

**ILNAS-NSB commitment, missions and the National
Standardization Strategy
(Standards Analysis - ICT Sector focus)**

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ANEC GIE**

April 3, 2014

- I) ILNAS, ANEC and Standardization activities in Luxembourg**

- II) Luxembourg Standardization Strategy 2014-2020**

- III) Policy on ICT technical standardization**

- IV) Standards Analysis - ICT Sector focus**

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▶ **Creation**

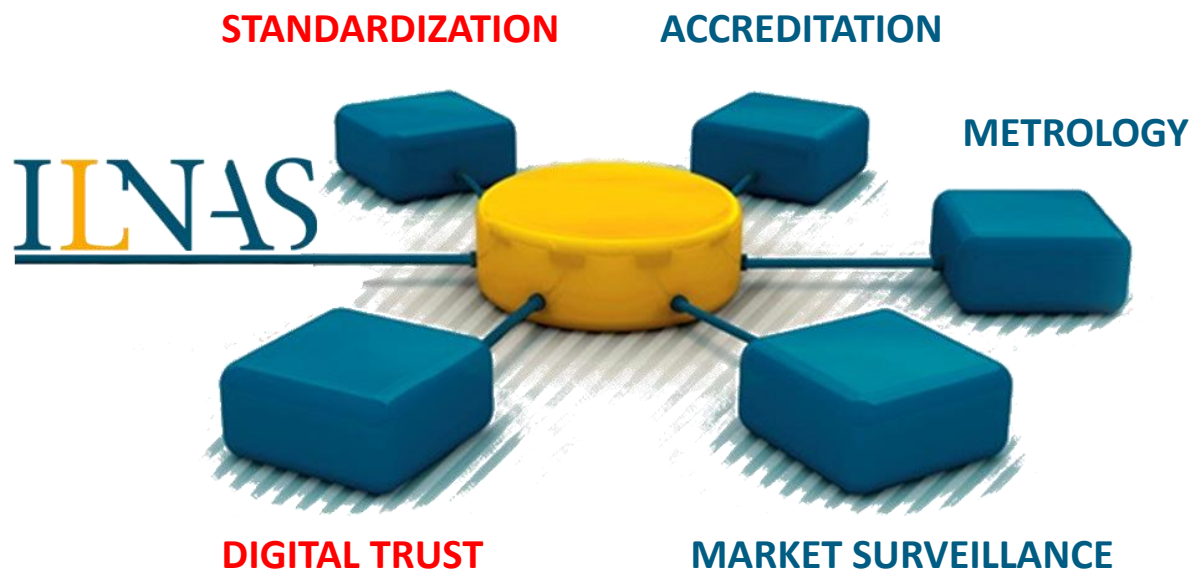
- Law dated May 20th, 2008
- Grouping of various technical and administrative missions

▶ **Legal Status**

- Public administration under the authority of the Minister of the Economy

▶ **Staff**

- 35 civil servants (March 2014)



▶ **Missions**

- Maintain the national database of more than 92.000 normative documents
- Organize education and training courses about standardization
- Publish and implement European and national standards
- Develop partnerships with academia and research
- Manage the National Mirror Committees



▶ **Services**

- Participation in technical standardization committees, free of charge
- Selling standards (e-shop - <https://ilnas.services-publics.lu>)
- Free consultation of standards at the ILNAS offices
- Mentoring and training of new delegates in standardization
- Carrying out studies on standardization activities in important economic sectors
- Organizing standardization fora dedicated to specific economic sectors

- ▶ **Date of creation**
 - October 4th, 2010

- ▶ **Legal Status**
 - Economic Interest Grouping (EIG)

- ▶ **Staff**
 - 20 employees (March 2014)

