High-Level Forum on European Standardisation

WORKSTREAM 3
NSBs peer-review (including SMEs and civil society inclusiveness)

REPORT

Summary of findings from the questionnaires and interviews

September 2024

Table of Contents

1.   Introduction

In 2022, recognising the growing importance of standards, the European Commission launched its [Standardisation Strategy](#) and created the High-Level Forum on European Standardisation (HLF). The High-Level Forum aims at setting strategic priorities, supporting key policy areas, and ensuring the EU's role as a global standard-setter. This Forum brings together industry, SMEs, the European Standardisation Organisations, Member States, societal and other stakeholders to discuss standardisation priorities and the future of European standardisation among other topics.

The Standardisation strategy pointed out that more could be done at the national level to improve access to standards development and standards themselves. In this context, it was proposed to launch a peer-review process between EU Member States and National Standardisation Bodies (NSBs) to exchange good practice and foster new ideas on how to facilitate SME-friendly conditions and the involvement of civil society, users and all relevant stakeholders.

Increasing the access and effective participation of SMEs, societal and all relevant stakeholders in standardisation at the national level is essential to increase inclusiveness and their participation in the development of European and international standards via the national delegation principle. Under this principle, each NSB is responsible for developing a consensus among national stakeholders in a so-called "national mirror committee" and presents this unified position to relevant European and/or international Technical Committees. Therefore, broad stakeholder involvement is vital to ensure that the national position accurately reflects diverse interests in the standards development process.

The HLF Workstream 3 on "NSB peer-review and National Inclusiveness", co-led by Small Business Standards (SBS) and CEN-CENELEC, was created in June 2023 with the aim of gathering information on the access and participation conditions at the national level, identifying best practices and issuing concrete recommendations to NSBs and Member States, as well as all other stakeholders involved in standardisation.

This report summarises all the information gathered by the workstream through various questionnaires and interviews. The findings form the basis for the recommendations of the workstream and High-Level Forum members. These recommendations together with this report will be the main deliverables of this workstream.

2. Methodology

To gather information on the existing situation, three questionnaires were developed and disseminated in autumn 2023, targeting: representatives of EU and EEA Member States, National Standardisation Bodies (NSBs), and other national stakeholders. These questionnaires aimed to investigate the conditions for stakeholder access and effective participation in national standardisation, and to gather best practices from public authorities and NSBs. The questionnaires, drafted by SBS with input from Workstream 3 members, were distributed in October 2023 and were open for 10 weeks. The surveys incorporated both multiple-choice questions (with options for additional details) and open-ended questions. The online tool ZohoSurvey was used to manage the collection of responses.
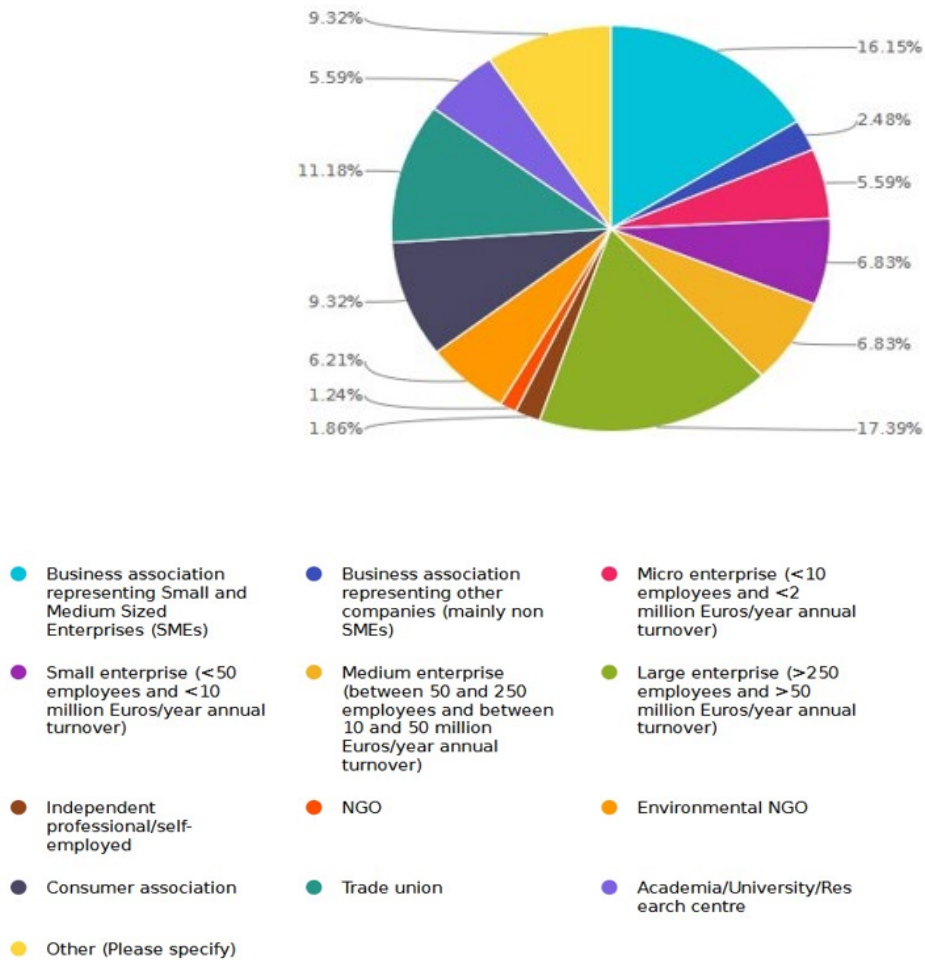
The questionnaires explored three main areas:

- conditions for stakeholder access to the standardisation process,
- measures for effective participation of stakeholders already involved in the process, and
- existing best practices.

These are the three main chapters in which this report will be articulated. Participants were also invited to provide open comments and recommendations.

Thanks to the efforts of Workstream members and dissemination support from the European Commission, the questionnaires reached a broad and representative range of stakeholders. In total 210 valid[1] responses were received: 161 from national stakeholders, 14 from Member State representatives, and 35 from NSBs.

1. Which kind of stakeholder category do you represent?

Answered: 161   Skipped: 0

- ● Business association representing Small and Medium Sized Enterprises (SMEs)
- ● Business association representing other companies (mainly non SMEs)
- ● Micro enterprise (<10 employees and <2 million Euros/year annual turnover)
- ● Small enterprise (<50 employees and <10 million Euros/year annual turnover)
- ● Medium enterprise (between 50 and 250 employees and between 10 and 50 million Euros/year annual turnover)
- ● Large enterprise (>250 employees and >50 million Euros/year annual turnover)
- ● Independent professional/self-employed
- ● NGO
- ● Environmental NGO
- ● Consumer association
- ● Trade union
- ● Academia/University/Research centre
- ● Other (Please specify)

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[1] Valid replies include either a complete reply, or a reply that, while not fully completed addressed the majority of the questions, offering valuable insights.

SMEs and SME associations represented the largest national stakeholder community in terms of replies comprising approximately 35% of the total respondents. They were followed by large enterprises and their associations (20%), trade unions (11%), consumer associations (10%), NGOs (8.5%), and academia (5%). Among SMEs, business associations were the most prominent respondents, followed by medium-sized enterprises, small enterprises, and microenterprises.

To complement the questionnaire data, 20 qualitative interviews were conducted in spring 2024 with 4 Member State representatives, 6 NSBs, and 10 stakeholder group representatives. The interviews, designed by SBS with input from the Workstream representatives, provided further insights.

The data from the questionnaires and interviews were systematically analysed. Multiple-choice responses were aggregated and summarised, while open-ended responses were thematically analysed to identify common patterns and insights. Notably, many questions allowed for multiple answers, resulting in totals that may exceed 100%.

These preliminary findings were also discussed during a hybrid workshop organised on 5 June where there was the opportunity to present and discuss the preliminary findings with stakeholders, Member States and NSB representatives.

The full questionnaires and the replies received by the users are included in this Report as Annexes.

3. Conditions and measures for stakeholder access

There are different measures that can be put in place by National Standardisation Bodies (NSBs) and national government authorities to attract and include more representatives from underrepresented stakeholders in the standardisation process at the national level. This chapter investigates the existing conditions for access, starting from the existence of specific contact points for stakeholder representatives and issues concerning awareness of existing measures and conditions.

3.1 Contact points and measures to engage stakeholders

The findings from the questionnaire highlight several crucial elements regarding the engagement of underrepresented stakeholders — such as SMEs, societal stakeholders, and academia — in the standardisation process. A significant issue identified is the absence of clear, defined, and proactive contact points within NSBs and public authorities. As seen in the graphic below, only 54% of NSBs indicated having a dedicated contact person to liaise with these stakeholders, while 71% of responding Member States report the presence of contact points for at least some stakeholder categories. In the case where only some, and not all, categories of stakeholders have a counterpart, this is primarily for consumers.

