

SURVEILLANCE
DU MARCHÉ

ACCREDITATION

CONFIANCE
NUMÉRIQUE

MÉTROLOGIE

NORMALISATION

ILNAS

Welcome
Bienvenue
Willkommen

STANDARDIZATION OPPORTUNITIES IN LUXEMBOURG

Presentation of the National Standards Body

29/05/2018



1. Presentation of ILNAS

ILNAS

- Public administration under the authority of the Minister of the Economy
- Created by the law dated July 14, 2014 (repealing the amended Law of May 20, 2008)
- Total staff: 45 (May 2018)

National standards body

- Composed of 5 persons
- Close collaboration with the G.I.E. ANEC-N (6 persons)



2. ILNAS Standardization activities

- 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



3. Availability of standards

3.1 Standardization catalogue

- 61 national standards
- 60.201 European Standards from CEN, CENELEC and ETSI
- 60.729 International Standards from ISO and IEC
- 46.104 DIN standards



➔ More than 160.000 normative documents at your disposal

3. Availability of standards

3.2 ILNAS e-shop

- Format: electronic
- Language: French, German and English
- Competitive prices
- Free access to documents in public enquiry



World Class Standards



WELCOME TO THE ILNAS E-SHOP!

National (ILNAS, DIN), European (EN) and International (ISO, IEC) standards are available here!

ILNAS offers you the possibility to search and purchase National, European and International Standards, prepared and adopted by the Standardization Organizations such as ILNAS, DIN, CEN, CENELEC, ETSI, ISO and IEC. This online catalogue includes draft standards, adopted and published ones as well as historical deliverables.

A read-only access to standards is offered [for free at several locations](#) in Luxembourg.

Search a standard

☒ Ratified standards ☐ Draft standards ☐ Withdrawn standards ☐ Standards in public enquiry

[Advanced search](#)

How to search standards? **How to purchase standards?** **How to get your standards?**

Two ways are provided to you:

- A Quick Search box allowing you to search by standard code (number) or keywords and phrases
- An Advanced Search which allows you to combine further search criteria such as:
 - Standard reference / wording
 - Standardization Body
 - Technical Committee
 - Domain (ICS Field: International Classification for Standards)
 - Directive
 - Edition date

News

Cloud Computing: renforcer la confiance grâce aux normes

En 2016, 19 % des entreprises luxembourgeoises utilisaient des services de Cloud Computing[1], soit une progression de 6 % depuis 2014. Cette technologie offre de nombreux avantages aux organisations qui l'adoptent (ex. : accessibilité, optimisation des coûts) cependant plusieurs facteurs, tels que les potentiels problèmes de sécurité ou de portabilité, limitent encore son usage. Dans ce cadre, les organisations internationales de normalisation travaillent activement à développer des normes répondant à ces problématiques afin de favoriser l'adoption du Cloud Computing par les organisations.

[Lire la suite](#)

PORTAIL-QUALITE.LU
QUALITE-SECURITE-CONFORMITE

3. Availability of standards

3.3 Free access on lecture stations

Availability of all EN (CEN,CENELEC et ETSI), ISO, IEC and ILNAS standards (despite DIN)

Location of the lecture stations:

1) **Université du Luxembourg**

Campus Kirchberg

2) **Chambre of Commerce**

House of Entrepreneurship

3) **Bibliothèque nationale de Luxembourg**

Luxembourg city-center

4) **ILNAS**

Esch-Belval

5) **LIST**

Esch-Belval (Maison de l'innovation) & Belvaux



4. Participation in standardization activities

4.1 National delegate in standardization

- **Why participate ?**
 - Privileged access to the drafts of future standards
 - Opportunity for commenting and voting
 - Be part of a network of experts
- **Who can participate ?**
 - Every socio-economic actor with a certain expertise
- **Cost of participation ?**
 - Free participation in Luxembourg
- **Register of National experts (May 2018)**
 - 290 persons registered
 - 753 registrations in technical committees

Registre national des délégués en normalisation - Mai 2018

Nombre d'inscriptions aux comités techniques :	
ILNAS/OLN	100
CEN	194
CENELEC	17
CEN/CENELEC	3
CEN/CENELEC/ETSI	2
ECISS	28
ISO/IEC	190
ISO	208
IEC	9
Total	753
Nombre de personnes inscrites : 290	

