



AFTERWORK

National delegates in standardization

● Luxembourg ●



Dr. Jean-Philippe HUMBERT
ILNAS



Mr. Jérôme HOEROLD
ILNAS/OLN



Dr. Emilia TANTAR
Black Swan LUX



Dr. Jean LANCRENON
ANEC GIE

Speakers



Dr. Jean-Philippe HUMBERT
ILNAS



Technical standardization

"Inclusive tool for performance and excellence to serve the economy"



→ Strategy signed by the
Minister of the Economy of
Luxembourg

PERFORMANCE



Pillar 1 – Use of relevant technical standards



Pillar 2 – Involvement in the standardization process

EXCELLENCE



Pillar 3 – Active participation of the NSB in the
European and international standardization
organizations



Pillar 4 – Development of research and education about
standardization

Technical standardization
"Inclusive tool for performance and excellence to serve the economy"

3 growth sectors identified



CONSTRUCTION



**INFORMATION AND
COMMUNICATION
TECHNOLOGIES**



AEROSPACE



II. Research activities

A. Research program “Technical Standardisation for Trusted Use in the Field of Smart ICT” (2017-2020)

Research program “Technical Standardisation for Trusted Use in the Field of Smart ICT” (2017-2020) in collaboration with the University of Luxembourg

The University of Luxembourg and ILNAS are strengthening their collaboration in the field of Smart ICT and standardization. A ceremony was held on May 17, 2017 at the Ministry of Economy to formally conclude the partnership.



In the rear row, from left to right: Jean-Philippe Humbert, Pascal Bouvry, Paul Heuschling, Yves Elsen, Björn Ottersten;
In the front row, from left to right: Ludwig Neyeses, Francine Closener, Jean-Marie Reiff

The Smart-ICT Team



Nader Samir
- PhD Candidate
- Since 1.10.2017
- Industrial experience in UAVs



Prof. Pascal Bouvry
- Principal Investigator
- Project coordination
- PhD supervision



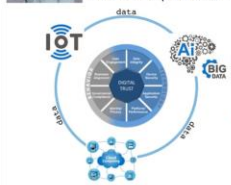
Saharnaz Dilmaghani
- PhD Candidate
- Since 01.03.2018
- Standardization experience



Chao Liu
- PhD Candidate
- Since 15.10.2017
- Cloud Computing



Matthias Brust
- Postdoc
- Project support



SNT

Journal Papers

4

Conference papers

21

Short Papers

4

White Paper

1

Technical Report

1

Awards

2

News Coverage

5

Talks to wider audience

15



10/2018 - White Paper “DATA PROTECTION AND PRIVACY IN SMART ICT - SCIENTIFIC RESEARCH AND TECHNICAL STANDARDIZATION”



IS Day 2019 - Information Security Awards
Security Project of the Year: SNT – ILNAS



10/2019 - Technical Reports “SMART ICT: GAP ANALYSIS BETWEEN SCIENTIFIC RESEARCH AND TECHNICAL STANDARDIZATION”

