

## **Petit-déjeuner « Normalisation & Data Centers »**

July 2, 2015

*ILNAS / ANEC*

## Program

- ▶ **I - Standardization developments - Data Centers**
- ▶ **II - Standardization developments - Cloud Computing**
- ▶ **III - Participating in standardization Technical Committees in Luxembourg**



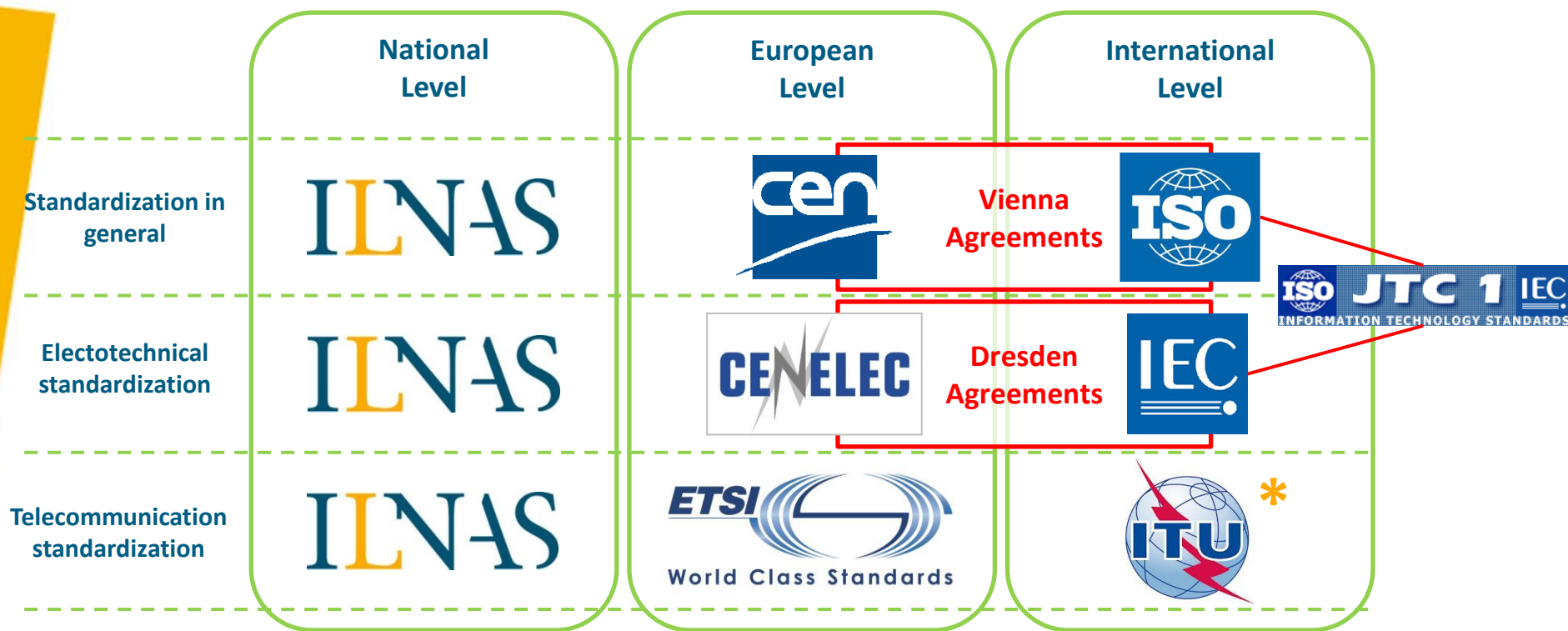
**Standardization developments  
Data Centers**

*Nicolas DOMENJOURD - ANEC GIE*

## Summary

- ▶ Overview of standardization organizations
- ▶ ISO/IEC JTC 1/SC 39 - Sustainability for and by information technology
- ▶ CLC/TC 215 - Electrotechnical aspects of telecommunication equipment
- ▶ Conclusion

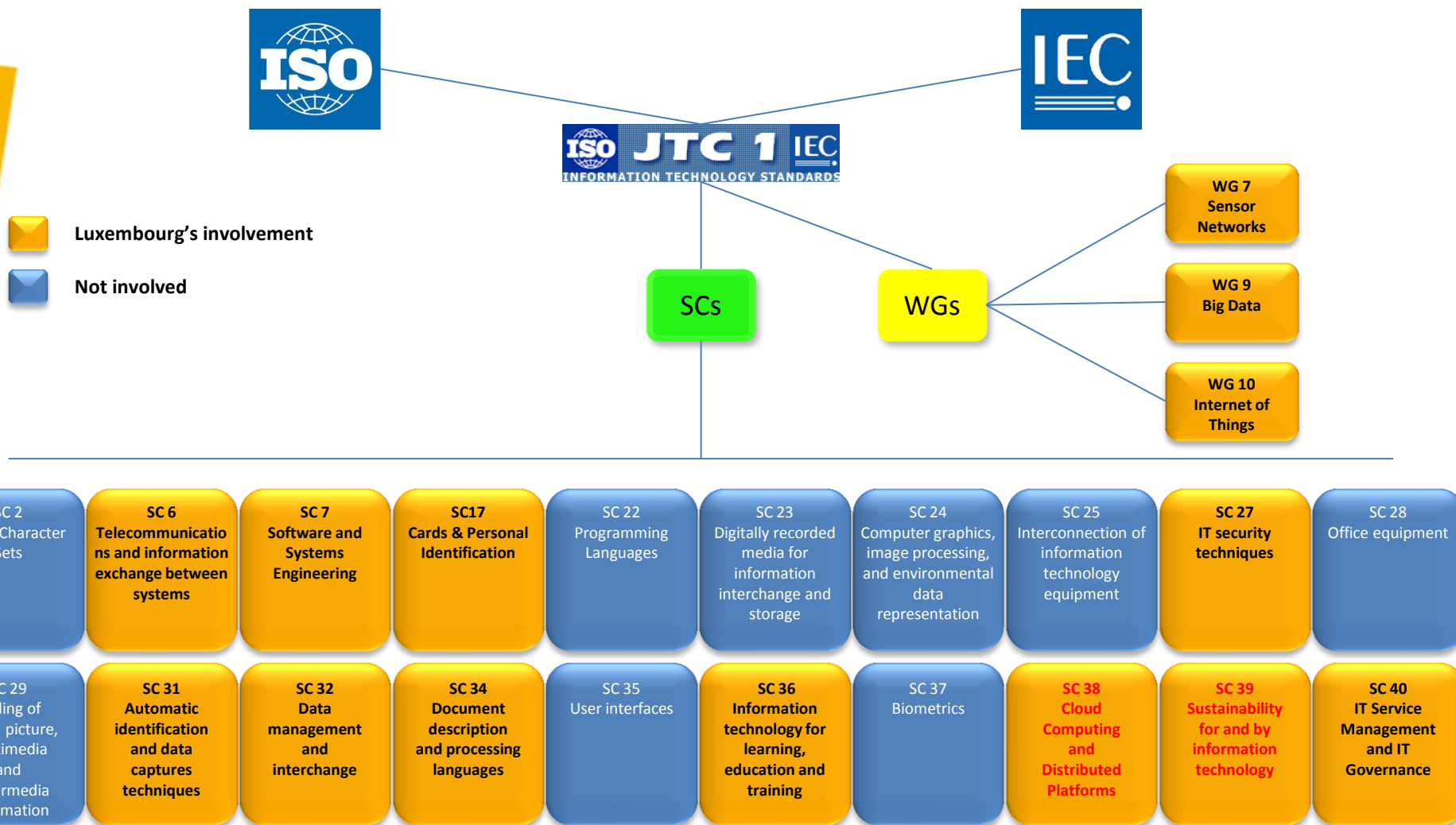
## Standardization organizations



\* ITU-T

*Fora & Consortia*


## ISO/IEC JTC 1 representation at the national level



## Summary

- ▶ Overview of standardization organizations
- ▶ ISO/IEC JTC 1/SC 39 - Sustainability for and by information technology
- ▶ CLC/TC 215 - Electrotechnical aspects of telecommunication equipment
- ▶ Conclusion

## ISO/IEC JTC 1/SC 39 - Sustainability for and by Information Technology

General information			
<b>Committee</b>	<b>ISO/IEC JTC 1/SC 39</b>	<b>Title</b>	<b>Sustainability for and by Information Technology</b>
<b>Creation date</b>	2012	<b>MEMBERS</b> 	<b>Participating Countries (17):</b> Belgium, Canada, China, Finland, France, Germany, Italy, Japan, Republic of Korea, <b>Luxembourg</b> , Netherlands, Norway, Russian Federation, Singapore, South Africa, United Kingdom, United States  <b>Observing Countries (9):</b> Australia, Austria, Czech Republic, Islamic Republic of Iran, Ireland, Kenya, Poland, Spain, Switzerland
<b>Secretariat</b>	ANSI (USA)		
<b>Secretary</b>	Ms. Sally Seitz		
<b>Chairperson</b>	Mr. Jay Taylor		
<b>Organizations in liaison</b>	Ecma International, ITU, TGG, ETSI		
<b>Web site</b>	<a href="http://www.iso.org/iso/standards_development/technical_committees/other_bodies/iso_technical_committee.htm?commid=654019">http://www.iso.org/iso/standards_development/technical_committees/other_bodies/iso_technical_committee.htm?commid=654019</a>		
<b>Scope</b>	Standardization related to the intersection of resource efficiency and IT which supports environmentally and economically viable development, application, operation and management aspects.		