ILNAS

1, av du Seving - L-4367 Belvaux - Tél : (+352) 24 77 43 40 - Fax : (+352) 24 79 43 40 - Email : normalisation@ilnas.etat.lu - www.portail-qualite.lu

Revisé le 16 mai 2018 Approuvé par André KREISKAMP Page 1 sur 11

4. Participation in standardization activities

4.2 StandICT.eu initiative

- New initiative funded by the European Commission which aims to financially support the participation and contribution of European experts in the international standardization activities related to the ICT domain (5G, Cloud Computing, Cybersecurity, Big Data, IoT, etc.)
- Pragmatic approach and streamlined process to reinforce EU expertise in the international ICT standardization scene
- Pinpoint gaps and priorities matching EU DSM (*digital single market*) objectives
- Until 2020, ten calls will be opened (one call every two months) to financially support the participation in standardization of European academia and research organizations, as well as national and European associations and companies
- The financial support varies from 1.000€ (participation at a specific meeting) to 8.000€ (contribution to the development of standards as President or member of a WG (project of 12 months min.))
- [First call](#) has been launched in March 2018 (close date : today)

StandICT.eu

Portail qualité
www.portail-qualite.lu

ILNAS e-shop
ilnas.services-publics.lu



National Standards Body

Tel. : (+352) 247 743 40

Fax : (+352) 247 943 40

E-mail : normalisation@ilnas.etat.lu

SURVEILLANCE
DU MARCHÉ

ACCREDITATION

CONFIANCE
NUMÉRIQUE

MÉTROLOGIE

NORMALISATION

ILNAS



JTC 1/SC 42 Artificial Intelligence

Standards for Artificial Intelligence: work in progress

Outcomes of inaugural plenary meeting

Natalia Cassagnes

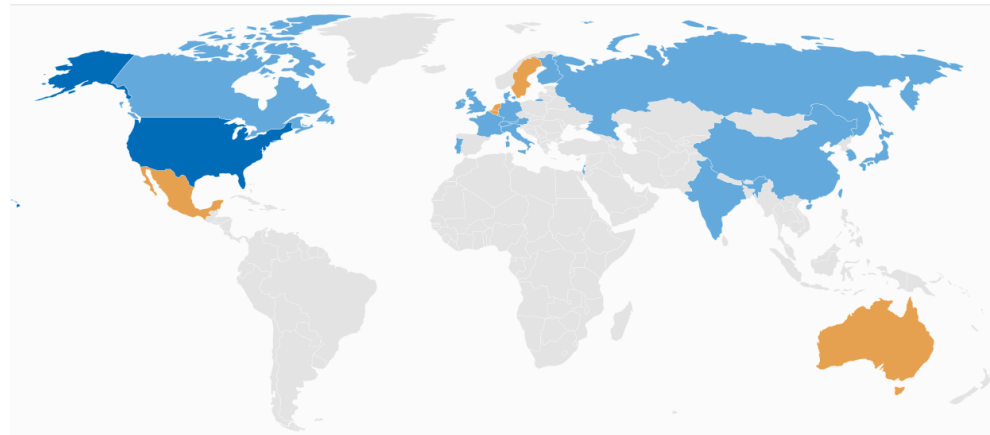
29 May 2018



- **Establishment**
 - November 2017

- **Inaugural plenary meeting**
 - 18-20 April 2018, Beijing (China)
 - 15 P-members, 2 O-members

- **Current involvement**
 - 19 P-members, 5 O-members
 - Luxembourg : P-member (since May 2018)



- Participation

- 17 countries, 87 delegates
- Large enterprises, SMEs, Research organizations, National Standardization bodies

- Discussion

- ISO constraints on the program of work
 - Placement of ISO/IEC JTC1/WG9 Big Data
 - Inclusion of societal concerns in SC42 program of work
- Structure: organization of work
 - Existing and New projects proposals
 - Determine areas for standardization
- Liaisons
- Convenors, Editors, Liaison representatives
- Next meeting

- Decisions

- 13 Resolutions

- **Placement of ISO/IEC JTC1/WG9 Big Data**

- Resolution 1 (Beijing) – Transfer of JTC 1/WG 9 Big Data to JTC 1/SC 42

JTC 1/SC 42 requests that the program of work of JTC 1/WG 9 be transferred to SC 42 in accordance with JTC 1 Resolution 13 contained in SC 42 N 007 (ISO/IEC JTC 1 N 13630).

