

Welcome
Bienvenue
Willkommen



Presentation of the National Standards Body

National Standardization Strategy and related Policy for the ICT sector

Dr. Jean-Philippe HUMBERT, Deputy Director – ILNAS

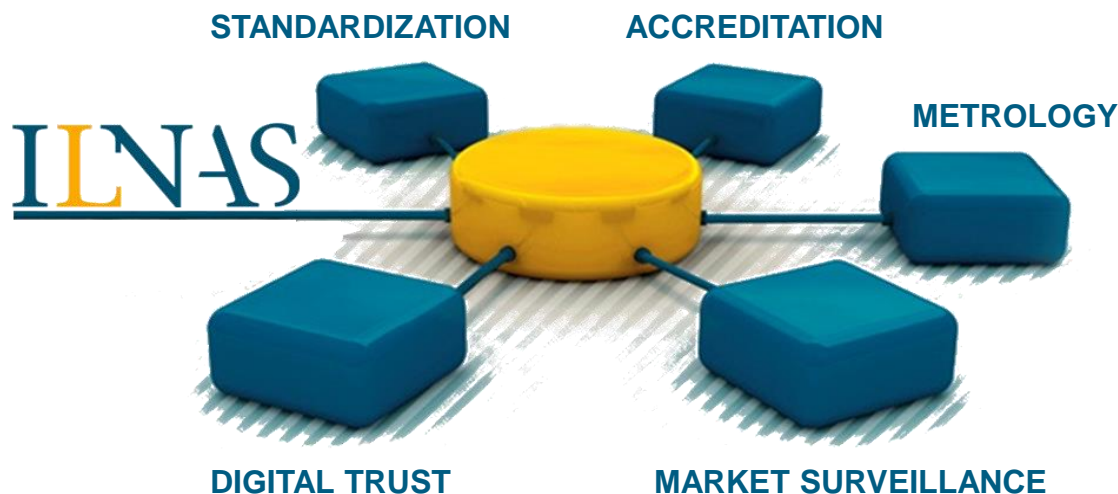
ILNAS

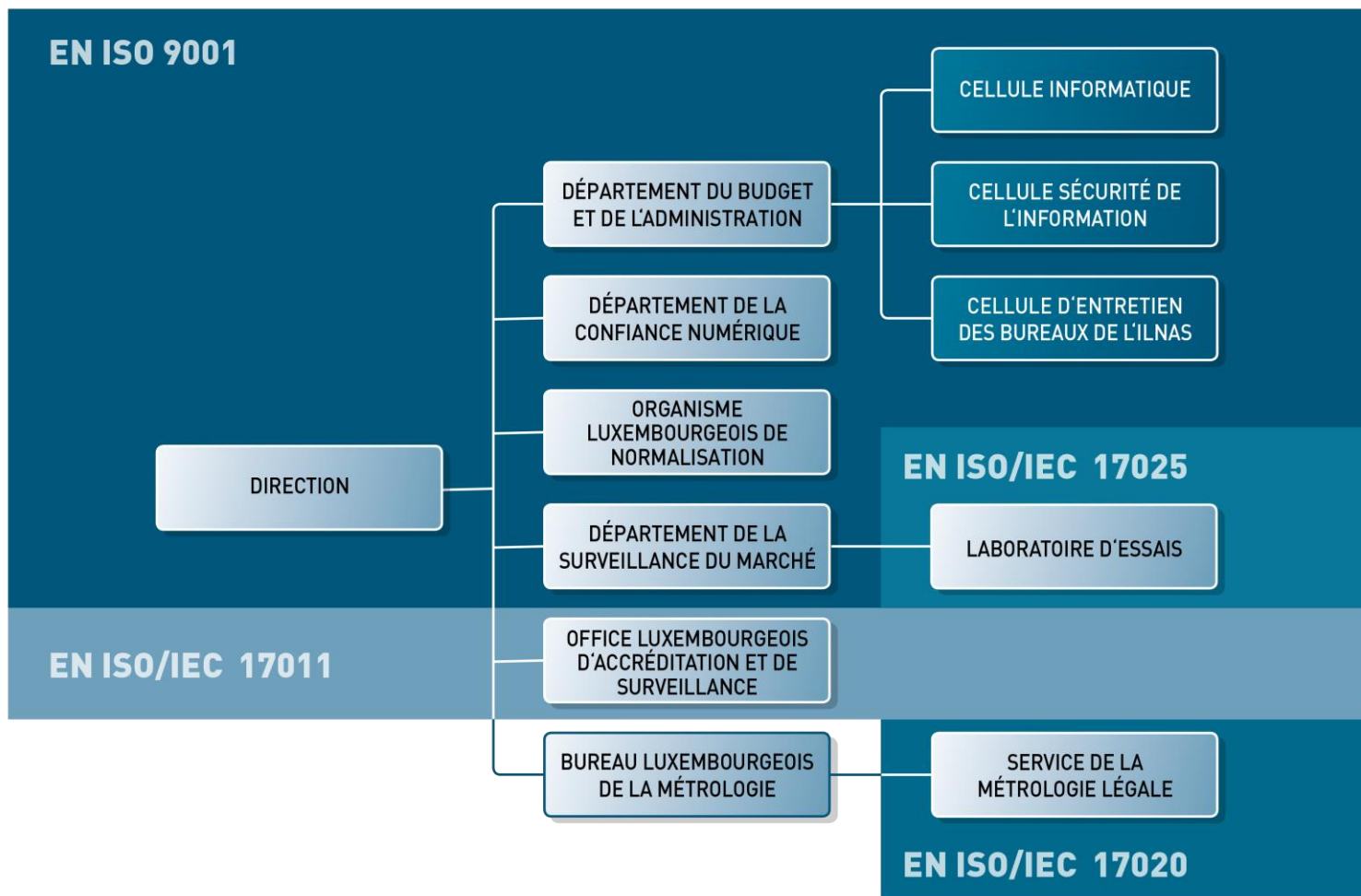


LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Économie



- **Creation:** Law dated July 14, 2014 (repealing the amended Law of May 20, 2008) and law dated February 17, 2017
- **Status:** Public administration under the authority of the Minister of the Economy
- **Total staff:** 44 civil servants (July 2018)
- **Web site:**



