

Welcome
Bienvenue
Willkommen

ILNAS



ILNAS-ETSI Workshop

Technoport · 06.07.2018



AGENDA

09:30 - 09:50 | Presentation of the National Standards Body
National Standardization Strategy and related Policy for the ICT sector
Dr. Jean-Philippe HUMBERT, Deputy Director - ILNAS

09:50 - 10:25 | ILNAS White Paper IoT & Technical Standardization
Dr. Shyam WAGLE, Project Officer Smart ICT research and standardization - ANEC GIE

10:25 - 10:45 | Education & Research
Prof. Pascal BOUVRY, Chargé de Mission auprès du Recteur - University of Luxembourg

10:45 - 11:05 | Coffee Break

11:05 - 11:35 | Presenting oneM2M
Mr. Xavier PIEDNOIR, Head of External Relations - ETSI

11:35 - 12:05 | ETSI and 5G
Mr. Ultan MULLIGAN, Director of Innovation - ETSI

12:05 - 12:25 | Education about Standardization : the ETSI approach
Mr. Ultan MULLIGAN, Director of Innovation - ETSI

12:25 - 14:00 | Networking Lunch

**ILNAS-ETSI
Workshop**

SPEAKERS



Mr. Ultan MULLIGAN
Director of Innovation
ETSI

Mr. Ultan Mulligan is Director of Innovation at ETSI. Until recently he held the position of Director of Communications and was also vice-chairman of the Marketing and Communications committee in the oneM2M Partnership Project – a joint collaboration between ETSI and 5 other ICT standards bodies across the globe. Previously responsible for Strategy and New Initiatives, developing new standardisation or pre-standardisation activities at ETSI including establishing ETSI's first Industry Specification Groups, he has also managed OSA/Parlay API standardisation activities for ETSI. In ETSI's Protocol and Testing Competence Centre he has managed specification and testing projects on numerous technologies. Besides ETSI, he has participated in many standards bodies including oneM2M, 3GPP, ITU-T, CEN, and groups such as Bluetooth SIG and Parlay.

Mr. Mulligan has a B. Eng. from Dublin City University and an Executive MBA from the ESCP-EAP in Paris.



Mr. Xavier PIEDNOIR
Head of External Relations
ETSI

Mr. Xavier Piednoir heads ETSI's External Relations activities, working in the Director General's team in close coordination with the ETSI Legal and Strategy Development departments. He is in charge of the partnership care and development as well as projects in foreign countries (notably SESEI in India). He also takes part in the action with European Commission. Xavier has a strong technical background, being an expert in the smart card technology, the standardization of which he was involved for 15 years, as an expert for Orange and later as a Technical Officer in ETSI.



Prof. Pascal BOUVRY
*Chargé de Mission auprès
du Recteur*
University of Luxembourg

Dr. Bouvry earned his undergraduate degree in Economical & Social Sciences and his Master degree in Computer Science with distinction ('91) from the University of Namur, Belgium. He went on to obtain his Ph.D. degree ('94) in Computer Science with great distinction at the University of Grenoble (INPG), France. His research at the IMAG laboratory focussed on Mapping and scheduling task graphs onto Distributed Memory Parallel Computers. Next, he performed post-doctoral researches on coordination languages and multi-agent evolutionary computing at CWI in Amsterdam.

Dr. Bouvry gained industrial experience as manager of the technology consultant team for FICS (belonging to S1 corp) a world leader in electronic financial services. Next, he worked as CEO and CTO of SDC, a Saigon-based joint venture between SPT (the second telecom operator in Vietnam), Spacebel SA (a Belgian leader in Space, GIS and Healthcare), and IOIT, a public research and training centre. After that, Dr. Bouvry moved to Montreal as VP Production of Lat45 and Development Director for MetaSolv Software, a world-leader in Operation Support Systems for the telecom industry (including AT&T, Worldcom, Bell Canada, etc.).

Pascal Bouvry is part of the editorial boards of IEEE Transactions on Sustainable Computing, IEEE Cloud Computing Magazine, Springer journal on Communications and Sustainable Computing, and Elsevier journal in Swarm and Evolutionary Computation.

Dr. Bouvry is currently "*Chargé de Mission auprès du Recteur*" in charge of the University High Performance Computing service, heading the PCOG (Parallel Computing and Optimization Group), directing the doctoral programme DP-CSCE, directing the certificate Smart ICT for Business innovation, and serving as Professor. Pascal Bouvry is also faculty of the Interdisciplinary Centre of Security, Reliability and active in various scientific committees and technical workgroups (IEEE CIS Cloud Computing vice-chair, IEEE TCSC GreenIT steering committee, ERCIM WG, ANR, COST TIST, etc.).

Professor Bouvry is the Luxembourg national delegate for PRACE (Partnership for Advanced Computing in Europe). The mission of PRACE is to enable high-impact scientific discovery and engineering research and development across all disciplines to enhance European competitiveness for the benefit of society.