## ISO/IEC JTC 1/SC 39 - Sustainability for and by Information Technology

<b>Structure</b>	ISO/IEC JTC 1/SC 39/WG 1 ISO/IEC JTC 1/SC 39/WG 2	<b>Resource Efficient Data Centres</b> Green ICT
<b>Standardization work</b>		
<b>Published standards</b>		1
<b>Standards under development</b>		8
<b>Involvement of Luxembourg</b>		
<ul style="list-style-type: none"> <li>• Mr. Didier MONESTES (Systemic Area Network)</li> <li>• Mr. Johnatan PECERO (ANEC GIE)</li> </ul>		
<b>Comments</b>		
<p>The current work program includes:</p> <ul style="list-style-type: none"> <li>• ISO/IEC AWI TR 30133, Information technology -- Data centres -- Guidelines for resource efficient data centres</li> <li>• ISO/IEC DIS 30134-1, Information Technology -- Data Centres -- Key performance indicators -- Part 1: Overview and general requirements</li> <li>• ISO/IEC DIS 30134-2, Information Technology -- Data Centres -- Key performance indicators -- Part 2: Power usage effectiveness (PUE)</li> <li>• ISO/IEC DIS 30134-3, Information Technology -- Data Centres -- Key Performance Indicators -- Part 3: Renewable Energy Factor (REF)</li> <li>• ISO/IEC CD 30134-4, Information Technology -- Data Centres -- Key performance indicators -- Part 4: IT Equipment Energy Efficiency for Servers (ITEE)</li> <li>• ISO/IEC CD 30134-5, Information Technology --- Data Centres Data Centres -- Key Performance Indicators -- Part 5: IT Equipment Utilization for Servers (ITEU_SV )</li> </ul>		

## ISO/IEC JTC 1/SC 39/WG 1 - Resource Efficient Data Centres

### ▶ WG 1 - Terms of Reference:

- Development of a data centre **resource efficiency taxonomy, vocabulary and maturity model**
- Development of a **holistic suite of metrics and Key Performance Indicators (KPI)** for data centres
- Development of **guidance for resource efficient data centres**
- Development of an **energy management system standard specifically tailored for data centres**

## ISO/IEC NP TR 30131, Information technology -- Data Centres -- Taxonomy and Maturity Model

### ▶ Scope:

- Develop a **taxonomy and maturity model for assessing resource efficiency, environmental and economic viability for IT services within data centres**
- **Economic and environmental design/operations trade-offs** will be described in terms of location, grade of service, workload and lifecycle contexts
- The **multi-level taxonomy** includes key linkages to these elements:
  - **Service Level**
  - **Vocabularies**
  - **Definition of Terms**
  - **Application of Taxonomy**
  - **Use Cases for Representative Facility (Data Centre) Types**
  - **Facility Lifecycle Scenarios**
  - Any other required references to assess facility resource efficiency
- These elements and linkages **support continuous improvement** for the facility management/owner and other stakeholders such as users or clients of those facilities

## ISO/IEC AWI TR 30133, Information technology -- Data centres -- Guidelines for resource efficient data centres

### ▶ Scope:

- This Technical Report provides **generally applicable guidelines to improve the resource efficiency of data centres** for any field of application
- The guidelines for resource efficiency improvement deal with **various establishment and operation aspects such as data centre planning, management, cooling, power feeding, ICT and also cost aspects** that are not restricted
- This Technical Report focuses on **continuous improvement processes, design and guidelines that prioritize resource efficiency**. In general the processes and guidelines are neutral to technology and location

## ISO/IEC DIS 30134-1, Information Technology -- Data Centres -- KPI -- Part 1: Overview and general requirements

### ▶ Scope:

■ This International Standard specifies:

- **Definitions and terminology for data centre resource efficiency Key Performance Indicators (KPIs)** used within the series ISO/IEC 30134
- **Common requirements** for the data centre resource efficiency KPIs of series ISO/IEC 30134
- **Common objectives** for the data centre resource efficiency KPIs of series ISO/IEC 30134
- **General information regarding the use** of data centre resource efficiency KPIs of series ISO/IEC 30134
- **Common structure** for the other standards in series ISO/IEC 30134

## ISO/IEC DIS 30134-2, Information Technology -- Data Centres -- KPI -- Part 2: Power usage effectiveness (PUE)

### ▶ Scope:

#### ■ This International Standard:

- **Defines the Power Usage Effectiveness (PUE)** of a data centre
- Introduces **PUE measurement categories**
- Describes the **relationship of this KPI to a data centre's infrastructure, IT equipment and IT operations**
- Defines the **measurement, the calculation and the reporting of the parameter**
- Provides information on the **correct interpretation of the PUE**

## ISO/IEC DIS 30134-3, Information Technology -- Data Centres -- KPI -- Part 3: Renewable Energy Factor (REF)

### ▶ Scope:

- Specifies the **Renewable Energy Factor (REF)** as a **KPI to quantify the use of renewable energy managed by owner/operator for their data centre**.  
Renewable energy here is in the form of electricity
- REF is defined as **the ratio of renewable energy use to all the energy use of the data centre**
- Purpose of this document is **standardization and representation of a methodology to calculate REF**. The standard offers the ISO/IEC definition of renewable energy (does not supersede or override any local jurisdiction(s) for the definition of renewable energy that may apply in certain cases)
- REF **does not include usage of water or other resources, and assessment of carbon footprint** of the data centre

## ISO/IEC CD 30134-4, Information Technology -- Data Centres -- KPI -- Part 4: IT Equipment Energy Efficiency for Servers (ITEE)

### ▶ Scope:

- Specifies the **process of deriving ITEEsv as a KPI which quantifies the energy efficiency capacity** (maximum capability of work per unit energy) **of the servers** in a data centre
- This document specifies a **process by which server effectiveness relative to energy be calculated using a choice of pre-existing or context specific performance benchmarks**



## ISO/IEC CD 30134-5, Information Technology --- Data Centres -- KPI - - Part 5: IT Equipment Utilization for Servers (ITEU\_SV )

▶ Scope:

- Specifies the ITEUsv as a KPI to quantify the utilization of servers in a data center

## Potential ways of development

### ▶ KPIs under consideration:

- **ERE – Energy Reuse Effectiveness** (should also include ERF – Energy Reuse Factor), formerly **submitted as NPUE – Net PUE** (original ERE work done by the Green Grid)
- **CUE – Carbon Usage Effectiveness** (original work done by the Green Grid)
- **Water KPIs** including **WUE- Water Usage Effectiveness & WR - Water Reuse Effectiveness** (dispositioning of exhaust/post use water, and all intake of water, separate from reuse or return)
- **DCCE - Data Centre Cost Efficiency**
- **DCPE - Data Centre Profit Efficiency**


### ▶ Other KPIs for future consideration:

- **COP - Coefficient of Performance**
- **SEER - Seasonally adjusted Energy Efficiency Ratio**