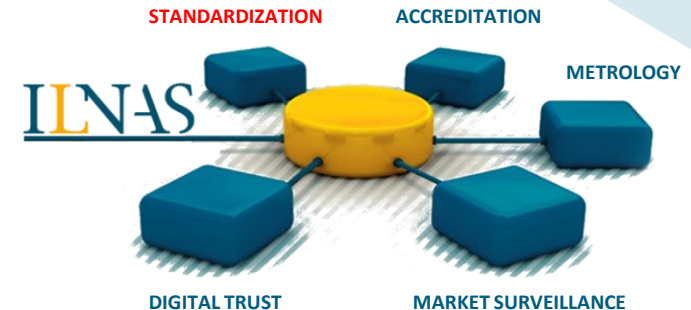


- Ensure availability of standards

- Maintain the national database of more than 160.000 normative documents
- Selling standards (e-shop - <https://ilnas.services-publics.lu>)
- Free consultation of standards

- Participation in standardization

- Coordination and supervision of the creation of national normative documents
- Participation in standardization committees (European and international level)
- Manage the National Mirror Committees
- Publish and implement European, international and national standards
- Organize education and training courses about standardization
- Develop partnerships with academia and research
- Foster and promote voluntary, consensus-based standards



**LUXEMBOURG
STANDARDIZATION STRATEGY
2014-2020**

"Technical standardization as a service"

ILNAS

– **THREE PILLARS:**

PILLAR 1

Information and communication technologies (ICT)

PILLAR 2

National influence and compliance with legal attributions

PILLAR 3

Products and services



– **THREE LEADING PROJECTS:**

PROJECT 1

Developing the interest and the involvement of the market

PROJECT 2

Promoting and reinforcing market participation

PROJECT 3

Supporting and strengthening the EaS and related research activities

PROJECT 1

Developing the interest and the involvement of the market



- **Drawing up a yearly national standards analysis for the ICT sector**
 - Standards watch of the related sector
 - Identification of relevant technical committees and Fora/Consortia
 - Preparation of the final report of analysis and opportunities
- **Defining a national implementation plan for ICT technical standardization**
 - To involve targeted stakeholders of the Grand Duchy of Luxembourg in a global approach to standardization
 - Enhancing the international recognition of the Grand Duchy of Luxembourg

PROJECT 2 Promoting and reinforcing market participation**– Participating in relevant technical committees**

- Closely follow relevant ICT standardization committees
 - ISO/IEC JTC1 - Information technology
 - ISO/IEC JTC 1/SC 38 - Cloud Computing and Distributed Platforms
 - ISO/IEC JTC 1/SC 41 - Internet of Things
 - ISO/IEC JTC 1/SC 42 - Artificial Intelligence
 - ISO/TC 307 - Blockchain and distributed ledger technologies
- And more...
 - ITU-T Study Groups
 - ETSI technical committees
 - ETSI/TC CYBER
 - ETSI/TC ESI
 - ETSI/TC SmartM2M

**– Provide information to the national community**

- Share ICT standardization knowledge, with related community in Luxembourg
- Organization of related workshops at national level
 - ICT prospective developments
 - Smart ICT domain



**Publication of SMART
ANS TIC V2.0**



**Start of the new class of the
university certificate “Smart
ICT for Business Innovation”**



**Participation in the Plenary
meeting ISO/IEC JTC 1/SC 42
“Artificial Intelligence”**



**ILNAS-Ministry of the Economy Breakfast
White Paper “Blockchain and Distributed
Ledger Technologies”**

JANUARY

FEBRUARY

MARCH

APRIL

MAY

JUNE

JULY

**Breakfast “Artificial
Intelligence & Technical
Standardization”**



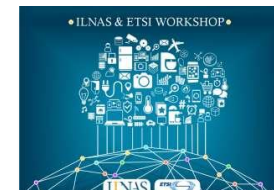
**P-Membership ISO/IEC
JTC 1 (ILNAS
presidency)**



**National Mirror
Committee meeting
ISO/IEC JTC 1/SC 42**



**ETSI WORKSHOP
White Paper “IoT &
Technical Standardization”**



PROJECT 3 Supporting and strengthening the EaS and related research activities



- **Managing the university certificate “Smart ICT for Business Innovation”**
 - New promotion started in February 2018
 - 12 students involved
- **Developing research activities**
 - White Papers on “ Digital Trust & Smart ICT ” (Regularly updated)
 - White Paper “Blockchain and Distributed Ledgers”
 - White Paper “Internet of Things”
 - Research program dedicated to the domains of “Smart ICT” and Technical Standardization
 - PhDs on “Smart ICT” topics
- **Prospective of new diplomas**
 - A dedicated ICT standardization Master’s Degree under development in collaboration with the University of Luxembourg

