

Standards in the Digital Single Market: setting priorities and ensuring delivery

Fields marked with * are mandatory.

General information on respondents

* Do you wish your contribution to be published?

Please indicate clearly if you do not wish your contribution to be published.

- YES
 NO

Submissions that are sent anonymously will neither be published nor taken into account.

The Commission may contact you in case a clarification regarding your submission is needed. If you do not wish to be contacted, please state this clearly in your reply.

I wish to be contacted:

- YES
 NO

* I'm responding as:

- An individual in my personal capacity
 The representative of an organisation/company/institution

* What is your name?

Sebastiano

* What is your surname?

Toffaletti

* Please enter your email address:

s.toffaletti@pin-sme.eu

Please enter your telephone number:

+3222850726

* Please enter the name of your institution/organisation/business:

PIN-SME

* Is your organisation registered in the Transparency Register of the European Commission and the European Parliament?

Yes

No

* Please indicate your organisation's registration number in the Transparency Register.

920867915729-68

* Please enter the address of your organisation:

4, Rue Jacques de Lalaing, 1040, Brussels, Belgium

* My institution/organisation/business operates in:

EU

* What is the primary place of establishment of the entity you represent?

Belgium

* Please indicate your main field of business activity and the field of activity related to the consultation's topic (if not identical to the overall business activity).

ICT

* Please select the description that applies to your organisation.

Industrial Association, Forum & Consortium

Is your organisation active in ICT standardisation?

- Yes
- No

* Please indicate the Standard Setting Organisations in which you are active:

ETSI, CEN, ISO/IEC

And if possible:

- The approximate number of person-months devoted to standardisation related activities.

P/M

- The percentage this means to the total of your resources.

%

Questions

II.1 Questions on general framework and problem statement

It is of particular interest to understand if the standards currently under development effectively match interoperability and successfully creating a Digital Single Market. In addition, it is especially interesting to identify those actions in standards development that could act as a solution for wider industry and public needs, not limited to the specific technologies that have been standardized.

Please indicate whether you agree to the following statements and explain your answer briefly.

Q1.1 - Do you share the Commission's analysis in Part 2 of [this document](#)?

- YES
- PARTLY
- NO
- NO OPINION

* Please explain:

Standardisation is a private exercise led by industry and interested stakeholders. Without the right level of involvement from the interested parties, in particular the industry, standardisation is likely to produce standards that will not be used in the market. Or an even worse scenario is that, because the right stakeholders in particular from industry, are not present, standardisation produces bad standards that are then made de facto mandatory by legislation or use in public procurement.

In all cases, the Commission should work with the industry and the interested parties in order to promote, accelerate or facilitate the development of certain standards, not impose an agenda on the Standardisation Organisations that forces them to produce standards with or without industry.

The intervention of the Commission should be punctual and effective: for instance if there is market failure, ie standardisation is unable to produce a certain standard because the parties are unable to find an agreement (e.g. standardised chargers for mobile phones), or the parties who should elaborate a certain standard are unable to afford their participation (eg SMEs for e-invoicing standards), then an intervention of the Commission is justified and beneficial because it addresses and possibly solves a specific issue.

Q1.2 - ICT is assuming a greater role in sectors of the economy which were not previously significant users of ICT. How do you see the role of ICT standards for the economy, in particular beyond the ICT sector?

- Very Important
- Important
- Modest importance
- Not important
- No opinion

* Your comment, indicating a specific sector:

manufacturing, crafts, services

Q1.3 - Do you agree that setting priorities for ICT standards at EU level, accompanied by clear time-tables, could help standard-setting organisations in better organising their work and support the Digital Single Market?

- YES
- PARTLY
- NO
- NO OPINION

*Please explain why:

It could help to have a shared vision on priorities and adapt collaborative tools and methods accordingly. However, it is for those who participate in and drive the standards making process to decide on priorities, whether industry, administrations, users, etc. As explained above in Q1.1 intervention by the EC can be effective only if justified and punctual.

Q1.4. - What other steps should be considered to ensure that any such prioritisation would enjoy broad support of key stakeholders?

Prioritization, or in other words EC intervention, can only be supported when justified and punctual. Examples are given in Q1.1

Q1.5 - What would be the most effective instrument at EU level to ensure that any such prioritisation is taken up by relevant standard-setting organisations? (please select and rank up to 3 instruments)

	1	2	3
A Commission Communication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A Commission Recommendation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Standardization requests issued to EU standard-setting organisations and included in the Annual Union Work Programme for European standardisation	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Regulation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Priorities stated in the Rolling Plan for ICT Standardisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
None of them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Your comment:

PIN-SME believes that policy priorities can and should be indicated in a policy/legal document but devising standardization work programmes is best left to the parties interested in standardisation. The EC should invest resources to have a regular strategic and operational discussions between policy makers and standardisation stakeholders, in particular industry and SMEs.

Q1.6 - What would be the impact of a priority ICT standards plan defined at the level of the EU on Europe's effort to pursue leadership in global standard-setting?