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- ▶ Conclusion

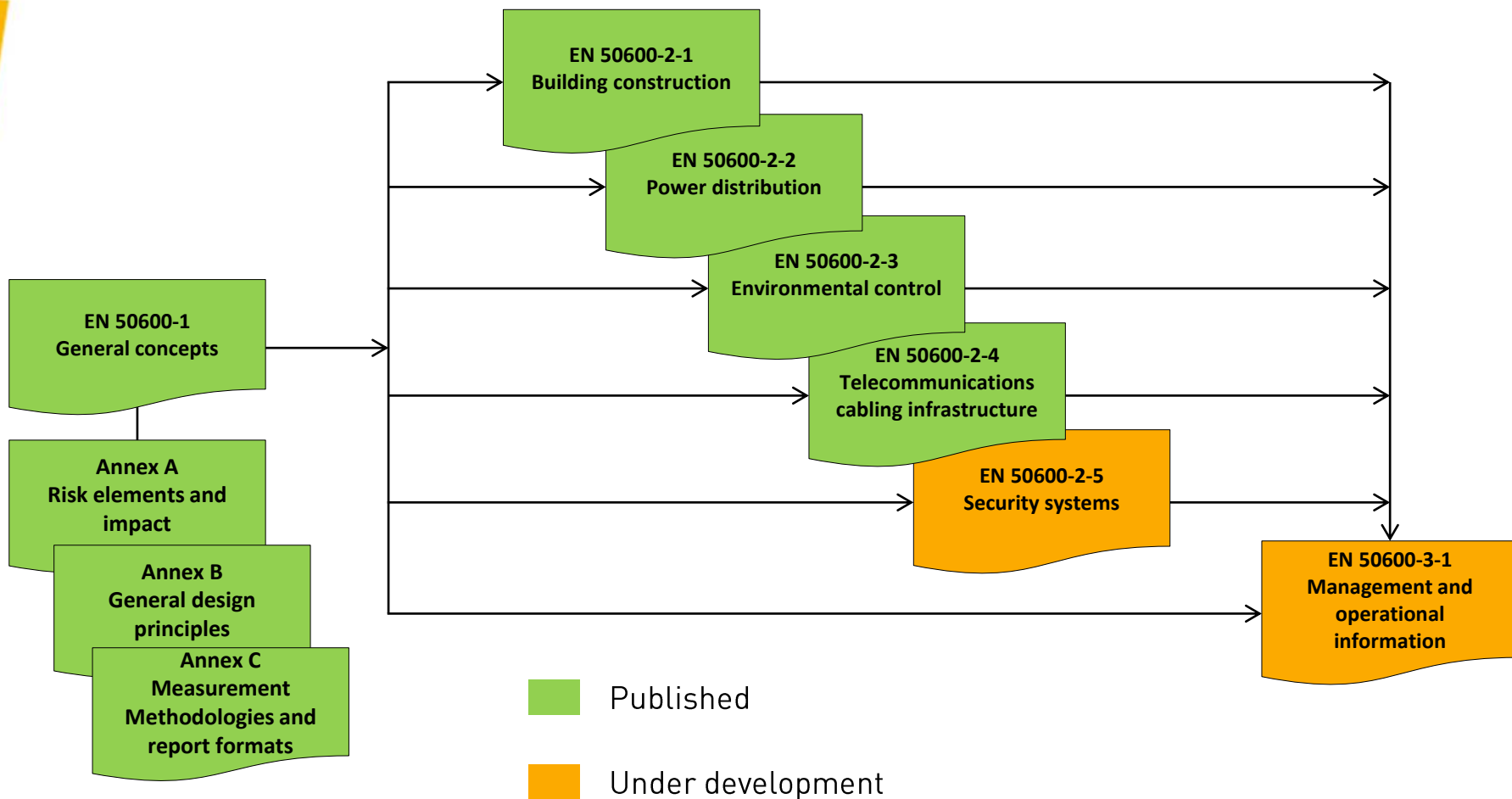
## CLC/TC 215 - Electrotechnical aspects of telecommunication equipment

General information			
Committee	CLC/TC 215	Title	Electrotechnical aspects of telecommunication equipment
Creation date	1991	<b>MEMBERS</b> 	33 members of CEN/CENELEC (including <b>Luxembourg</b> )
Secretariat	Germany		
Secretary	Dipl. Ing. Thomas Wegmann		
Chairperson	Mr. Dominique Roche		
Organizations in liaison	EC, EURALARM		
Web site	<a href="http://www.cenelec.eu/dyn/www/f?p=104:7:127814256114401:::FSP_ORG_ID:1258297">http://www.cenelec.eu/dyn/www/f?p=104:7:127814256114401:::FSP_ORG_ID:1258297</a>		
Scope	<p>The priorities of CLC/TC 215 are notably:</p> <ul style="list-style-type: none"> <li>- To review international standardization results of ISO/IEC JTC 1 as far as telecommunication equipment with respect to Customer Premises Cabling and Energy Efficient Data Centers are concerned. This includes coordination of harmonization and assignment to the responsible organization in close cooperation with CEN bearing in mind JTC 1 being a joint ISO/IEC-Committee</li> </ul>		

## CLC/TC 215 - Electrotechnical aspects of telecommunication equipment

<b>Structure</b>	CLC/TC 215/WG 01 CLC/TC 215/WG 01-04 CLC/TC 215/WG 02 <b>CLC/TC 215/WG 03</b>	Cabling design Testing of installed cabling Cabling installation – Quality assurance and installation practices <b>Facilities and infrastructures</b>
<b>Standardization work</b>		
<b>Published standards</b>	43	
<b>Standards under development</b>	5	
<b>Involvement of Luxembourg</b>		
<ul style="list-style-type: none"> <li>Mr. Didier MONESTES (Systemic Area Network)</li> </ul>		
<b>Comments</b>		
The current work program includes: <ul style="list-style-type: none"> <li>prEN 50600-2-5:2015, Information technology - Data centre facilities and infrastructures - Part 2-5: Security systems</li> <li>FprEN 50600-3-1:2015, Information technology - Data centre facilities and infrastructures - Part 3-1: Management and operational information</li> </ul>		

## Standardization work: EN 50600 series overview



## prEN 50600-2-5:2015, Information technology - Data centre facilities and infrastructures - Part 2-5: Security systems

### ▶ Scope:

- Addresses the **physical security of data centres** based upon the criteria and classifications for “availability”, “security” and “energy efficiency enablement” within EN 50600-1
- Provides **designations for the data centres spaces** defined in EN 50600-1
- Specifies **requirements and recommendations for data centre spaces**, and the **security systems employed within those spaces**, in relation to protection against:
  - **Unauthorised access**
  - **Fire events** internal to the data centre spaces
  - Environmental events, other than fire, and including **electromagnetic interference, vibration, flooding, gas and dust hazards** which may exist
    - Internal to the data centre spaces
    - External to the data centre spaces
- Safety and electromagnetic compatibility (EMC) requirements are outside the scope

## FprEN 50600-3-1:2015, Information technology - Data centre facilities and infrastructures - Part 3-1: Management and operational information

### ► Scope:

- Specifies **processes for management and operating of data centres**
  - Primary focus: **operational processes to deliver the expected level of resilience, availability, security and energy efficiency**
  - Secondary focus: **management processes to align the actual and future demand of users** (see Figure 2)
  - Transition from planning and building to operating a data centre is considered as acceptance test process
  
- Although the focus is not on KPI, they are provided with the processes as applies

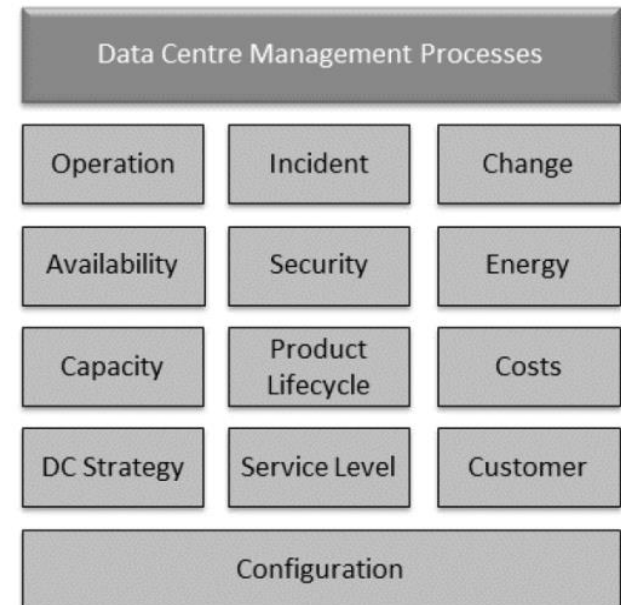


Figure 2 - Data centre management processes overview



## CLC/TC 215 - Future developments

### ▶ EN 50600-4 series

- **TC 215 mirrors the work of JTC 1/SC 39/WG 1 and agreed to transpose the ISO/IEC 30134 series (KPIs) into EN 50600-4-X series**
  - CLC/TC 215 comments international drafts with a “European eye”
  - Concern at this moment only ISO/IEC 30134-1 to 3 (but should be extended to other KPI standards)
  
- **TC 215 March 2015 plenary meeting**
  - The TC noted with concern the still **poor quality of ISO/IEC 30134 DIS**
  - TC 215 will closely monitor comment resolution in SC 39 to determine its transition approach of series ISO/IEC 30134 into EN 50600-4-X
  - Depending on the acceptance of general and technical comments during DIS comment resolution, **TC 215 may be forced to further adjust the contents to serve European needs**