PROJECT 3 Supporting and strengthening the EaS and related research activities



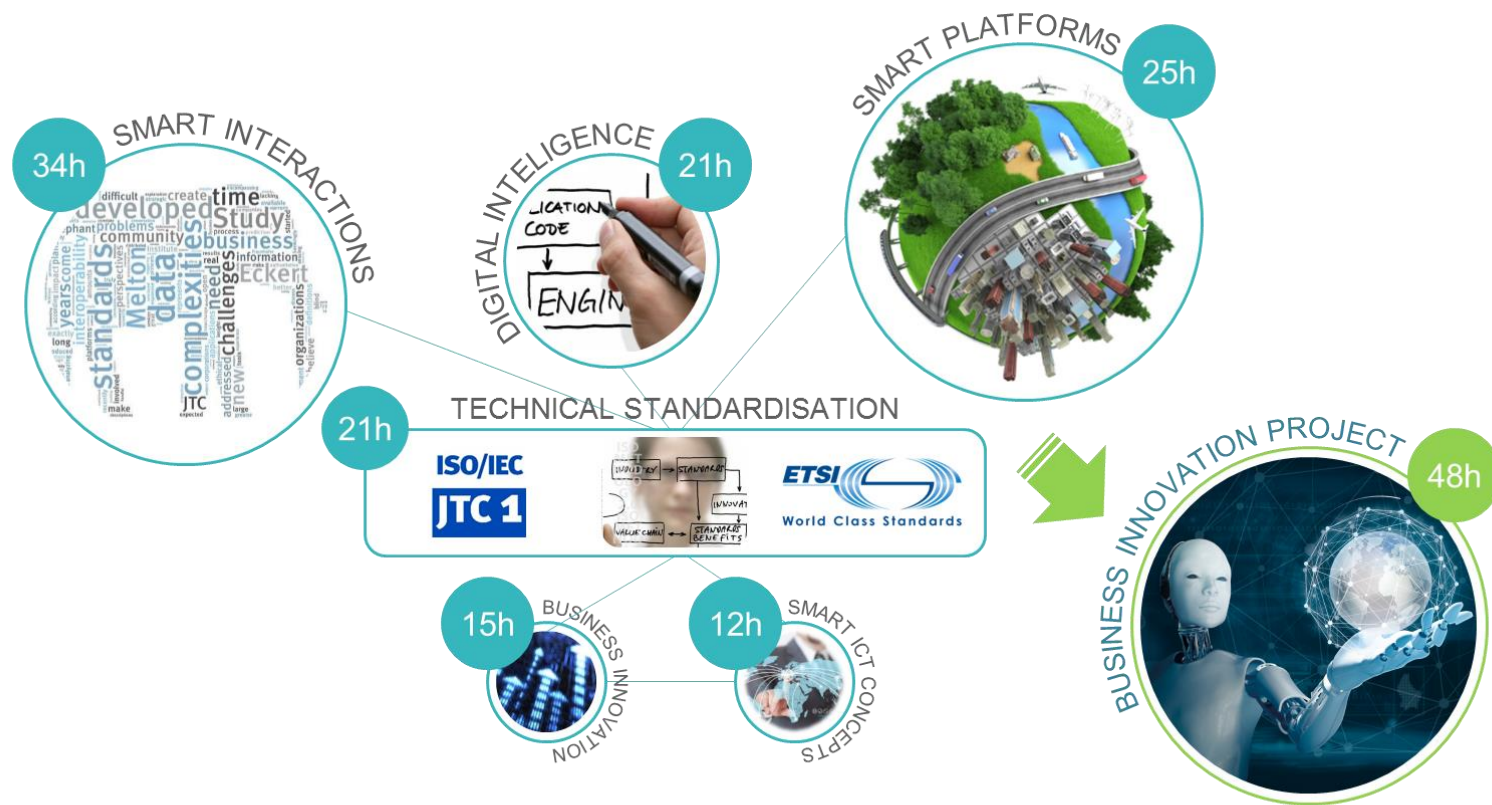
<http://smartict.uni.lu>

- **Place:** University of Luxembourg – Campus Belval
- **Duration:** 1 year program (Thursday and Friday evenings + some Saturday mornings) - 2 semesters: 18 ECTS
- **Language:** English
- **Prerequisite:** Bachelor degree with a minimum of 3 years professional experience in ICT or Master degree in ICT
- **Number of students:** 20 max.
- **Fees:** 3 600 €
- **Start of the courses:** February 2018
- **Supporting organizations:**
 - LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Économie
 - CEN CENELEC
 - ETSI World Class Standards
 - FEDIL ICT
 - Digital Lëtzebuerg
 - CHAMBRE DE COMMERCE LUXEMBOURG
 - technoport®
business incubator | coworking | fab lab
- **Industrial partners:**



nadi



PROJECT 3 Supporting and strengthening the EaS and related research activities

Strengthening ILNAS's relations with academic partners with the aim of structuring education about standardization and ad-hoc research in the Grand Duchy of Luxembourg

- **Origin:**

- Pilot project conducted between September 2015 and September 2016: "Smart ICT for Business Innovation" university certificate in partnership with the University of Luxembourg
- Current promotion: February 2018 to January 2019

- **Objective: University Master in the field of technical standardization (horizon 2019)**

- Will answer national priorities related to "Smart ICT" topics, providing a smart way to link technology, standards and the business world, while creating an additional means of innovation at the national level



White paper “Digital trust for Smart ICT” 14th October 2016 – the baseline

- **It surveys current advances in Digital Trust from three complementary points of view:**
 - A technical analysis
 - A business and economic prospective analysis
 - A technical standardization perspective
- **From the technical analysis**
 - It reviews the basic concepts of the technology and the existing work supporting the development of Digital Trust
 - It presents some technical challenges related to Digital Trust
- **From business and economic prospective**
 - It highlights the interest for Digital Trust
 - It stresses the need of Digital Trust for each Smart ICT concepts
- **From standards point of view technical standardization**
 - It considers both as an important tool to support Digital Trust for Smart ICT



PROJECT 3 Supporting and strengthening the EaS and related research activities**– Research Program (2017-2020) on Digital Trust for Smart ICT**

- Joint collaboration between ILNAS & SnT-UL to reinforce the collaboration in the domain of Smart ICT for Business Innovation through Technical Standardization
- Partnership and contract between ILNAS and SnT has been signed in March 2017
- 3 PhD students are involved : Digital Trust for Smart ICT
 - Cloud Computing
 - Big Data and Analytics
 - Internet of Things
- Other main targets of the research program
 - To support the evolution of the academic program of the university certificate Smart ICT for Business Innovation through the results of the research
 - To serve as a basis for a future Master Program Smart Secure ICT for Business Innovation (expected 2019/2020)

ILNAS

SnT

securityandtrust.lu

<https://smartict.gforge.uni.lu/>

PROJECT 3

Supporting and strengthening the EaS and related research activities

– Research Program (2017-2020) on Digital Trust for Smart ICT

- 3 PhD students are involved into the development process of technical standardization:
 - **Big Data and Analytics**
 - ISO/TC 276 - Biotechnology
 - ISO/IEC JTC 1/SC42 - Artificial Intelligence (including Big Data)
 - **Internet of Things**
 - ISO/TC 20/SC 16 - Unmanned aircraft systems
 - ISO/IEC JTC 1/SC41 - Internet of Things
 - **Cloud Computing**
 - ISO/IEC JTC 1/SC 38 - Cloud Computing and Distributed Platforms
 - **Horizontal technical standardization knowledge development**
 - ISO/IEC JTC 1/SC 27 - IT Security techniques
 - ETSI CYBER - Cyber Security