A. Research program “Technical Standardisation for Trusted Use in the Field of Smart ICT” (2017-2020)

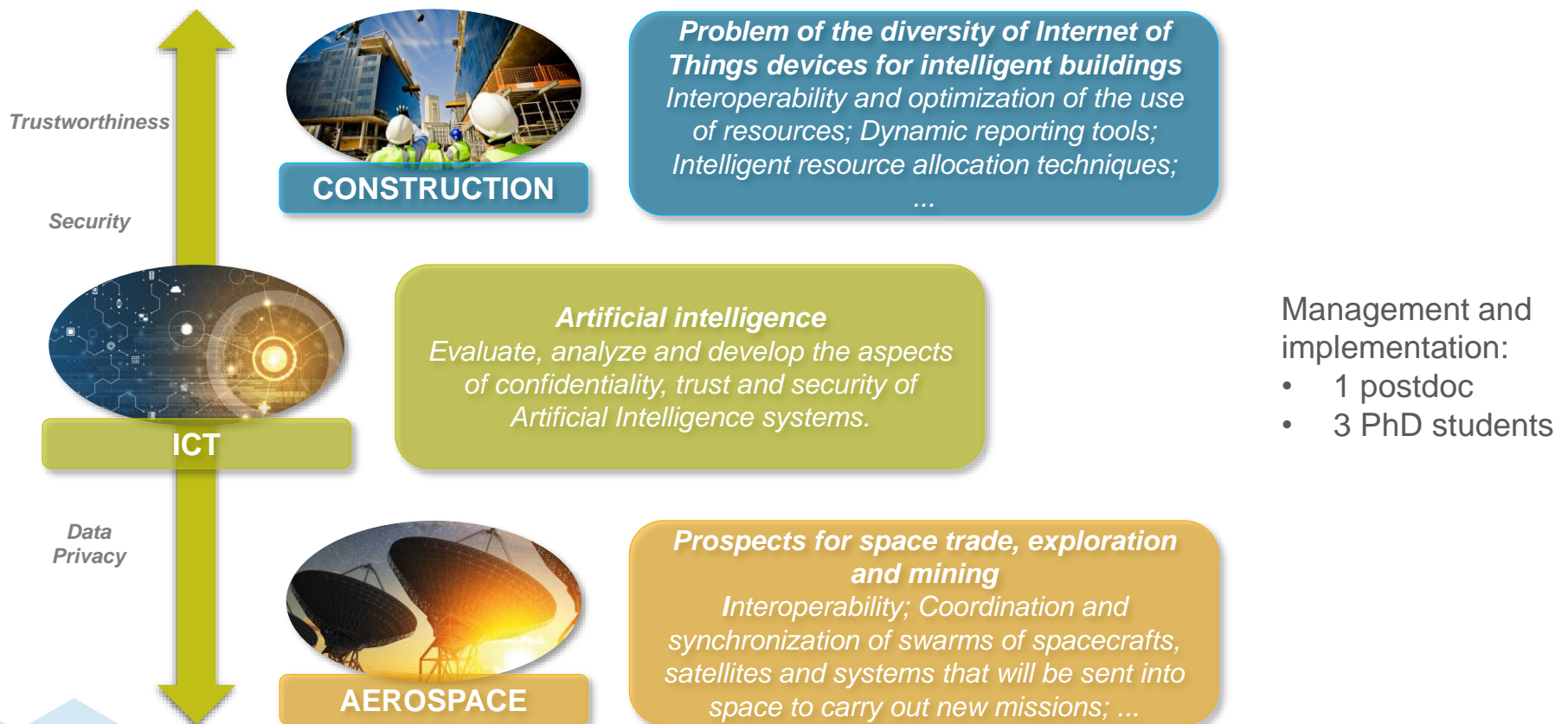
Recent updates

- **Ms. Saharnaz Dilmaghani**
 - Winner of the ‘Young Researcher’ category of the CEN and CENELEC Standards+Innovation Awards
 - PhD thesis will be defended in Q1 or Q2 2022

- **Dr. Nader Samir Labib**
 - PhD thesis defended in Q4 2021
 - Title: “A Distributed Unmanned Aerial Vehicles Traffic - Management System”



Research program “Technical Standardisation for Trustworthy ICT, Aerospace, and Construction” (2021-2024) in collaboration with the University of Luxembourg