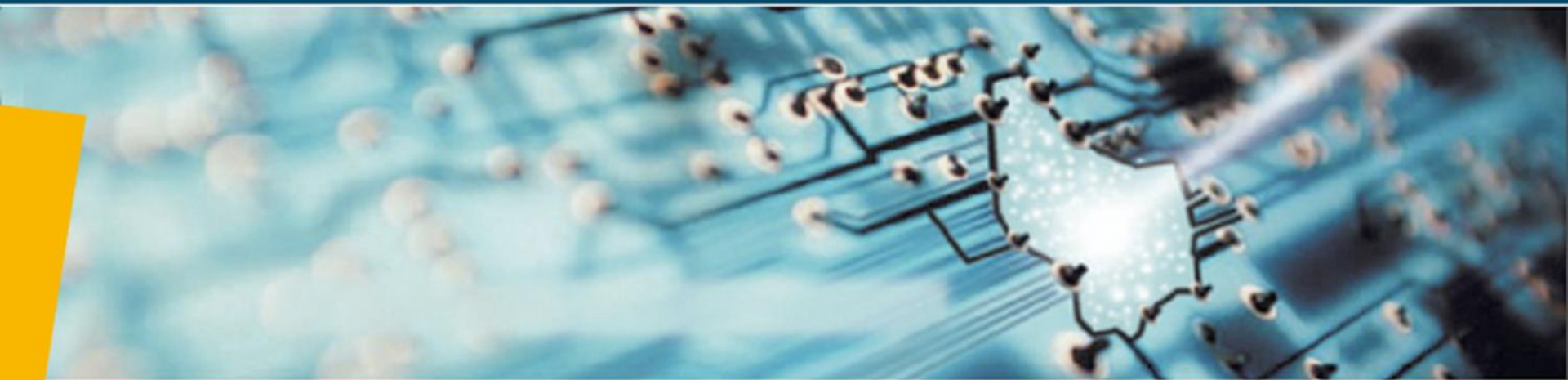
## CLC/TC 215 - Future developments

### ▶ EU Code of Conduct Datacenters

- Last CEN/CENELEC/ETSI Coordination Group Green Data Centres **requested that TC 215 transform the “Best practices” document in support of the EU CoC on Data Centres into a Technical Report**
- Decision at the last plenary to develop **CLC/TR 50600-99-1 “Recommended practices for energy management”**, an editorial re-write of the most recent EU CoC Best practices document
  - Would increase the profile of both the Code of Conduct for Data Centres and the EN 50600 series document in the EC and the wider data centre community
  - Intent is to **encourage greater use of EN 50600 and increased participation in the EU Code of Conduct Scheme across the region**
  - TR will **cover the whole spectrum of technologies deployed within data centres such as power supply, air conditioning/cooling, operations, etc.**

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## Standardization developments Cloud Computing

*Johnatan PECERO - ANEC GIE*

## Summary

- ▶ Overview of ISO/IEC JTC 1/SC 38 - Cloud Computing and Distributed Platforms
- ▶ ISO/IEC JTC 1/SC 38 - Standardization work
- ▶ Conclusion

## ISO/IEC JTC 1/SC 38 - Cloud Computing and Distributed Platforms

General information			
<b>Committee</b>	<b>ISO/IEC JTC 1/SC 38</b>	<b>Title</b>	<b>Cloud Computing and Distributed Platforms</b>
<b>Creation date</b>	2009	<b>MEMBERS</b> 	<b>Participating Countries (29):</b> United States, Australia, Austria, Belgium, Brazil, Canada, China, Denmark, Finland, France, Germany, India, Ireland, Israel, Italy, Japan, Republic of Korea, <b>Luxembourg</b> , Netherlands, Poland, Portugal, Russian Federation, Singapore, Slovakia, South Africa, Spain, Sweden, Switzerland, United Kingdom <b>Observing Countries (7):</b> Bosnia and Herzegovina, Czech Republic, Hong Kong, New Zealand, Norway, Serbia, Uruguay
<b>Secretariat</b>	ANSI (USA)		
<b>Secretary</b>	Ms. Lisa Rajchel		
<b>Chairperson</b>	Dr. Donald Deutsch		
<b>Organizations in liaison</b>	Cloud security alliance, DMTF, INLAC, ITU, OASIS, OGF, SNIA		
<b>Web site</b>	<a href="http://www.iso.org/iso/standards_development/technical_committees/list_of_iso_technical_committees/iso_technical_committee.htm?commid=601355">http://www.iso.org/iso/standards_development/technical_committees/list_of_iso_technical_committees/iso_technical_committee.htm?commid=601355</a>		
<b>Scope</b>	Standardization in the area of Cloud Computing and Distributed Platforms including but not limited to: <ul style="list-style-type: none"> <li>- Service Oriented Architecture (SOA);</li> <li>- Service Level Agreement;</li> <li>- Interoperability and Portability;</li> <li>- Data and their Flow Across Devices and Cloud Services.</li> </ul>		
<b>Structure</b>	JTC 1/SC 38/WG 2 <b>JTC 1/SC 38/WG 3</b> JTC 1/SC 38/WG 4 JTC 1/SC 38/WG 5	Services Oriented Architecture (SOA) <b>Cloud Computing Service Level Agreements (CCSLA)</b> <b>Cloud Computing Interoperability and Portability (CCIP)</b> <b>Cloud Computing Data and its Flow (CCDF)</b>	

## ISO/IEC JTC 1/SC 38 - Cloud Computing and Distributed Platforms

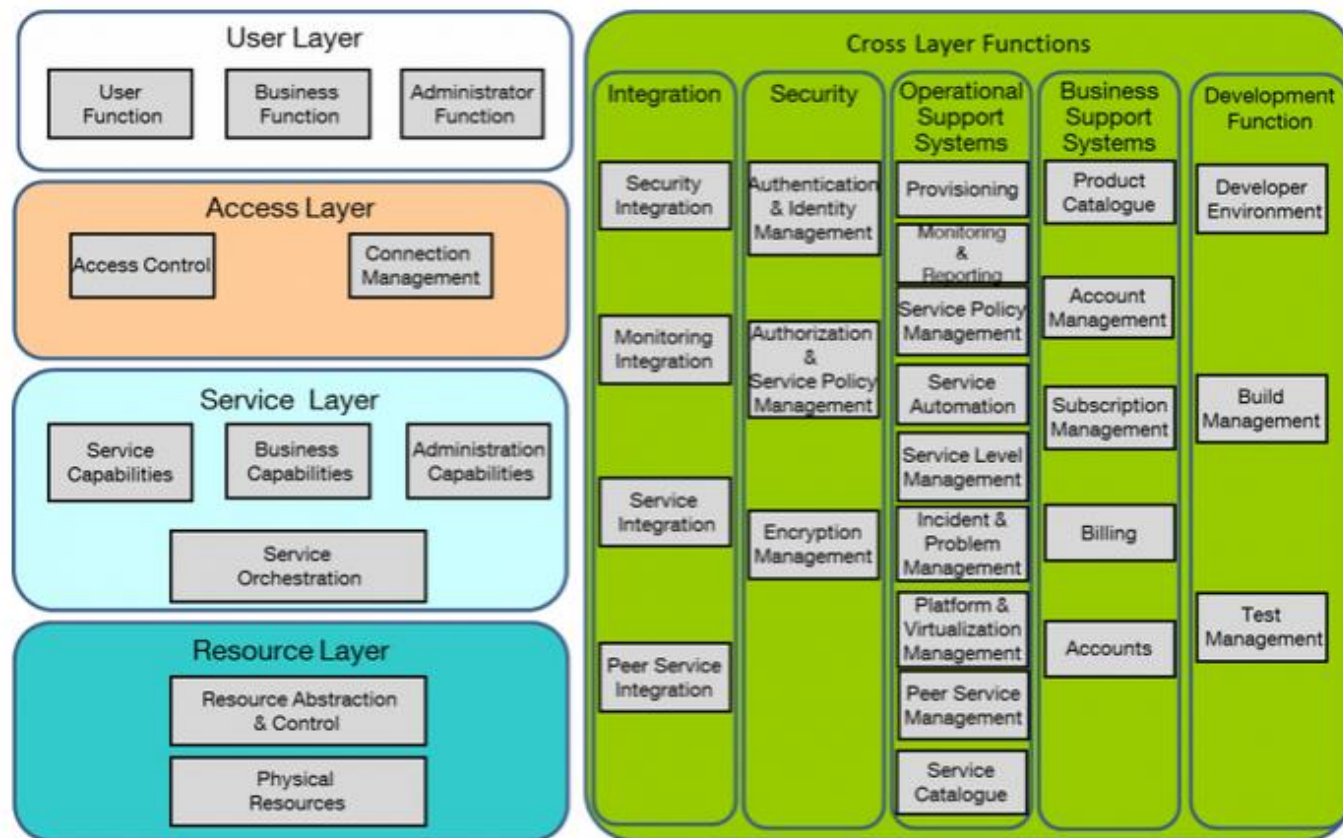
Standardization work	
Published standards	6
Standards under development	8
Involvement of Luxembourg	
- Mr. Jurgen Blum (Chairman)	KBL European Private Bankers S.A.
- Mrs. Myriam Djerouni	Banque de Luxembourg S.A.
- Mr. Jean-Michel Remiche	POST Telecom S.A.
- Mrs. Shenglan Hu	POST Telecom PSF S.A.
- Mr. Qiang Tang	Université du Luxembourg
- Mr. Johnatan Pecero	ANEC GIE
Comments	
<p>The current work program includes:</p> <ul style="list-style-type: none"> <li>• ISO/IEC CD 19086-1, Information technology -- Cloud computing -- Service level agreement (SLA) framework and Technology -- Part 1: Overview and concepts</li> <li>• ISO/IEC NP 19086-2, Information technology -- Cloud computing -- Service level agreement (SLA) framework and Technology -- Part 2: Metrics</li> <li>• ISO/IEC NP 19086-3, Information technology -- Cloud computing -- Service level agreement (SLA) framework and technology -- Part 3: Core requirements</li> <li>• ISO/IEC AWI 19941, Information Technology -- Cloud Computing -- Interoperability and Portability</li> <li>• ISO/IEC AWI 19944, Information Technology -- Cloud Computing – Data and their Flow across Devices and Cloud Services</li> </ul>	