JTC 1/SC 42 instructs its Secretary to submit this Resolution to JTC 1 no later than 30 April 2018.

- Effective immediately, no further approval by ISO required
- Current status
 - WG9 Big Data is disbanded
 - Projects of WG9 are under direct responsibility of SC42
 - The organization of work on the Big Data projects is in progress

- Inclusion of societal concerns in SC42 program of work

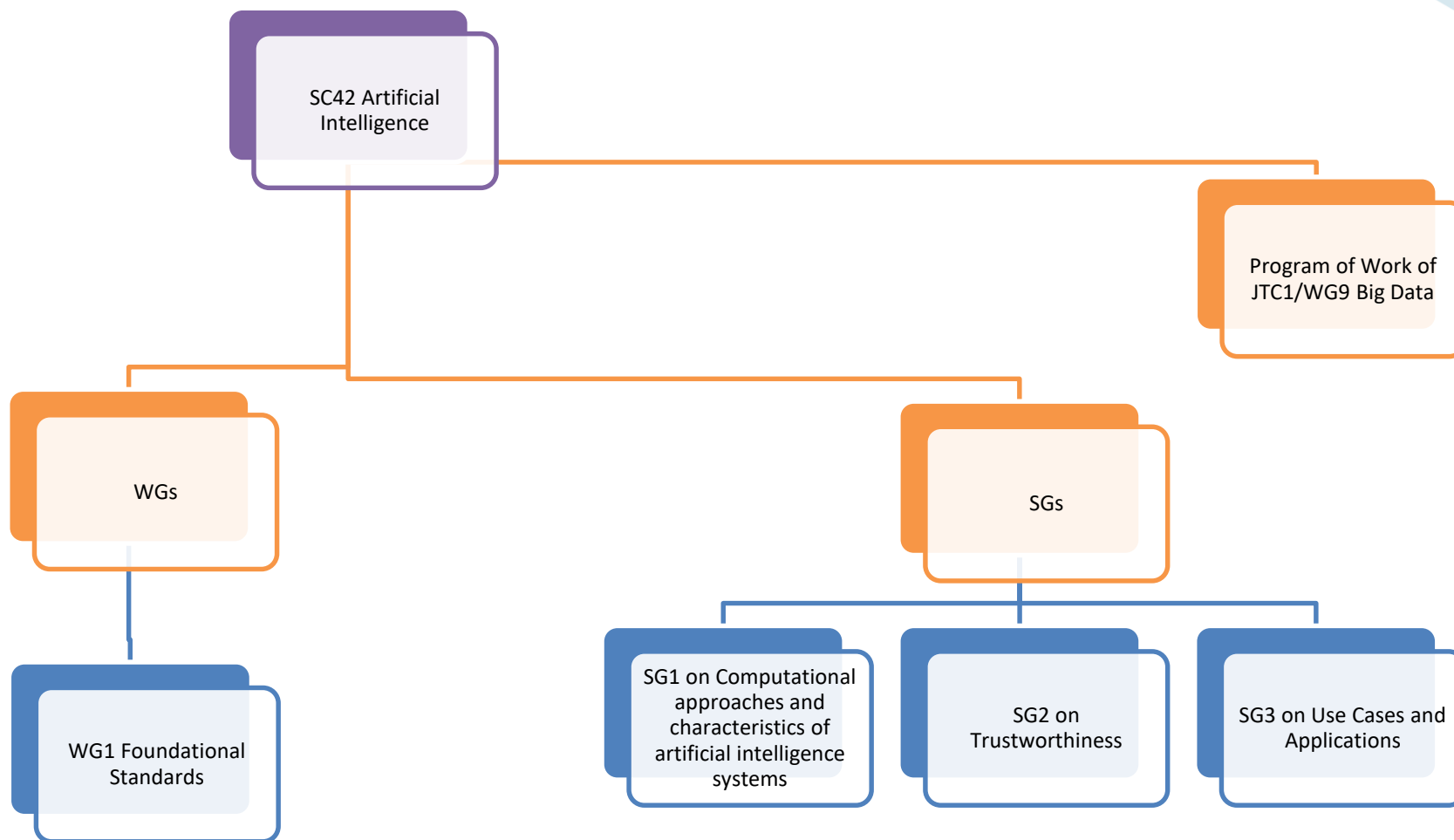
- Resolution 2 (Beijing)- Request to JTC 1 regarding TMB Resolution 125/2017 and the inclusion of societal concerns in JTC 1/SC 42 program of work.