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SNT

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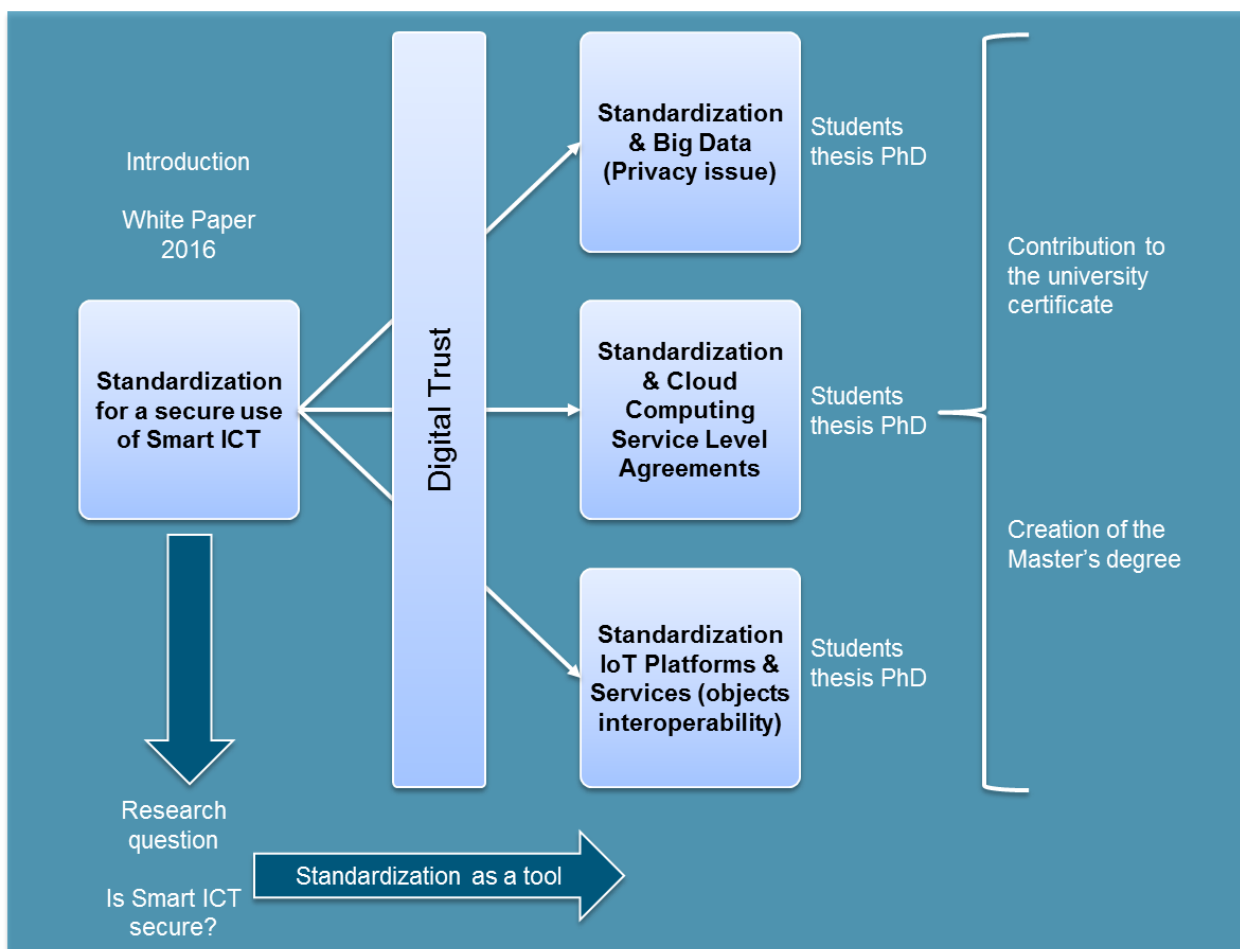
PROJECT 3 Supporting and strengthening the EaS and related research activities– **Research Program (2017-2020) on Digital Trust for Smart ICT**

- 3 PhD students are involved:
 - To be registered into one or more relevant technical standardization committee(s) (as defined)
 - To tackle the technical standardization state of the art and its development into their literature list
 - To take part into the related National Mirror Committees(s)
 - To exchange continuously with ILNAS
 - To carry out the related technical standardization “knowledge” into their research questions: (depending on the problematic)
 - Take into account existing standards (or in development)?
 - Consider developing new standards to disseminate research findings?
 - Contribute (by research outcomes) to the work of existing technical committees developing standards?
 - ...
- To federate these developments: creation of a common working-group ILNAS-SnT: « Technical Standardization / Research & Smart Secure ICT for Business Innovation »
 - Development objectives:
“White Paper Digital trust in Smart ICT” - Update 2018/Privacy (common problematic to the three Smart ICT domains: Cloud Computing, Big Data and Internet of Things) - (in collaboration with the Ministry of the Economy)