1. Do you have a specific service/department or contact person to liaise with SMEs and other underrepresented stakeholders (consumers, environmental stakeholders, trade unions) with regard to their participation in standardisation work within your National Standardisation Body (NSB)?
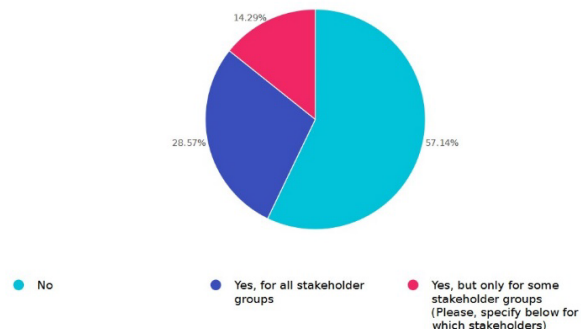
Answered: 35   Skipped: 0

- Yes
- No
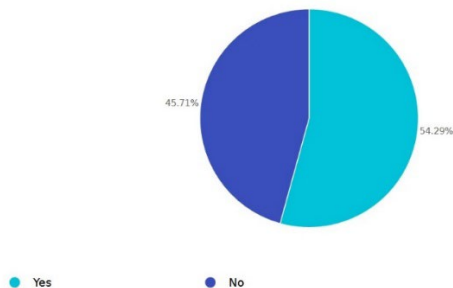
1. Do you have a specific office or contact person in place to liaise with SMEs, societal stakeholders (e.g. consumers, environmental stakeholders, trade unions) and/or academia with regards to their participation in national standardisation?

Answered: 14   Skipped: 0

- No
- Yes, for all stakeholder groups
- Yes, but only for some stakeholder groups (Please, specify below for which stakeholders)

Going past the basic issue of establishing contact, in terms of interaction and feedback mechanisms, both NSBs and stakeholders report that the most common form of engagement is passive. This primarily involves the dissemination of information through websites, press releases, or social media, as indicated by 60% of respondents in both questionnaires, the one for NSBs and national stakeholders. Additionally, about 60% of NSBs mention using ad-hoc meetings, though the replies do not give more details on the engagement modalities. Specific stakeholder groups within NSBs, similar to the SME Working Group and the Societal Stakeholder Group within CEN-CENELEC, are mentioned by 40% of NSBs and 37% of stakeholders, with 53% of stakeholders participating in at least one technical body.

In addition to indicating the existing methods of interaction, stakeholders, through the questionnaire replies and some interviews, have expressed concerns about what they perceive as an overly passive approach by NSBs, characterised by the mere distribution of general information without proactive or effective engagement. It was also highlighted by several stakeholder replies that alternative systems of feedback and engagement, such as ad-hoc meetings, were of little impact and seen as ineffective or dormant.

However, there are also positive examples of engagement by NSBs highlighted by different stakeholder categories. National consumer organisations in Denmark, Germany, and Italy report a generally good, proactive relationship with their NSBs, particularly regarding participation in dedicated groups or bodies. Environmental stakeholders, while pointing out a lack of interaction and awareness in many cases, commend NSBs like NSAI, CYS, and DIN for their proactive engagement efforts. Trade union representatives highlight effective interactions with NSBs in Nordic countries, DIN and UNI, noting a stronger political interaction and trade union participation in advisory bodies.

NSBs predominantly use general information dissemination to engage new stakeholders in the standardisation process (77%), closely followed by liaising with industry, SME, or societal stakeholders' representatives, used by 68% of NSBs. Outreach events such as webinars and trainings are also widely utilised (62%), and some NSBs (e.g., DS, NSAI, ITS) provide specific teaching materials or e-learning support to introduce new stakeholders to standardisation.

In terms of attempting to proactively approach and recruit new stakeholders and potential experts, 77% of NSBs liaise with universities or higher education institutions and contact stakeholders' representatives

to nominate relevant experts for technical bodies. Additionally, 54% of NSBs conduct some form of mapping to identify possible relevant stakeholders or experts to be involved.

QUESTIONNAIRE TO NSBs

4. Which measures are in place to identify and approach possible interested stakeholders and experts and raise their awareness on relevant standardisation developments? *(multiple answers possible)*

Answered: 35   Skipped: 0

- Mapping of possible relevant experts/stakeholders
- Proactively contacting stakeholder representatives to nominate experts in relevant TCs/WGs
- Liaising with local or national organisations that represent the interests of SMEs and/or societal stakeholders
- Liaising with universities or other higher education institutions
- None in particular
- None at the moment but we have plans to put in place future initiatives within the next 12 months (Please give further details below)
- Other (Please specify)

For disseminating information on new standardisation developments (creation of new technical bodies or activation of new work items), the leading method is once more general dissemination via press releases, websites, or social media (74%). Furthermore, 47% of NSBs have a dedicated area on their website for such information, and 32% use monitoring tools to help stakeholders keep track of updates and developments.

On the Member States' side, an equal number of respondents (57%) indicated that consultations and meetings with stakeholders' representatives are the primary methods of contact. Additionally, 50% of respondents indicated the possibility for stakeholders to participate in hearings and briefings. To encourage the participation of various stakeholder categories in standardisation, the most direct and widely used measures at the governmental level are meetings with stakeholder representatives and webinars or outreach events.

One additional point that emerged from both the interviews and workshop discussions is the need to build a strong business case for standardisation to help stakeholders understand the benefits and importance of their involvement in the standardisation process. Clearly articulating the advantages, providing case studies and success stories from similar organisations can further demonstrate the

tangible benefits of active involvement. In this sense a repository of such case studies could be created and shared. Additionally, a targeted approach may be necessary to address the specific needs and concerns of different stakeholders and sectors, ensuring the message resonates effectively with each group.

3.2 Forms of support to stakeholder access

There are numerous mechanisms implemented by Member States and NSBs to provide financial support for stakeholder participation in standardisation.

Member States typically use two main approaches. The first, more straightforward method involves direct contributions or reimbursements for costs incurred during standardisation work. A prime example is France's Crédit d'Impôt Recherche (CIR), a tax deduction available to companies of all sizes that participate in research, development and innovation activities, including standardisation. Another example of this approach is WIPANO in Germany.

A more common approach is for government authorities to channel funds through NSBs for activities specifically aimed at supporting participation in standardisation of some or all stakeholder categories, such as SMEs. This indirect funding approach is used in various countries, including Italy, the Netherlands, France, Sweden, Estonia, Cyprus, and Ireland. For societal stakeholders, SMEs and academia, such funding often subsidises or completely covers participation fees in standardisation work. This translates into NSB measures to support stakeholder participation through for example free participation for all stakeholders (e.g., ASI, NSAI, CYS) in technical committees, free participation for societal stakeholders and academia (e.g., AFNOR, DS), participation fees proportional to the company's size, and discounts or bundle deals for purchasing standards for SMEs.

While NSBs typically report on these allocations and their specific use in annual reports, the responses to questionnaires and interviews do not clearly indicate whether concrete KPIs or evaluation criteria are established to assess the effectiveness and impact of these funding mechanisms on stakeholder participation.

It is important to note that these two approaches are not mutually exclusive. For instance, in some countries like France, a direct funding scheme is in place and is complemented by funds provided to the standards body to ensure free access to standardisation work for certain stakeholders.

One of the measures mentioned in Regulation 1025/2012 on European Standardisation[2], to support stakeholder participation and contribution to the standards development process is free access to draft standards. However, only 54% of responding NSBs provide free access to draft standards under development, a practice that could significantly enhance stakeholder access and participation in shaping the national positions.

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[2] Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council: https://eur-lex.europa.eu/eli/reg/2012/1025/oj

QUESTIONNAIRE TO NSBs

6. Are there measures in place to **facilitate the access** of SMEs and societal stakeholders' representatives to the activities of the NSB? *(multiple answers possible)*