- POSITIVE
- NEUTRAL
- NEGATIVE
- NO OPINION

*Please explain:

Positive, as long as

- 1) policy makers express clear and well defined policy priorities
- 2) rely on market players and standards organizations to devise standardization plans in support of the policy objectives
- 3) communicate accordingly in EU and outside.

Q1.7 - What would be the impact of a priority ICT standards plan defined at the level of the EU on the ability of European companies to capture new global market opportunities?

- POSITIVE
- NEUTRAL
- NEGATIVE
- NO OPINION

*Please explain:

In a fast evolving market, it is impossible to say that such priority plan would then concretely benefit European companies in any particular field. On the contrary, if the objective is support global competitiveness of European companies, then the EC should evaluate on a case-by-case basis very specific and tailored interventions for specific standards in support of specific industry groups. This can only be done if the EC has sufficient market intelligence and regular connection to the industry, especially innovative SMEs.

Q1.8 - Besides establishing a priority ICT standards plan, what other measures could the Commission (or other EU institutions) take to ensure that standardisation plays its role in achieving a Digital Single Market?

- Invest in market intelligence to find out where EC intervention can lead to competitiveness for European companies, especially SMEs.
- Establish a dialogue with European industry, especially SMEs, to develop knowledge of areas where EC intervention might be justified and effective.

Q1.9 - How should standard-setting organisations best respond to the increasing speed of technological development and the integration of technologies in business processes across all industrial sectors?

A - Regarding the adaptation of existing standards to new developments:

- Keep factoring in (market) requirements as they surface/evolve—and trigger/collect them a priori to the extent workable
- Maintenance and/or update of existing standards, change requests within and during the standards making process

B - Regarding the introduction of new standards for new technologies/products:

The current standardisation system is sufficiently reactive to new technological developments. Industry and stakeholders need good standards, not faster standards. Speed of standardisation should never compromise the quality of standards. Bad standards are in most cases useless because they will not be used by industry; in the worse cases, when bad standards become de facto mandatory through reference in legislation or public procurement, this is a disaster for the competitiveness of companies.

Q1.10 - How do you see the involvement of European ICT Standardization experts in international standardisation organisations (ITU, ISO, IEC) and global standard setting organizations (i.e. IEEE, IETF, OASIS, W3C, ECMA international)?

A - The *SCOPE (or LEVEL?) of involvement*.

- Is appropriate
- Should be increased
- Should be decreased
- No opinion

Please explain:

With regard to participation of European SMEs in international ICT standardisation, this is certainly limited due to its costs. Hence, additional public support would be beneficial.

It should also be noted that ETSI, due to its particular model, is to be considered a global/international standardisation body, whose standards are develop in Europe for global use.

B - The *QUALITY of involvement*:

- Is appropriate
- Should be improved
- No opinion

Please explain:

Europe should invest education and training of (international ICT) standardisation experts. In many areas industry, especially SMEs, lack knowledge and expertise about standardisation. Even when companies have the right understanding of the importance of ICT standardisation, it is very hard for them to recruit good experts.

II.2 Questions on priority domains for standardisation in the Digital Single Market

In this section, the Commission invites survey participants to express opinions and ideas on setting priorities for ICT standardisation.

The Commission has identified 10 domains set out below, as well as a set of sub-domains within each domain. Please note that domains and subdomains are interrelated and that overlaps are possible and desirable in particular with respect to synergies between different sectors. Some domains are horizontal and may benefit a large number of sectorial applications; some other domains are more sectorial and were identified as areas where ICT standardisation would bring important benefits.

First check whether the list of domains is complete and relevant. If the list is considered incomplete, please complement it with additional domains that you consider priority.

Q2.1 - Please identify and rank the domains (up to 5) and subsequently subdomains (up to 3 per domain) within each domain that you consider a priority. If specific domains or subdomains are missing please add them.

at most 5 answered row(s)

	1	2	3	4	5
Domain 1: 5G communications	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Domain 2: Cloud computing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Domain 3: Cybersecurity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Domain 4: Data driven services and applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Domain 5: Digitisation of European Industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Domain 6: eHealth and aging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Domain 7: Intelligent Transport Systems (ITS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Domain 8: Internet of Things	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Domain 9: Smart Cities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Domain 10: Smart and Efficient Energy Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Others Domain(s) and subdomain(s):

ICT Competences (e-skills)

Subdomains of Domain 1: 5G communications

at most 3 answered row(s)

	1	2	3
Architecture definition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Channel model characterisation for innovative usages (e.g. V2V)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Converged control plane (fixed mobile)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evolved Packet Core (EPC)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Multi domain SDN interoperability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Multi tenancy and multi technology C-RAN	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Network slicing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New radio access technologies and waveforms, including backhaul/front haul integration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Resource identification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SDN Northbound interface	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Domain 2: Cloud computing

at most 3 answered row(s)

	1	2	3
Application portability	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
As a service solutions (IaaS, PaaS, SaaS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cloud networking infrastructures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cloud platforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moving non-personal data between service providers	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Service Level Agreements (SLAs)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Process Computation Integrity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Domain 3: Cybersecurity

at most 3 answered row(s)

	1	2	3
Cyber security design requirements	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Process standard for incident reporting	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Process standard for cyber risk management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Process standard for vulnerability disclosure	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Technical standards for encryption	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical standards for public key infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical standard for security and privacy by design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Domain 8: Internet of Things

at most 3 answered row(s)

	1	2	3
Advanced Manufacturing / M2M	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Building and Home automation	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Energy / Environment monitoring	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Medical and health care systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reference architectures and related standardised interfaces	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smart cities and communities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smart living environment for ageing well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smart farming and food security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transportation (including ITS, C2C, C2I, automated driving)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wearables	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer to Q2.2 to Q2.6 for each of the domains selected. In your answer please specify if applicable the subdomains that you have selected.