2021 - ILNAS Research activities

DIGITAL TRUST

ARTIFICIAL INTELLIGENCE

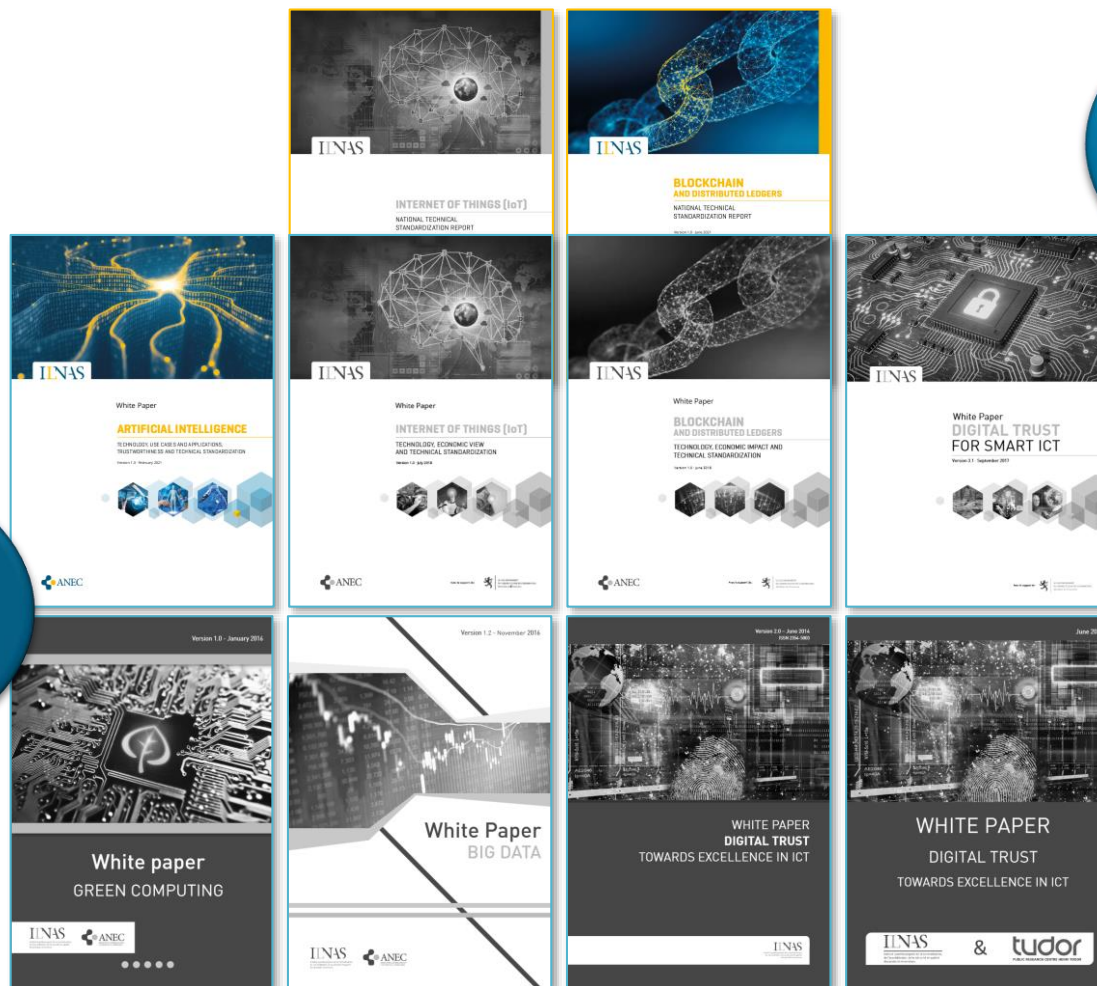
BLOCKCHAIN

INTERNET OF THINGS

BIG DATA

1 new **White Paper** on **Artificial Intelligence**

1 new **National Technical Standardization Report** on **Blockchain and DLT**



Technology review

Economic overview

Challenges

Technical Standardization

...

Master MTECH – ILNAS in collaboration with the University of Luxembourg and the Chamber of Employee

| STANDARDISATION | ECTS |
|---------------------------------|------|
| Smart Secure ICT and Innovation | 1 |
| Technical Standardisation | 3 |
| TOTAL | 4 |

| SMART ICT | ECTS |
|---------------------------|------|
| Smart ICT Technologies I | 5 |
| Smart ICT Technologies II | 5 |
| TOTAL | 10 |

| DIGITAL TRUST FOR SMART ICT | ECTS |
|-----------------------------------|------|
| Security for Smart ICT I | 2 |
| Security for Smart ICT II | 3 |
| Trust Architectures for Smart ICT | 4 |
| TOTAL | 9 |

| TECHNOPRENEURSHIP | ECTS |
|---|------|
| Management of Business and Technical Innovation | 3 |
| Digital Intelligence | 2 |
| Legal Aspects | 2 |
| TOTAL | 7 |

| MASTER THESIS | ECTS |
|---------------|------|
| Master Thesis | 30 |
| TOTAL | 30 |

60 ECTS

327 hours
of teachingInternship
(750 hours)Started in February
20212 years
lifelong-
learning

11 Modules

9 students



With the support of:



THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURG
Ministry of the Economy