## Summary

- ▶ Overview of ISO/IEC JTC 1/SC 38 - Cloud Computing and Distributed Platforms
- ▶ ISO/IEC JTC 1/SC 38 - Standardization work
- ▶ Conclusion



# ISO/IEC JTC 1/SC 38 - Published standards – ISO/IEC 17789:2014



Recommandation UIT-T Y.3502 | Standard internationale ISO / CEI 17789 'Cloud computing - Architecture de référence'

## ISO/IEC JTC 1/SC 38 - Published standards – ISO/IEC 27018:2014

- ▶ First International Standard that focuses on security of personal data in the cloud.
- ▶ The standard specifies certain minimum types of security measures that cloud providers should adopt, if applicable, including encryption and access controls.
- ▶ Key Objectives:
  - Help cloud service providers that process personally identifiable information to address applicable legal obligations as well as customer expectations
  - Enable transparency so customers can choose well-governed cloud services
  - Facilitate the creation of contracts for cloud services
  - Provide cloud customers with a mechanism to ensure cloud providers' compliance with legal and other obligations

## ISO/IEC JTC 1/SC 38 - Published standards

▶ Example of recently published standards:

- ISO/IEC 17788:2014, Information technology -- Cloud computing -- **Overview and vocabulary**
- ISO/IEC 17789:2014, Information technology -- Cloud computing -- **Reference architecture**
- *ISO/IEC 27018:2014, Information technology -- Security techniques -- Code of practice for protection of personally identifiable information (PII) in public clouds acting as PII processors*
  - Published by ISO/IEC JTC 1/SC 27, IT Security techniques (liaison with SC 38)

## ISO/IEC JTC 1/SC 38 - Work program – WG 3



- ▶ ISO/IEC CD 19086-1, Information technology - Cloud Computing -- **Service Level agreement (SLA) framework and Technology** -- Part 1: **Overview and concepts**
- ▶ **Scope:**
  - Specifies:
    - **Overview of Service Level Agreements (SLA)s** for cloud services
    - Identification of the **relationship between the master service agreement and the SLA**
    - **Cloud SLA concepts** that can be used **to build SLAs**
    - **Terms commonly used** in SLAs for cloud services
  - Does not provide a standard structure for cloud SLA contracts
  - Contracts vary between cloud service providers, and in some cases different cloud service customers can negotiate different contract terms with the same cloud service provider for the same cloud service
    - **Seeks to establish a set of common cloud SLA building blocks** (concepts, terms, definitions, contexts) that can then be used to create cloud SLAs that **help avoid confusion and facilitate common understanding between cloud service providers and cloud service customers**
  - This International Standard does not supersede any legal requirement

## ISO/IEC JTC 1/SC 38 - Work program – WG 3

- ▶ ISO/IEC NP 19086-2, Information technology - Cloud Computing -- **Service Level agreement (SLA) framework and Technology** -- Part 2: **Metrics**
  
- ▶ **Scope:**
  - Specifies:
    - An overview of Service Level Agreements (SLA)s for cloud services
    - Identification of the relationship between the master service agreement and the SLA
    - Cloud SLA concepts and requirements that can be used to build SLAs
    - Terms and **metrics commonly used in SLAs for cloud services**

## ISO/IEC JTC 1/SC 38 - Work program – WG 3

- ▶ ISO/IEC NP 19086-3, Information technology - Cloud Computing -- **Service Level agreement (SLA) framework and Technology** -- Part 3: **Core requirements**
  - Scope is not available at this time
  
- ▶ ISO/IEC NP 19086-4, Information technology - Cloud Computing -- **Service Level agreement (SLA) framework and Technology** -- Part 4: **Security and privacy**
  - Developed by ISO/IEC JTC 1/SC 27 - IT security
  - Scope is not available at this time

## ISO/IEC JTC 1/SC 38 - Work program – WG 4

- ▶ ISO/IEC AWI19941, Information Technology -- Cloud computing -- **Interoperability and Portability**
  
- ▶ **Scope:**
  - Define **Terms and concepts for Interoperability and Portability in cloud computing**
  - Overview of **Interoperability Types**
  - Overview of **Portability Types**
  - Exploring **differences and issues on Cloud Computing Interoperability and Portability**
  
  - Specifies: cloud computing interoperability and portability types, the relationship and interactions between these two aspects, and common terminology and concepts used to discussing interoperability and portability and particularly relating to cloud services

## ISO/IEC JTC 1/SC 38 - Work program – WG 5

- ▶ ISO/IEC AWI19944, Information Technology -- Cloud Computing -- **Data and their Flow across Devices and Cloud Services**
- ▶ **Scope:**
  - This proposal suggests doing **foundational work to investigate data flow issues based on the application of the cloud reference architecture to the ecosystem of devices and services**
    - This ecosystem involves portable, complex, multi-cloud, multi-jurisdictional environments
  - This project will not be addressing legal, regulatory, and cross-border trade discussions, but will help with, and provide a framework for, and deeper and better understanding of, issues involving such topics so that others in the international community can address them

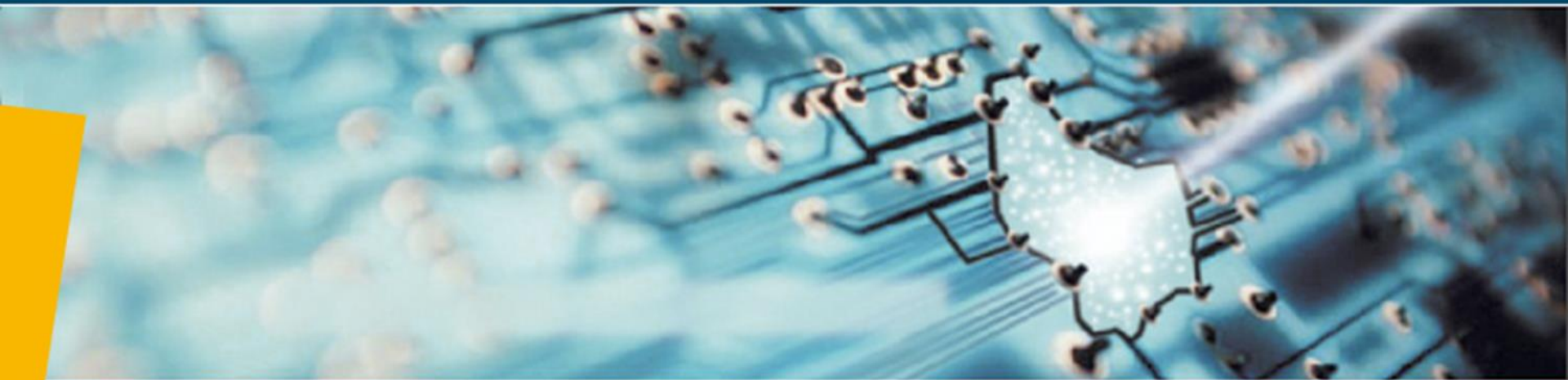


## Summary

▶ ISO/IEC JTC 1/SC 38

▶ Other Standardization initiatives

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## Participating in standardization Technical Committees in Luxembourg

