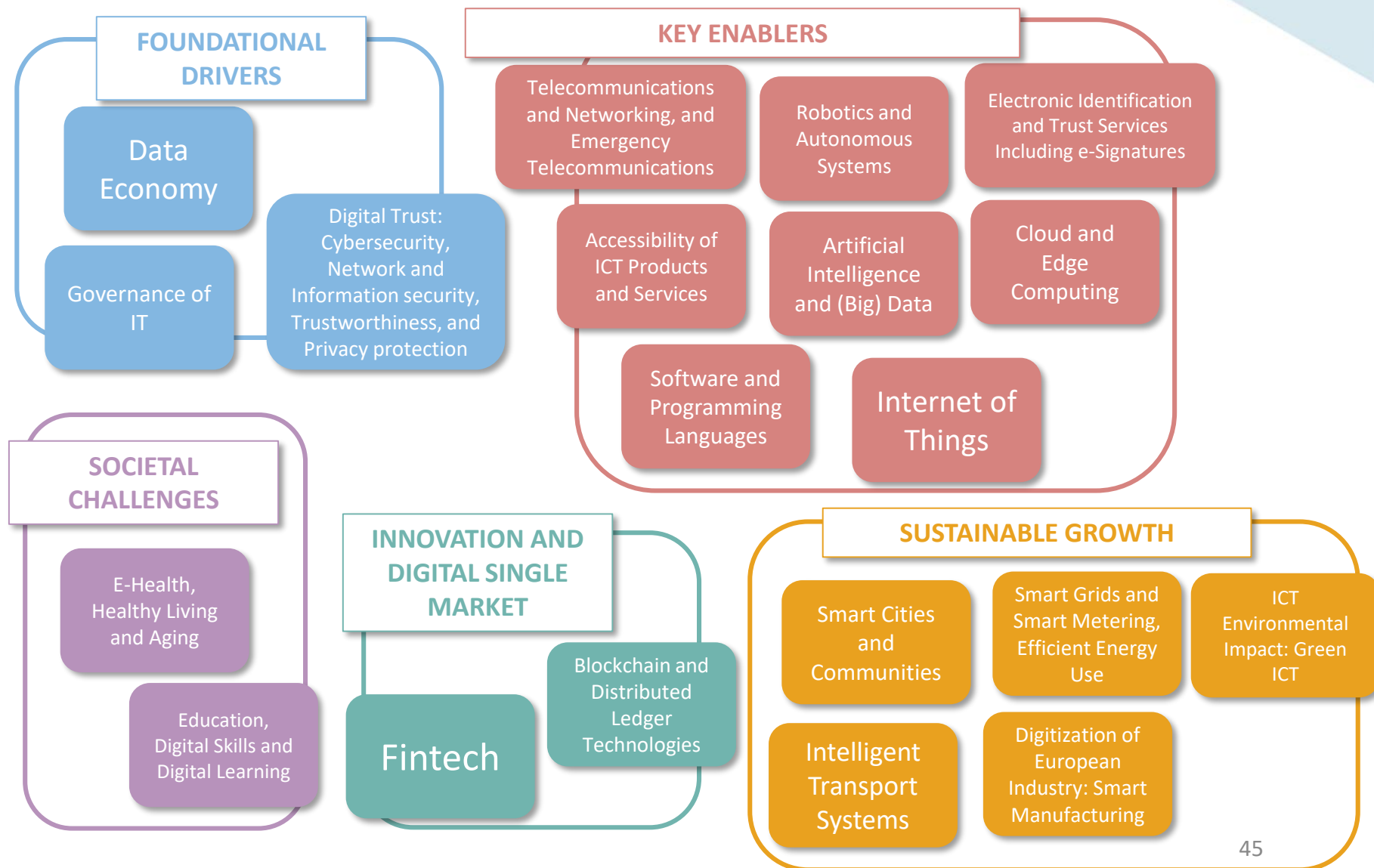
9 international technical committees | 31 international sub-committees
4 international working groups | 27 European technical committees



ICT



<https://gd.lu/cQFNkt>



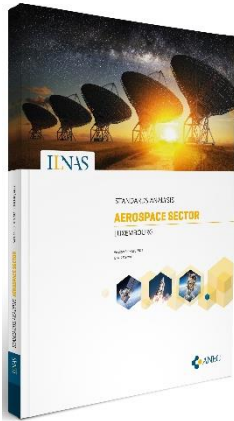
I. Promoting technical standardization to the market

