Importance of Standards Education

Towards the future of Education on Standardisation: StandICT.eu EUOS Standards Academy

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The context: EU standardisation strategy

- COM(2022) 31 of 2/2/22: *An EU Strategy on Standardisation. Setting global standards in support of a resilient, green and digital EU single market*

Strengthening and leveraging the EU standardisation system	**Good governance principles**	**EU leading in global standardisation**	**Cutting-Edge Innovation to support standards**	**Education and Skills for standardisation**
- High Level Forum – Chief Standardisation Officer - Prioritisation of standardisation needs - EU excellence hub on standards - Review of standards - Improve European Standardisation System (ESS) process - Adoption of common specs as back-up solution - Task Force EC-ESOs	- Amendment Reg. 1025/2012 on EU standardisation (National Standardisation Organisations – NSOs) - involved in mandates decisions) - Call ESOs to improve their governance (integrity, more inclusiveness, access to standards) - Evaluation of 1025/2012 - EU to develop technical specs through implementing acts	- Coordination mechanisms with MS and NSOs; International observatory. More presence of EC in international standardisation - Foster international standards for a free, open, accessible and global internet - Trade agreements, Regulatory Dialogues and Digital partnerships to include standardisation - Promote International cooperation with different mechanisms, including HE. Support EU experts participation in international standardisation, Promote EU standards in partner countries. Africa and Global Gateway	- EU funded R&D&I to support standardisation. Standardisation Booster - Building critical mass for standards uptake: CEF and DEP - ESOs to integrate open source solutions - Develop a Code of Practice for researchers on standardisation	- Organise Standardisation University Days - Valorisation of R&I through standardisation and pre-normative research: HE and COST - EU Academy Platform and High Level Forum (HLF) for dissemination of standardisation training material

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Key challenges in Standardisation Education (non-exhaustive list)

1. There is **no formal education nor vocational training on standardisation**. Many EU companies – whether large or small – lack a structured and strategic approach to standardisation

2. There is a **generational gap in standardisation** – key EU experts in the field are retiring and the demand for standardisation professionals is growing in the market

3. There is a need to **increase the number of students, researchers and young professionals educated in standardisation**, → European universities, R&I centers and HEI

4. The **multidisciplinary nature of standardisation** presents a challenge in bringing this topic into the curricula of university, as this touches many diverse domains.

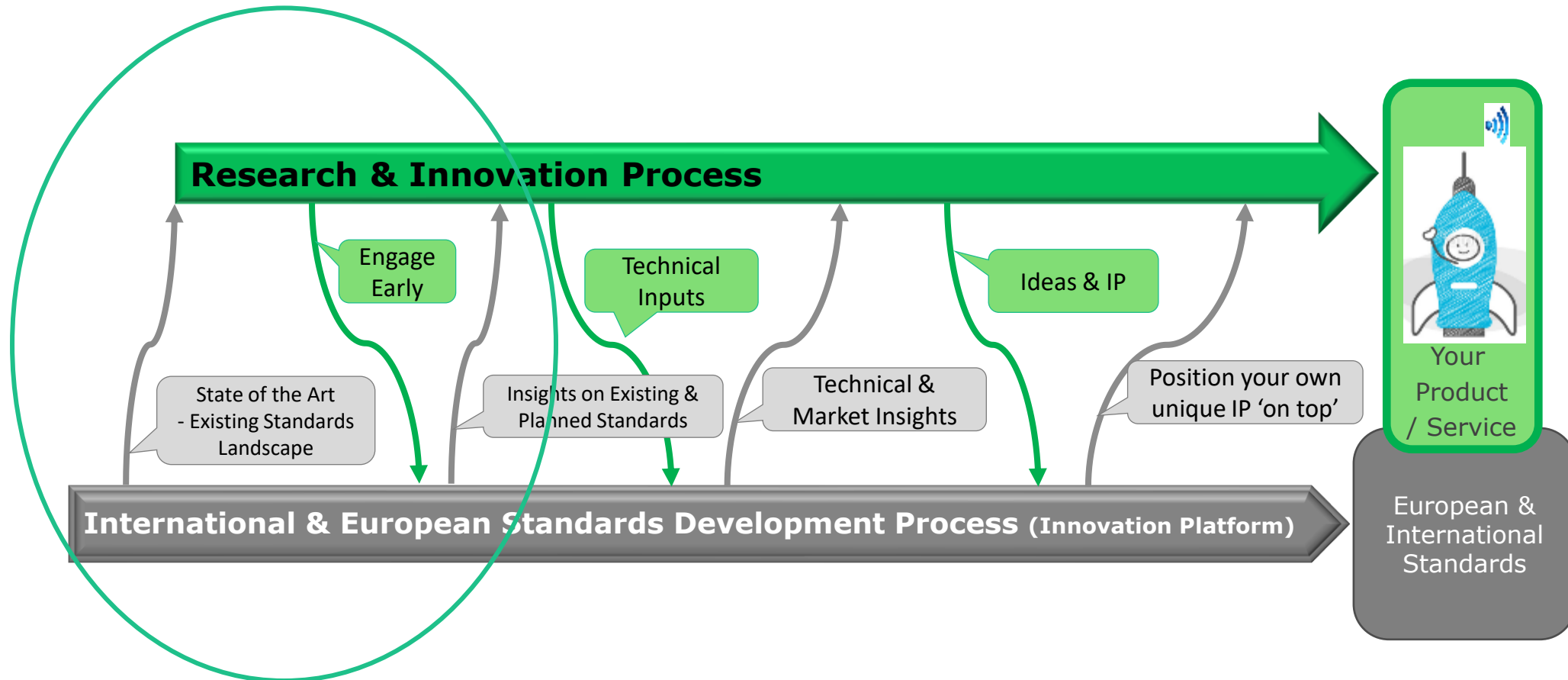5. To **attract new students/young professionals into standardisation**