- ▶ **Partners**



ILNAS



CHAMBRE
DES METIERS
Luxembourg



CHAMBRE DE
COMMERCE
LUXEMBOURG



statec
LUXEMBOURG

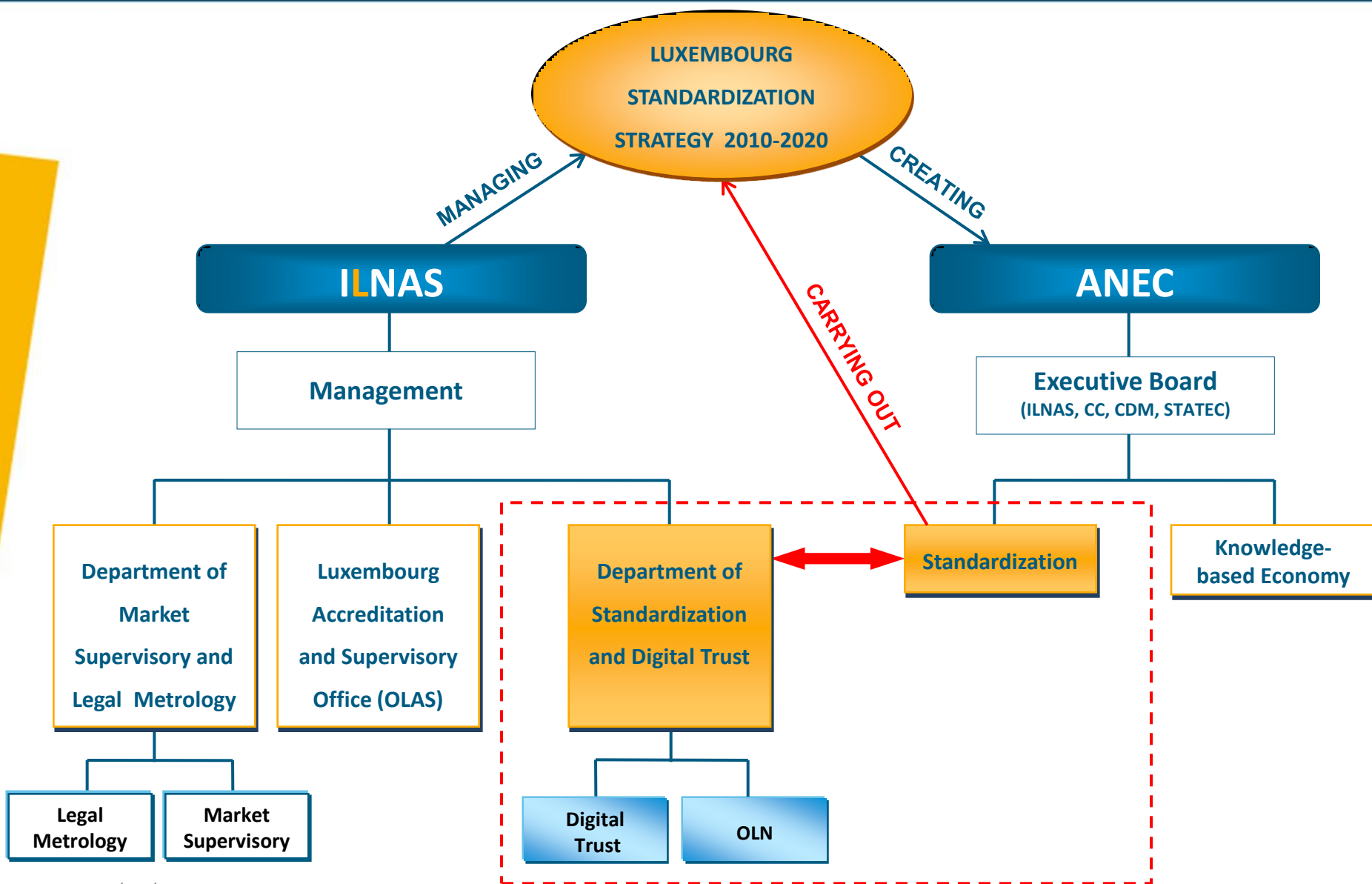
▶ Missions

- Develop a standardization culture in Luxembourg
- Effectively develop standards-related education at a national level
- Guarantee sector-based standards-related development in line with market requirements
- Develop applied research activities in line with standardization
- Propose standards-related products and services in line with national economic requirements

▶ Products and services

- Standardization diagnostic of an economic entity
- Measurement of the economic benefit of standardization
- Creation of standards-related policies for businesses
- Development of training on request
- Applied standards-related monitoring for businesses
- Support for businesses in research projects





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▶ **Three Pillars**

PILLAR 1 Information and communication technologies (ICT)

PILLAR 2 National influence and compliance with legal attributions

PILLAR 3 Products and services

PILLAR 1 Information and communication technologies (ICT)

- Support and constant **development of the standardization field dedicated to ICT**
- Implementation of the **Luxembourg Policy on ICT standardization (2013-2020)**
- Detection of **niche opportunities for economic developments**

PILLAR 2 National influence and compliance with legal attributions

- Support to the **influence of Luxembourg within European and international standards organizations**
- Active contribution to **respect legal attributions in terms of European standardization**
- Detection of **opportunities for the national economic market**

PILLAR 3 Products and services

- Support in terms of **implementation of current products and services in the field of standardization**
 - Diagnostic
 - Awareness and training sessions
 - Specific watch
 - Sector-based analysis