July 2, 2015

*Dr.-Ing. Laurent WAHL*  
*Head of ILNAS standardization department*

## Summary

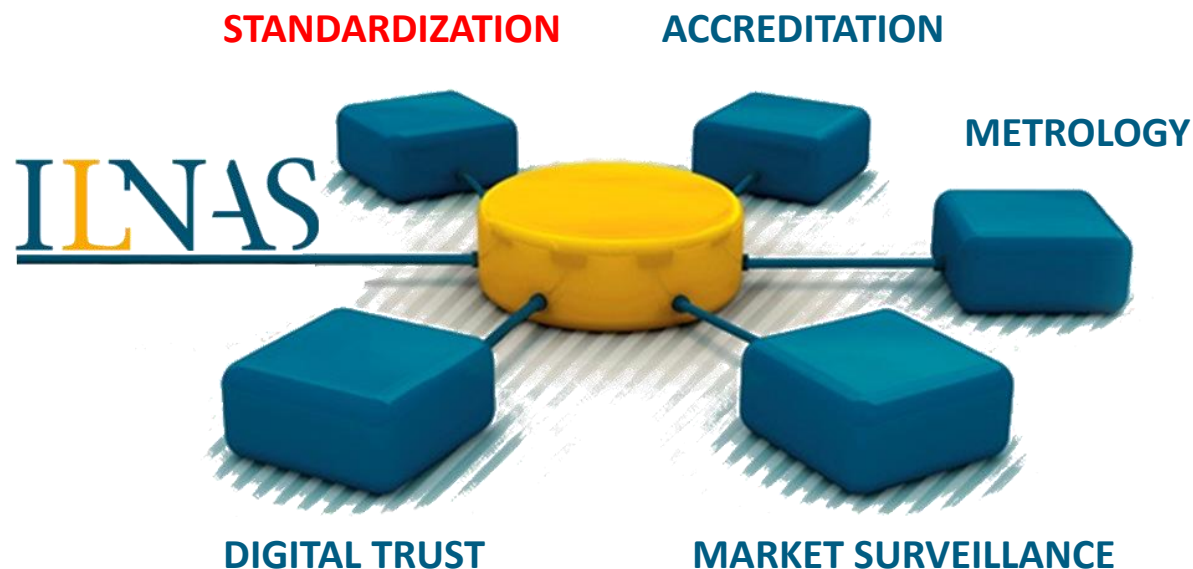
- ▶ **ILNAS - The National Standards Body of Luxembourg**
- ▶ **What are the challenges of being involved in standardization ?**
- ▶ **How are national standardization committees organized?**
- ▶ **What are the rights and duties of national standardization delegates ?**
- ▶ **ILNAS & ANEC support for national standardization delegates**

## Summary

- ▶ **ILNAS - The National Standards Body of Luxembourg**
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## ILNAS, *Institut Luxembourgeois de la Normalisation, de l'Accréditation, de la Sécurité et qualité des produits et services*

- ▶ **Creation:** May 20, 2008
- ▶ **Status:** Public administration under the authority of the Minister of the Economy
- ▶ **Total staff:** 33 civil servants (June 2015)



## Luxembourg's National Standards Body

### ▶ Selling standards

- About 130.000 normative documents are available:

- 61 national standards: ILNAS
- 50.000 European standards: EN
- 55.000 international standards: ISO and IEC
- 25'000 German standards: DIN



- Selling standards (e-shop - <https://ilnas.services-publics.lu>) :

- Languages: German, English and French
- Competitive prices

- Free consultation of standards:

- At ILNAS offices
- University of Luxembourg
- Public Research Center LIST
- National library (BnL)



## Luxembourg's National Standards Body



### ▶ Participation in standardization

- Manage the participation in technical standardization committees:
  - Open to everybody
  - Free of charge
  - More than 200 experts registered
- Creation of national standards
  - National standard about the living surface (23 persons inscribed)
  - National Annexes to European Standards
  - Adoption of European standards as national standards
- Organize education and training courses
- Represent Luxembourg at international level



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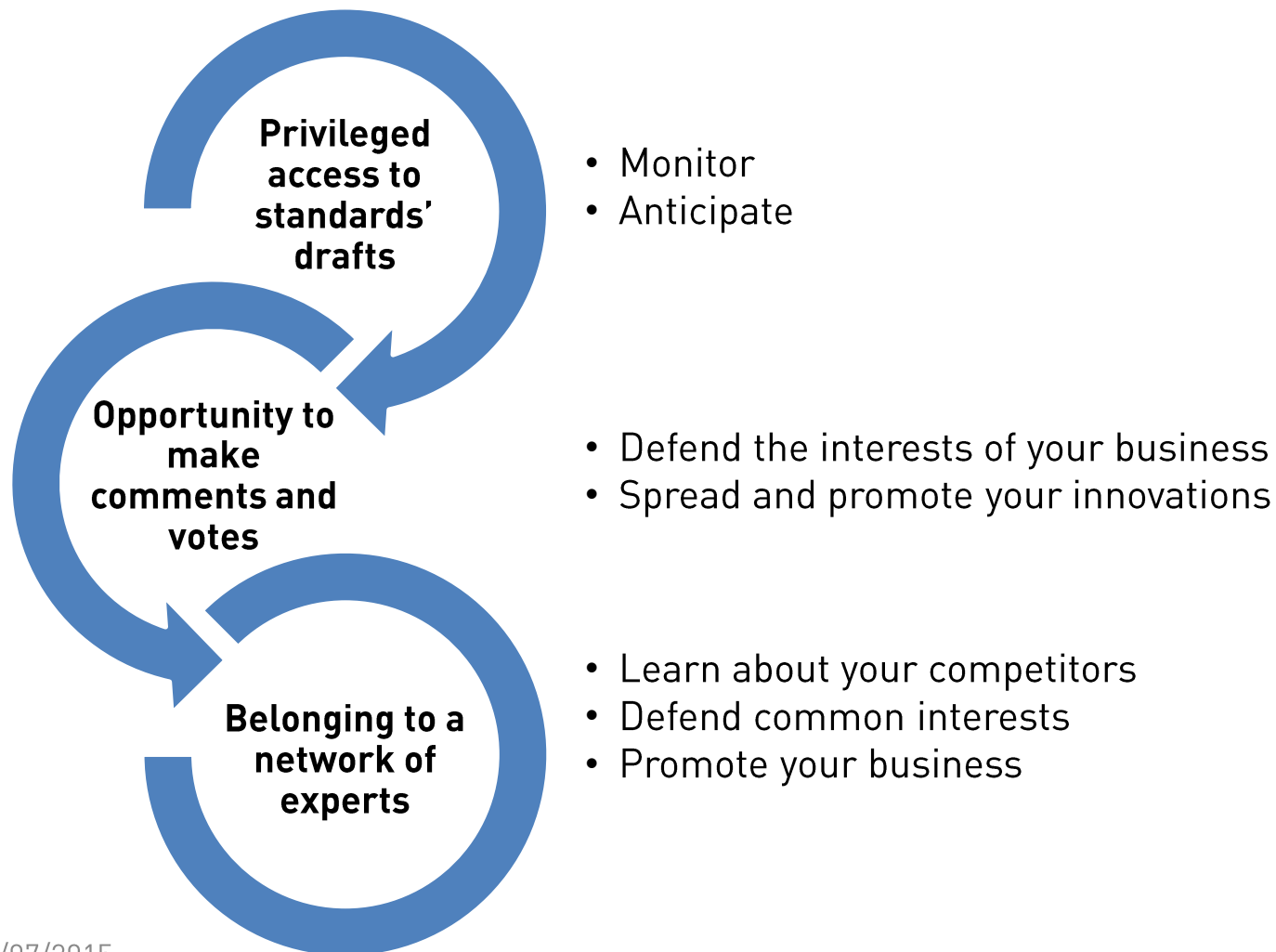


## Standardization stakes for a country

- ▶ *AFNOR study “The economic impact of standardization”*
  - Every year, standards are responsible for a GDP growth of 0.8% in average
  - Over 66% of the 1,790 companies or organizations interviewed stated that standardization contributes to the generation of profits
  
- ▶ **Advantages**
  - Disseminate new products on the market
  - Improve technological advantages of the country
  - Take into account national specificities
  - Defend national positions at international scale