Some other developments in 2021



3 new ILNAS Reading Stations

- *Chambre des Métiers*
- *Lycée des Arts et Métiers*
- *Atert-Lycée Redange*

Development of ILNAS Online Video Trainings

| | | |
|---|--|---|
| <p>Training - Standardization in the Construction Sector</p> <p>AFFICHER LA PLAYLIST COMPLÈTE</p> | <p>Training - Standardization in the Aerospace Sector</p> <p>AFFICHER LA PLAYLIST COMPLÈTE</p> | <p>Training - Standards and standardization</p> <p>AFFICHER LA PLAYLIST COMPLÈTE</p> |
| <p>Training - ILNAS E-Shop</p> <p>AFFICHER LA PLAYLIST COMPLÈTE</p> | <p>Training - National delegate in standardization (CENELEC and...)</p> <p>AFFICHER LA PLAYLIST COMPLÈTE</p> | <p>Training - National delegate in standardization (CEN and ISO)</p> <p>AFFICHER LA PLAYLIST COMPLÈTE</p> |

First National Standardization Commission Cybersecurity

INTERNATIONAL
36 national delegates

ISO &
ISO/IEC JTC 1
ISO/IEC JTC 1 /SC 27
ISO/IEC JTC 1 /WG 13
ISO/PC 317

CEN-CENELEC
JTC 13

7 national delegates

EUROPEAN

ETSI
TC CYBER

16 national members
(of ETSI)



Mr. Jérôme HOEROLD
ILNAS/OLN



Dr. Emilia Tantar

Chief Data and Artificial Intelligence Officer, Black Swan LUX





Dr. Emilia TANTAR
Black Swan LUX

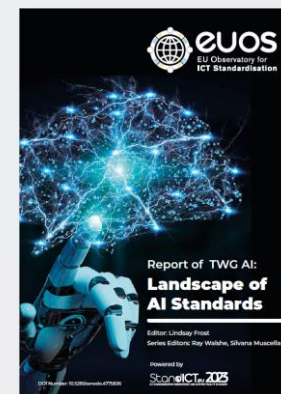


Participation in technical standardization:

- 2018: ISO/IEC JTC 1/SC 42 - Artificial Intelligence
 - Chairwoman of the National Mirror Committee since 2021
 - Liaison representative from SC 42 to Small Business Standards since May 2021
- 2020: ISO/IEC JTC 1/SC 40 - IT service management and IT governance
- 2020: ISO/IEC JTC 1/WG 13 - Trustworthiness
- 2020: IEC/SEG 10 - Ethics in Autonomous and Artificial Intelligence Applications
- 2020: CEN-CENELEC Focus Group Artificial Intelligence
- 2021: CEN-CENELEC/JTC 21 - Artificial Intelligence
 - Co-Convenor of the Ad Hoc Group 2 “AI Conformity Assessment”

Other standardization activities at European level:

- Involvement in the EU Observatory For ICT Standardisation - Technical Working Group on Artificial Intelligence (TWG AI):
 - Participation in the preparation of the report “Landscape of AI Standards” (May 2021)
- Representation of the interests of SMEs in technical standardization:
 - Member of the DIGITAL SME Alliance’s Task Force “AI & Standards”



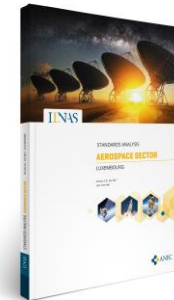
Dr. Emilia Tantar

Chief Data and Artificial Intelligence Officer, Black Swan LUX



Dr. Jean LANCRENON
ANEC GIE

- ◆ For the first time in the 2020-2030 Strategy, the three main sectors are concretely covered
- ◆ Construction:
 - One Project Officer, Mr. Ruddy Enguehard
 - Standards Analysis Construction sector - Luxembourg - March 2021, v1.0
 - **Building** up our competence here since 2020
- ◆ Space:
 - One Project Officer, Mr. Jordan Tromme
 - Standards Analysis Aerospace sector - Luxembourg - July 2021, v3.0
 - Attention to this re-**launched** in 2021
- ◆ ICT:
 - Three Project Officers, Mrs. Natalia Cassagnes, Ms. Rim Doukha, Dr. Shyam Wagle
 - Standards Analysis ICT Luxembourg - October 2021, v9.0
 - **Broadcasting** on the overall ICT field, covering namely ISO/IEC JTC 1 activities, rather than just Smart ICT
- ◆ Many stakeholder meetings held, many more to go!
- ◆ All policies cover up until 2025.
- ◆ Eager to engage with you all in 2022!



THANK YOU
FOR YOUR ATTENTION!