- Mainly **on request** from the national economic market



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▶ **Five lead projects**

- Developing yearly the national standards analysis for the ICT sector
- Defining a national implementation plan for ICT technical standardization
- Organizing and developing the ICT technical standardization representation at the national level
- Reinforcing the research and innovation activities related to ICT standardization
- Representing national interests within European and International entities in the field of ICT technical standardization

▶ **Objectives**

- Strengthening of the national ICT standardization community
- Organization and development of the ICT technical standardization representation at the national level
- Increasing of the national representation within European and International entities in the field of ICT technical standardization
- Provision of awareness raising on ICT standardization according to market-sector needs
- Development of research activities in relation to ICT standardization, in the national interest

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INFORM

about
standardization
developments in
the ICT sector

IDENTIFY

potential interests
& opportunities
for the national
market

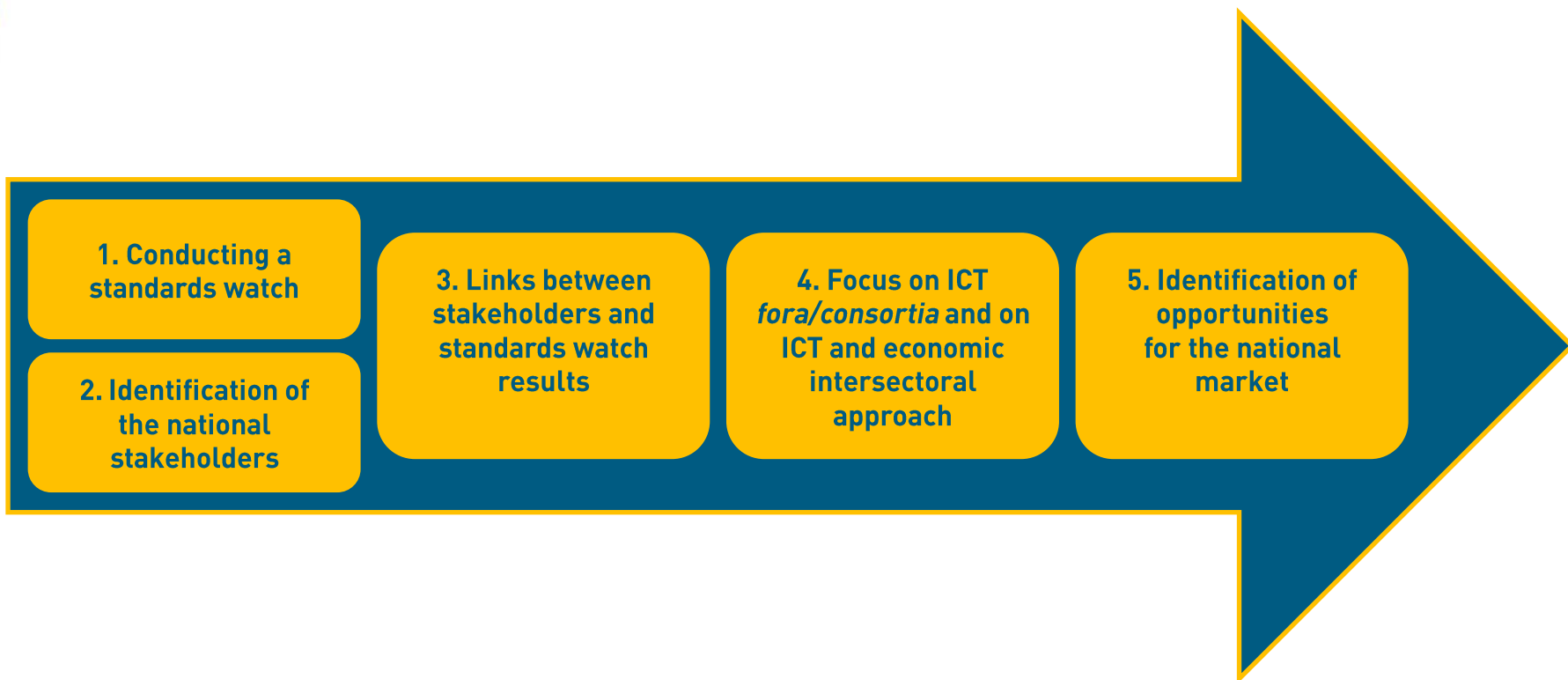
ENCOURAGE

the involvement
in the
standardization
process

DEVELOP

“standards-
related” skills and
collaborations

For the benefit of all national stakeholders



CLOUD COMPUTING

- ISO/IEC JTC 1/SC 38 Distributed application platforms and services
- ETSI/TC CLOUD Cloud Computing