A. Draw up national standards analysis

44 standardization entities
(TC, WG, ...) identified



AEROSPACE



<https://gd.lu/dPk3b>

Regrouped into 5 parts:

- Solely dedicated to the space sector, with a wide range of applications
- Telecommunication
- Earth Observation
- Technical areas (mechanical, electrical...)
- Systems engineering, Quality, Safety and Management processes

3 major technical committees:

- ISO/TC 20/SC 14 “Space systems and operations”
- CEN/CLC/JTC 5 “Space”
- ASD-STAN “Aerospace”

I. Promoting technical standardization to the market

B. Define national implementation plans

- **Implementation plans are drawn up on a yearly basis by ANEC GIE, under the supervision of ILNAS, in order to ensure that planned developments for each sector are in line with the national standardization priorities**
 - Aim is to involve targeted stakeholders of the Grand Duchy of Luxembourg in a global approach to standardization in order to support the sectors in terms of competitiveness, visibility and performance, while enhancing the international recognition of Luxembourg at the standards level
 - Directly in relation with the national Standards Analyses



I - Promoting technical standardization to the market

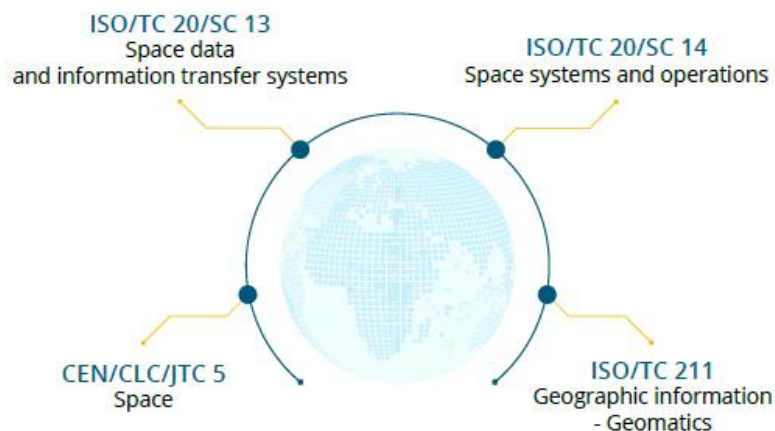
II - Reinforcing the valorization and the involvement regarding technical standardization

III - Supporting and strengthening the Education about Standardization and the related research activities



A. Participate in relevant technical committees

- In order to provide the most relevant information on technical standardization to the national ICT/aerospace/construction communities, ILNAS commissioned ANEC GIE to analyze the national market needs of these specific sectors in order to define a list of relevant technical committees
- These technical committees are followed closely and directly by ANEC GIE in order to provide the most relevant information to the interested national actors



- ✓ CEN/TC 250 "Structural Eurocodes"
- ✓ CEN/TC 442 "Building Information Modelling (BIM)"
- ✓ ISO/IEC JTC 1/SC 41/WG 6 "Digital Twin"
- ✓ ILNAS/TC in the construction sector
- ✓ ...

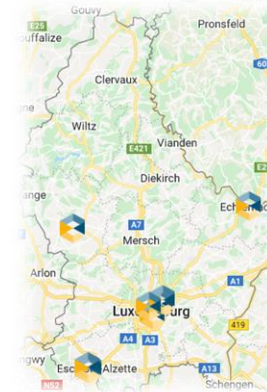


- ✓ CEN/CLC JTC 13 "Cybersecurity and Data Protection"
- ✓ CEN/CLC JTC 19 "Blockchain and Distributed Ledger Technologies"
- ✓ CEN/CLC JTC 21 "Artificial Intelligence"
- ✓ ISO/IEC JTC 1 "Information technology" and relevant subcommittees
- ✓ ETSI/TC CYBER "Cyber Security"
- ✓ ETSI/ISG SAI "Securing Artificial Intelligence"
- ✓ ...