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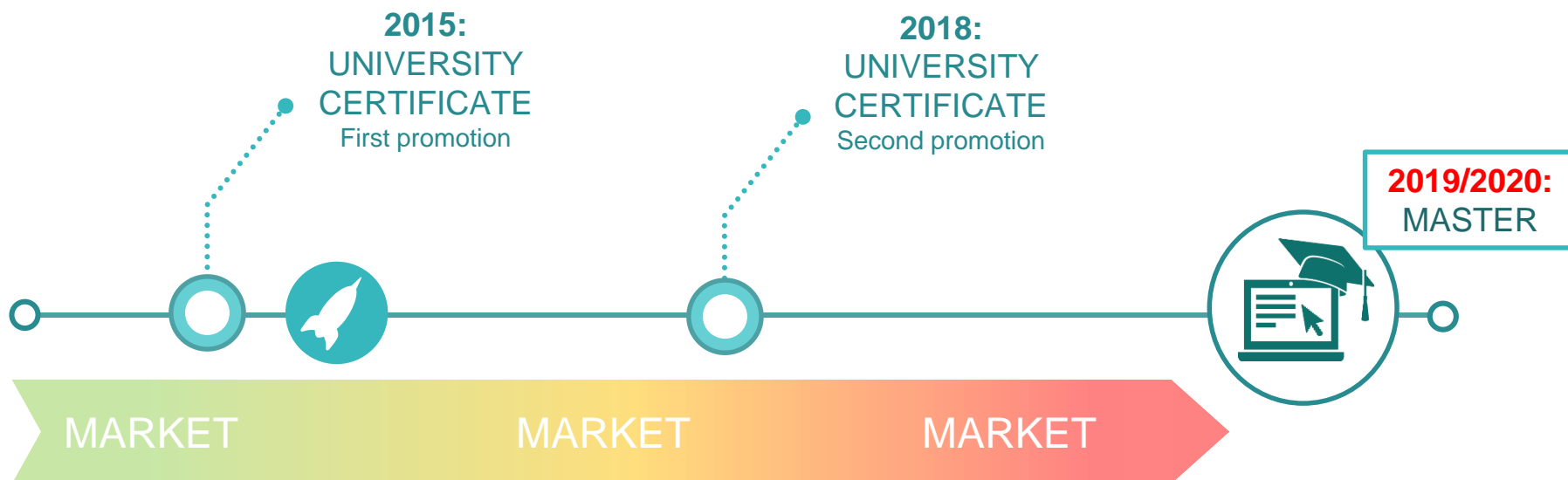
PROJECT 3 Supporting and strengthening the EaS and related research activities

