

Hydrogen: understanding the EU policy context

Women in ICT standardization, Online event 7 March
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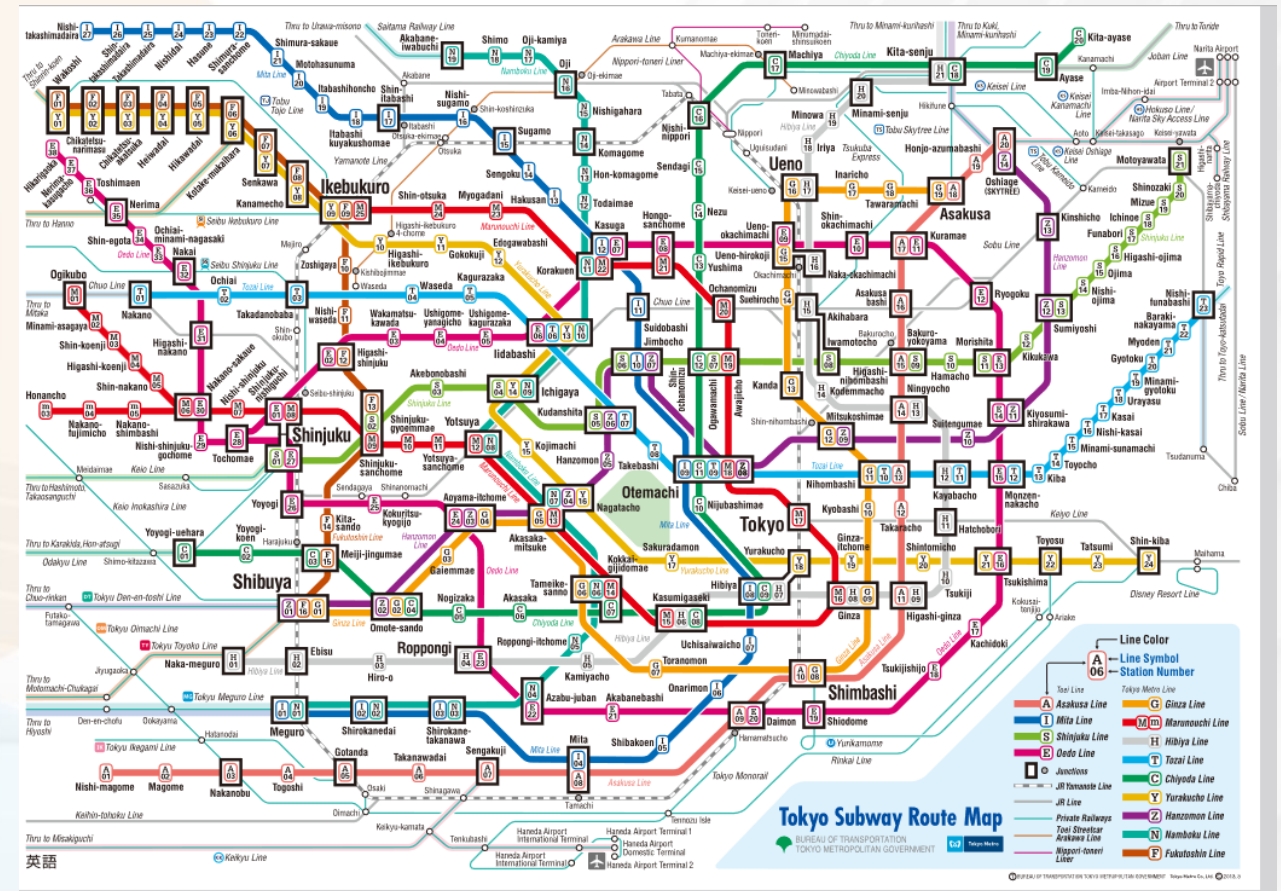


The HSBooster.eu and StandICT26.eu expert


- **Licensed architect, master in Lobbying and EU legislation (STEM&LEGAL BACKGROUND)**
- **Contracted funding expert for the EUAA Operation in Spain (Madrid) and in Cyprus (Nicosia)**
- **EU Japan visiting scientist** at the Building Research Institute (former Ministry of Construction Japan) – technical standards
- **Programme Officer, auditor of R&I projects, researcher, public official.**
- **Evaluator of proposals for the EC and other international donors.**

- **Expertise:** standardization, climate change, integrated urban solution, energy, RES, Innovation of SMEs, close to market products, internationalization of EU SME, innovative programmes for EU and international HEI, circular economy

To provide a general orientation on the EU legal framework behind standards and cooperation with SDOs to improve the single market



Source: https://www.kotsu.metro.tokyo.jp/eng/services/pdf/rosen_e.pdf



Hydrogen – Understanding EU policy context

RECURRENT ISSUES WHEN ADVISING APPROVED
PROJECTS ON STANDARDS as HSBooster.eu expert

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RECURRENT ISSUES WHEN ADVISING APPROVED PROJECTS ON STANDARDS

- To provide a general orientation on the EU legal framework behind standards and cooperation with SDOs to improve the single market.
- To **better** understand the state of the art and the complex standard landscape on hydrogen in an EU evolving scenario.
- To help identify specific areas worth of new standards/revised standards relevant to the beneficiary, provided the highly experimental nature and maturity of technologies.
- To Help identify similar experimental projects related to the value chain of hydrogen funded by the EU or other international donors.
- To help identify HSBooster training opportunities due to the complexity of hydrogen transition as both at legal and technical level

Support 1) To provide a general orientation on the EU legal framework behind standards and cooperation with SDOs to improve the single market.

