# AI and Standards Supports

**Prof Ray Walshe**

*ADAPT Research Centre*

*Dublin City University, IRELAND*

[Ray.Walshe@DCU.ie](mailto:Ray.Walshe@DCU.ie)

# Key-Achievements of StandICT.eu 2023 so far

**6** Open calls Completed

Open Call #7 now launched & runnning until 06 July

Functional **Grants Platform** for applications & evaluation process (58 contractualised EPEs)

**8** Webinars on topical subjects (AI, Cybersecurity, EU ICT Policies, Trusted Information, Education in Standardisation, Blockchain)

Participation to **33** third-party events + **9** SDOs meetings

**16** Memorandum of Understanding signed with relevant players Synergies with **56** Stakeholders

**EUOS Release** (March 2021) + *Publication of AI Landscape Report + Smart City Landscape Report + Trusted Information Report*

**11** EUOS TWGs on key ICT domains to work on dedicated Landscape & Gap Analysis
**4 Landscape Reports** completed

More Landscape Analysis reports in release pipeline for 2022 (**Blockchain, IoT, EDGE, Robotics, Ontologies**)

COMMUNITY
**1484** registered users
**3165** LinkedIn Followers
**790+** Twitter Followers

Expert Advisory Group (EAG) members from SDOs, European Commission & Industry (**20 members** contributing to keep topic list updated)

**3 Impact Reports** released to disseminate the concrete outputs of fellows funded under Open Call #1 e #2

4th issued in June 2022

# 1st to 6th Open Call
# RESULTS & POPULAR TOPICS

**FUNDED**
**217**
Applications for a total amount of
**1.565.796,54 €**

**GRANT TYPE**
**197** Long term
**18** Short term
**2** One Shot

**ORGANISATION TYPE**
**44%** SMEs    **21%** Academia / Research
**26%** IT Consultancy / Development
**2%** Large Enterprise    **5%** SDO
**2%** Goverment / Public Services

**GENDER**
**42** FEMALE    **175** MALE

*Consistent number of proposals coming from applicants coming from SMEs and/or IT field as well as from Academia/Research*

*Cybersecurity, 5G, Artificial Intelligence, Blockchain & DLT proved to be yet the most popular topics.*

*A wide range of different topics tackled: e-Health; Semantics; Smart Grids; Smart Cities and more.*
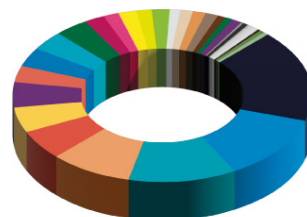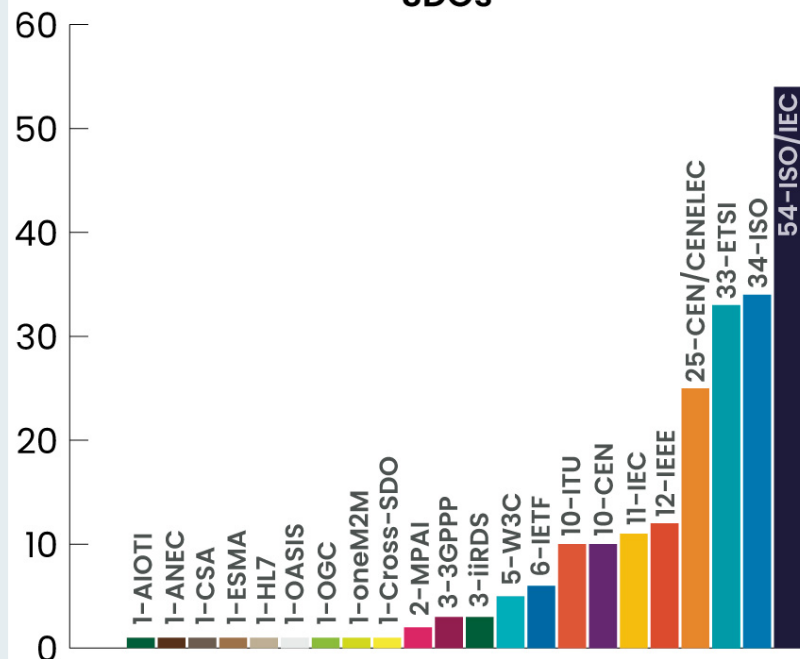
## MOST TARGETED TOPICS

