



HSbooster.eu
Horizon Standardisation Booster



Recommendations Report

High-level Recommendations for the Future Standardisation Booster Framework Contract

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Work Package

WP5

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Introduction

HSbooster.eu is a 36-month initiative that pilots a European Standardisation Booster. The booster provides a series of support services to EU-funded projects to help them to increase and valorise project results by contributing to the creation of or revision of standards.

This document provides a set of recommendations for a future booster concept and framework based on the learnings and experiences in the HSbooster.eu project. The objective is to sustain and enhance the link between research and standardisation domains in Europe.

A series of external workshops and reviews were conducted to refine the recommendations further. The continuous engagement of all stakeholders in this process of ongoing review and enhancement is a reflection of the collective commitment that is essential to HSbooster.eu and future endeavours. For further background on this report, you can read the full deliverable D5.2 *“Recommendations Report - Framing the Future HSbooster.eu Framework Contract”*.

Below we summarise the seven recommendations which are then elaborated in document. Each is supported by a comprehensive set of considerations and accompanied by practical suggestions aimed at maintaining momentum in a future booster initiative. This structured approach ensures that this report is both informative, actionable, and provides a clear roadmap for sustained progress.

The seven recommendations are:

Recommendation 1 – Framework and resources

A future booster should mature the HSbooster.eu concept while maintaining a high service level. To do so, a clear scope and framework should be established, coupled with the allocation of adequate resources .

Recommendation 2 – Collaboration between key stakeholders

Establishing a long-term, sustainable link between R&I and standardisation requires a tightly knit collaboration between key stakeholders. A future booster should promote interaction and collaboration between the EC, the booster, the standardisation communities, and beneficiaries.

Recommendation 3 – Premium Service

The HSbooster.eu premium service concept has a proven track record of providing support and advice of very high quality and with a high satisfaction score. The continuation of the premium service or a very similar concept is fundamental for a booster successor.

Recommendation 4 – Tools and platform

HSbooster.eu has developed a comprehensive platform and a varied set of tools that can be pivotal in increasing the link between R&I and standardisation. To maximise their impact, the HSbooster.eu platform and tools should be further developed, further promoted, and widely utilised.

Recommendation 5 – Training Academy:

Education and training are prerequisites for a successful and mutually beneficial relationship between R&I and standardisation. A future booster should increase the use of the existing Training Academy, add new elements continuously based on user feedback and data tracking, and be developed and advertised further to enhance usage.

Recommendation 6 – Framework programmes and the Annual Union Work Programme (AUWP)

Systematic integration of standardisation in framework programmes and full incorporation of standards/standardisation in calls related to AUWP topics/items will strengthen European priorities. A closer link between R&I and standardisation requests should be established by linking relevant FP calls with AUWP topics and by collaboration with DG GROW and DG RTD to support European legislation and policy goals.

Recommendation 7 – Upscaling

Upscaling and full implementation at the member state level is paramount for a booster to create significant and long-term impact. Mechanisms for upscaling should be developed in dialogue with multipliers and concepts for one-to-many services should be further explored.

Through these recommendations, a future booster will deliver the necessary impact to support and sustain a resilient link between research and standardisation domains.



Recommendation 1 – Framework and resources

A future booster should mature the HSbooster.eu concept while maintaining a high service level. To do so, a clear scope and framework should be established, coupled with the allocation of adequate resources.

A future booster should consider:

1. A long-term initiative running for a minimum of three years to have sufficient time and resources to further develop the concept while improving existing and developing new services, tools, and training material.
2. Funding to cover a set of direct costs and subcontracting:
 - a. A pool of funding for acquiring standards, participating in TC/WGs, and developing CWAs should be made available for projects that apply for this support and are selected based on a set of predefined criteria.
 - b. Funds to the EAG to give advice and carry out concrete tasks such as screening premium project service reports, supporting the development of tools, and further developing the methodologies established in HSbooster.eu.
 - c. Funds to subcontract specialists to carry out concrete training activities including development of e-learning, articles, games, and training materials. Training and webinars often require specialised skills to be of a high quality.
 - d. Flexible funding to the EPE. Experts should be able to apply for additional funding when carrying out more extensive or complex services such as activities that require knowledge of several fields and TCs.
3. Having a key set of competencies in place in a future booster including sufficient experience in delivering booster services, project management, training, data management, platform development, communication, and networking as well as knowledge of standardisation, EC framework programmes, and the European policy landscape.
4. Increasing the standardisation knowledge base e.g. by having a pool of national standard bodies, CEN, CENELEC, and ETSI etc. as affiliated entities or subcontractors.