BACKGROUND INFORMATION

- **ROLE OF EUROPEAN STANDARDIZATION ORGANIZATIONS and STANDARDS**

- *“The European standardisation organisations are defined in Article 2, point 8 and Annex I to the Standardisation Regulation (main reference Regulation (EU) No 1025/2012). **There are three European standardisation organisations: CEN, CENELEC and ETSI.** They have an exclusive role to carry out standardisation work requested by the Commission in support of EU legislation and policies. The European standardisation organisations **now cooperate with a wide range of stakeholders, including from third countries,** and allow them to participate not only in the technical work but also in their internal policy- and decision-making.” (Excerpts from COM (2022) 32 final. Explanatory note)*

- **MAIN DOCUMENTS**

- [EU Code of Practice on standardization](#) (EUR_Lex)
- [COM\(2022\) 32 final](#) - Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulation (EU) No 1025/2012 as regards the decisions of European standardisation organisations concerning European standards and European standardisation deliverables.
- [Standard essential patents regulation](#) [EU Legislation in Progress], EPRS, Nov 2023

PRELIMINARY RECOMMENDATIONS: Review the EU decision process as it is essential to understand how the relationship among EU institutions and SDOs has evolved and is evolving

Support 2) To better understand the state of the art and the complex standard landscape on hydrogen in an EU evolving scenario for aspects relevant to the beneficiary.

STATE OF PLAY ON ACCELERATION ON HYDROGEN TRANSITION AT EU LEVEL

In the course of 2022 and early 2023, transition to hydrogen as a possible alternative to fossil fuels has got an acceleration with a new impulse and latest strategies/initiatives/targets set by the EC. However, many aspects are still to be negotiated at the policy, normative level which overall pose quite a challenge for new experimental projects and new technologies as to catch up and to close the gaps along the value chain from generation to consumption.

Among the main issues under negotiations in the EU decision making process

- 1) establishing which sources of generation makes **for Green hydrogen** (see the recent EP ruling on France nuclear-powered electric grid to be classified as "low carbon".,
- 2) the problems with the use of existing gas networks (due to **embrittlement even with low concentration of hydrogen**) and the necessity to phase them out, whereby given the urgency of transition, hydrogen would require building a new infrastructure;
- 3) "how to ensure that green hydrogen production via electrolyzers does **not use renewable energy** that would otherwise have been used to provide zero-carbon electricity to the grid", a key controversial concept known as **"additionality"** (*);
- 4) **Lack of specific standards, an issue now high on the EC agenda**, where hydrogen is one of the priority of the 2023 WP of the Union, a process that will however require more time to be adopted and to have an impact on the market;
- 5) **Technology uncertainty on availability and readiness of the Technology (TRL) at the moment;**

(* Source: <https://www.hydrogeninsight.com/policy/european-commission-finally-publishes-definition-for-green-hydrogen-providing-the-certainty-required-for-investment-to-begin/2-1-1403136> (Feb 2023)

Support 3) To help identify specific areas worth of new standards/revised standards relevant to the beneficiary, provided the highly experimental nature and maturity of the proposed technology

STATE OF ART AND EU WIDE PROGRESS IN POLICIES RELATED TO STANDARDIZATION IN THE HYDROGEN APPLICATIONS

- Below reference to some of the main and most up-to-date publications and document (legislative and quasi legislative) by the EP, EC and other institutions on hydrogen and on the recent standard priorities informing the EC 2023 Work Programme, provided by the expert to directly engage and contribute to the standardization process at EU levels.
 - [EPRS Fiche on Hydrogen directive and networks \(April 2023\)](#)
 - Commission note of 27/03/2023 C(2023) 1210 final "[The 2023 annual Union work programme for European standardisation](#)", Among the Priorities : *Commission has identified standardisation actions on hydrogen.*
 - Latest report by the European Clean Energy Alliance (ECHA) and the latest publication on hydrogen standards "[ROADMAP ON HYDROGENSTANDARDISATION](#)" Published by the EC DG Internal Market on 2/3/2023
 - [Commission sets out rules for renewable hydrogen](#) (Press release 3/2/2023)
 - [Scoping study for supporting the development of a-KI0722020ENN.pdf](#) (EC, DG R&I – 2022)

HSBooster expert suggestion for future action...

RECOMMENDATIONS to take INTERNAL ACTION

- Use expertise and experience by partners representing specific networks on energy and hydrogen to gather technical inputs/evidence and to build contacts with SDOs (especially representatives of affiliated national organizations in partners' MS) and specific TCs.
- Monitor the EU legislation on:
 - hydrogen using inputs by the expert that highlights the main issues under discussion reflexing a complex evolving scenario (additionality, green hydrogen, technology maturity etc).
 - [on the Standard essential patents regulation](#) which represents an unfamiliar but powerful area to secure technology from competitors
 - the role of the EU institutions and their cooperation with EUROPEAN STANDARDIZATION ORGANIZATIONS which is continuously evolving .
- Take opportunity offered by HSBooster in getting targeted training in order to grow awareness on potential behind standardization especially when it comes to very experimental and challenges areas/technologies like the one addressed by the project.



Quote from direct experience...

A STEM background boosts
women talent to navigate the
complexity of standardization

ありがとうございました