- **37** Cybersecurity
- **27** Artificial Intelligence
- **24** Blockchain & DLT
- **23** 5G
- **13** Quantum Technology
- **11** e-Health
- **9** Semantic Interoperability
- **8** Smart Cities
- **7** Fintech & Regtech
- **6** Electronic Identification & Trust Services
- **6** Smart Grid & Smart Metering
- **5** Cross Domain Technologies
- **4** Accessibility of ICT
- **4** Big Data, Open Data & Public Sector Information
- **4** Intelligent Transport Systems
- **4** IoT
- **4** Ontology
- **3** ICT
- **2** Circular Economy
- **2** e-Transport

- **2** Industry 4.0
- **2** Personal Identification
- **2** Trusted Information
- **1** Augmented Reality
- **1** Building Trust
- **1** Cloud Computing
- **1** Construction
- **1** Digital Twins
- **1** ICT Environmentsl Impact
- **1** Privacy
- **1** Robotics & Autonomous Systems

## SDOs



Bar chart of SDOs: 1-AIOTI, 1-ANEC, 1-CSA, 1-ESMA, 1-HL7, 1-OASIS, 1-OGC, 1-oneM2M, 1-Cross-SDO, 2-MPAI, 3-3GPPP, 3-iiRDS, 5-W3C, 6-IETF, 10-ITU, 10-CEN, 11-IEC, 12-IEEE, 25-CEN/CENELEC, 33-ETSI, 34-ISO, 54-ISO/IEC

# StandICT.eu 2023
ICT STANDARDISATION OBSERVATORY AND SUPPORT FACILITY IN EUROPE

## IoTWeek Dublin
### June 20-23, 2022

**euos** — EU Observatory for ICT Standardisation

---

**A Bird'S eye ICT Standardisation in AI**

**Download**

**A BIRD'S EYE ICT STANDARDISATION IN SMART CITIES**

OASC — OPEN & AGILE SMART CITIES

**Download**

**TRUST IN THE EUROPEAN DIGITAL SPACE IN THE AGE OF AUTOMATED**

**Download**

---

*"Landscape of Artificial Intelligence Standards"*, *"Landscape of Smart Cities Standards"* and *"Landscape of Trusted Information Standards"* are the fruit of the dedicated Technical Working Groups.

The Reports provide an encompassing compilation of standardisation efforts underway in the framework of European SDOs, such as CEN and ETSI, Government, Public Bodies and Agencies, Global SDOs, and initiatives.

---

**11 Technical Working Groups** that encompass **+100 renowned Standards experts** in key ICT and technological domains:

1. Artificial Intelligence
2. Blockchain
3. Smart Cities
4. Cybersecurity
5. Trusted Information
6. Digital Twin
7. Big Data Interoperability
8. IoT & Edge Computing
9. Ontologies
10. Robotics
11. EUOS Academy

---

## StandICT.eu 2023
ICT STANDARDISATION OBSERVATORY AND SUPPORT FACILITY IN EUROPE

Looking for funds to support your work on **ICT standards**?

Submit your proposal to the
### 7th Open Call

Open Date: 5th May 2022
Closure: 6th July 2022

**APPLY NOW!**

"Artificial intelligence is a global "game changer". It will transform our lives and our societies. It is sometimes said that the best way to meet the future is to create it. Let us not leave that to others."
**[Morten Irgens, Vice-Rector, Oslo Metropolitan University, Norway]**

---

The #7 OC will run until the **06th of July**.
The leading theme will be **"AI, Data & Robotics"** and the list of eligible topics has been augmented with the introduction of new topics of the recently released ICT Rolling Plan and more (i.e. **Data Economy, 6G, U-Space**)

https://www.standict.eu/standicteu-2023-7th-open-call

# HSbooster.eu
Horizon Standardisation Booster

## Objectives

**General Objective:** To test a "standardisation booster" programme to facilitate European results in standardisation

**Obj.1** EU Community  **Obj.2** Serve H2020/HE Projects  **Obj.3** New standards development  **Obj.4** Uptake of new technologies

### Policy, Standards, and Synergies
- 3 impact reports
- 1 sustainability report
- 25+ MoUs signed
- 100+ measurable liaisons H2020-HE Projects/SDOs
- 500+ impacted standards

### Reports
- Interim & final call monitoring reports
- Service matrix
- Lessons learned & service report
- Initial, intermediate and final impact reports
- Sustainability report