Answered: 33   Skipped: 2

- 🔵 Facilitated access to mirror committees
- 🔵 Lowered participation/membership fees
- 🔴 Ad-hoc invitation of representatives to specific TCs/WGs/mirror committees
- 🟣 Free access to draft standards
- 🟡 No
- 🟢 No, but there are plans to put in place future initiatives within the next 12 months (Please give further details below)
- 🟤 Other (Please specify)
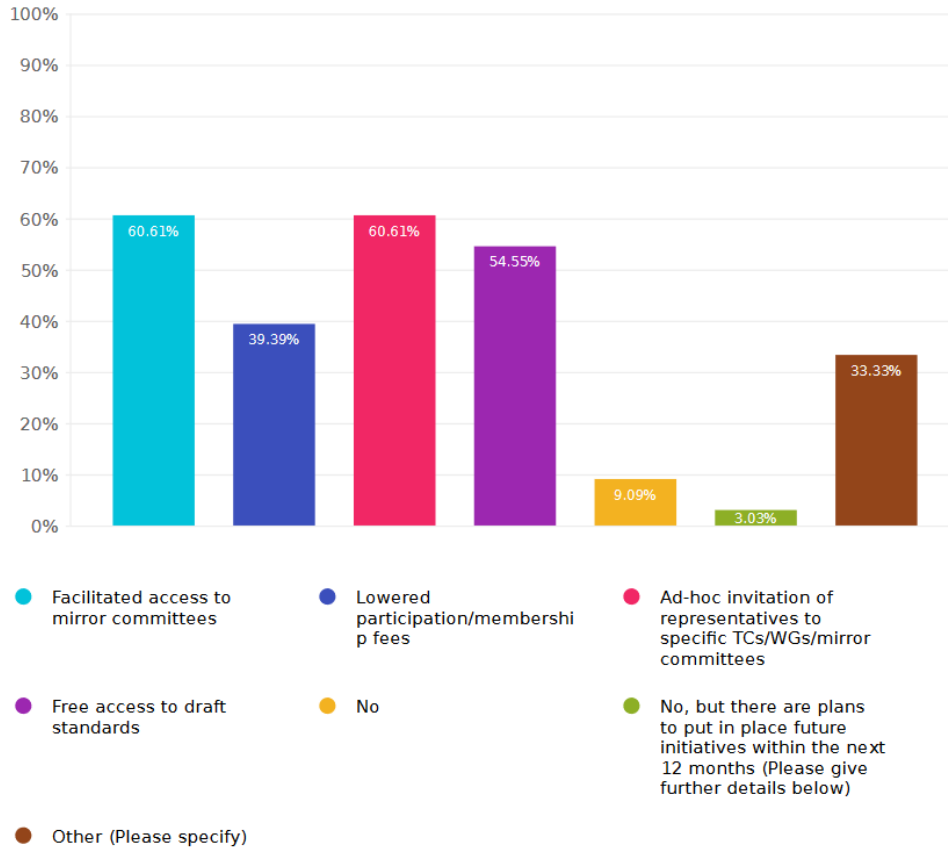
Stakeholder responses, however, indicate a troubling lack of awareness about NSBs' efforts to promote access and participation in standardisation. This lack of awareness has also been identified in previous studies[3] and highlights a disconnect between large parts of the stakeholder communities and the standardisation process. As indicated in the graphic below, a substantial 35% of stakeholders claim to be unaware of any such actions by NSBs.

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[3] SBS Survey – Involvement of SME Associations In standardisation and their relationship with the National Standards Bodies, https://sbs-sme.eu/publication/studies/sbs-survey-involvement-sme-associations-standardisation-and-their-relationship-national/

QUESTIONNAIRE TO NATIONAL STAKEHOLDERS

6. Are you aware of any specific efforts made by National Standardisation Body/Bodies to promote the access and participation of representatives of your stakeholder group to the standardisation work? *(multiple answers possible)*
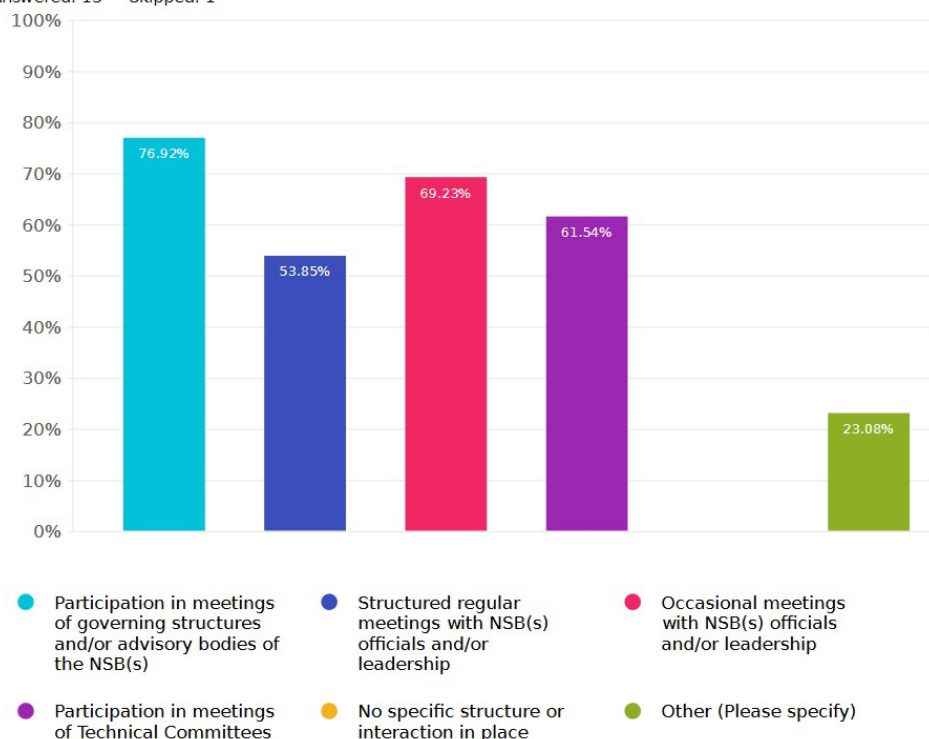
Answered: 145   Skipped: 16
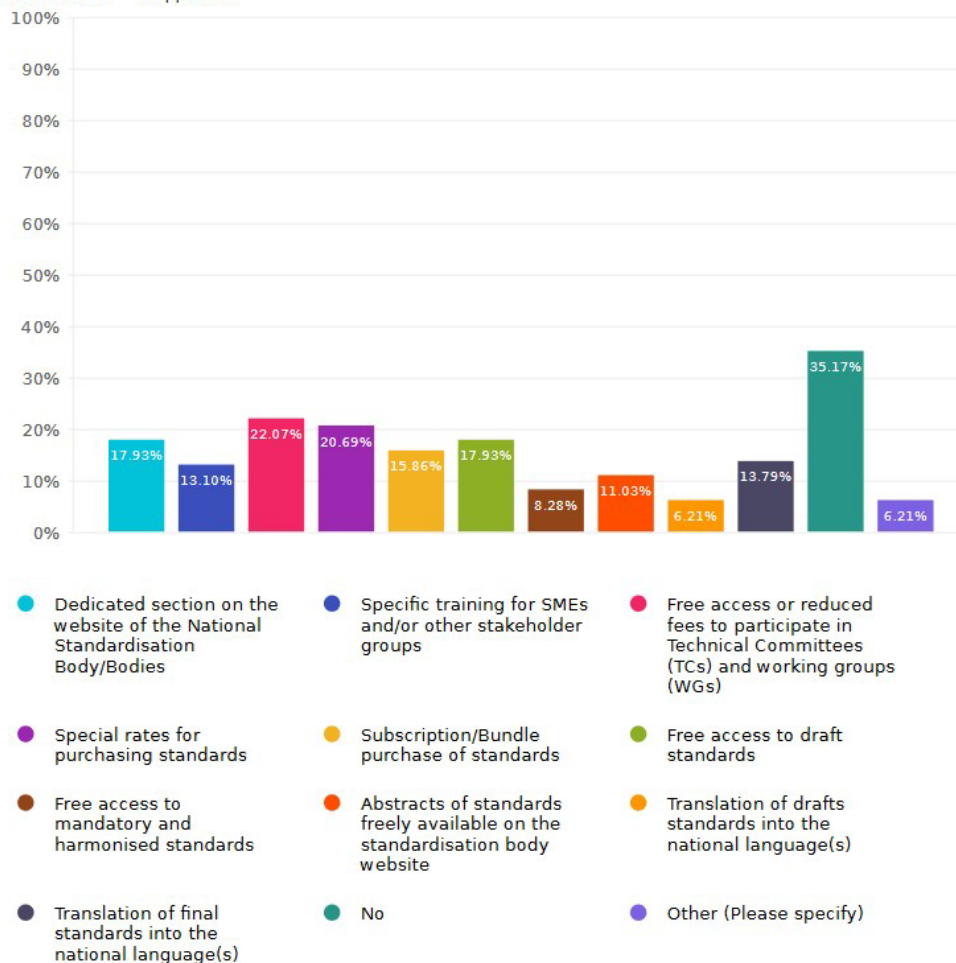
Similarly, 45% of stakeholders are unaware of government support measures related to standardisation (see Annex I, Question 9), with an additional 45% uncertain about the existence of such measures. This total of 90% reflects a significant awareness gap that needs to be addressed by stakeholder associations among their constituencies, as well as NSBs, and public authorities.

Finally, the cooperation between public authorities and NSBs appears generally positive, according to questionnaires and interviews. Nearly half (48%) of NSBs are public governmental agencies, a model common in smaller countries (e.g., Cyprus, Malta) and Central and Eastern Europe (e.g., Poland, Slovakia). The remaining 52% are private entities. Despite this distinction, the interaction and coordination are consistently adequate, as evidenced by the graphic below.