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Why Integrate Standards, Research & Innovation

Bridge the Innovation Gap for Impact at Global Scale
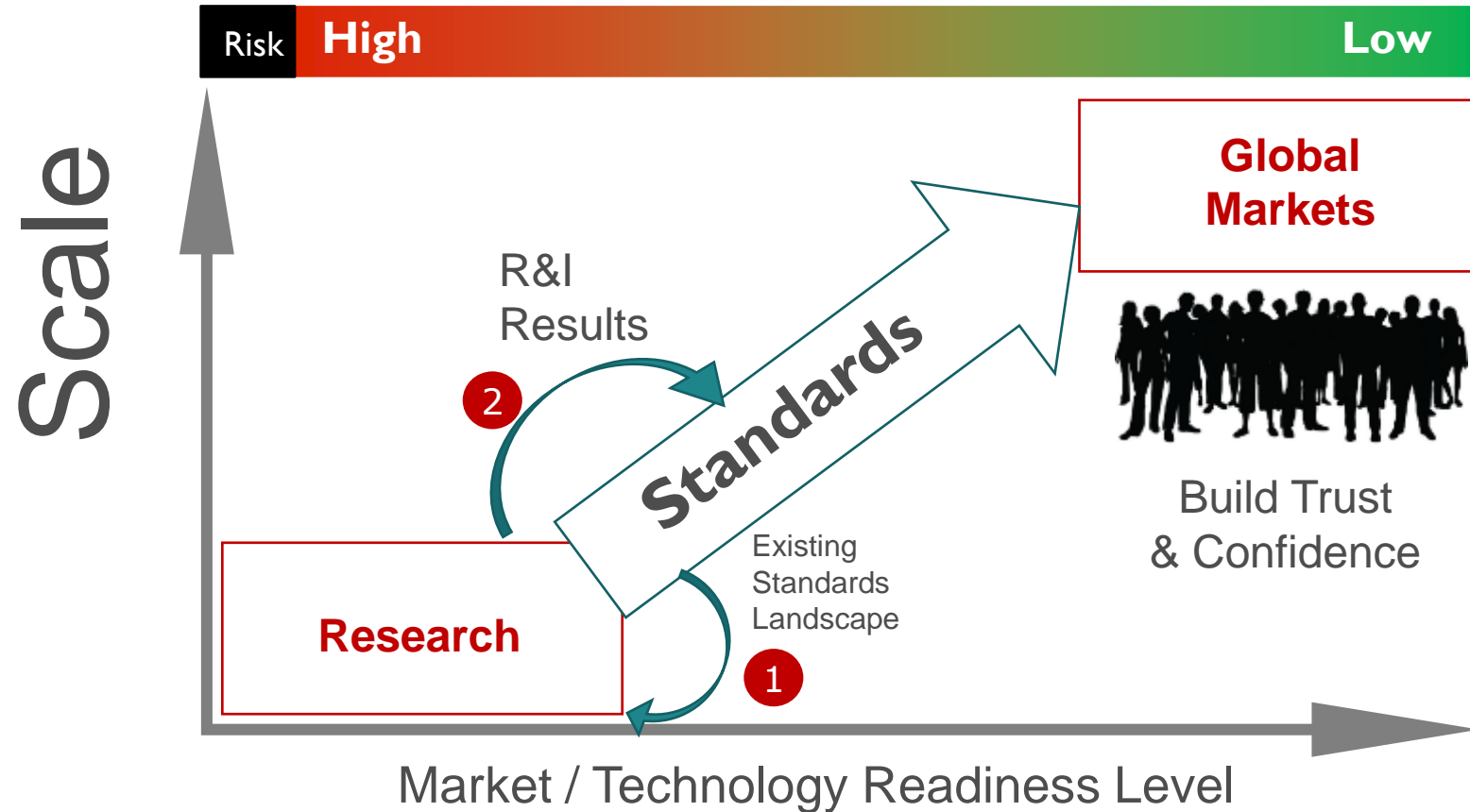
Standards De-risk & Accelerate Technology-Product-Service Development, Adoption & Scaling