DATA CENTER

- ISO/IEC JTC 1/SC 39 Sustainability for and by Information Technology
- CLC/TC 215 Electrotechnical aspects of telecommunication equipment

TELECOMMUNICATION

- ISO/IEC JTC 1/SC 6 Telecommunication and information exchange between systems
- ISO/IEC JTC 1/SC 25 Interconnection of information technology equipment
- ITU-T International Telecommunication Union
- CEN/TC PC 365 Internet Filtering
- ETSI European Telecommunications Standards Institute

SECURITY

- ISO/IEC JTC 1/SC 27 IT Security techniques
- ISO/IEC JTC 1/SC 37 Biometrics

**SOFTWARE AND
SYSTEM ENGINEERING**

- ISO/IEC JTC 1/SC 7 Software and systems engineering
- ISO/IEC JTC 1/SC 22 Programming languages, their environments and system software interfaces
- ISO/IEC JTC 1/SC 29 Coding of audio, picture, multimedia and hypermedia information

DATA MANAGEMENT

- ISO/IEC JTC 1/SC 2 Coded Character Sets
- ISO/IEC JTC 1/SC 23 Digitally Recorded Media for Information Interchange and Storage
- ISO/IEC JTC 1/SC 24 Computer graphics, image processing and environmental data representation
- ISO/IEC JTC 1/SC 31 Automatic identification and data capture techniques
- ISO/IEC JTC 1/SC 32 Data management and interchange
- ISO/IEC JTC 1/SC 34 Document description and processing languages
- CEN/TC 225 AIDC Technologies

ELECTRONIC SIGNATURE

- ISO/IEC JTC 1/SC 17 Cards and personal identification
- ISO/IEC JTC 1/SC 27/SG-PKI Study Group on Framework for PKI Policy / Practices / Audit
- CEN/TC 224 Personal Identification, Electronic Signature and Cards
- ETSI/TC ESI Electronic Signatures and Infrastructures

E-ARCHIVING

- ISO/TC 46 Information and documentation

SENSOR NETWORKS

- ISO/IEC JTC 1/WG 7 Sensor networks

GOVERNANCE OF IT

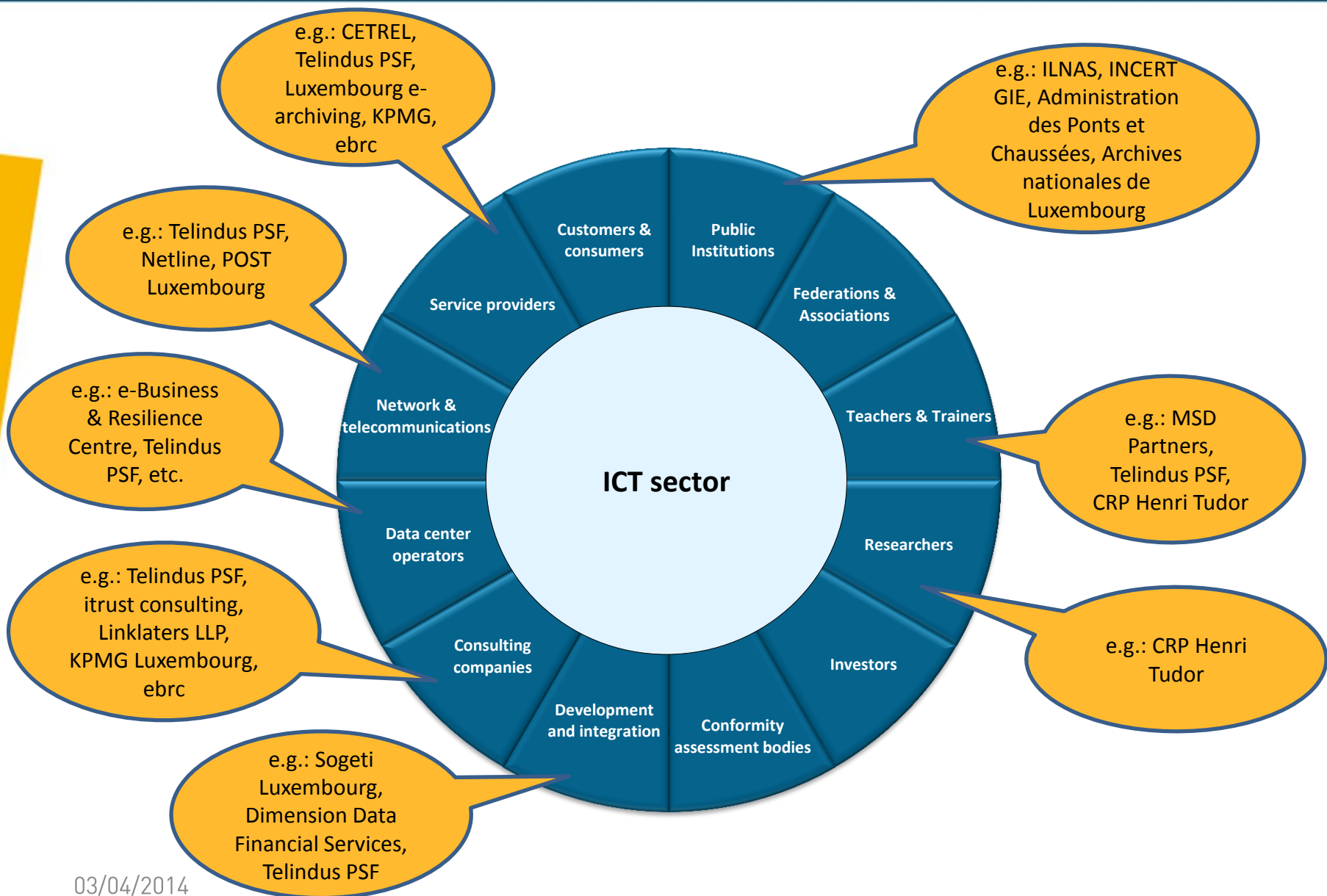
- ISO/IEC JTC 1/SC 40 IT Service Management and IT Governance