4. How do you normally interact with the National Standardisation Body/Bodies (NSBs) and/or participate in standardisation work? *(multiple answers possible)*

Answered: 13   Skipped: 1

- ● Participation in meetings of governing structures and/or advisory bodies of the NSB(s)
- ● Structured regular meetings with NSB(s) officials and/or leadership
- ● Occasional meetings with NSB(s) officials and/or leadership
- ● Participation in meetings of Technical Committees
- ● No specific structure or interaction in place
- ● Other (Please specify)

4. Conditions and measures for effective and balanced stakeholder participation

Engagement and participation of stakeholders in national standardisation can be achieved through various ways. This chapter examines these forms of participation, assessing their effectiveness and balanced participation. The analysis considers the measures implemented by NSBs and public authorities to ensure engagement at different stages of the standards development process: drafting, submission of comments (particularly at the stage of public enquiry), publication, access to standards, and the promotion of the use and implementation of standards by stakeholders.

4.1 Effective participation in technical work and NSB governance/advisory bodies

Stakeholder engagement and participation in national standardisation primarily occurs through participation in Technical Committees (57%), specific stakeholder groups or advisory bodies within NSBs (27%), and NSB management committees or boards (22%). Encouragingly, only 26% of respondents do

not engage in standardisation activities. However, it is important to consider that those that made the effort to reply to the questionnaire are likely to be those having some awareness of standardisation.

Going more in detail, stakeholders often participate in technical work directly through staff members (45%), through membership in associations (29%), or via experts linked to their organisations (29%).

The analysis of the responses from the different stakeholder groups reveals a few distinct patterns:

- Industry (both SMEs and larger companies), environmental NGOs and academia typically engage more via direct participation in technical committees.
- Comparatively, consumers representatives and trade unions tend to participate more in stakeholder groups and/or management committees and less in technical committees.
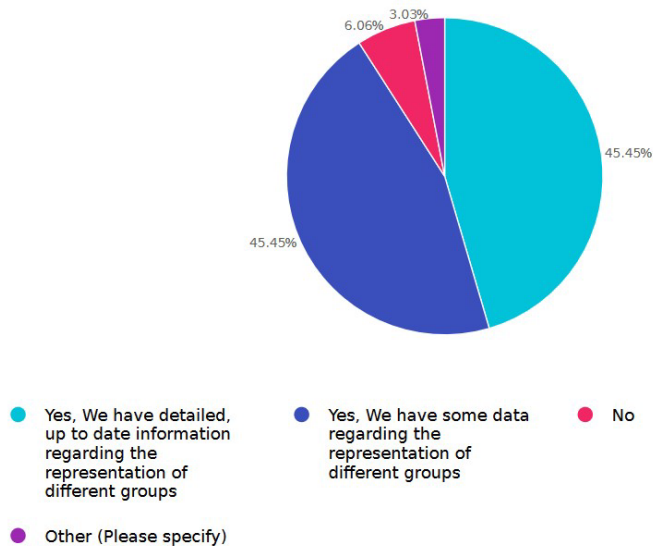
Regarding the manner of stakeholder participation, there is a notable reliance on in-house staff to participate in standardisation. However, this approach can strain time and resources, especially for micro-enterprises, where we see that only 12.5% rely on in-house staff. SMEs tend to use external expertise more than larger companies and rely to a certain extent on associations for representation, whereas larger companies typically participate through both in-house staff and industry associations. The results tend to point to the significant role of sectoral or stakeholder associations in pooling expertise (close to 1/3 of respondents) on sectoral or stakeholder associations. This was also highlighted during the discussions at the workshop. Promoting the involvement of these associations at the national level could therefore enhance participation.

NSBs monitor stakeholder group participation, with around 90% indicating they track representation levels. 45% of the NSBs indicate they have detailed and up-to-date information.

QUESTIONNAIRE TO NSBs

8. Is there updated information on the current representation of different stakeholder groups (micro, small and large companies, environmental actors, consumers, trade unions, governmental agencies, academia...) in the standardisation work of the NSB?
Answered: 33   Skipped: 2

- Yes, We have detailed, up to date information regarding the representation of different groups
- Yes, We have some data regarding the representation of different groups
- No
- Other (Please specify)

On the questions of representation within individual Technical Committees, the majority of the interviewed NSBs referred to their internal regulations for representation in technical bodies. Several NSBs indicated they carry out either regular annual or ad-hoc monitoring of the composition of different technical bodies. On the other hand, 60% lack mitigation measures in case one or more stakeholder groups are not represented (see Annex II, question 8b).

To facilitate the effective participation of stakeholders, 70% of NSBs offer IT tools for accessing and commenting on standardisation documents, 63% provide free access to relevant normative references for the development of the standard at hand, and 57% allow online or hybrid meeting access. As we will see in the section regarding the obstacles, joining meetings online is an important measure mentioned by stakeholders to support their participation by reducing time constraints, travel costs and environmental footprints. Some of these figures seem low considering that for example, in line with the membership criteria of CEN and CENELEC[4], working documents (and their related deliverables listed as normative references) need to be made available to all members participating in the national technical bodies free of charge.

Regarding participation of stakeholder representatives in the governing structures and/or advisory bodies, 57% of NSBs include SME and societal stakeholder representatives permanently in such structures, while 27% have no such measures. About 25% create advisory bodies aimed at discussing issues concerning underrepresented stakeholders (similar to the CEN-CENELEC Groups for SMEs or Societal stakeholders) or invite these stakeholders to governing or advisory bodies meetings on an ad-hoc basis.

As mentioned in previous sections, government authorities support stakeholder participation through direct actions and indirectly through public funding to the NSBs. Around 60% of responding Member States indicate they implement actions under Regulation 1025/2012 on European standardisation to enhance inclusiveness. These actions are based on cooperation and feedback with NSBs (e.g., The Netherlands) or through direct interactions with representatives of at least some of the stakeholder communities (e.g., Sweden, Austria).

However, there are shortcomings in gathering and evaluating stakeholder issues. Most Member States mention they carry out audits on the work of the NSBs towards inclusiveness (listed in the graphic below under "other") via reporting, without direct feedback loops with stakeholder organisations. Less than 25% engage in direct liaison or consultations. Establishing a contact point for standardisation stakeholders at the governmental level could improve interaction and address participation issues at national level more effectively.
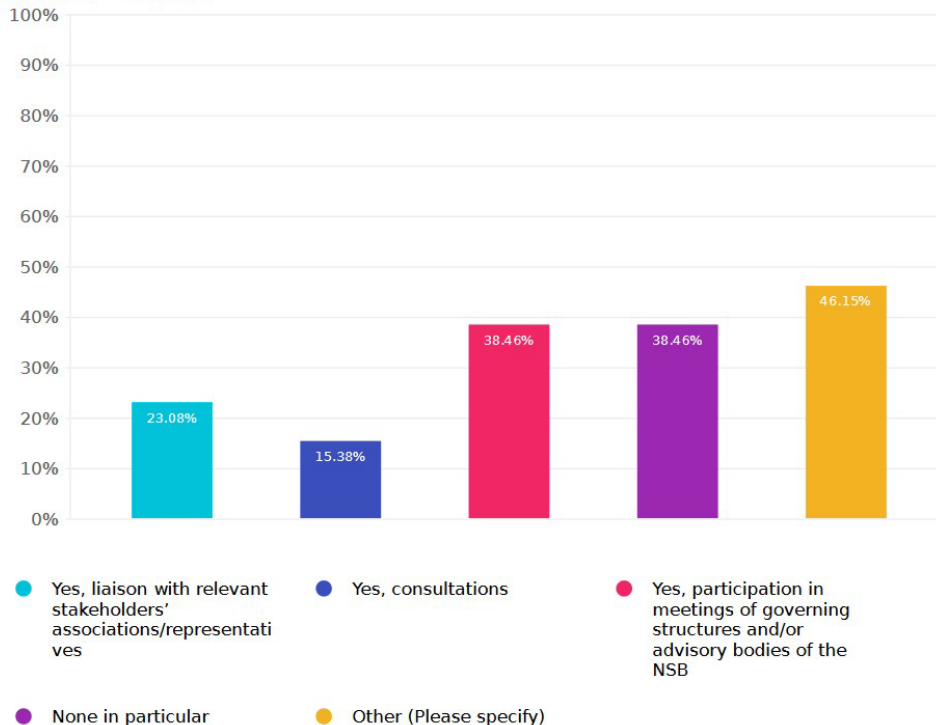
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[4] CEN-CENELEC Guide 22 Guide on the organisational structure and processes for the assessment of the membership criteria of CEN and CENELEC, https://www.cencenelec.eu/media/Guides/CEN-CLC/cenclcguide22.pdf

7. Are there initiatives or actions in place to gather, verify and evaluate the issues encountered by stakeholders in participating in national standardisation and interacting with NSBs? *(multiple answers possible)*

Answered: 13   Skipped: 1

- Yes, liaison with relevant stakeholders' associations/representatives
- Yes, consultations
- Yes, participation in meetings of governing structures and/or advisory bodies of the NSB
- None in particular
- Other (Please specify)

4.2 Submission of technical comments and public enquiry

Effective stakeholder participation in standardisation depends on the ability to submit comments and opinions on ongoing work in a straightforward and user-friendly manner. This is particularly crucial during the public enquiry stage, where draft standards are open for public comment to establish a national consensus, influencing the NSB's comments submitted to the European or International technical committee and the decision to vote for or against the proposed standards.