Noting TMB Resolution 125/2017, JTC 1/SC 42

- *Recognizes that the term “societal concerns” is very broad and may have contextual meaning that is both within and outside the scope of JTC 1*
- *Approves SC 42 N 077 as a contribution to JTC 1*
- *Requests that the exclusion of Societal Concerns from the SC 42 program of work be removed in line with the explanations provided in document SC 42 N 077*

SC 42 requests that the JTC 1 secretary forwards this request and SC 42 N 077 to the ISO TMB for its consideration.

- SC 42 N 077 [“Consideration of Societal Concerns”](#)
 - Societal concerns in JTC1: metrics for sustainable data centers, security and privacy protection, accessibility
 - Illustration of topics for SC42 consideration: algorithmic bias, designing human safety in AI algorithms, AI eavesdropping
- Current status
 - Waiting for the decision of ISO TMB (June 2018)



- **SC42/WG1 Foundational Standards**

- WG1 is assigned to work on the 2 approved projects:
 - ISO/IEC AWI 22989 – Artificial Intelligence Concepts and Terminology
 - ISO/IEC AWI 23053 – Framework for Artificial Intelligence Systems Using Machine Learning (ML)
- WG1 convenor: Mr. Paul Cotton (Canada)
- ISO/IEC AWI 22989 Editor: Mr. Wei Wei (Germany)
- ISO/IEC AWI 23053 Editor: Mr. Milan Patel (United Kingdom)
- Current status:
 - Call for experts for WG1
 - New version of ISO/IEC 22989 with submitted comments to be prepared by 24 August 2018
 - New version of ISO/IEC 23053 with submitted comments to be prepared by 24 August 2018

- **SC42/SG1 on Computational approaches and characteristics of artificial intelligence systems**
 - Terms of reference for the SG1 include:
 - Study different technologies (e.g., ML algorithms, reasoning etc.) used by the AI systems including their properties and characteristics.
 - Study existing specialized AI systems (e.g., NLP or computer vision) to understand and identify their underlying computational approaches, architectures, and characteristics.
 - Study industry practices, processes and methods for the application of AI systems.
 - Develop new work item proposals as appropriate and recommend placement.
 - Report to the second SC 42 Plenary.
 - SG1 convenor: Dr. Tangli Liu (China)
 - Current status:
 - Call for experts for SG1