Recommendation 2 – Cooperation between key stakeholders

Establishing a long-term, sustainable link between R&I and standardisation requires a tightly knit Collaboration between key stakeholders. A future booster should promote interaction and collaboration between the EC, the booster, the standardisation communities, and beneficiaries.

A future booster should consider:

1. Carrying out joint workshops with the EC to include the policy aspects at workshops and webinars to increase visibility and outreach to beneficiary stakeholders.
2. Creating a close partnership with CEN-CENELEC and ETSI, through CCMC and the ETSI secretariat and through the management/leadership of these.
3. Continuous dialogue with ESO strategic groups addressing R&I e.g. CEN-CENELEC working group on standards, innovation, and research and ETSI RISE to build trust and create a channel to CEN, CENELEC, NSBs, other projects, and the EC.
4. Collaborating more closely with NSBs as this is crucial for the success of a booster continuation.
5. Developing a concept for interaction with TCs e.g. by promoting the booster concept at TC and WG meetings and facilitating more cooperative activities between the booster and TCs e.g. joint workshops.
6. Cooperating with the JRC on identifying science and technology areas to be systematically considered by CEN, CENELEC and JRC as topics for the standardisation foresight workshop “Putting Science into Standards”.
7. Increasing dialogue with beneficiaries e.g. dedicated workshops to collect input and as members of the EAG.
8. Hosting a forum to stimulate cooperation, joint activities and foster synergies to enable cross collaboration between vertical and horizontal activities. This may include organising networking events and workshops that connect R&I projects directly with standardisation committees to foster better understanding and direct communication.
9. Setting up an annual conference dedicated to research and innovation hosted by a European university.

Recommendation 3 – Premium Service

The HSbooster.eu premium service concept has a proven track record of providing support and advice of very high quality and with a high satisfaction score. The continuation of the premium service or a very similar concept is fundamental for a booster successor.

A future booster should consider:

1. Continuing and leveraging the HSbooster.eu premium service concept.
2. Adapting the premium service model to support projects more dynamically across their lifecycle by offering initial consultation and support during the proposal writing phase and early project stages. In certain cases, involving more than one EPE per project should be considered to cover more standardisation aspects.
3. Regularly following up on finished services after a fixed or agreed time period to offer additional support as standardisation activities can be lengthy and further advice and support may be needed.
4. Establishing regular feedback mechanisms where projects can voice their challenges and suggestions directly to the HSbooster administrators to continually refine and improve the service.
5. Providing premium services for nationally funded research and innovation projects across EU and EFTA, as European standardisation is intricately connected to and reliant on national initiatives and activities
6. Continuously offering one-to-many webinars dedicated to the EPE to raise awareness and increase the use of the training academy and key booster tools and methodologies when carrying out services.
7. Adopting the existing EPE and increasing the number of experts in key strategic areas (such as those defined in the AUWP) and in areas where there are many applicant projects but few experts by developing targeted promotion material, using social media, and cooperating with TCs.
8. Developing a specialized training program to enhance the skills and knowledge of experts that are below par to elevate their advisory capabilities and to ensure that they provide researchers with the most effective and engaging guidance on standardisation.
9. Engaging more experts from National Standard Bodies as experts as they can be crucial in the delivery of services. Due to their extensive knowledge and access to standards, NSB experts can be matched with all types of projects and are crucial when there is no expert available in the requested domain.
10. Further developing and automating the ranking of EPEs to facilitate an easier processing of scoring of experts and to decrease the number of experts rejected due to errors or lack of data.
11. Promoting, and assisting project representatives in selecting relevant TCs and WGs and entering either as members or as document subscribers to follow and contribute to the standardisation work.
12. Continuing to use the Premium Deep Dive service as it is a mean to facilitate coordinated and collaborative strategies between projects to contribute to standardisation in a timely manner.



13. Encouraging stakeholders such as EPE members and TC/WG members to promote the Booster Premium service and Premium Deep Dive service in their network to engage projects to contribute to the development of standards.
14. Evaluating the structure of the EAG to ensure effectiveness and best practice. The EAG should include key representatives of ESOs, selected NSBs, EC representatives, RTOs, projects, and multipliers to deliver value driven insight and advice.
15. Extending the CWA Premium Service support to enable projects to develop CWAs.

Recommendation 4 – Tools and platform

HSbooster.eu has developed a comprehensive platform and a varied set of tools that can be pivotal in increasing the link between R&I and standardisation. To maximise their impact, the HSbooster.eu platform and tools should be further developed, further promoted, and widely utilised.