National Standardisation Bodies (NSBs) are responsible for conducting public enquiries. To facilitate this, 70% of NSBs indicate having set up dedicated portals for commenting. Additionally, 73% conduct internal consultations within national mirror committees and 39% engage in targeted consultations with stakeholder groups outside these mirror committees. Collected comments are then discussed in the relevant national mirror committee (79%). 48% of the NSBs reported extending ad-hoc invitations to commenting stakeholders to attend the mirror committee where their comments would be discussed.

Stakeholder experiences with participation in public enquiries are mixed. While 51% of respondents are aware of online platforms for submitting comments, 39% are unaware, and 11% claim no such initiatives exist. Awareness levels vary among stakeholder categories, with consumer representatives being the most informed (75%), followed by industry representatives - both SMEs and larger companies - (58%), environmental NGOs (40%), academia (33%), and trade unions (13%). It should be noted that the questionnaire included a follow-up question asking respondents who acknowledged the existence of a

platform to specify the online address of such a platform. Only about half of those who indicated awareness of the platform responded to this question. Furthermore, most responses did not refer to a specific platform where the lists or texts of standards under enquiry are available. Instead, they referred to the general website of the standards body, the internal platform of the national mirror committee (which is not publicly accessible), or other sections of the standards body's website where different information is provided. This suggests that respondents did not understand the question as it was intended and that these platforms, where they exist, are even less well-known than the general responses imply. This observation is also supported by previous studies from SBS[5] and ETUC[6].

The ETUC study, carried out in 2022, also highlights that access conditions to the enquiry process are diverse across Europe with just over half of NSBs providing full and free online access to draft standards under enquiry. Even in such cases, the study noted discrepancies regarding the number and type of draft standards made available. Some of these points were also confirmed during the interviews.

When specifically asked about the user-friendliness of such methods and tools, 75% of respondents reported them as user-friendly. The minority who responded negatively cited difficulties in finding the right information on the NSB website and incomplete public enquiry pages. Nevertheless, as indicated above, it is unclear whether all respondents interpreted the question as intended and were actually commenting on online access to draft standards under enquiry.

Follow-up interviews with stakeholders (including ANEC, ECOS, and ETUC) revealed mixed opinions. SME representatives generally echoed the survey findings. Consumer representatives were generally positive with the enquiry system but noted occasional issues with the reception of comments by the national technical committee and lack of feedback. Environmental stakeholders reported inconsistent experiences across NSBs and user-unfriendly tools. ECOS also highlighted that the fragmentation and different systems used by NSBs complicated guidance and capacity building among national stakeholders. Trade union representatives found many NSB systems user-unfriendly and difficult to navigate, particularly for less experienced stakeholders, potentially discouraging active participation.

4.3 Consultation and access to published standardisation deliverables

As the standards development process progresses to its final stages, it is crucial to assess the conditions that facilitate stakeholders' consultation, access, and purchase (where applicable) of published standards. Various initiatives are implemented at the NSB level to facilitate the access of SMEs, with no single approach being clearly favoured, as illustrated in the graphic below.
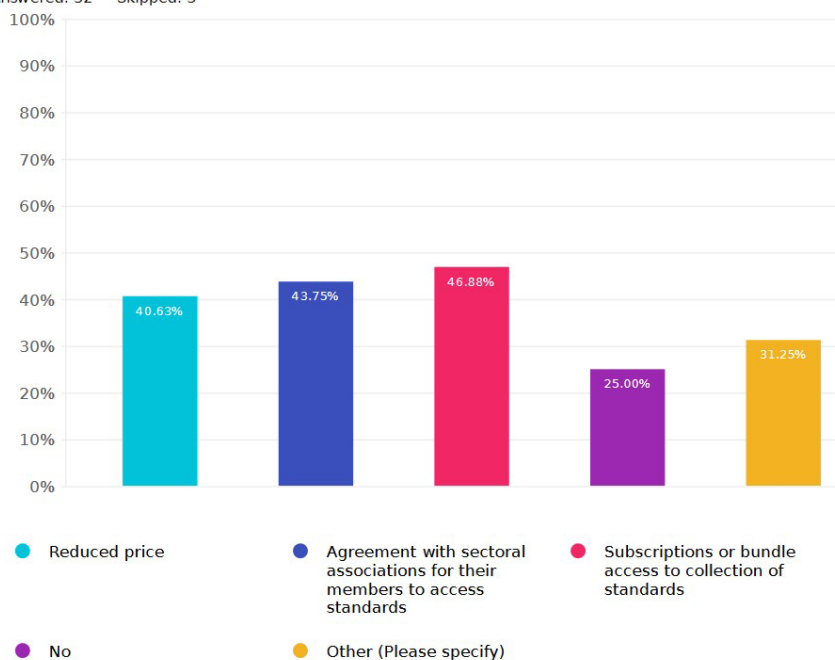
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[5] SBS Survey – Involvement of SME Associations In standardisation and their relationship with the National Standards Bodies, https://sbs-sme.eu/publication/studies/sbs-survey-involvement-sme-associations-standardisation-and-their-relationship-national/

[6] Trade union access to national standardisation committees: https://www.etuc.org/sites/default/files/page/file/2023-05/Brochure%20Accesse%20Condition%20to%20national%20mirror%20committee_EN_v4.pdf

12. Are there specific favourable conditions for accessing published standards for SMEs? *(multiple answers possible)*

Answered: 32   Skipped: 3

- ● Reduced price
- ● Agreement with sectoral associations for their members to access standards
- ● Subscriptions or bundle access to collection of standards
- ● No
- ● Other (Please specify)

Other initiatives include providing published standards free of charge to mirror committee participants, if within the committee's scope. Many NSBs (e.g., NBN, HRN, NSAI, DS, ELOT) offer free in-person consultation of published standards via a reading room on their premises. In some countries (e.g., Austria, Italy), this service is extended more widely through cooperation with public authorities or stakeholder organisations, allowing in-person consultation at selected offices of chambers of crafts and commerce and universities.

Additionally, all NSBs that are members of ETSI make all ETSI deliverables available in full, free of charge, following ETSI's well-established business model. Regarding publicly available information on NSB websites about published standardisation deliverables, 72% of NSBs indicate they offer a free abstract, while 65% provide an index, which often includes other referenced standards.

4.4 Measures to support the implementation of standards

The questionnaire also addresses the implementation of standards. Standards are developed with the intention of being used and providing benefits to their users and society in general. However, this crucial aspect is often overlooked in general discussions about standardisation and it can be challenging for NSBs and public authorities to implement effective measures to promote the uptake of standards.

The lack of awareness and the technical complexity of standards make it essential for potential users to receive support and guidance from NSBs, government, and stakeholder organisations. This support is important to help them identify, navigate, and successfully implement standards.

The most common initiatives by both NSBs and public authorities to address this issue include organising webinars and trainings on the implementation of specific standards (65% for NSBs; 45% for Member States). Additionally, 31% of NSBs report creating implementation guides, particularly for widely used standards like ISO 9001 on Quality Management Systems or ISO 27001 on Information Security Management Systems.

A vital element in addressing the insufficient uptake and implementation of standards is the establishment of monitoring tools. These tools allow stakeholders to track standardisation developments and identify suitable standards for their activities. This report highlights three exemplary monitoring tools established by different NSBs that can be considered best practices:

- DIN-Media new free monitoring tool (available in German and English) which, after free registration, updates users on standardisation developments across a wide range of topic and areas based on the key words defined by the user.
- ASI's MeinNormen Radar, a paid service that informs users about which standards are going to be published or revised and when Austrian legislation references standards.
- CEI's Catalogo Guidato/MyNorma a tool that helps locate relevant standards, subscriptions, or training courses of interests based on technical topics and job characteristics. This catalogue is divided by sector and type of deliverable, with each sector listing the necessary and sufficient standards to meet specific needs. Subscription and search features are available for free, though some advanced functionalities or specific services may require payment.