II. Reinforcing the valorization and the involvement regarding technical standardization

B. Promote the participation of the national market in technical standardization committees and the use of relevant standards

- Promote the use of the ILNAS reading stations



- Organize events to promote participation in technical standardization committees and the use of relevant standards in the three sectors

- Breakfasts to present the Standards Analyses
- Conference on the Standards Analysis of the Space sector
- Presentation in the ICT Spring
- Conference on cybersecurity standardization
- ...

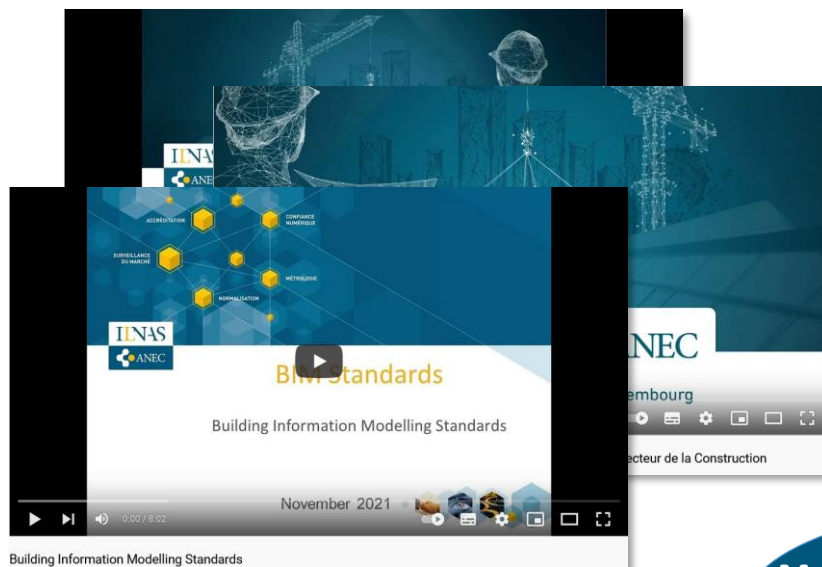


- Meet and raise the awareness of the national stakeholders (companies, public sector, associations, etc.) of the three sectors

II. Reinforcing the valorization and the involvement regarding technical standardization

C. Provide information to the national community

Development of videos for awareness-raising on standards in the construction sector



Flyers



Technical sheets valorizing standards in specific domains



More than 100 companies of the construction sector contacted since 2021

Booth BIMLUX 2021



CONSTRUCTION SECTOR

→ 120 national delegates
→ 70 national entities represented



CONSTRUCTION

II. Reinforcing the valorization and the involvement regarding technical standardization

C. Provide information to the national community

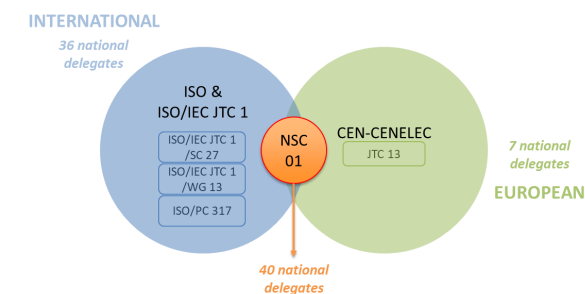
Development of videos for awareness-raising on standards in the ICT sector



Flyers



Creation of the National Standardization Commission "Cybersecurity"



More than 800 companies of the ICT sector contacted since 2021

Presentations in national events (e.g.: ICT Spring)