- ▶ Presentation of the results using identification ID-cards for each standardization technical committee

ISO/IEC JTC 1/SC 38 Distributed application platforms and services

General information			
Committee	ISO/IEC JTC 1/SC 38	Title	Distributed application platforms and services
Creation date	2009	MEMBERS 	Participating Countries (26): USA, Australia, Austria, Brazil, Canada, China, Denmark, Finland, France, Germany, India, Ireland, Italy, Japan, Republic of Korea, Luxembourg , Netherlands, Poland, Portugal, Russian Federation, Singapore, South Africa, Spain, Sweden, Switzerland, United Kingdom Observing Countries (8): Belgium, Bosnia and Herzegovina, Czech Republic, Hong Kong, New Zealand, Norway, Serbia, Uruguay
Secretariat	ANSI (USA)		
Secretary	Mrs. Marisa Peacock		
Chairperson	Dr. Donald Deutsch		
Involvement of Luxembourg	3 national delegates (Mr. Jürgen Blum, Mrs. Myriam Djerouni Mr. Jean-Michel Remiche)		
Organizations in liaison	DMTF, INLAC, ITU, OASIS, OGF, SNIA		
Web site	http://www.iso.org/iso/home/standards_development/list_of_iso_technical_committees/iso_technical_committee.htm?commid=601355		