A future booster should consider:

1. Continuing and leveraging the Intranet developed in HSbooster.eu as a seamless IT platform, along with its suite of digital tools and procedures, as it is essential for supporting the services provided and is integral to the upscaling effort.
2. Further developing and implementing the SOT as it has an unused potential to support FP project applicants in determining their standardisation route and potential. The SOT could be incorporated into EC support platforms for proposal writing to increase linkages to standardisation.
3. Including a mechanism for crediting researchers for their input in the standard catalogue, to recognize and incentivize the research community's contributions to standards thereby acknowledging their valuable role in advancing standardisation efforts.
4. Handling data and data management exclusively via the platform to support workflow processes and promote traceability.
5. Utilising the contact databases developed for the project as it is a key asset for future outreach campaigns providing available contact information of projects and beneficiaries.
6. Integrating and looking for synergies with tools developed in other relevant projects looking at linking research and standardisation.



Recommendation 5 – Training Academy

Education and training are prerequisites for a successful and mutually beneficial relationship between R&I and standardisation. A future booster should increase the use of the existing Training Academy, add new elements continuously based on user feedback and data tracking, and be developed and advertised further to enhance usage.

A future booster should consider:

1. Continuously providing targeted, high-quality training that is in line with thematic areas set out by a future booster.
2. Investing in long-term capacity building programs for the R&I Community to be able to contribute effectively to standardisation activities.
3. Developing courses, guides, the SOT, and manuals for the R&I community on how standardisation activities can be introduced in a project proposal.
4. Continuing to produce more success stories based on the premium services activities to increase demand of services from projects and to inspire experts when providing services.
5. Cooperating with other Training Academies and the ESOs, as well as similar projects to grow the network of stakeholders delivering training in the TA and incorporating training material from other initiatives.
6. Developing and expanding the online platform with E-learning material to serve projects with relevant educational materials for self-paced, independent, and remote learning.
7. Offering on-site training sessions to/in collaboration with targeted partners, for instance major universities/research institutes as well as major research conferences and events.
8. Developing and integrating a module for training-of-trainers to enhance capabilities of standardisation experts to meet the needs of projects.
9. Continuously evaluating and updating the TA based on online reviews, data tracking, and QR-codes for fast evaluation by users to ensure that the TA is renewed, fit for purpose, and state-of-the-art.

Recommendation 6 – Framework programmes and the Annual Union Work Programme

Systematic integration of standardisation in framework programmes and full incorporation of standards/standardisation in calls related to AUWP topics/items will strengthen European priorities. A closer link between R&I and standardisation requests should be established by linking relevant FP calls with AUWP topics and by collaboration with DG GROW and DG RTD to support European legislation and policy goals.

A future booster should consider:

1. Collaborating with DG Grow and DG RTD to strengthen the link between R&I framework programmes and standardisation through systematised reference to and incorporation of research and standards in framework programmes pillars and individual calls. Links to a future booster should be provided when relevant.
2. Providing support for EISMEA standardisation projects and function as the link between R&I stakeholders and the standardisation community. EISMEA standardisation projects should consider heightened emphasis on incorporating research & innovation and societal stakeholders into standardisation activities, ensuring a more inclusive and comprehensive approach.
3. Supporting projects in several R&I domains. Actions and priorities should be aligned with the AUWP actions to support the EU's policy ambitions.
4. Cooperating with the European Commission to strengthen the link between the R&I community, Standardisation Requests, and the TCs responsible for developing the requested standard documents by e.g. matchmaking and providing training to relevant R&I stakeholders to enable them to participate actively in the work being carried out.
5. A trial where specific calls refer to the booster and/or where projects, clusters, or missions are contacted by the European Commission as pilots of the services.
6. Cooperating with the European Commission on dissemination activities, as communications endorsed by the European Commission are highly effective and can significantly amplify the usage of booster services.

Recommendation 7 - Upscaling

Upscaling and full implementation at the member state level is paramount for a booster to create a significant and long-term impact. Mechanisms for upscaling should be developed in dialogue with multipliers and concepts for one-to-many services should be further explored.