### Training Academy
### EAG
### EPE
### Pan-European Synergies

### The HSbooster.eu Programme
- 1,000+ H2020/HE projects served overall
- 1 continuously open call for recruiting 250+ External standardisation Experts (EPE)
- 250+ Automated services delivered
- 250+ Proactive services delivered
- 5 open calls, assigning 500 Premium services
- 6 training packages, 1,500+ trainees

### Community
- 2,000+ engaged community members
- 250+ EPE members
- 10 EAG members
- 3,000+ DB of H2020/HE projects with promising standardisation paths

### Outreach
- 14 Webinars
- 3 Workshops
- 2 Yearly "Impact Events"
- 24 newsletters
- 8 Press Releases

---

## IOT Week Dublin
### June 20-23, 2022

*A new service for EU research projects that want to ensure that their* **results create real impact** *by contributing to standards development. -*
**Peter Droell, Director at the European Commission's Research and Innovation Unit**

---

## HSbooster.eu
Horizon Standardisation Booster

### 5 OPEN CALLS

**Covering topics related to the standardisation urgencies** highlighted in the **EU Strategy on Standardisation.**

The **1st OPEN CALL** will start on **21st June** until **30th September**

2nd OPEN CALL > October 2022 – January 2023
3rd OPEN CALL > February – May 2023
4th OPEN CALL > June – September 2023
5th OPEN CALL > October 2023 – January 2024

Health
Resilience
Sustainable Digitalisation
EU Green Transition
Smart City & Circular Economy

Funded by the European Union

---

## HSbooster.eu
Horizon Standardisation Booster

### OPEN CALL for Standardisation Experts

Supporting Horizon Europe and H2020 projects address Standardisation priorities in Europe

**Join our pool of experts**

Funded by the European Union

---

## External Advisory Group

Backed and supported by experts with complimentary expertise and roles
- Vertical sectors
- Technologies
- Standardisation
- Advisory roles
- Market needs
- Innovation
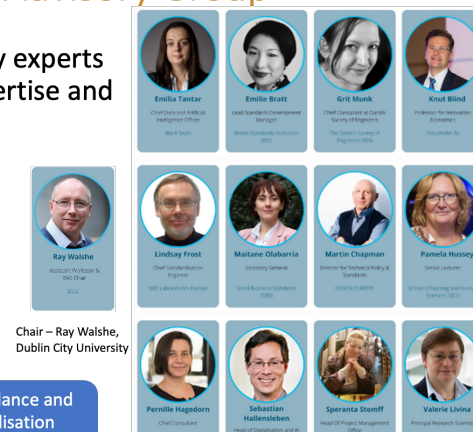
Chair – Ray Walshe, Dublin City University

EAG provides high-level strategic guidance and provides expert input into standardisation

Emilia Tantar
Emilie Bratt
Grit Munk
Knut Blind
Ray Walshe
Lindsay Frost
Maitane Olabarria
Martin Chapman
Pamela Hussey
Pernille Hagedorn
Sebastian Hallensleben
Speranta Stomff
Valerie Livina

CEN CENELEC · ETSI · IEC · ISO · DIGITAL SME · Small Business Standards · OASIS · bsi · NPL · Fraunhofer FOKUS · DA

---

### COMMpla
Communication Platforms and Online Solutions
- Project Coordinator
- COMMpla Platform manager

### Trust-IT Services
communicating to markets
- Automated services management

### DCU
- EAG management Open calls and EPE management

### UNIVERSITY OF BELGRADE
- Training academy management

### DS DANSK STANDARD
- Proactive services management

### SGS
- Premium services management

**HSbooster.eu**
Horizon Standardisation Booster

**IoTWeek Dublin**
June 20-23, 2022

## 57 Standardisation Experts Recruited since 30th May 2022
### Open call open until January 2024.

**Experts by Open Call Topic**

- Sustainable Digitisation — 43%
- Resilience — 20%
- Green transition in Europe — 15%
- Smart Cities and Circular Economy in Buildings — 11%
- Health — 11%

**Experts by Role**

- Experts — 36%
- Chairs — 15%
- Delegates — 9%
- Editors — 8%
- Head of delegation — 6%
- Other — 26%