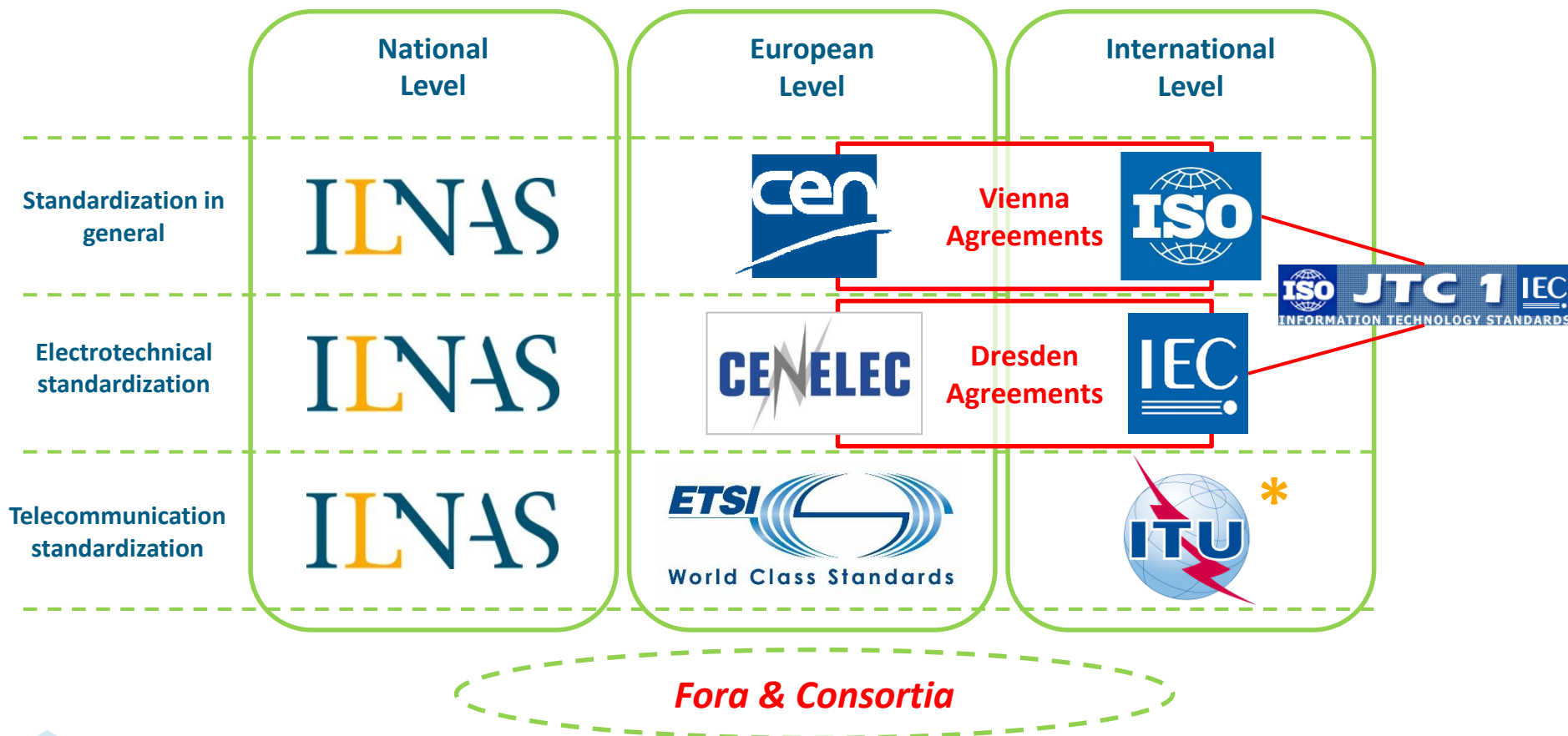
PROJECT 3

Supporting and strengthening the EaS and related research activities

MID AND LONG-TERM OBJECTIVES

Prospective evolution



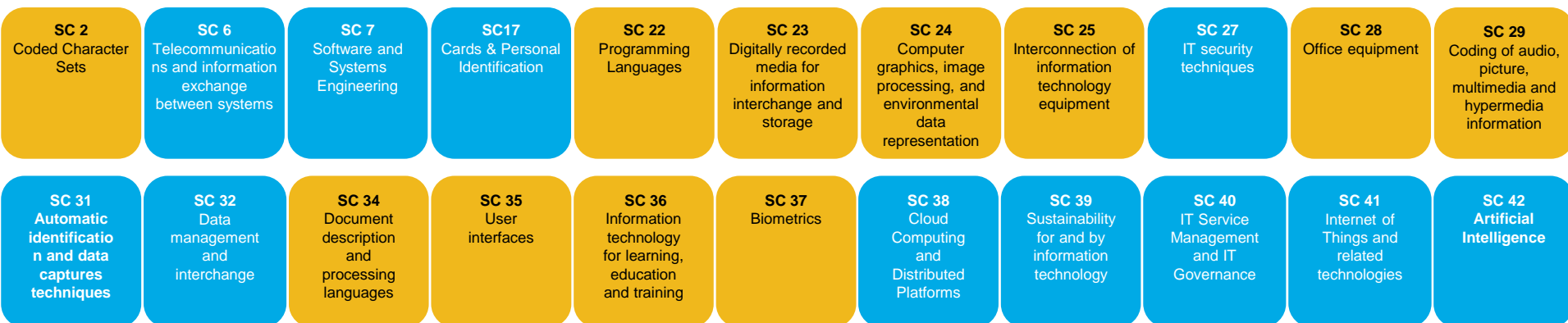
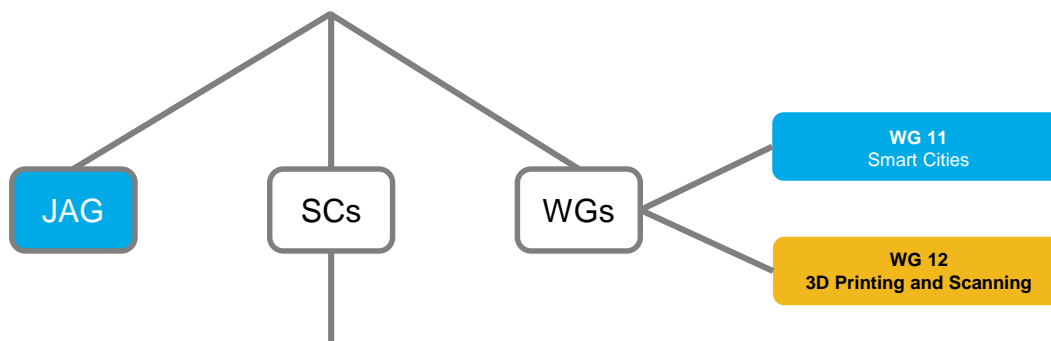


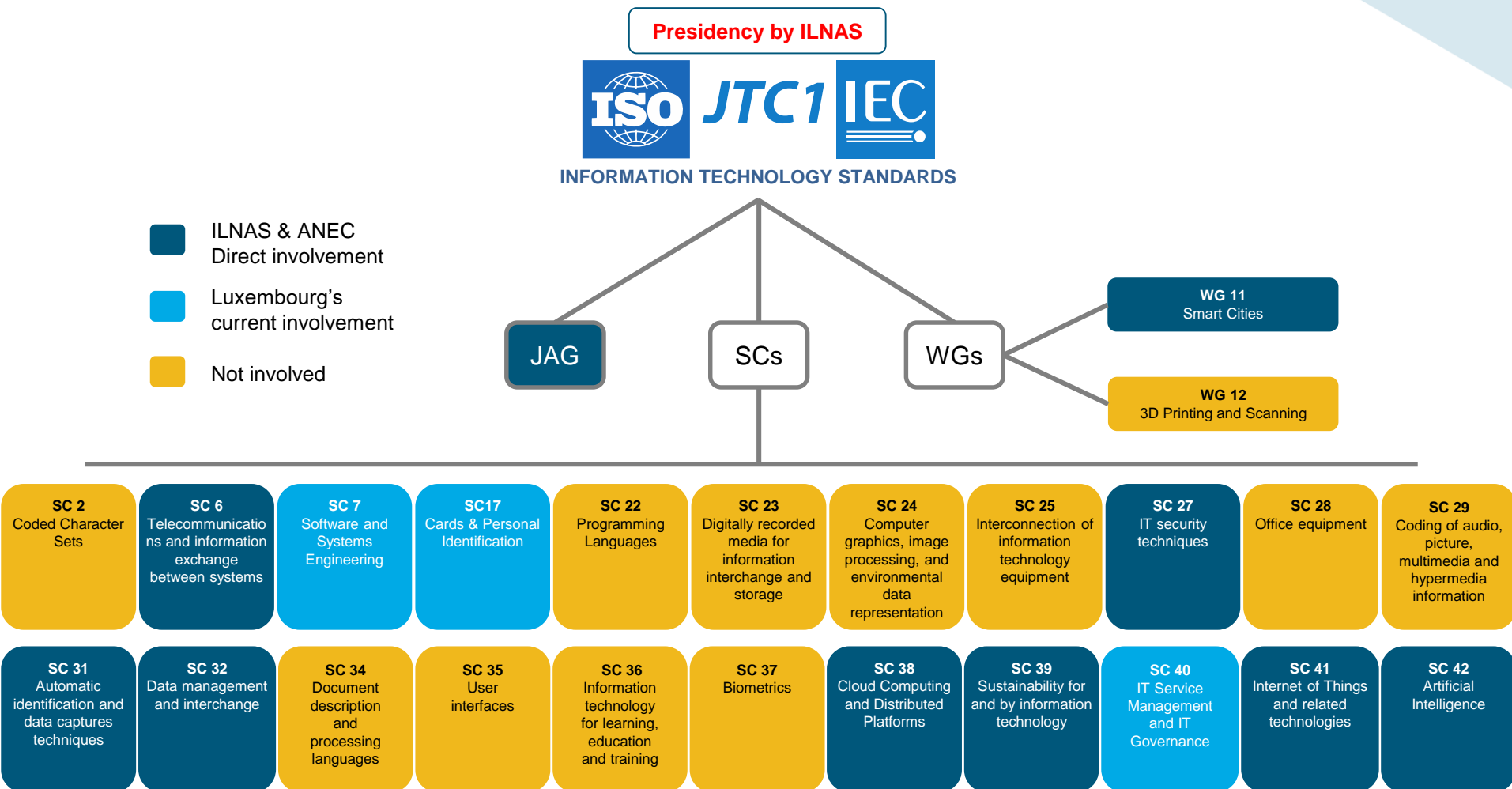
* ITU-T (ILNAS membership since October 2017)