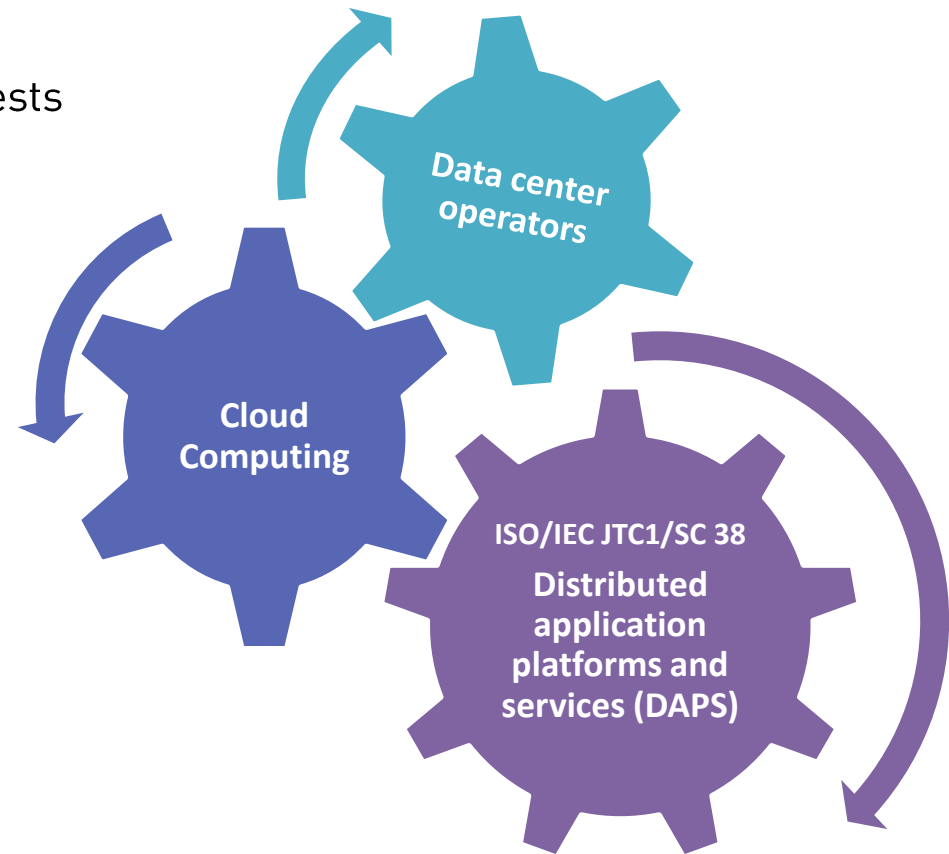
Scope	Standardization for interoperable Distributed Application Platform and Services including: <ul style="list-style-type: none"> - Web Services; - Services Oriented Architecture (SOA); - Cloud Computing 	
Structure	JTC 1/SC 38/WG 1 JTC 1/SC 38/WG 2 JTC 1/SC 38/WG 3	Web Services Services Oriented Architecture (SOA) Cloud Computing
Standardization work		
Published standards	Number of published ISO standards under the direct responsibility of JTC 1/SC 38 (number including updates): 4	
Standards under development	6	
Comments		
<p>The current work program includes:</p> <ul style="list-style-type: none"> - ISO/IEC DIS 17788, Information technology -- Distributed application platforms and services -- Cloud computing -- Overview and Vocabulary - ISO/IEC DIS 17789, Information Technology -- Cloud Computing -- Reference Architecture - ISO/IEC NP 19086, Information Technology -- Distributed application platforms and services -- Cloud computing -- Service Level Agreement (SLA) Framework and Terminology 		



- ▶ **To provide links between the stakeholder categories and the ICT subsectors** as they were defined in the initial stage of the standards watch

Potential interests

- ▶ Details of the different potential interests



◆ Information:

↪ Learn about standards developments

■ Performance:

↪ Increase performance (networking/benchmarking)

❖ Services:

↪ Develop new services

□ Projects:

↪ Follow or participate in research projects

● Training:

↪ Update or develop training sessions

\$ Investments:

↪ Invest in a new technology

- ▶ Results are presented through a specific **matrix for each stakeholder category** (as presented below)

Network and telecommunications	Information	Performance	Services	Projects	Training	Investments
Cloud Computing	X		X			X
Data Center	X	X	X	X		
Telecommunications	X	X	X	X		X
Security	X	X		X		
Software and System Engineering	X	X		X		
Data Management						
Electronic Signature						
E-archiving	X	X	X	X		
Sensor Networks	X	X	X	X		X
Governance of IT	X	X				

- ▶ Much of the key standardization activity in ICT is carried out by **industry consortia** rather than in formal standards organization
- ▶ **Survey of fora/consortia** considered as the most relevant for the current national market