**Standardization: An instrument for competitiveness and economic growth**

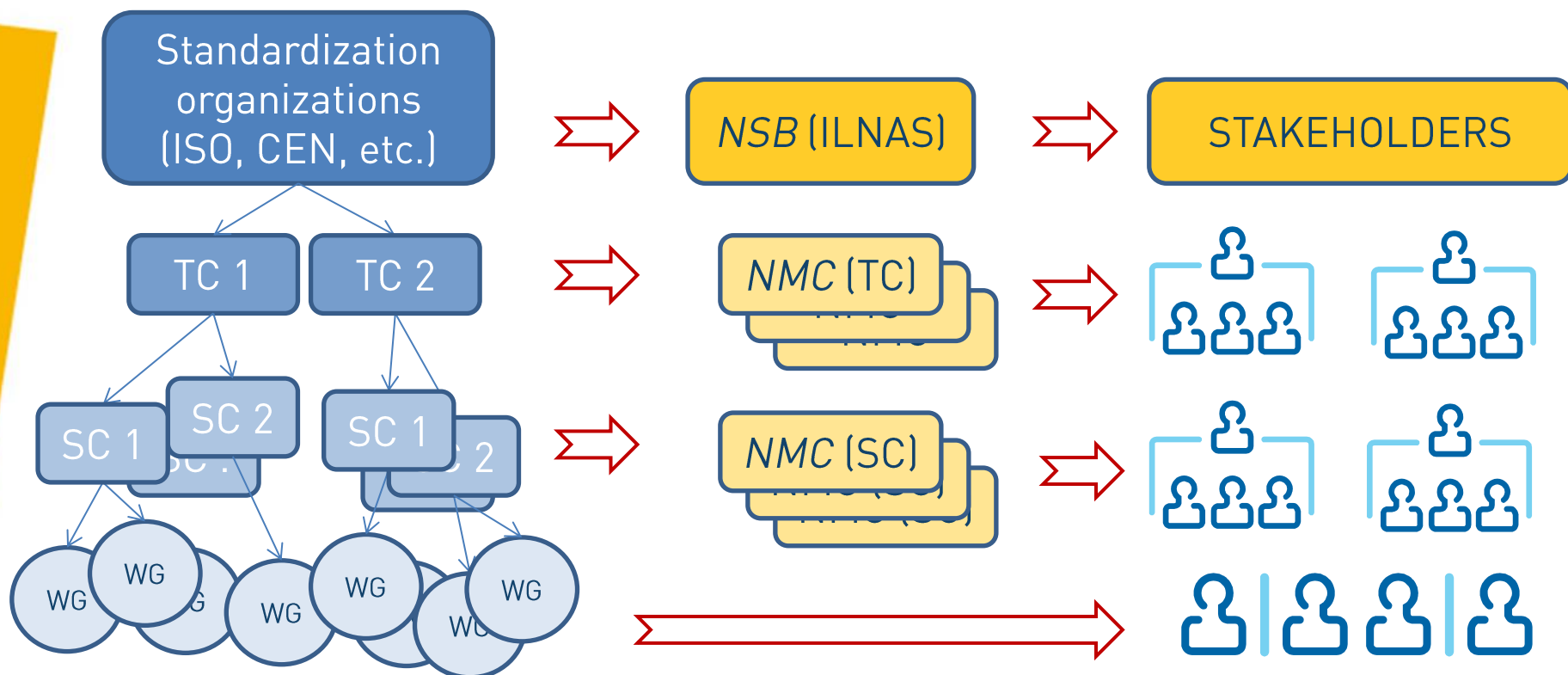
## Standardization stakes for companies



## Summary

- ▶ **ILNAS - The National Standards Body of Luxembourg**
- ▶ **What are the challenges of being involved in standardization ?**
- ▶ **How are national standardization committees organized ?**
- ▶ **What are the rights and duties of national standardization delegates ?**
- ▶ **ILNAS & ANEC support for national standardization delegates**

## Organization of participation in standardization



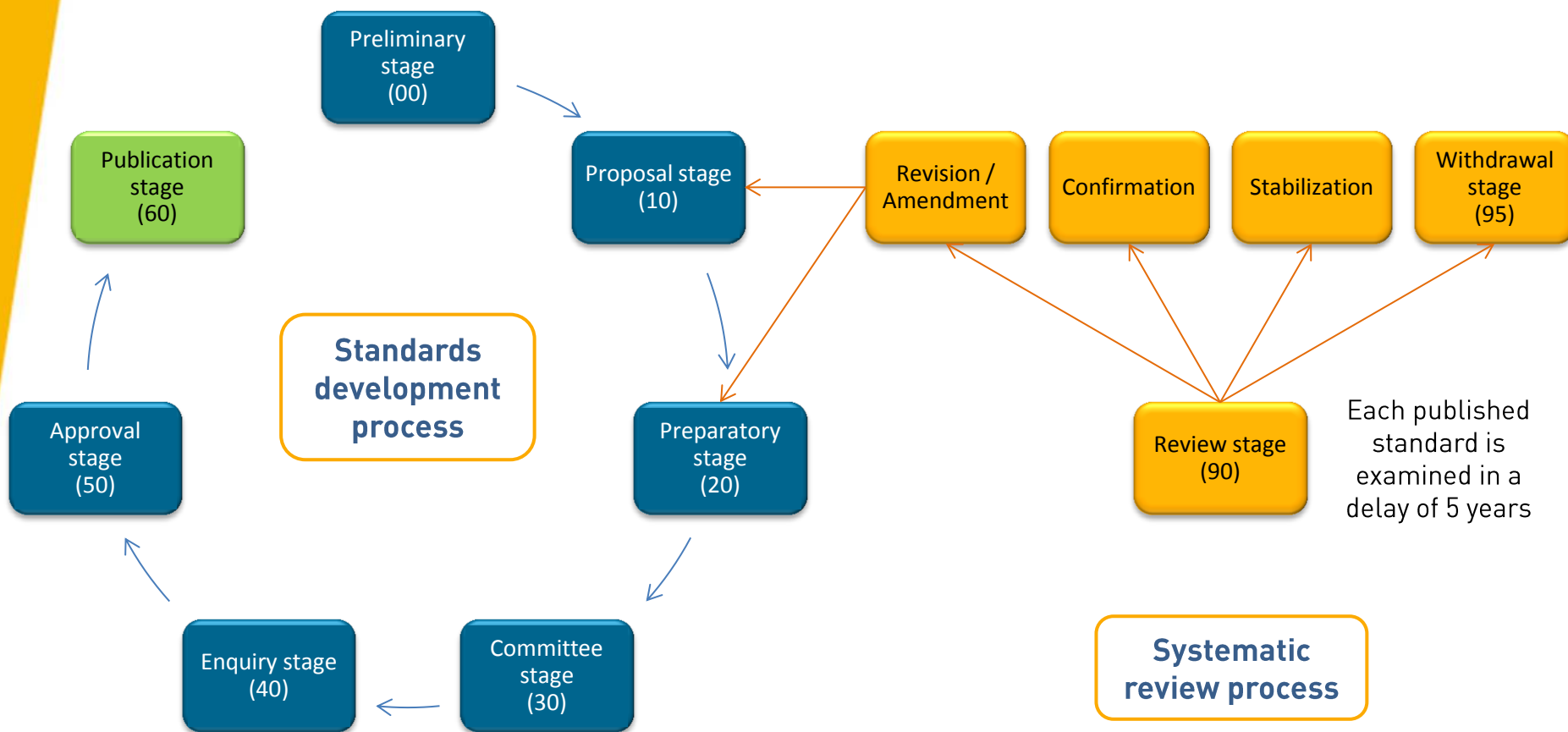
- ▶ **TC:** *Technical Committee*
- ▶ **SC:** *Sub-committee*
- ▶ **WG:** *Working Group*

- ▶ **NSB:** *National Standardization Body*
- ▶ **NMC:** *National Mirror Committee*

## Organization of national mirror committees (NMC)

- ▶ **National Mirror Committee**
  - Has to designate its chairman
  - Meets as a group of experts to determine consensus positions
  - Each entity has only one vote
  - Designate delegate(s) participating in international meetings
  
- ▶ **Chairman**
  - Organize the group of experts in a professional manner, ensuring a traceability
  - Define the internal rules
  - Ensure consensus for any official position provided
  
- ▶ **Guiding principle**
  - **CONSENSUS: general agreement**, characterized by the **absence of strong opposition** against the subject issued by any important part of the concerned interests and by a process seeking to take into account the views of all stakeholders and reconcile any divergent positions. **Consensus does not necessarily imply unanimity** [ISO/IEC Guide 2: 2004]

## Standards development process



# Main tasks of a national mirror committee

- ▶ Analyze draft standards during all the development process
- ▶ Vote the draft standards
  - Approval
  - Disapproval
  - Abstention
- ▶ Comment the draft standards