Strategic Engagement from R&I in Standards Development

Research & Innovation Process

Engage Early

Technical Inputs

Ideas & IP

State of the Art - Existing Standards Landscape

Insights on Existing & Planned Standards

Technical & Market Insights

Position your own unique IP 'on top'

International & European Standards Development Process (Innovation Platform)

Your Product / Service

European & International Standards

Importance of Standards Education for Researchers & Academics – early phases

Recommendations
- Code of practice on Standardisation

Based on the lessons learnt and success factors from examples of Horizon 2020 projects

Higher education institutions and research & innovation organisations

Project partners

Policy and stakeholders

Inclusiveness – all types of projects with a wide range of TRLs

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Importance of finding synergies amongst ongoing EU initiatives* and do not duplicate efforts

ETSI

National Standardisation Bodies

CEN **CENELEC**

HSbooster.eu **TRAINING ACADEMY**

eUOS Standards Academy

STAND4EU
Boosting the Exploitation of Standardisation Inputs from European Projects

Horizon Europe
THE NEXT EU RESEARCH & INNOVATION PROGRAMME (2021–2027)

DIGITAL EUROPE PROGRAMME

*apologies if other ongoing initiatives are missing in this slide

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Standards Academy

The **Standards Academy** serves as a knowledge-hub on key factors of the Standardisation ecosystem, the functioning of the Standards development process, and its economic and societal benefits *https://www.standict.eu/euos-academy* Tailored StartPacks for Beginner, Intermediate and Advanced users

Standards Academy Programme

- **Improve the expertise and skills**, and knowledge in standardisation strategy and uptake **of European experts of EU organisations involved in international ICT standardisation**;
- Develop **target group-specific training material**, modules and **SME mentorship programme**;
- Perform **large-scale training** through workshops **for different levels of standardisation skills**.

Screening existing teaching material related to standardisation from different sources/organisations

Development of webinars for beginners, intermediate and advanced users in the format of 3 sessions à 2 hours

One specific session about the Standards Academy at the EURAS 2023 in Aachen between 28th and 30th of June to collect feedback

High-Level Forum on European Standardisation
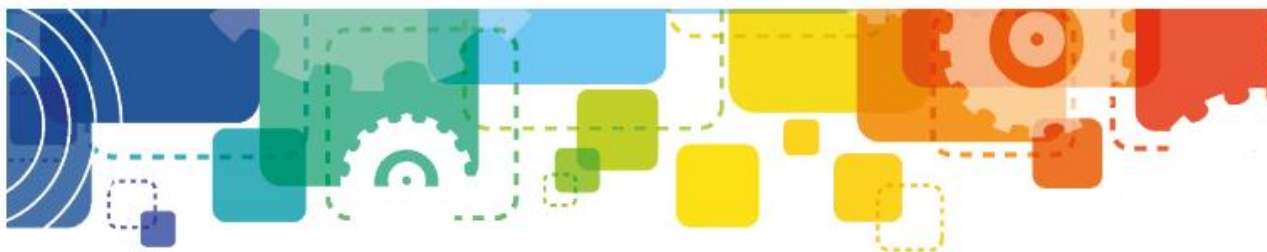
High-Level Forum on European Standardisation

Priorities identified[1]

Sectoral work-streams

Horizontal work-streams

Education & skills

Three proposals submitted by:
- TU Eindhoven
- CEN & CENELEC
- DIGITALEUROPE

With support from other HLF members:
- France
- The Netherlands
- DIGITAL SME Alliance
- DIGITALEUROPE
- Belgium
- SBS
- T&D Europe
- The Netherlands

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Horizon Europe WP 23-24 initiatives

HORIZON-CL4-2023-HUMAN-01-63: Provide for a strong and sustainable pool of experts for European Standardisation: attract the students of university/HEI

<u>Expected Outcome</u>: Projects should support the following outcomes:

- Inclusion of standardisation knowledge in curricula of university/Higher Education Institutions (HEI) to educate students about standardisation in order to attract them, a tomorrow's professionals, to contribute to standardization: *building up a strong and sustainable pool of European standardisation-competent professionals ready to engage in European and International Standardisation;*

- Increased visibility of standardisation in European universities/HEI;

- More standardisation-competent university/HEI education leavers forming the pool of professionals ready to contribute to and defending EU's interest in standardisation;

- More set of courses for universities/HEI integrating standardisation contents and covering the respective technological, innovations-supportive and societal aspects including the potential of standards to safeguard EU core values;

- Increased visibility of standardisation at universities/HEI through "Academic Standardisation Days" and setting-up of a Students' Standardisation Association.

Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 2.50 and 3.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 3.00 million.

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EU Excellence Hub

- Network of EC colleagues working on standardisation (across all DGs)

- Internal Working Group on *"Research, Innovation and Standards"* with colleagues from different EC services (DG GROW, DG CNECT, DG RTD and JRC)

- EU Excellence Hub is a place for promoting all the ongoing standarisation initiatives amongst EC colleagues. **If you have any material, please send it to us!**

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Thank you

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