▶ **14 fora/consortia selected:**

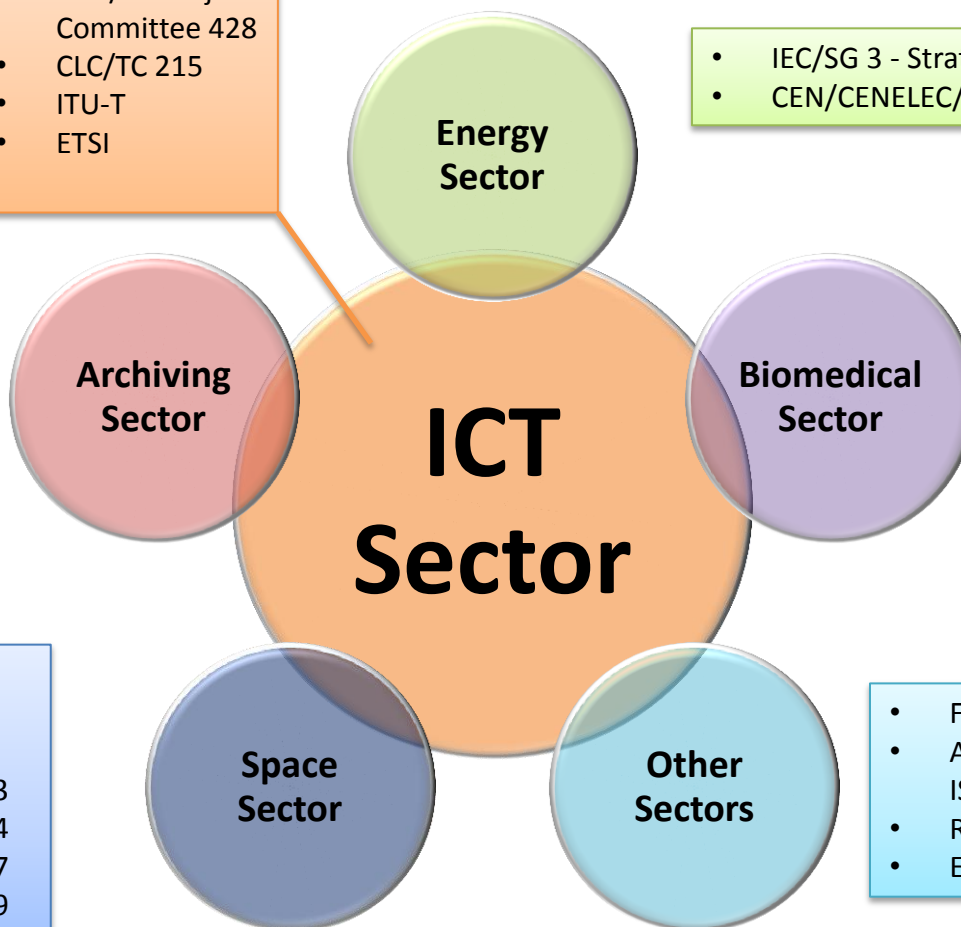
- ITU-T
- IETF
- W3C
- IEEE-SA
- DMTF
- Ecma International
- OASIS
- OMG
- OGF
- TOG
- SNIA
- TCG
- UPnP Forum
- OGC

General information			
Forum / Consortium	UPnP Forum	Title	Universal Plug and Play Forum
Creation date	1999	MEMBERS 	More than 1000 companies
President	Dr. Alan Messer		
Involvement of Luxembourg	1 member (Actimage)		
Web site	http://www.upnp.org/		
Scope	<p>UPnP technology targets home networks, proximity networks and networks in small businesses and commercial buildings. It enables data communication between any two devices under the command of any control device on the network. UPnP technology is independent of any particular operating system, programming language, or network technology.</p> <p>The Forum's goals are to allow devices to connect seamlessly and to simplify network implementation in the home and corporate environments. Toward this end, UPnP Forum members work together to define and publish UPnP device control protocols built upon open, internet-based communication standards.</p>		
Executive summary	<p>The UPnP architecture offers pervasive peer-to-peer network connectivity of PCs of all form factors, intelligent appliances, and wireless devices. The UPnP architecture is a distributed, open networking architecture that leverages TCP/IP and the Web to enable seamless proximity networking in addition to control and data transfer among networked devices in the home, office, and everywhere in between.</p>		
Structure	<p>The following committees are actively working on new and updated UPnP standards:</p> <ul style="list-style-type: none"> - Audio / Video Working Committee (AV) - E-Health & Sensors Working Committee (EHS) - Friendly Devices Working Committee (FRIENDLYDEVICES) - Home Energy Management and Smart Grid (HEMS) - Low Power Working Committee (LOWPOWER) 		
Standardization work			
Published standards	About 1200		
Standards under development	Unknown		

- ISO/IEC JTC 1
- CEN/TC 224
- CEN/TC 225
- CEN/TC 247
- CEN/TC 251
- CEN/TC 278
- CEN/TC 287
- CEN/TC 294
- CEN/TC 310
- CEN/TC 353
- CEN/TC Project Committee 365
- CEN/TC Project Committee 428
- CLC/TC 215
- ITU-T
- ETSI

- ISO/TC 171 – Document management applications
- ISO/TC 46 - Information and documentation

- ITU-T/SG 13
- ITU-T/SG 16
- ISO/IEC JTC 1/SC 2
- ISO/IEC JTC 1/SC 23
- ISO/IEC JTC 1/SC 24
- ISO/IEC JTC 1/SC 27
- ISO/IEC JTC 1/SC 29