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ISO/IEC JTC 1/SC 39 N 314  
Date: 2015-14-10  
ISO-IEC\_30134-5  
ISO/IEC TC 1/SC 39  
Secretariat: ANSI

**Information Technology - Data Centres - Key Performance Indicators - Part 5: IT Equipment Utilization for Servers (ITEU<sub>sv</sub>)**

**Warning**

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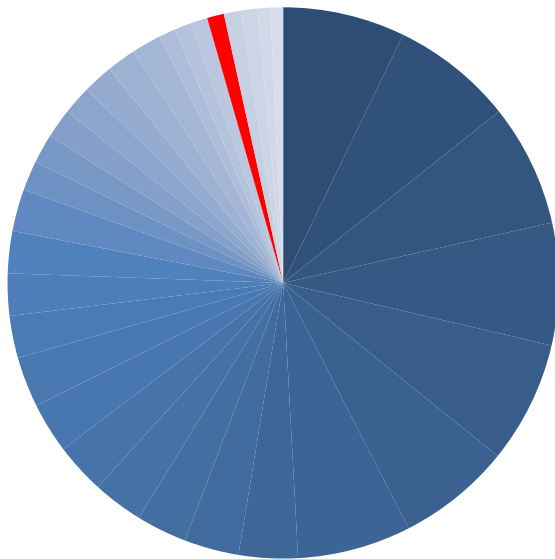
Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation

Template for comments and secretariat observations						Date: 2015-05-14	Document	Project
MB/ NC <sup>1</sup>	Line number	Clause/ Subclause	Paragraph/ Figure/Table	Type of comment <sup>2</sup>	Comments	Proposed change	Observations of the secretariat	
JP-1	3			ge	We recommend to use the term "energy efficiency" as used in line 2, instead of "energy effectiveness" used in line 3. The term "energy efficiency" are used in the variety reference of Bibliography, [16] [23] [25] [26] [27] [28] [41] [43]	Please replace the term "energy effectiveness" in line 3, by "energy efficiency". From the same point of view, please replace other "energy effectiveness" in every line by "energy efficiency"		
JP-2	120			ge	Japan supports the Document N260. We hope you add some references related to Green IT and the part of "energy effectiveness of the following components" in Bibliography. The references are shown in the right column.	"Energy effectiveness of the following components" should be followed by [44] , [45] [44] Green IT Promotion Council Japan; "DPPE: Holistic Framework for Data Center Energy Efficiency", August 2012 <a href="http://home.jeita.or.jp/greentec/topics/release/pdf/dppe_e_20120824.pdf">http://home.jeita.or.jp/greentec/topics/release/pdf/dppe_e_20120824.pdf</a> [45] Green IT Promotion Council Japan; "Energy Saving in Society by IT Solutions / How to Quantify the Contribution of 'Green by IT' <Practical Guide>". February 2013 <a href="http://home.jeita.or.jp/greentec/activities/sports/110528/pdf/survey03.pdf">http://home.jeita.or.jp/greentec/activities/sports/110528/pdf/survey03.pdf</a>		
US5				Ge	The US believes that part 1 is a start to the discussion but much more detail needs to be included in subsequent parts.			
DE01	125	4.2		Ge	"From the perspective of computing the overall energy effectiveness, this Technical Report takes a very high level macroscopic view. At this level, it is considered that the transport network consists of multiple wired and wireless network equipment."			

<sup>1</sup> MB = Member body / NC = National Committee (enter the ISO 3166 two-letter country code, e.g. CN for China, comments from the ISO/IEC editing unit are identified by \*)  
<sup>2</sup> Type of comment: ge = general te = technical ed = editorial

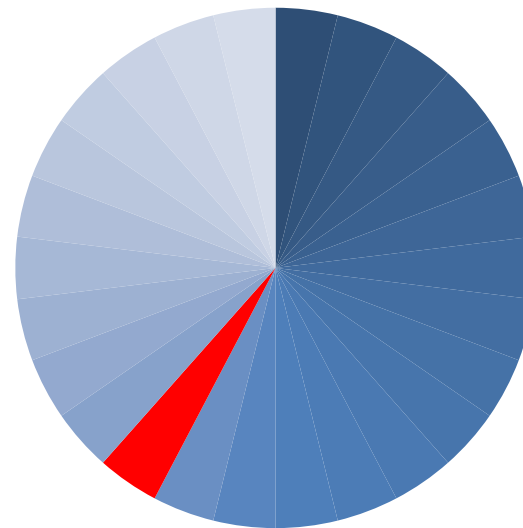
# Luxembourg's weight of vote in standardization

## European technical committees



- Germany
- France
- Italy
- United Kingdom
- Turkey
- Spain
- Poland
- Romania
- Netherlands
- Belgium
- Greece
- Hungary
- Portugal
- Czech Republic
- Austria
- Bulgaria
- Sweden
- Switzerland
- Croatia
- Denmark
- Finland
- Ireland
- Lithuania
- Norway
- Slovakia
- Cyprus
- Estonia
- Latvia
- Luxembourg
- Slovenia
- Macedonia
- Iceland
- Malta

## International technical committees (E.g.: ISO/IEC JTC 1/SC 39)



- Australia
- Austria
- Belgium
- Canada
- China
- Czech Republic
- Finland
- France
- Germany
- Italy
- Iran
- Ireland
- Japan
- Kenya
- Republic of Korea
- Luxembourg
- Netherlands



## Summary

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## Rights of delegates

### ▶ Rights

- Access to documents
- Work on standards under development
- Vote during the validation or approval process
- Participate in international meetings
- Give feedbacks to ILNAS, if necessary, on malfunctions

### ▶ Duties

- Respect of the standardization policy
- Nondisclosure of technical committee's documents to third parties
- Active participation in the standardization process
- Providing a periodic review to ILNAS (personal activities, comments, etc.)

## Registration process to a standardization technical committee

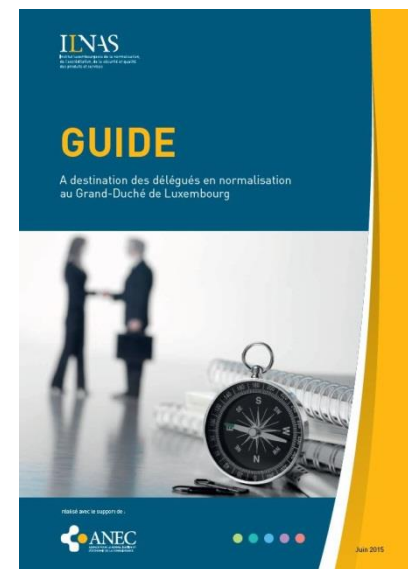
- ▶ **Application form for registration to a standardization technical committee**
  - Form ILNAS/OLN/F001
  - Available at <http://www.portail-qualite.public.lu/fr/normes-normalisation/developpement-normes/devenir-delegue-national/index.html>
  
- ▶ **Processing of the application by ILNAS**
  - Evaluation of the application: competencies, relevance, interest for the national economy
  - Approval of the registration application
  
- ▶ **Entry to the national register of standardization delegates**
  - Notification to the candidate
  - Access to the collaborative platform

## Summary

- ▶ ILNAS - The National Standards Body of Luxembourg
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## Support offered to national delegates

- ▶ **Training session « New delegate in standardization »**
  - Training sessions to new delegates are provided (0,5 days):
    - Understand standardization
    - Participate in the standardization process in Luxembourg
    - Use the electronic platform
- ▶ **Guide for standardization delegates in Luxembourg**
- ▶ **E-mail support:**
  - [normalisation@ilnas.etat.lu](mailto:normalisation@ilnas.etat.lu)
  - [anec@ilnas.etat.lu](mailto:anec@ilnas.etat.lu)

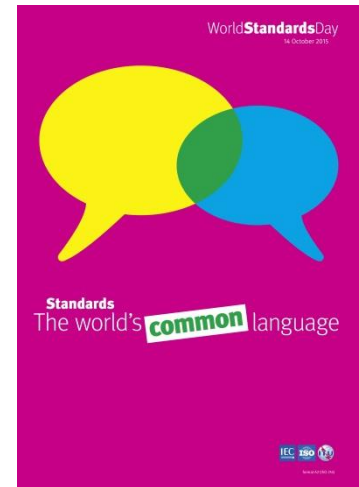


**Thank you for your attention**

**QUESTIONS & ANSWERS**

## Periodical actions

- ▶ **World Standards Day - October 14, 2015**
  - Bring the national standardization community together
  - A specific session dedicated to ICT
  - Program coming soon



## University certificate “Smart ICT for Business Innovation”





## CONTACT



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des produits et services

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