5. Obstacles and proposals for access and participation

So far, this report has focused on an overview of the initiatives implemented by NSBs and Member States to ensure favourable conditions for stakeholder access and effective participation. It has also presented data on the effectiveness and outcomes of these initiatives. In this chapter, the focus shifts to examining the specific obstacles and challenges encountered by stakeholders, NSBs, and Member States in navigating and participating in the standardisation system, as well as in interacting with their counterparts.
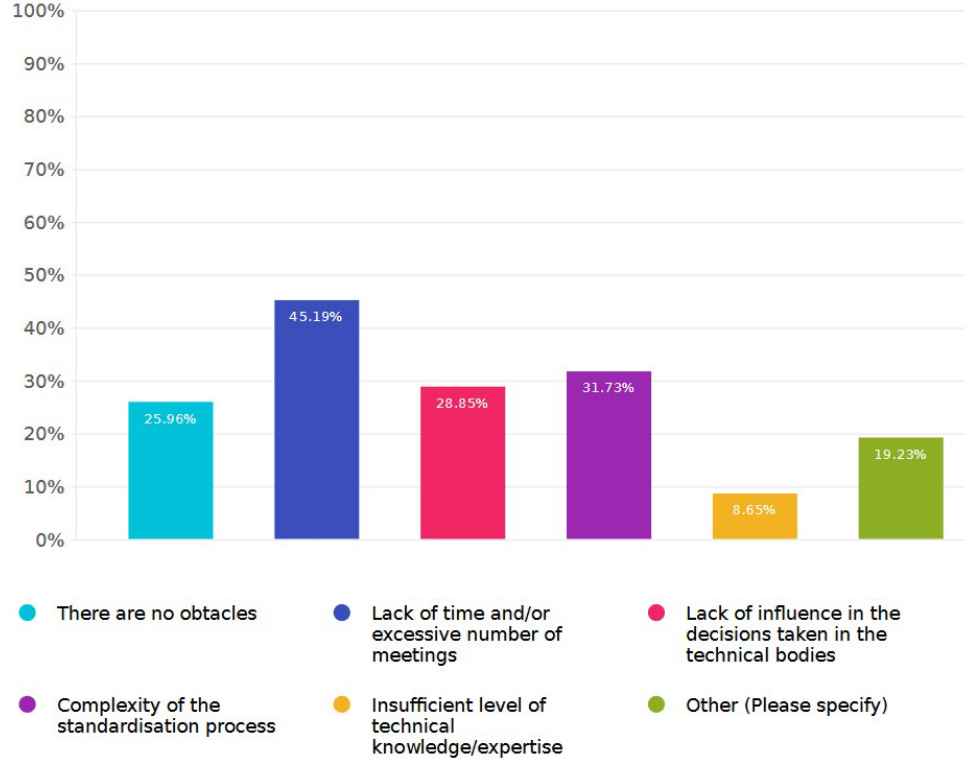
5.1 Obstacles encountered by stakeholders

We begin our analysis with a general overview of the main obstacles identified by stakeholders, as outlined in the graph below:

5a. If your organisation participates in the standardisation process, what are the main obstacles to an effective participation and impact?

Answered: 104   Skipped: 57

The information from the graphic was complemented by additional open questions asked in the questionnaire and during follow-up interviews. Ultimately, three main sets of obstacles were clearly identified, each of which will be analysed in detail in the sections below:

- Lack of resources (financial and non-financial)
- Complexity of the standardisation process
- Unbalanced composition and limited influence in technical bodies

It is also important to note that while most stakeholders identified these three obstacles as primary concerns, their significance varies across different stakeholder types. This suggests that addressing these obstacles may, to a certain extent, require a targeted approach according to the different stakeholder categories.

5.1.1 Lack of resources (financial and non-financial)

In the analysis of the responses, a significant majority of stakeholders identified a lack of resources — both financial and in terms of time and personnel capacity — as the primary obstacle to more active participation in standardisation. Not surprisingly, given their limited personnel capacity and their necessity to focus on their core business, 100% of respondents from micro-enterprises mentioned the

lack of time or excessive number of meetings as an obstacle. The percentage of respondents mentioning this option tends to decrease as the size of the company increases, although it remains significant.

In the open responses to the questionnaire (see Annex I, Question 5a for the complete list) in follow-up interviews with stakeholders and at the workshop of 5 June, it became increasingly evident that the main barrier is primarily financial. Many stakeholders emphasised that additional financial support, particularly from public authorities, could largely address the issues of time constraints and human resource capacity.

While a few respondents highlighted the potential importance of European Commission funds (for instance, through participation in projects, possibly in collaboration with European partners), the overwhelming majority indicated national government funding as the most preferable and suitable source to increase participation in standardisation. Stakeholders argued for direct allocation of public funds to stakeholders and stakeholder organisations, rather than channelling funds through NSBs, even if earmarked specifically for inclusiveness initiatives.

However, due to the significant time commitment required for effective participation in standardisation work, financial resources alone may not sufficiently address the main obstacle of time constraints for micro-enterprises. In this regard, during the workshop, the use of SME associations to bridge the gap between standardisation and smaller companies was suggested. Public funding for SME associations would greatly aid in fostering awareness, enhancing capacity, and promoting engagement in technical activities of SMEs through their associations.

Finally, despite some forms of discounts and facilitations for underrepresented stakeholders, substantial investments are still necessary, especially where fees are required for membership in each individual national technical committees or mirror committee, as is common in several NSBs. This support should not be limited to covering participation fees alone, as stakeholders, especially those participating in European and international committees, also incur additional costs associated with attending these meetings.

5.1.2 Complexity of the standardisation process

While almost one third of questionnaire respondents highlighted the complexity of the standardisation process as an obstacle, the more nuanced insights from qualitative responses, particularly in follow-up interviews, painted a slightly different picture. While the need for technical guidance and training from NSBs, especially for newcomers to standardisation, was acknowledged as a critical issue to address, many stakeholders also noted that a certain level of complexity is inherent and almost intrinsic to the standardisation system.

Several stakeholders discussed how addressing the issue of funding, as mentioned earlier, would ultimately alleviate the obstacles posed by the system's complexity by enhancing stakeholders' technical and organisational capabilities over time. Additionally, several stakeholders emphasised the importance of sectoral and different stakeholders' associations in providing guidance and building capacity.

5.1.3 Lack of influence in standardisation work

Another obstacle commonly identified by stakeholders was the challenge of exerting influence and ensuring representation of their interests in technical work. This issue was cited as the primary obstacle by medium enterprises (75%) and the second obstacle by micro-enterprises (66%) and environmental NGOs (50%), whereas respondents from large companies tended to mention this obstacle to a lesser extent (20%). While a minority of respondents attributed this limited influence to a lack of engagement from NSBs, the vast majority pointed to an imbalance in roles and representation within technical bodies as the core issue.

Several stakeholders linked this imbalance to the dominant role of industry representatives, particularly from larger players, in technical work. It was also stressed that NSBs should have greater oversight over the work of individual technical bodies and take more decisive actions to ensure genuine consensus among all stakeholders involved.

Societal stakeholders, in particular, highlighted in their responses how their experts and representatives often feel isolated during technical discussions, unable to effectively present their views and interests or influence the consensus position.

5.1.4 Other obstacles identified

Beyond these three main areas of concern, a few other topics were identified as potential obstacles to involvement and participation.

One element raised by a few respondents was the slowness of the standardisation process compared to the rapid evolution of relevant technologies and applications, which can lead to a lack of interest and involvement in standardisation work.

An additional point raised by stakeholders from academia and research communities in some countries was the lack of importance and recognition given to standardisation work at the university level. Since a standardisation deliverable does not count as a credited publication for academics, there is often a lack of motivation to get involved and dedicate time to standardisation work. While some countries and settings may strongly need mechanisms to improve the recognition of standardisation work by academics, this is not the case everywhere. For instance, follow-up interviews with academics from the Netherlands highlighted how department and university evaluations place significant emphasis on societal contribution, commercialisation, and valorisation. In these contexts, it is relatively easy for a researcher to emphasise their contribution to standardisation and receive recognition for it.
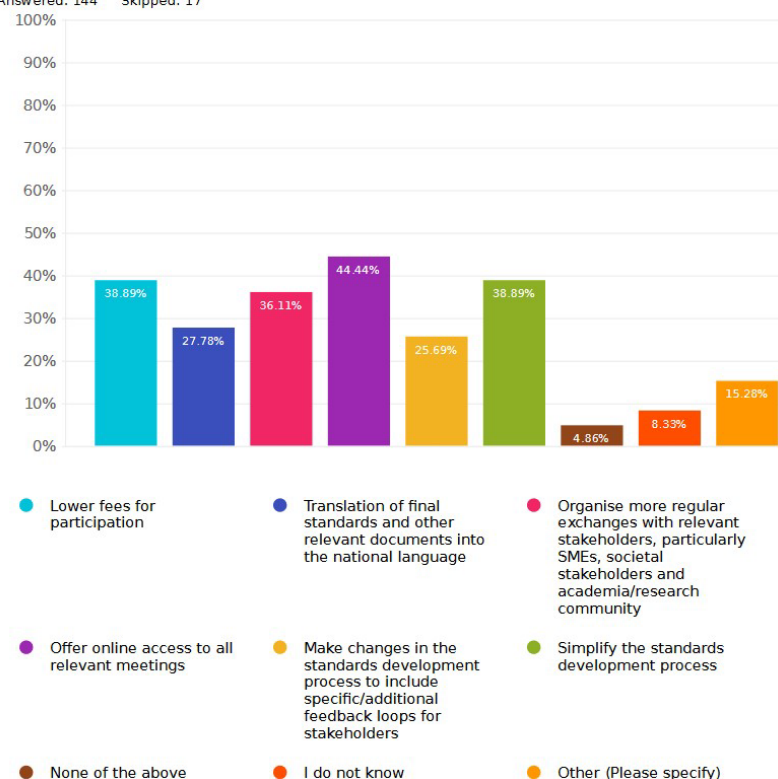
5.2 Proposals from stakeholders

In addition to asking stakeholders to identify issues and obstacles to involvement in standardisation, the questionnaire and follow-up interviews also aimed to gather their suggestions for possible solutions, as illustrated in the graphic below.