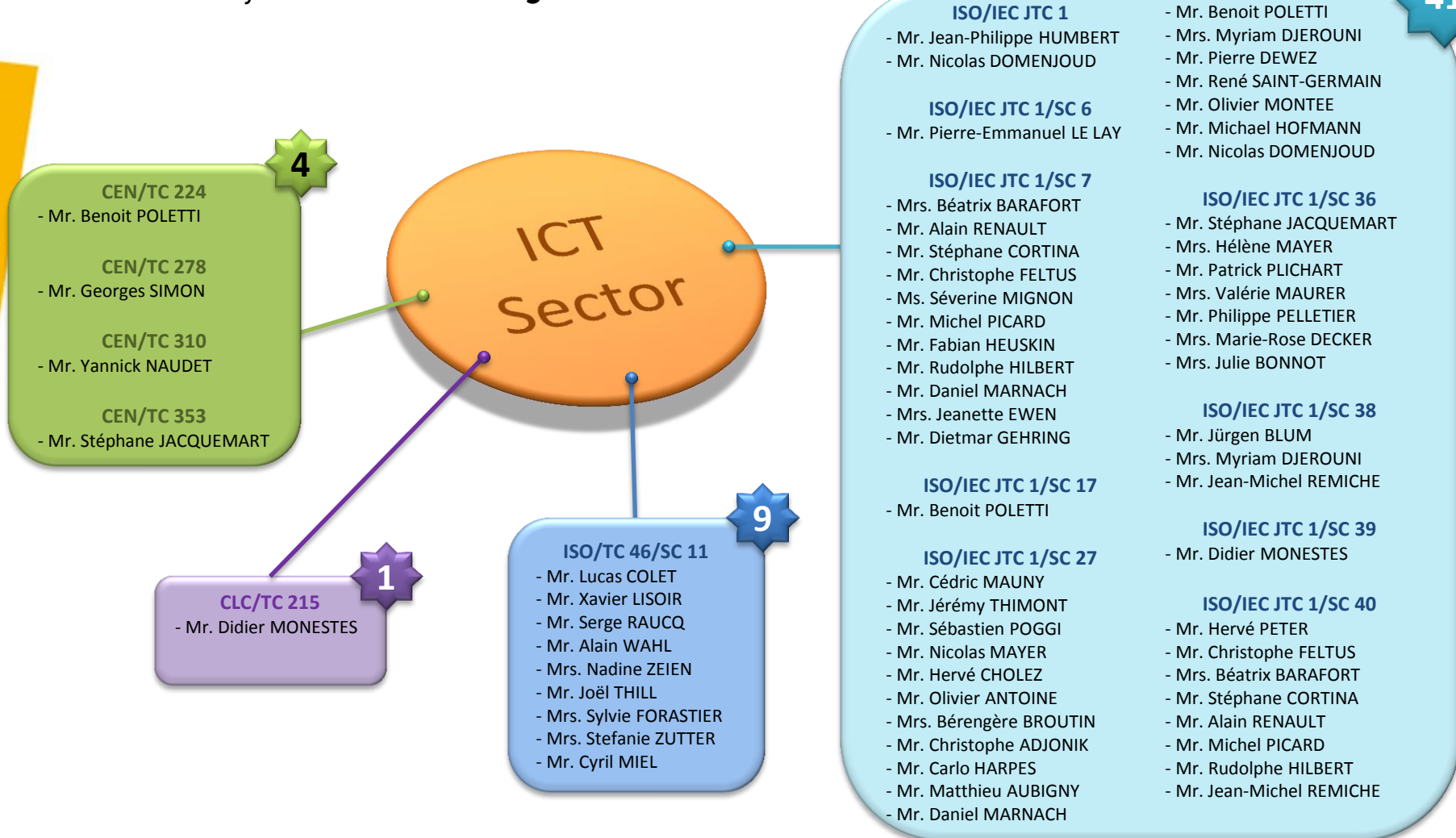
- IEC/SG 3 - Strategic Group on Smart Grid
- CEN/CENELEC/ETSI JWG Smart Grids

- ISO/TC 215
- ISO/TC 276
- ITU-T/SG 16
- CEN/TC 251
- ETSI/eHEALTH

- Financial services (ISO/TC 68, etc.)
- Automotive sector (ISO/TC 184, ISO/TC 22, etc.)
- Railway sector (CLC/TC 9X, etc.)
- Etc.

- ▶ Opportunities identified for the national market
 - **Participation in the ISO/IEC JTC1 national forum:** an information network about ICT standardization
 - **Particular involvement of national delegates** (editor of European or International standards, chairman of a national mirror committee)
 - **Following of the standardization work** performed in ICT *fora/consortia*
 - **Involvement at the strategic level** of ICT standardization
 - **Benefit from the support** offer by the national standards body
 - **Profit from services** in relation to standards evolutions
 - **Participate in research projects** involving standardization
 - **Benefit from the existing training** offers for the sector
 - Improve the **image of Luxembourg** in the standardization landscape

- At the national level, the ICT sector is already an active standardization sector with currently **52 national delegates**



Thank you for your attention



Institut luxembourgeois de la normalisation,
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