**Representatives from**

- National Standardisation Bodies — 50%
- International SDOs — 34%
- European Standards Organisations — 16%
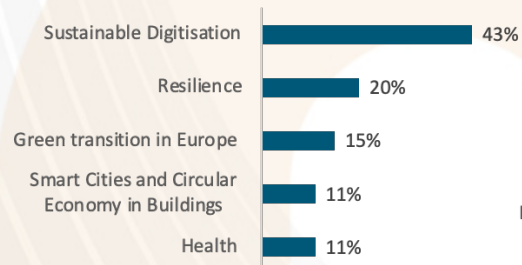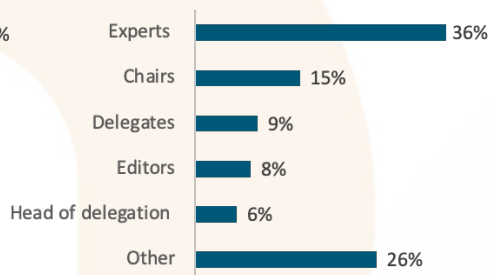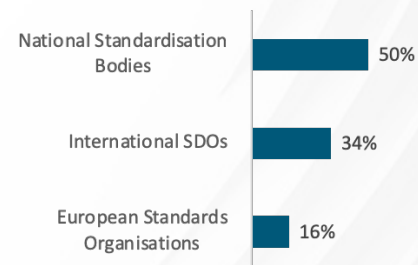
**Gender** 28% Female 72% Male

**Average Years of Experience in standardisation** 5.3

Standardisation practices & procedures | State of the art | Where are revisions or new standards needed? | Optimal standardisation workflows and timelines | Unique inside knowledge to facilitate contributions
Applications open: www.hsbooster.eu/epe/register

**HSbooster.eu**
Horizon Standardisation Booster

- First Open Calls for projects opens 21st June 2022
- July – August
  - Finalisation of service platform & testing
  - Allocation and notification of experts to project applications
- 5th September
  - Service delivery commences
- September 2022 – March 2024
  - Services delivered on first come first serve basis

JTC1 SC42 Artificial Intelligence

**WG 1** Foundational Standards

- ISO/IEC 23053 Framework for Artificial Intelligence (AI) Systems Using Machine Learning (ML)
- ISO/IEC 22989 Artificial Intelligence – Concepts and Terminology
- ISO/IEC 42001 Artificial Intelligence – Management System

**WG 2 (DATA)**

- Part 1: Overview, terminology and examples
- Part-2 – Data quality measures
- Part 3: – Data quality management requirements
- Part 4: – Data quality process framework
- ISO/IEC 5259-x AI– Data quality for analytics and ML
- ISO/IEC DIS 24668 AI— Process management framework for big data ANALYTICS
- Data Life Cycle for AI (DL-AI) AHG
- Data Quality AHG

**WG 3 Trustworthy AI**

- ISO/IEC CD 23894 Risk Management
- ISO/IEC AWI TS 6254 – [XAI] eXplainable AI
- ISO/IEC WD TR 24029-2 Formal methods methodology [RNN-2]
- ISO/IEC WD TR 24368 – Overview of ethical and societal concerns
- ISO/IEC WD TR 5469 – Functional safety and AI systems
- ISO/IEC WD 5059 – Quality model for AI systems

**WG 4 Use cases and applications**

- ISO/IEC AWI 5339 Artificial Intelligence (AI) – Guidelines for AI applications
- ISO/IEC CD 5338 Artificial Intelligence (AI) – AI system life cycle processes

**WG 5** Computational Approaches and Computational Characteristics

- OKER AHG (Ontology and Knowledge Engineering / Representation)
- ISO/IEC DTS 4213 AI — Assessment of Machine Learning Classification Performance
- MLCD AHG (Machine learning computing devices)
- ISO/IEC 5392 AI -Reference Architecture of Knowledge Engineering

ISO JTC1 SC42 IEC
INFORMATION TECHNOLOGY STANDARDS

cen CENELEC

**CENCENELEC JTC21**
**Projects Approved**
TR Conformity Assessment
TR Language processing
**In Preparation**
EN Nudging
Green/Sustainable AI

**Prof Ray Walshe**

*ADAPT Research Centre*

*Dublin City University, IRELAND*

Ray.Walshe@DCU.ie

StandICT.eu 2023
ICT STANDARDISATION OBSERVATORY AND SUPPORT FACILITY IN EUROPE

HSbooster.eu
Horizon Standardisation Booster

Adra-e
AI, Data and Robotics ecosystem