■ Luxembourg's current involvement

■ Not involved

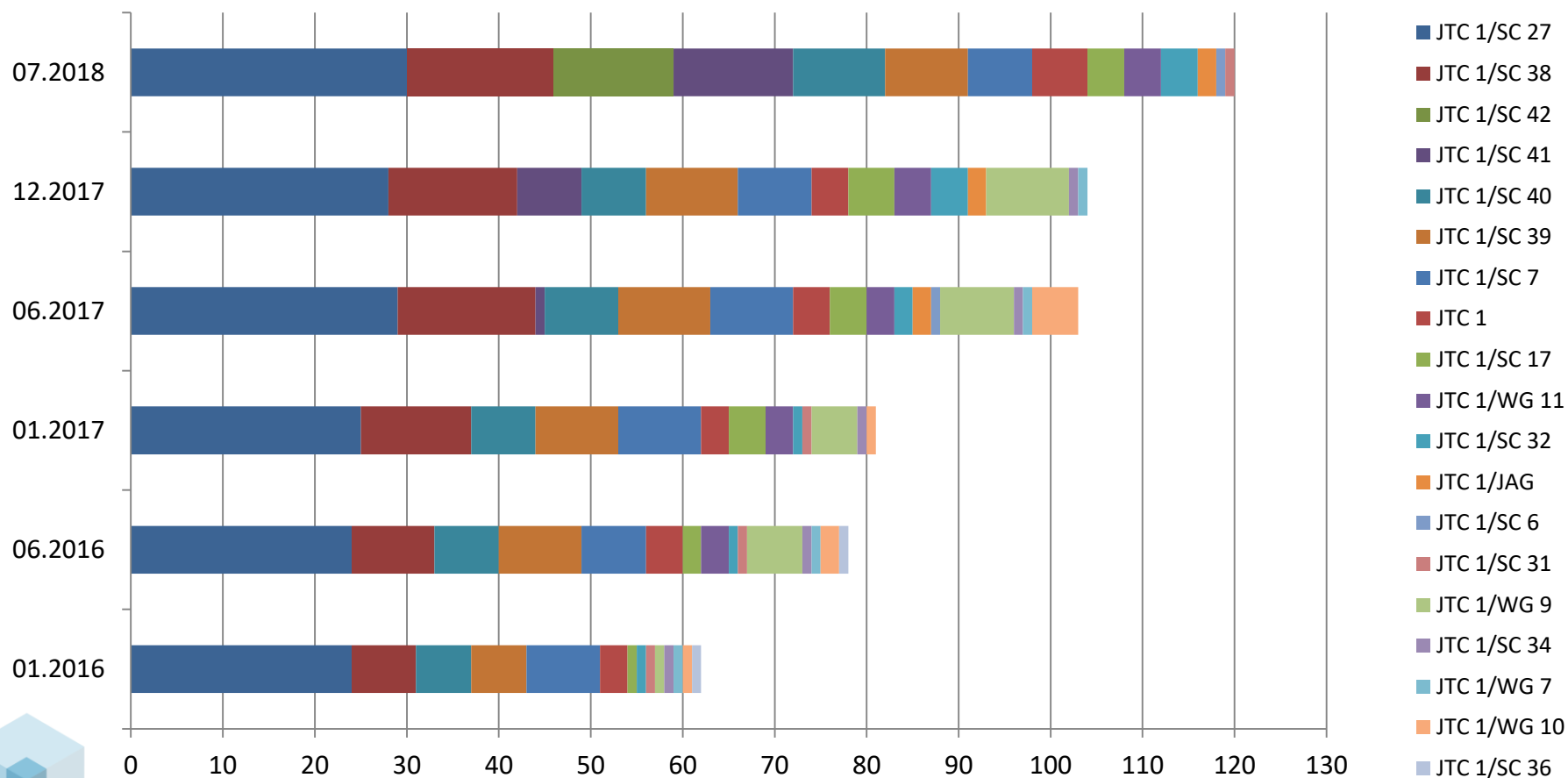




ISO/IEC JTC 1 national situation

– Top representation in JTC 1:

- 30 delegates in the Digital Trust domain
- 16 delegates in the Cloud Computing domain
- 13 delegates in the IoT domain
- 13 delegates in the Artificial Intelligence/Big Data domains



ICT standardization national situation

85 national delegates in the ICT sector

70

ISO/IEC JTC 1 (6)

- Mr. Jean-Philippe HUMBERT
- Mrs. Natalia CASSAGNES
- Mr. Nicolas DOMENJOUD
- Mr. Ravi JHAWAR
- Mr. Johnatan PECERO
- Mr. Shyam WAGLE

ISO/IEC JTC 1/JAG (2)

- Mr. Jean-Philippe HUMBERT
- Mr. Nicolas DOMENJOUD

ISO/IEC JTC 1/WG 11 (4)

- Mr. Nicolas DOMENJOUD
- Mr. José GARCIA SAEZ
- Mr. Johnatan PECERO
- Mr. Shyam WAGLE

ISO/IEC JTC 1/SC 6 (1)

- Mr. Shyam WAGLE

ISO/IEC JTC 1/SC 7 (7)

- Mr. Alain RENAULT
- Mrs. Béatrix BARAFORT
- Mr. Elias CHBEIR
- Mr. Stéphane CORTINA
- Mr. Christophe FELTUS
- Mr. Michel PICARD
- Mr. Pierre-Olivier PORTMANN

ISO/IEC JTC 1/SC 17 (4)

- Mr. Valentin LACAVE
- Mr. Abdelkrim NEHARI
- Mr. Enrico OZZANO
- Mr. Benoît POLETTI

ISO/IEC JTC 1/SC 27 (30)

- Mr. Benoît POLETTI
- Mr. Cédric MAUNY
- Mr. Carlo HARPES
- Mr. Johann AMSENGA
- Mr. Matthieu AUBIGNY
- Mr. Hatice BASKAYA
- Mr. Benoît BERTHOLON
- Mr. Raphaël BLEUSE
- Mr. Hervé CHOLEZ
- Mr. Stéphane CORTINA
- Mrs. Saharnaz DILMAGHANI
- Mrs. Myriam DJEROUNI