7. What would be the most effective measures to improve the participation of stakeholders to standardisation work? *(multiple answers possible)*

Answered: 144   Skipped: 17

- ● Lower fees for participation
- ● Translation of final standards and other relevant documents into the national language
- ● Organise more regular exchanges with relevant stakeholders, particularly SMEs, societal stakeholders and academia/research community
- ● Offer online access to all relevant meetings
- ● Make changes in the standards development process to include specific/additional feedback loops for stakeholders
- ● Simplify the standards development process
- ● None of the above
- ● I do not know
- ● Other (Please specify)

As we can see, a wide range of possible initiatives were suggested, addressing all the main sets of obstacles highlighted in the previous section. Suggestions aimed at easing concerns regarding time and financial resources such as offering online access to all relevant meetings or lower fees for participation were among the most popular. These were followed by the simplification of the standards development process and the organisation of more regular exchanges with SMEs, societal stakeholders and the academia/research community.

Nevertheless, we can also see some differences among stakeholders. For example, the translation of final standards and other documents features prominently among the replies of SMEs (nearly 48%), and especially micro-enterprises (75%), while this did not feature to prominently among the replies of other stakeholders.

Additionally, a specific open question in the questionnaire sought proposals and recommendations to improve the standardisation system at the national level. The proposals have been grouped together below. The full list of replies can be found in Annex I, Question 11:

- • Increase efforts to make stakeholders understand the importance and benefits of standards.

- Provide more direct financial support to stakeholders and their experts to participate in standardisation.
- Consider the financial, human, and time constraints of small businesses.
- Offer free participation in standardisation for civil society representatives.
- Streamline the standardisation process and ensure that participants' time and effort are rewarded with good technical results within a defined timeline.
- Increase publicity from NSBs about ongoing work, how to access participation, contact information, translation of content, etc.
- Enhance stakeholder involvement through their associations and organisations.
- Promote the economic advantages of standardisation for SMEs.
- Make contributions to standardisation work creditable as publications to encourage academic participation.
- Increase knowledge transfer on standardisation topics in technical schools and universities, especially in scientific areas (e.g., engineering, chemistry), and involve NSBs in classes.
- Emphasise and fund national and European grants and projects (e.g., Horizon Europe) that link research to applications related to standardisation.

5.3 Obstacles encountered by NSBs

In addition to the various obstacles facing stakeholders, the questionnaires and interviews also explored the difficulties encountered by NSBs in their interactions and attempts to engage with different stakeholder categories.

Echoing a similar question asked to stakeholders, the first question posed to the NSBs concerned what might be, from their perspective, the main obstacles preventing underrepresented stakeholders and organisations from actively participating in standardisation work. It is interesting to note how some of the answers, particularly concerning the lack of time and human resources, align with the results from the similar question posed to stakeholders.

However, other results are markedly different. For instance, while insufficient level of technical knowledge/expertise was identified as an obstacle by only 9% of stakeholder respondents (only significantly mentioned by environmental NGOs), it was seen as a barrier to participation by 70% of the NSBs. Even considering that the stakeholders participating in this questionnaire have a level of technical knowledge on standardisation that may be above average, this stark contrast highlights a clear disconnect.

9. What are in your view the main barriers that might prevent organisations representing SMEs, environmental, consumer and trade unions' interests from participating in standardisation activities?

Answered: 33   Skipped: 2
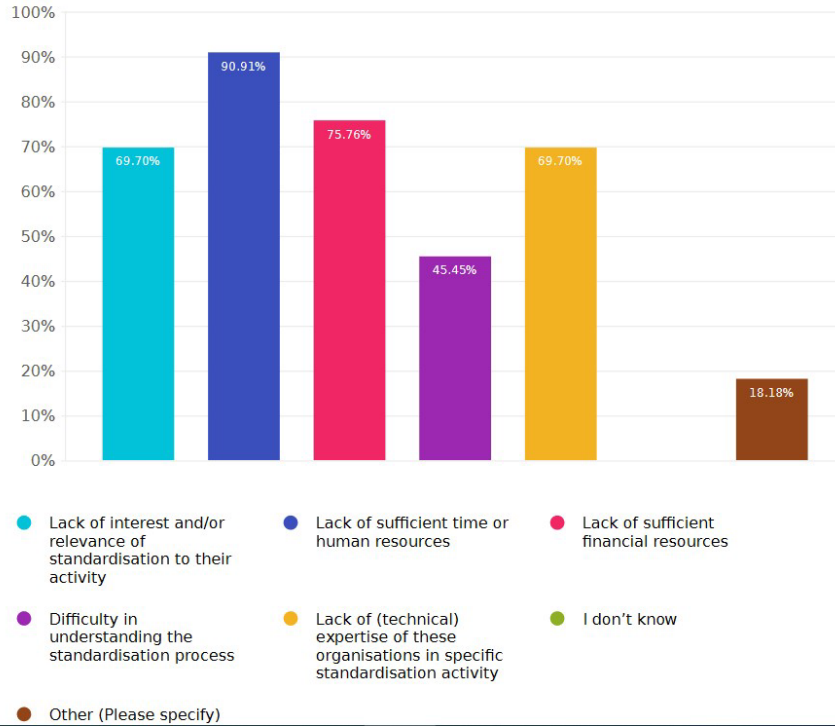
Furthermore, an open question was posed to the NSBs on the main challenges they faced when trying to engage and work with stakeholder groups. A breakdown of the answers received can be found below:

- 28% Limited presence and HR capacity of stakeholders

- 28% Limited interest in participating in standardisation from stakeholders

- 24% Limited awareness of standards and their importance from stakeholders

- 12% NSB HR constraints

- 12% NSB financial constraints

- 8% Limited financial capacity of stakeholders

- 4% Difficulty in identifying stakeholder representatives and related experts

The full list of replies received to this question can be found in Annex II, Question 15.

5.4 Proposals from NSBs

In addition to investigating the difficulties encountered by NSBs in their outreach and engagement with stakeholders, a specific open question in the questionnaire and interviews asked for proposals and recommendations to improve the standardisation system. The replies have been grouped together below.

The full list of replies can be found in Annex II, Question 16:

- Nominate dedicated contact persons within NSBs for different underrepresented stakeholder categories.
- Establish advisory bodies for stakeholders and/or allocate seats on the Board for representatives of selected stakeholder categories.
- Waive participation fees for underrepresented stakeholders, financed by dedicated public funding.
- Implement a subsidy scheme for the participation of experts from underrepresented stakeholders in European and International Technical Committees.
- Organise national or regional meetings between NSBs and stakeholders, supported by national governments and involving representatives from relevant Annex III organisations.
- Develop national young standardisation professional programmes in collaboration with universities.
- Offer higher discounts on the sale of standards packages to stakeholders as part of an annual subscription.
- Launch targeted awareness-raising campaigns supported by testimonials from representatives and experts of stakeholder groups.
- Foster closer contact and cooperation between NSBs and national governments.

5.5 Obstacles encountered by Member States

A similar line of analysis was also conducted to investigate the challenges encountered by Member States representatives in their interactions with the national standardisation system.
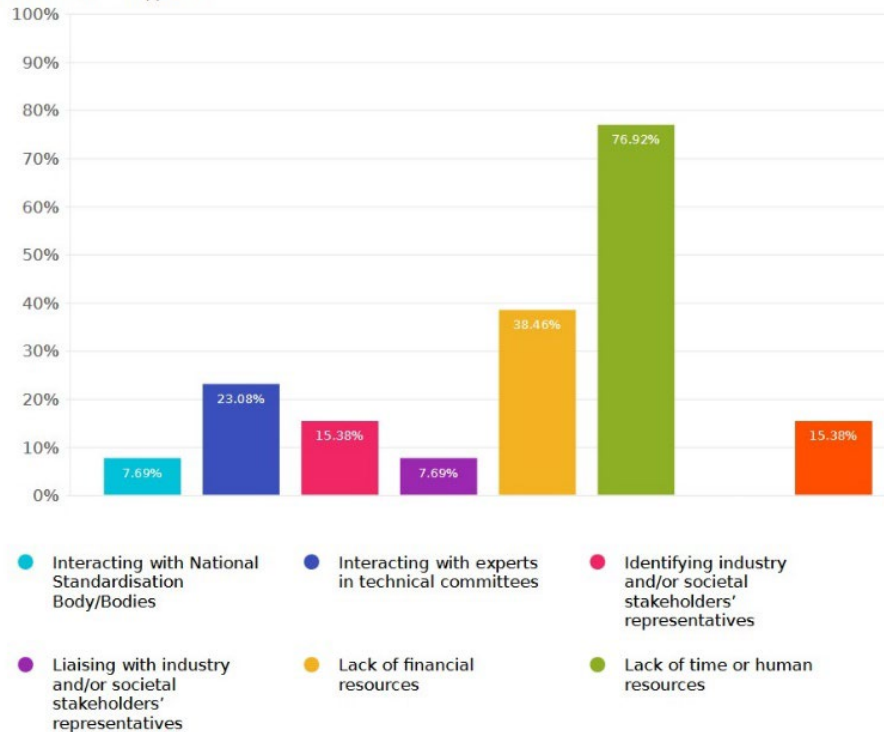
As depicted in the graphic below, the overwhelming majority of respondents identified the lack of time and human resources as the primary issue encountered, followed by the lack of financial resources. It can be argued, however, that an increased financial commitment would also tackle the reported lack of human resources.