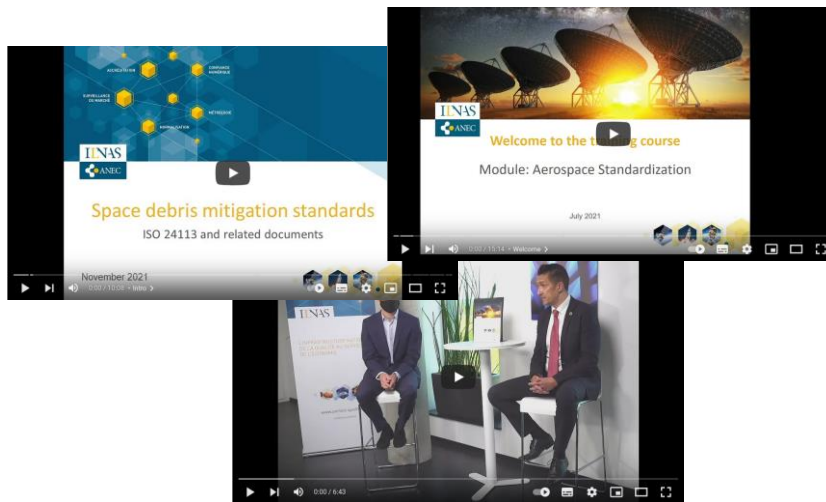
ICT SECTOR

→ 94 national delegates
→ 52 national entities represented

II. Reinforcing the valorization and the involvement regarding technical standardization

C. Provide information to the national community

Development of videos for awareness-raising on standards in the Aerospace sector



Flyers



More than 50 companies of the Aerospace sector contacted since 2021

AEROSPACE SECTOR

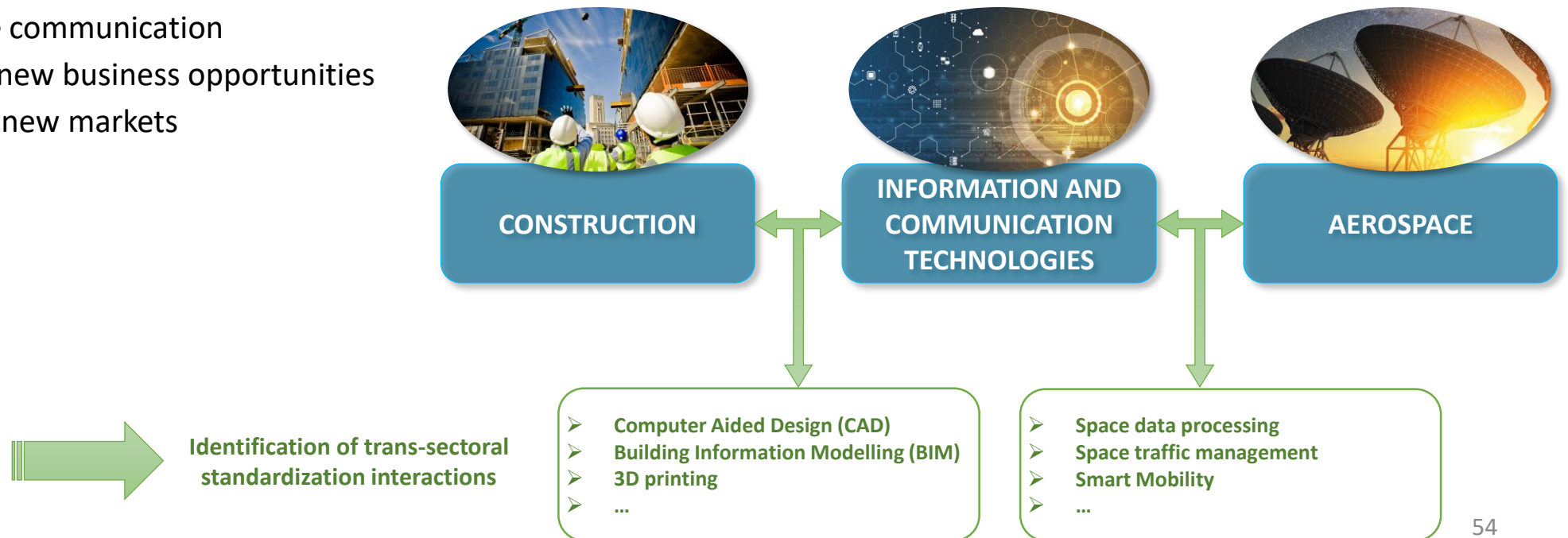
- 2 national delegates
- 2 national companies in ETSI
- 3 national entities represented



AEROSPACE

D. Create transversal links with the ICT domain

- **The aerospace and construction sectors are evolving in parallel with the development and the usage of ICT**
 - It is important to create transversal links with technical standardization of the ICT domain in order to identify new opportunities for common developments
- **Relevant information will be provided to the national stakeholders active in the aerospace and construction sectors, in order to allow them:**
 - to improve the efficiency of their processes
 - to facilitate communication
 - to identify new business opportunities
 - to develop new markets



I - Promoting technical standardization to the market

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A. Developing research activities