- Mr. Nicolas DOMENJOUD

- Mrs. Michèle FELTZ

- Mr. Ben FETLER

- Mr. Clément GORLT

- Mrs. Shenglan HU

- Mr. Ravi JHAWAR

- Mrs. Céline KERGER

- Mr. Jean LANCRENON

- Mr. Tom LECLERC

- Mr. Michel LUDWIG

- Mr. Nicolas MAYER

- Mr. Olivier MONTEE

- Mr. Enrico OZZANO

- Mr. Gaëtan PRADEL

- Mr. René SAINT-GERMAIN

- Mr. Nader SAMIR LABIB

- Mr. Raphaël TABAN

- Mr. Qiang TANG

ISO/IEC JTC 1/SC 31 (1)

- Mr. Shyam WAGLE

ISO/IEC JTC 1/SC 32 (4)

- Mrs. Natalia CASSAGNES
- Mr. Christophe DELOGNE
- Mr. Laurent DUFOSSE
- Mr. Johnatan PECERO

ISO/IEC JTC 1/SC 38 (16)

- Mr. Johnatan PECERO
- Mr. Raphaël BLEUSE
- Mr. Matthias BRUST
- Mr. Cyril CASSAGNES
- Mrs. Myriam DJEROUNI
- Mr. Laurent FISCH
- Mrs. Shenglan HU
- Mr. Abdallah IBRAHIM
- Mr. Andreas KREMER
- Mr. Chao LIU
- Mrs. Digambal NAYAGUM
- Mr. Joost PISTERS
- Mr. Jean RAPP
- Mr. Jean-Michel REMICHE
- Mr. Qiang TANG
- Mr. Shyam WAGLE

ISO/IEC JTC 1/SC 39 (9)

- Mr. Didier MONESTES
- Mr. Nicolas DOMENJOUD

- Mr. Bruno FERY

- Mr. Antoine FRANCOIS

- Mr. Mathias HANNIER

- Mr. Johnatan PECERO

- Mr. Valentin PLUGARU

- Mr. Sébastien RENAULD

- Mr. Sébastien RICHARD

ISO/IEC JTC 1/SC 40 (10)

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- Mr. Vincent CADY
- Mr. Cyril CASSAGNES
- Mr. Elias CHBEIR
- Mr. Stéphane CORTINA
- Mr. Christophe FELTUS
- Mr. Michel PICARD
- Mr. Pierre-Olivier PORTMANN
- Mr. Jean-Michel REMICHE
- Mr. Alain RENAULT

ISO/IEC JTC 1/SC 41 (13)

- Mr. Shyam WAGLE
- Mr. Adlani ANOUAR
- Mr. Raphaël BLEUSE
- Mr. Matthias BRUST
- Mr. Arunas BUKNYS
- Mr. Vincent CADY
- Mr. Cyril CASSAGNES
- Mr. Abdallah IBRAHIM
- Mr. Jean LANCRENON
- Mrs. Maria-Rita PALATTELLA
- Mr. Nader SAMIR LABIB
- Mr. Ridha SOUA
- Mr. Robert SPICER

ISO/IEC JTC 1/SC 42 (13)

- Mrs. Natalia CASSAGNES
- Mr. Matthias BRUST
- Mr. Vincent CADY
- Mr. Cyril CASSAGNES
- Mrs. Saharnaz DILMAGHANI
- Mr. Christophe DELOGNE
- Mr. Laurent DUFOSSE
- Mr. Laurent FISCH
- Mrs. Aida HORANIET
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- Mr. Andreas KREMER
- Mr. Johnatan PECERO
- Mr. Shyam WAGLE

CLC/TC 215

- Mr. Didier MONESTES
- Mr. Bruno FERY
- Mr. Antoine FRANCOIS
- Mr. Sébastien RENAULD
- Mr. Sébastien RICHARD

ISO/TC 46/SC 11

- Mr. Lucas COLET
- Mrs. Sylvie DESSOLIN
- Mrs. Sylvie FORASTIER
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- Mr. Henri MONTIN
- Mr. Michel PICARD
- Mr. Serge RAUCQ
- Mr. Alain WAHL

ISO/TC 307

- Mr. Ravi JHAWAR
- Mr. Benoit BERTHOLON
- Mr. Cyril CASSAGNES
- Mr. Elias CHBEIR
- Mr. Christophe DELOGNE
- Mrs. Michèle FELTZ
- Mr. Jean LANCRENON
- Mr. Johnatan PECERO
- Mr. Qiang TANG
- Mr. Sébastien VARRETTE
- Mr. Povilas ZINYS

ISO/TC 68

- Mr. Andrew BRYANT
- Mr. Enrico OZZANO

ISO/TC 215

- Mrs. Valérie BOISSART
- Mrs. Natalia CASSAGNES

ISO/TC 268

- Mr. Falk FERNBACH

ISO/TC 299

- Mr. Arunas BUKNYS

IEC/PC 118

- Mr. Johnatan PECERO

ICT SECTOR

CEN/CLC/ETSI SG-CG
- Mr. Jean-Régis HADJI-MINAGLOU

CEN/CLC/ETSI CSCG
- Mr. Pascal STEICHEN

CEN/CLC/JTC 8
- Mrs. Natalia CASSAGNES
- Mrs. Andra GIURGIU

CEN/CLC/JTC 13
- Mr. Ravi JHAWAR

CEN/TC 224

- Mr. Benoît POLETTI
- Mrs. Shenglan HU
- Mr. Enrico OZZANO

CEN/TC 278
- Harold LINKE

CEN/TC 310
- Mrs. Wided GUEDRIA

- 10 ETSI members at national level:

ILNAS



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The logo for SwitNESS features a stylized blue and yellow icon to the left of the word "SwitNESS" in a blue serif font, with "Certezze Digitali" in a smaller blue font below it.

LUXTRUST

The logo for SES features a stylized blue and yellow icon to the left of the word "SES" in a bold blue serif font, with the tagline "your satellite company" in a smaller blue font below it.The logo for SKYLANE optics features a stylized red and blue icon to the left of the word "SKYLANE" in a blue serif font, with "optics" in a smaller blue font below it.The logo for SNT features a stylized blue and yellow icon to the left of the word "SNT" in a bold blue serif font, with the tagline "securityandtrust.lu" in a smaller blue font below it.

Danke



www.portail-qualite.lu