- **SC42/SG2 on Trustworthiness**

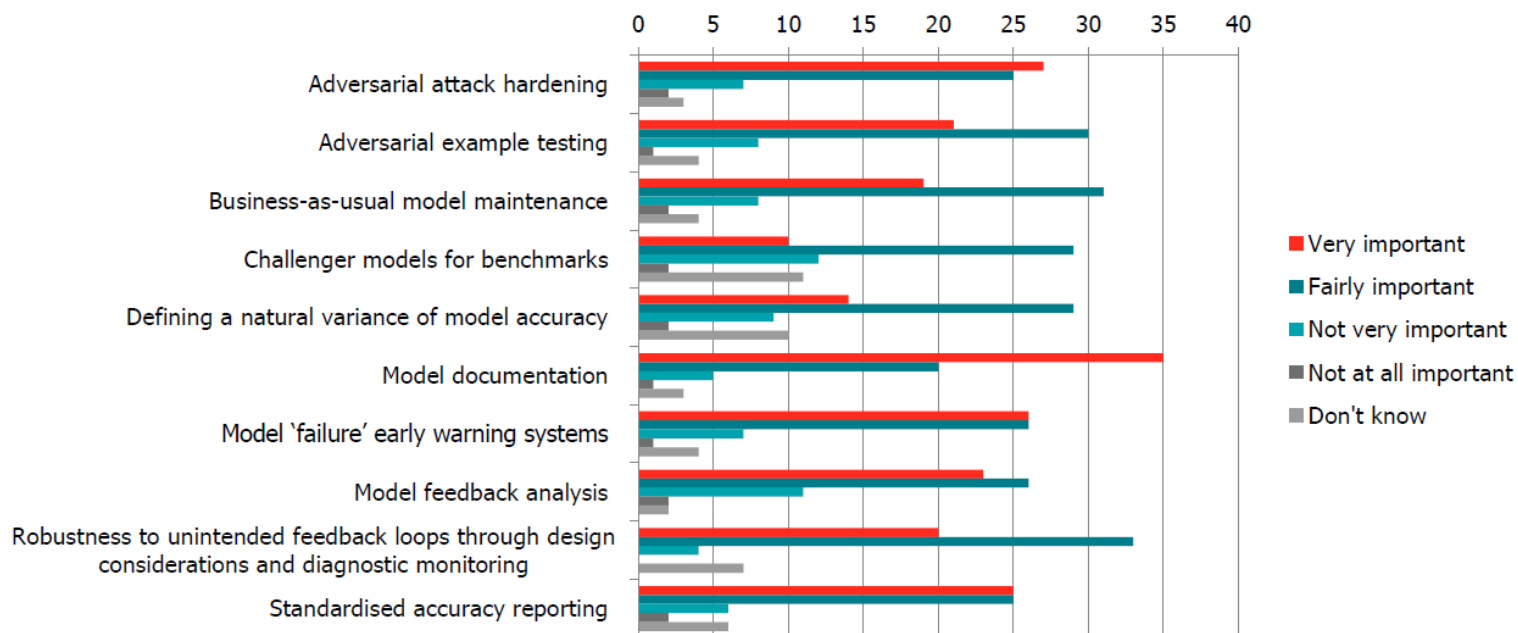
- Terms of reference for the SG2 include:
 - Investigate approaches to establish trust in AI systems through transparency, verifiability, explainability, controllability, etc.
 - Investigate engineering pitfalls and assess typical associated threats and risks to AI systems with their mitigation techniques and methods.
 - Investigate approaches to achieve AI systems' robustness, resiliency, reliability, accuracy, safety, security, privacy, etc.
 - Investigate types of sources of bias in AI systems with a goal of minimization, including but not limited to statistical bias in AI systems and AI aided decision making.
 - Develop new work item proposals as appropriate and recommend placement.
 - Report to the second SC 42 Plenary.
- SG2 convenor: Dr. David Filip (Ireland)
- Special editor for report on Robustness: Dr. Arnault Ioualalen (France)
- Current status:
 - Call for experts for SG2

- **SC42/SG3 on Use Cases and Applications**
 - Terms of reference for the SG3 include:
 - Identify different AI application domains (e.g., social networks and embedded systems) and the different context of their use (e.g., fintech, health care, smart home, and autonomous cars).
 - Collect representative use cases.
 - Describe applications and use cases using the terminology and concepts defined in ISO/IEC AWI 22989 and ISO/IEC AWI 23053 and extend the terms as necessary.
 - Develop new work item proposals as appropriate and recommend placement.
 - Report to the second SC 42 Plenary.
 - SG3 convenor: Dr. Fumihiro Maruyama (Japan)
 - Current status:
 - Call for experts for SG3

- JTC1 JAG Report on Artificial Intelligence (AI) and Autonomous Systems (AS)
 - Domain-specific lexicon and frameworks
 - Software engineering
 - Performance
 - Metrics
 - Safety
 - Usability
 - Interoperability
 - Security
 - Privacy
 - Traceability
 - Risk Analysis
 - Ethics