A future booster should consider:

1. Further developing the one-to-many services where one or more experts serve several interlinked projects e.g. within the same research area, sister projects or EU missions.
2. Continuously developing webinars and workshops on dedicated areas as they attract a significant audience and support several projects at once. They can be recorded and placed on social media channels which can create further impact.
3. Providing support services for proposal writing to ensure that standardisation is considered during strategic planning and consortium selection. Services could include current project assets such as the SOT, informative webinars, training, and consultancy from proposal stage up to ongoing projects.
4. Developing a systematic link and cooperation mechanisms with universities and their Technology Transfer Offices and Research Offices to support knowledge transfer and dissemination of booster activities.
5. Developing a systematic link to research associations and networks and RTOs e.g. by developing joint workshops and dissemination activities.
6. Developing a systematic link to pan-European entities e.g. sectoral clusters, professional associations, and European Digital Innovation Hubs (EDIHs)
7. Close collaboration with National Research and Innovation Agencies such as National Contact Points as they are in close contact with projects from the consortium preparation phase to the grant agreement support.

Set up for a future booster framework

Figure 1 provides a comprehensive visual representation of the essential elements that constitute the future booster framework. It delineates the critical components and their interconnections with European Union framework programmes and the AUWP, highlighting the potential for scalability. This illustration serves as a conceptual map, guiding stakeholders through the intricate landscape of a future booster's structure, its operational mechanisms, and its strategic alignment with overarching EU objectives aimed at fostering innovation and standardisation.