INFORMATION AND COMMUNICATION TECHNOLOGIES

2020-2022 - ILNAS Research activities

1 White Paper published

ARTIFICIAL INTELLIGENCE

Technology review

Economic overview

Challenges

Technical Standardization



4 National Technical Standardization Reports published

BLOCKCHAIN

INTERNET OF THINGS

CLOUD COMPUTING

MSS

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



1 postdoc

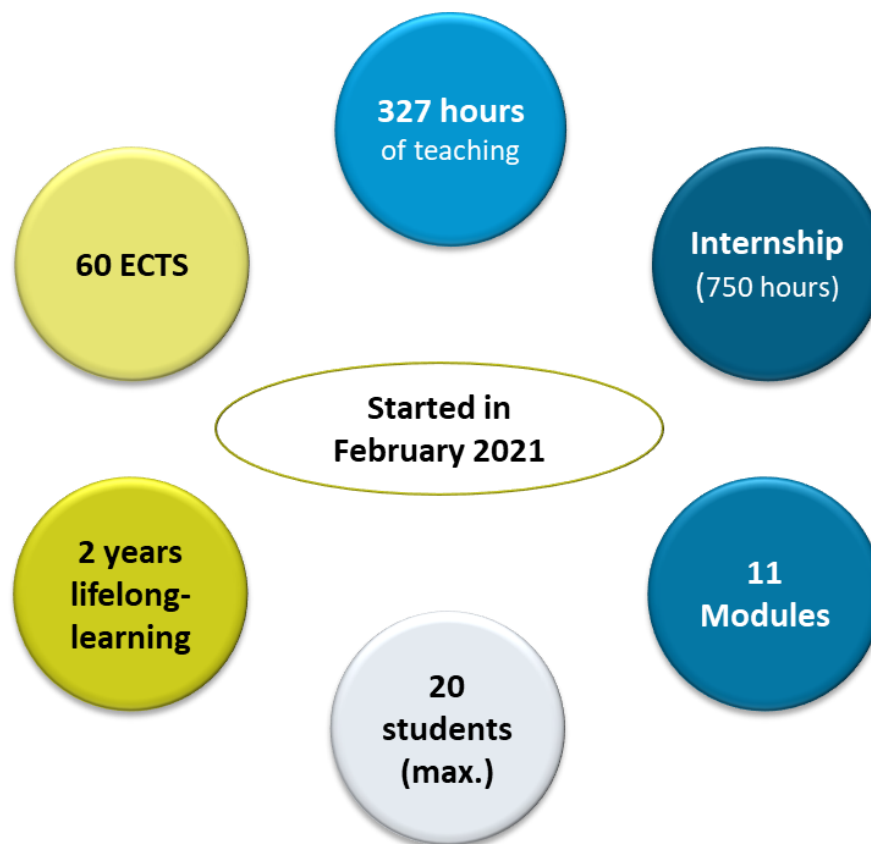
3 PhD students



B. Managing the Master MTECH

- ILNAS and ANEC GIE are participating actively in the Master's degree MTECH

- Lecturers
- Co-responsibles for modules
- Participation in the definition of the program
- Student supervision (internship)
- ...



C. Other projects

- **ILNAS commissioned ANEC GIE to reinforce the research and innovation activities related to technical standardization in the aerospace and construction sector, notably by defining and carrying out new research and education projects**

- **In this frame, the developments are/could be:**
 - Analysis of the current research trends and outlooks related to the construction/aerospace sector
 - Support of doctoral students (in collaboration with the University of Luxembourg), for example on research projects concerning the use of ICT in the construction/aerospace sector
 - The publication of white papers and / or other research publications on technical standardization in the field of construction/aerospace
 - Evaluate the possibilities to integrate educational content on aerospace technical standardization into educational programs or creating new educational programs dedicated to aerospace technical standardization

- **The Luxembourg's policies on technical standardization will enable to:**
 - Strengthen the national standardization communities in the three sectors
 - Organize and develop the technical standardization communities at national level
 - Raise awareness on technical standardization according to the market needs
 - Increase the national representation within European and international technical committees
 - Foster the use of relevant standards in business activities for the benefit of the national stakeholders
 - Develop research and education activities in relation with technical standardization considered as being of national interest



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