8. What are the main difficulties you encounter in interacting with the national standardisation system? *(multiple answers possible)*

Answered: 13   Skipped: 1

- Interacting with National Standardisation Body/Bodies
- Interacting with experts in technical committees
- Identifying industry and/or societal stakeholders' representatives
- Liaising with industry and/or societal stakeholders' representatives
- Lack of financial resources
- Lack of time or human resources

Similarly to the NSB analysis mentioned earlier, an open question was posed to Member States regarding the main challenges faced when trying to engage with NSBs or stakeholder groups. Below is a breakdown of the answers received:

- 33% Lack of time/HR resources to follow standardisation work
- 17% Low awareness and/or interest of stakeholders
- 17% Limited technical capacity and expertise from stakeholders
- 17% Lack of specific measures from the NSB to engage with stakeholders
- 8% Lack of financial resources to follow standardisation work
- 8% Limited financial capacity of stakeholders
- 8% Limited HR capacity of stakeholders
- 8% No particular difficulties

The full list of replies received to this question can be found in Annex III, Question 9.

5.6 Proposals from Member States

Similarly to stakeholders and NSBs, Member States representatives were also asked to propose initiatives and recommendations to improve the standardisation system. The replies have been grouped together below. The full list of replies can be found in Annex III, Question 10:

- Establish a working group between the ministry and NSB to coordinate on standardisation issues.

- Develop a centralised platform to access and monitor existing best practices in standardisation across Member States.

- Waive participation fees for societal stakeholders, SMEs, and academia participating in standardisation work.

- Implement EU incentives targeted at encouraging the participation of societal stakeholders, SMEs, and academia in national standardisation activities.

6. Existing best practices

The analysis of the questionnaire and follow-up interviews highlighted several best practices implemented by both NSBs and Member States that could be shared more widely. Selected best practices include:

BEST PRACTICES IN THE NSBS:

- Creation of well-established stakeholder groups and advisory bodies within NSBs, such as those at DIN, UNI, and AFNOR, involve representatives from various underrepresented stakeholders. However, some NSBs only include certain stakeholder categories (e.g., consumers, SMEs) in these bodies.
- NSBs like ASI, DS, NSAI, DKE and CYS offer no fees to participate and provide free access to technical work for SMEs and societal stakeholders.
- DS allocates a budget to reimburse expenses for consumer representatives participating in European and international standardisation work. CYS provides subsidies of up to 500 Euros annually to cover travel costs.
- Various NSBs, including DIN, ASI, and CEI, maintain monitoring tools like DIN-Media Monitoring tool, ASI's MeinNormen Radar, and CEI's Catalogo Guidato/MyNorma, enabling stakeholders to track standardisation developments and identify published standards (see also section 4.4 above).
- NSAI publishes annual reports on the activities of national Technical Committees, enhancing transparency.
- A number of NSBs, including NBN, ELOT, ASI, NSAI and UNI allow in-person consultation of published standards. ASI and UNI facilitate this through agreements with chambers of commerce, universities, and other stakeholder organisations.
- Several NSBs, including DKE and ASI, offer discounts on the sale of packages or collections of standards by trade and crafts associations.

- NSAI and DIN, among others, engage extensively with academic institutions through lectures and other activities to raise awareness about standardisation.
- DS and ITS provide teaching materials and/or e-learning support
- NSAI provides individual onboarding training to introduce new stakeholders/experts to standardisation.

BEST PRACTICES AT MEMBER STATES LEVEL:

- The French "Credit d'Impot Recherche" offers tax rebates to enterprises engaged in research, innovation, and development activities, including standardisation.
- Several countries, such as Sweden, have established coordination groups involving government agencies, ministries, NSBs, and sometimes stakeholders to enhance coordination and feedback on standardisation matters.
- Countries like France or Slovenia have set up interministerial groups to enhance involvement and coordination in standardisation across different government sectors.
- The Belgian Antenne-Normes (38 contact points, covering 9 main sectors), offering support and guidance to companies on standardisation-related issues, particularly implementation.
- In Germany, the Federal Ministry for Economic Affairs and Climate Action supports SMEs with up to 45 thousand euros through the WIPANO funding programme if they actively participate in standardisation committees.

- The Dutch government mandates that national standards referred to in Dutch laws and regulations must be accessible free of charge via the NSB website, with all associated fees covered by the government.
- In Ireland, the Building Better Business events, held nine times in 2023 across the country, aim to enhance engagement with SMEs and industry including standardisation matters, in collaboration with NSAI.

7. Conclusions

Increasing the access and effective participation of stakeholders in standardisation at the national level is essential to increase inclusiveness and their participation in the development of European and international standards via the national delegation principle. The analysis of stakeholder access and participation in the national standardisation process reveals several critical findings that highlight the successes achieved as well as the significant challenges that remain.

A significant issue identified in the report is the pervasive lack of awareness among stakeholders regarding the actions and support measures of National Standards Bodies (NSBs) and governments to promote access and participation in standardisation. This often stems from the overall lack of awareness of standardisation and its role. Therefore, the potential standardisation stakeholders do not know why and how to participate. Approximately 35% of stakeholders are unaware of any NSB efforts, and a notable 45% are unaware or uncertain about government support measures. Despite various dissemination methods like press releases, websites, and social media, these efforts are perceived as overly passive and insufficient for meaningful engagement. This gap underscores the need for enhanced

communication strategies and targeted outreach to ensure stakeholders are better informed and more effectively engaged in the standardisation process.

Financial and human resource constraints are primary barriers to stakeholder participation. This issue is especially pronounced among SMEs and micro-enterprises, which struggle with time and personnel capacity to engage effectively in the standardisation process. There is a strong call for increased financial support from public authorities at national level and EU-funded projects to facilitate stakeholder participation. Direct funding to stakeholders, rather than through the NSBs, was mentioned by a number of stakeholders as a way to address time and resource constraints effectively. Several best practices, such as waiving participation fees for societal stakeholders and SMEs and providing subsidies for travel and other expenses, have been implemented by some NSBs and Member States. These practices highlight potential pathways to improve stakeholder engagement across the board.

The role of stakeholders' associations as multipliers is crucial for increasing awareness and supporting effective participation in the standardisation process. These associations can serve as vital conduits for disseminating information, raising awareness about the importance and benefits of standardisation, and actively engaging their constituencies. By leveraging their networks and resources, stakeholders' associations can effectively communicate the actions and support measures provided by NSBs and governments, which many stakeholders currently lack awareness of. Additionally, these associations can pool expertise and represent the interests of their members in technical committees and advisory bodies, thereby ensuring a more inclusive and representative standardisation process. Enhanced collaboration with stakeholders' associations can address the awareness gap and foster a more engaged and knowledgeable stakeholder community.

The complexity of the standardisation process is also perceived as a significant obstacle for stakeholders, particularly for those new in the process. This complexity deters effective participation and reduces the influence of underrepresented groups in technical bodies. Simplifying the standardisation process and improving the transparency of ongoing work are critical needs identified by stakeholders. Enhanced communication, on-boarding training courses and clearer guidelines can help mitigate these challenges.

The implementation of standards requires significantly more focus and attention to ensure their effective use and the benefits they are designed to deliver. Currently, the uptake of standards is often hindered by a lack of awareness and technical complexity. Potential users need robust support and guidance from NSBs, governments, and stakeholder organisations to navigate and successfully implement these standards. Initiatives such as webinars, trainings, and the development of implementation guides have proven beneficial, but a comprehensive and coordinated approach is essential to enhance the overall adoption and impact of standards.

Numerous best practices have been identified that have been successful in various Member States and NSBs. These include the creation of stakeholder advisory bodies, free access to technical work for SMEs and societal stakeholders, the development of monitoring tools or tax incentives. Sharing best practices among NSBs and Member States is essential for enhancing stakeholder engagement in the standardisation process. Notably, some smaller NSBs have been exceptionally proactive in this regard, demonstrating that effectiveness is not solely dependent on size and capacity. These smaller NSBs often

employ innovative strategies and targeted outreach to involve stakeholders effectively. By disseminating these successful practices across all NSBs and Member States, the standardisation community can improve overall efficiency and inclusivity. This approach allows each NSB/Member State to adapt proven methods to their unique contexts, fostering a more cohesive and participatory standardisation environment.