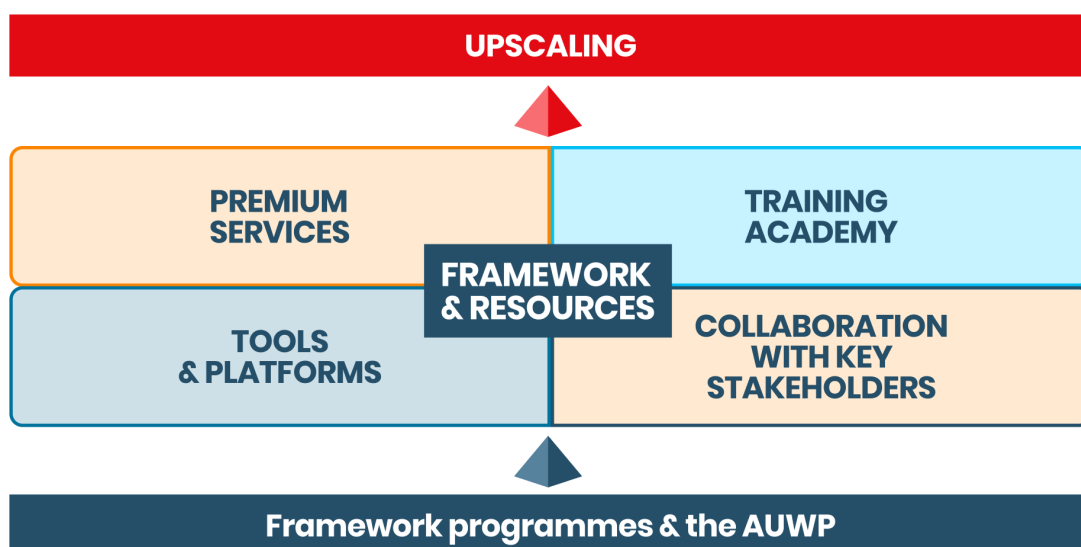


Figure 1 Illustration of framework

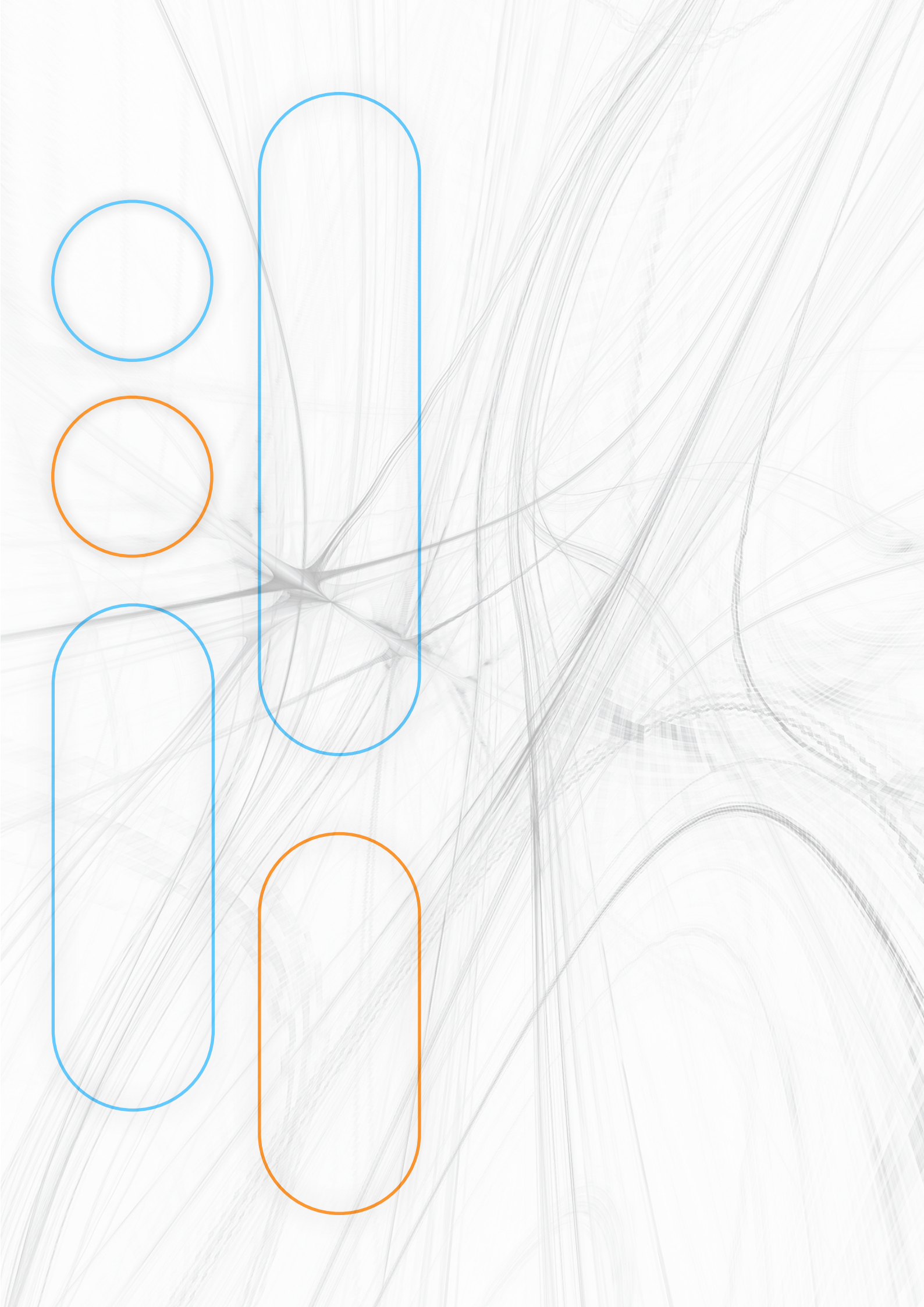
The visualisation underscores the importance of synergy between the booster and EU programmes, ensuring that the booster's initiatives are well-integrated and contribute to the broader goals of enhancing research and innovation across the Union.



Glossary

Acronym	Description
AUWP	2024 annual Union work programme for European standardisation (C/2024/1364)
CCMC	CEN-CENELEC Management Centre
CEN	European Committee for Standardisation
CENELEC	European Committee for Electrotechnical Standardisation
CEN BT STAIR	CEN-CENELECs group on research, innovation and education
CWA	CEN workshop agreement
DG Grow	The Directorate General for Internal Market, Industry, Entrepreneurship and SMEs
DG RTD	The Directorate General for Research and Innovation
EAG	Expert Advisory Group (HSbooster.eu)
EC	European Commission
EISMEA	European Innovation Council and SMEs Executive Agency
EPE	External Pool of Experts
ESO	European Standardisation Organisations ¹ (CEN, CENELEC, ETSI)
ETSI	European Telecommunications Standards Institute
EC	European Commission
EU	European Union
FP	Framework Programme
H2020	Horizon 2020
HE	Horizon Europe
HEI	Higher Education Institute
IEEE	Institute of Electrical and Electronics Engineers “Eye-triple-E”
IPR	Intellectual Property Rights
JRC	Joint Research Centre
NC	National committee (IEC/CENELEC)
NSB	National Standards Body (ISO/CEN)
Project	Any European R&I project receiving the HSbooster.eu services or contacted by the HSbooster.eu partners
R&I	Research & Innovation
RO	Research Office
RTO	Research and Technology Organisation
SDO	Standardisation Developing Organisation, a term that signifies any organisation developing standards, normally used for the industry or other sector specific organisations outside the formal organisations.
SoME	Social Media
SOP	Standard Operating Procedure
SOT	Standardisation Orientation Tool
T	Task
TA	Training Academy (HSbooster.eu)
TC	Technical Committee
TTO	Technology Transfer Office
WG	Working Group

¹ https://europa.eu/youreurope/business/product-requirements/standards/standards-in-europe/index_en.htm





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