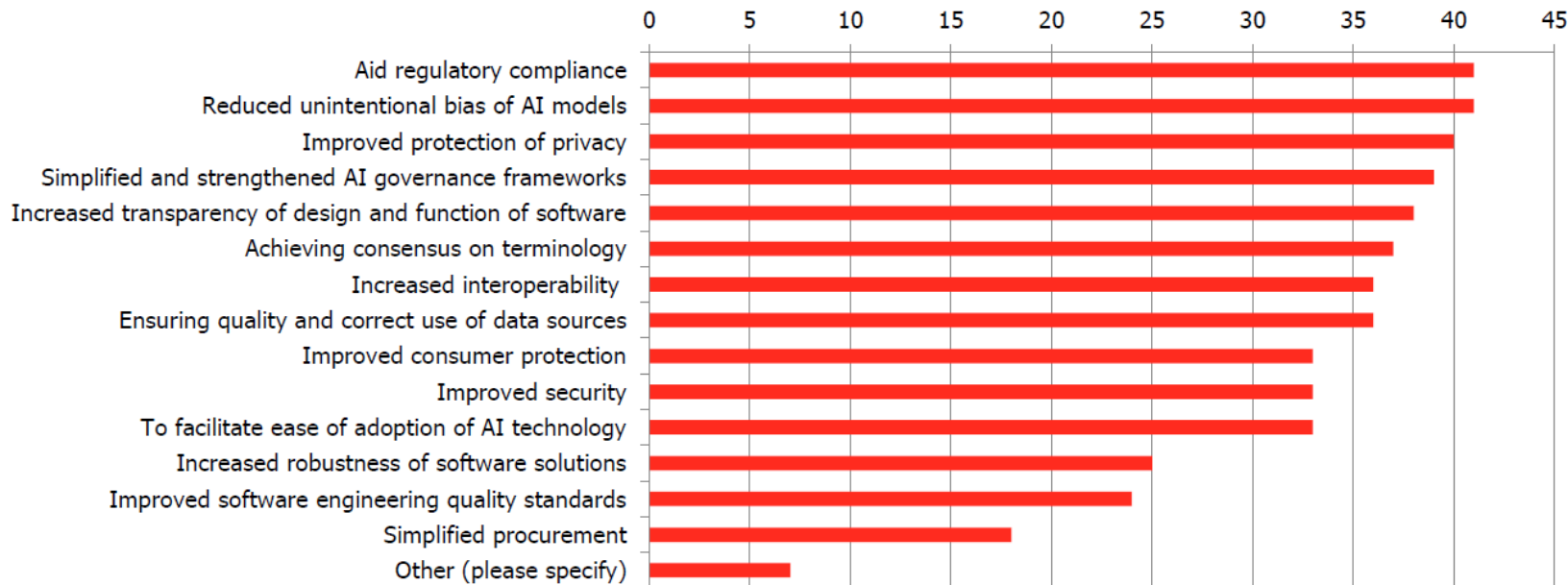
- BSI [AI Survey results on need for standardization](#)

Q6 Thinking about outcomes of AI models in production environments, to what extent, if at all, do you consider it important to have standards for: n=64



- BSI [AI Survey results on need for standardization](#)

Q2 What, if any, do you consider to be potential benefits of standardization for AI technology? n=64



NB Responders can select multiple options

- Internal liaisons (automatic)

- JTC 1/SC 7, Software and systems engineering
- JTC 1/SC 27, IT security techniques
- JTC 1/SC 29, Coding of audio, picture, multimedia and hypermedia information
- JTC 1/SC 34, Document description and processing languages
- JTC 1/SC 36, Information technology for learning, education and training
- JTC 1/SC 38, Cloud computing and distributed platforms
- JTC 1/SC 39, Sustainability for and by information technology
- JTC 1/SC 40, IT service management and IT governance
- JTC 1/SC 41, Internet of things and related technologies
- ISO/TC 69, Applications of statistical methods
- ISO/TC 215, Health informatics
- ISO/TC 299, Robotics
- ISO/TC 307, Blockchain and distributed ledger technologies
- ISO/TC 309, Governance of organizations
- JTC 1/WG 11, Smart cities
- IEC SyC Smart Cities

- External liaisons

- IEEE (approved)
- AI Task Force
- Partnership on AI
- Cloud Security Alliance (CSA)

- **Time**
 - 8-13 October 2018
- **Place**
 - San Francisco Bay Area, California, USA
- **Contributions deadlines**
 - WG and SG reports - 24 August 2018
 - Agenda - 7 September 2018
 - Contributions on existing items - 14 September 2018



ILNAS  **ANEC**

Southlane Tower I · 1, avenue du Swing · L-4367 Belvaux

Tel. : (+352) 24 77 43 - 70 · Fax : (+352) 24 79 43 - 70

E-mail: anec@ilnas.etat.lu

www.portail-qualite.lu