Dr. Jean-Philippe HUMBERT
Deputy Director
ILNAS

Dr. Jean-Philippe Humbert earned his PhD in Information and Communication Sciences, at *Université Paul Verlaine* of Metz, focused on information security and cybercriminality. Dr. Jean-Philippe Humbert is Vice-President of the *Agence pour la Normalisation et l'Economie de la Connaissance* (ANEC GIE) and Deputy Director of the *Institut Luxembourgeois de la Normalisation, de l'Accréditation, de la Sécurité et qualité des produits et services* (ILNAS) and, in this frame responsible of the national standardization strategy. Really involved into ICT Technical standardization and Education about standardization, since 2002, Dr. Jean-Philippe Humbert is also President of the National Mirror Committee ISO/IEC Joint Technical Committee 1 "Information Technology" and lecturer for the University of Luxembourg.



Dr. Shyam WAGLE
Project Officer – Smart ICT research
and standardization
ANEC GIE

Dr. Shyam WAGLE is a Project Officer – Smart ICT research and standardization responsible for Internet Things (IoT) at the ANEC GIE. He is also serving as president of national mirror committee of Luxembourg -- ISO/IEC JTC 1/SC 41: Internet of Things and related technologies. Prior to joining ANEC GIE, he worked as a researcher in different European Universities, such as University of Bologna, University of Turin, Autonomous University of Barcelona (UAB) and University of Luxembourg under a joint initiative of universities, research institutions and industries – LAST-JD program supported by European Union. Before joining research career in academia, he served as project lead responsible for planning, implementing of national telecom infrastructure, frequency and numbering plan for telco service provider. His research interests and areas of expertise include IoT, Cloud/Edge Computing, Artificial Intelligence (AI), telecommunications technologies ranging from 3G to 5G, and WiMAX/LTE together with related technical standardization activities. Dr. Wagle holds PhD in computer science from University of Luxembourg and joint-PhD degree in interdisciplinary research areas from LAST-JD research program.

TRAINING "INTERNET OF THINGS (IoT) AND TECHNICAL STANDARDIZATION" - 18.10.2018

- Objectives:

The training aims to provide basic concepts of IoT and its limitations along with case studies. In addition, it will provide insights on the relevant standardization activities in IoT and related technologies through standards watch.

- Program:

1. IoT fundamentals
 - Basic IoT characteristics
 - IoT evolutions
 - Data/information flow in IoT
 - Reference architecture
2. Limitations in today's IoT
 - Security, trust, privacy and identity management
 - Connectivity, interoperability and integrability
 - Data collection, ownership and management
3. Case studies
4. IoT and technical standardization
 - ISO/IEC JTC 1/SC 41 – Internet of Things and related technologies
 - ITU-T and ETSI initiatives
 - Analysis of other relevant standards
 - National standardization efforts: how to become a national delegate

- Practical information:

Audience: Beginners to mid-level IT knowledge

Date: 18.10.2018

Duration: 4 hours

Place: ILNAS premises

Language: English

Price: 250€ net VAT

INVITATION

July 12th, 2018 | 09:30 – 11:00

ILNAS – Southlane Tower I – 1 avenue du Swing (Belval)

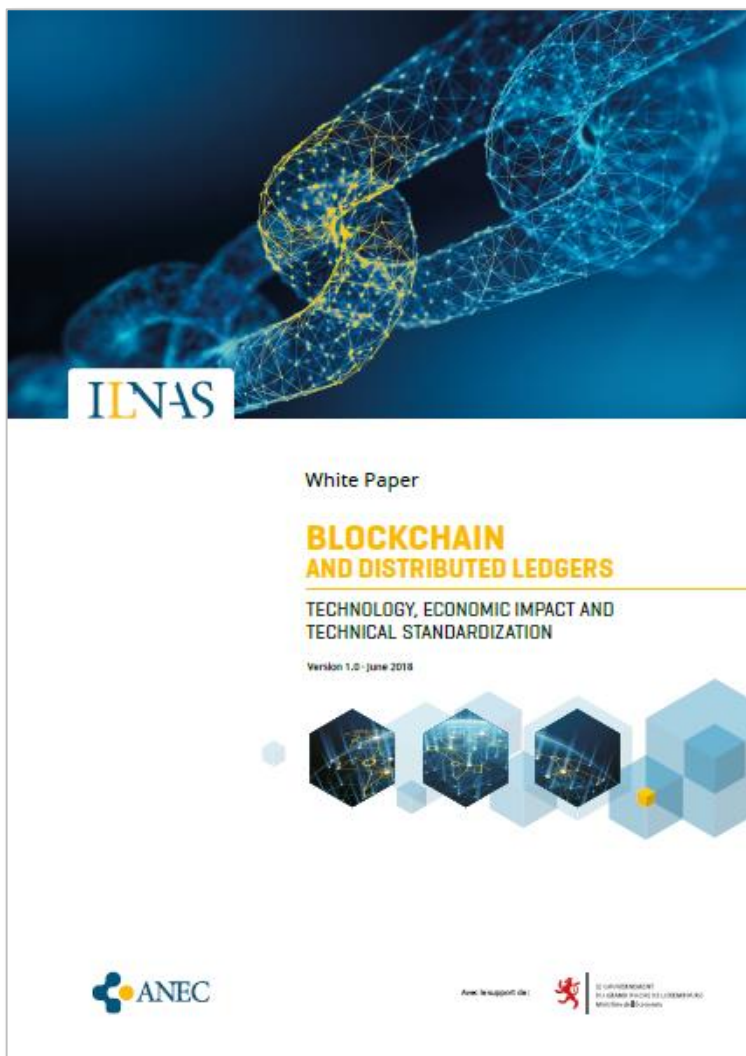
- About the White Paper “Blockchain and Distributed Ledgers”:

The goal of this white paper is to provide a comprehensive view of the developments around blockchain and distributed ledger technologies. To this aim, a systematic analysis of this domain is presented from three different perspectives: blockchain concepts and technology, economic and business impact, and technical standardization, so that the readers of this white paper could broadly answer to questions such as:

- ✓ How does blockchain work?
- ✓ What are the features, differences and similarities, in major blockchain platforms?
- ✓ How will blockchain affect different economic sectors?
- ✓ What are the benefits of adopting blockchain within a given business?
- ✓ What are the recent developments in blockchain technical standardization?
- ✓ Which set of standards are relevant?

Meet us on July 12th, 2018 to learn more about the white paper and related standardization developments.

Contact and registration: anec@ilnas.etat.lu



TRAINING "BLOCKCHAIN AND TECHNICAL STANDARDIZATION" – 14.09.2018

ILNAS



- Objectives:

The training aims to provide basics of Blockchains such as how it works, design choices, consensus mechanisms, mining and role of smart contracts. You will know the overall technological landscape, emerging trends, and the relationship between Blockchain and other Smart ICT. You will also gain insights on various standardization activities in this area.

- Program:

1. Blockchain fundamentals
 - How Blockchain works
 - Permissioned, permissionless, public and private Blockchains
 - Consensus and mining
 - Smart contracts
2. Overview of Blockchain platforms
 - High-level survey
 - Ethereum, Hyperledger and Stellar
 - Development trends
 - Relation with Smart ICT
3. Case studies
4. Blockchain and technical standardization
 - ISO/TC 307 – Blockchain and distributed ledgers
 - CEN/CENELEC and ITU-T initiatives
 - Analysis of other relevant standards
 - National standardization efforts: how to become a national delegate

- Practical information:

Audience: Beginners to mid-level IT knowledge

Date: 14.09.2018

Duration: 4 hours

Place: ILNAS premises

Language: English

Price: 250€ net VAT

SAVE THE DATE

WORLD STANDARDS DAY 2018 – 12.10.2018



Luxembourg Celebration of the World Standards Day

October 12th, 2018

- About the World Standards Day:

Each year on 14 October, the members of IEC, ISO and ITU celebrate World Standards Day, which is a means of paying tribute to the collaborative efforts of the thousands of experts worldwide who develop the voluntary technical agreements that are published as International Standards.

- Topic 2018: International Standards and the Fourth Industrial Revolution

Just as standards were crucial during the first industrial revolution, over 250 years ago, they will also play a critical role in the fourth.

The Fourth Industrial Revolution refers to the emerging technologies, which are blurring the traditional boundaries between the physical, digital and biological worlds. This increased connectivity of people and things will impact the way we produce, trade and communicate, much like steam power transformed production methods and the way of life of many societies during the first Industrial Revolution.

In the 18th century, the transition from manual work to machinery and factory work raised the need for standards. For example, to replace machine parts and enable specialized mass production of components.

Today, standards will once more play a key role in the transition to a new era. The speed of change we are witnessing would not be possible without them. Innovators rely on International Standards, like those produced by IEC, ISO and ITU, to ensure compatibility and interoperability, so that new technologies can be seamlessly adopted. They are also a vehicle to spread knowledge and innovation globally.

The rapid pace of change brought by the Fourth Industrial Revolution has its challenges. Robots and artificial intelligence will take over more and more tasks previously done by humans, additive manufacturing (also known as 3D printing) will change the way we make goods, and give us the ability to “print things” at home, and as everything from planes to baby monitors are connected digitally, the vulnerability of data and the consequences of a breach are growing exponentially. These are only some examples of the issues presented by a new generation of smart technologies characterized by big data, increased integration, cloud storage and open communication of devices to name a few. International Standards are a powerful way to ensure safety and minimize risk. For example, security standards can keep our data safe and deter hackers. And safety standards for robots, will make it easier to interact with humans.

The Fourth Industrial Revolution has begun, but in order to seize its full potential for the betterment of society, standards are needed.