*Q2.2 - For the **Domain 1: 5G communications** and the subdomains which you have selected, please explain briefly how the criteria indicated in Box I apply to them. We copy the criteria for your convenience.

- Link to DSM objectives and other EU policies
- Competitiveness of the European industry
- Clear and achievable targets
- Evidence of market relevance and stakeholders needs
- Domains where standard setting has direct benefits for consumers

5G is a technology that will create demand for more services and applications, hence create great opportunities for innovative SMEs

Q2.3 - The Priority ICT standards plan should lead to the production of technical specifications, standards or architectures where there is a need/gap, but could also propose any other type of standardisation action such as landscape analysis, gap finding, roadmaps or, ecosystem building that could contribute to ensure that standardisation plays its role in achieving a Digital Single Market. Please explain if a standardisation need/gap exists in the **Domain 1: 5G communications** and sub-domains which you have selected. Please also indicate within which time-frame such need could be addressed. Please limit to a maximum of five needs/gaps per domain or sub-domain:

Q2.4 - Among those below, which action could be a priority in the **Domain 1: 5G communications** and sub-domains which you have selected.? Please rank the list below and explain your choice.

	1	2	3	4	5	6	7	8	9
• Mandating European Standardisation Organisations (ESOs) for fast delivery of standards/technical specifications.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Foster cooperation among standards development organisations for ICT priorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Support Research & Innovation projects to contribute to standardisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Community Building	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Support creation of public-private partnerships - PPP	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Increase strategic coordination of ICT standardisation at EU level.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Ensure consistent application of existing standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Accelerate the identification of ICT technical specifications most commonly used for their reference in public procurement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• No opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2.5 - Please indicate any other standardisation initiatives which would help achieving the Digital Single Market in the **Domain 1: 5G communications** and sub-domains which you have selected., and who in the standardisation landscape would be best placed to lead on these initiatives:

Q2.6 - Would your organisation be prepared to invest resources in standard-setting to achieve the priority standards within the proposed time-frames?

Please answer this question only if you are responding as the representative of an organisation/company/institution.

- YES
- YES, provided some conditions are met
- NO
- No opinion

*Q2.2 - For the **Domain 2: Cloud computing** and the subdomains which you have selected, please explain briefly how the criteria indicated in Box I apply to them.

We copy the criteria for your convenience:

- Link to DSM objectives and other EU policies
- Competitiveness of the European industry
- Clear and achievable targets
- Evidence of market relevance and stakeholders needs
- Domains where standard setting has direct benefits for consumers

Interoperability and portability are essential for allowing SMEs to benefit from Cloud Computing both as users and as providers. For detailed recommendations, please read <http://www.cloudingsmes.eu/wordpress/wp-content/uploads/2015/10/Clouding-SMEs-WhitepaperV6final2.pdf>

Q2.3 - The Priority ICT standards plan should lead to the production of technical specifications, standards or architectures where there is a need/gap, but could also propose any other type of standardisation action such as landscape analysis, gap finding, roadmaps or, ecosystem building that could contribute to ensure that standardisation plays its role in achieving a Digital Single Market. Please explain if a standardisation need/gap exists in the **Domain 2: Cloud computing** and sub-domains which you have selected.. Please also indicate within which time-frame such need could be addressed. Please limit to a maximum of five needs/gaps per domain or sub-domain:

Q2.4 - Among those below, which action could be a priority in the *Domain 2: Cloud computing* and the subdomains which you have selected? Please rank the list below and explain your choice.

	1	2	3	4	5	6	7	8	9
• Mandating European Standardisation Organisations (ESOs) for fast delivery of standards/technical specifications.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Foster cooperation among standards development organisations for ICT priorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Support Research & Innovation projects to contribute to standardisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Community Building	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Support creation of public-private partnerships - PPP	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Increase strategic coordination of ICT standardisation at EU level.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Ensure consistent application of existing standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Accelerate the identification of ICT technical specifications most commonly used for their reference in public procurement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• No opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Please explain:

The need for interoperability in Cloud Computing is not about developing new standards, but finding ways to convince industry (especially large players) to implement common standards

Q2.5 - Please indicate any other standardisation initiatives which would help achieving the Digital Single Market in the **Domain 2: Cloud computing** and the subdomains which you have selected, and who in the standardisation landscape would be best placed to lead on these initiatives:

Q2.6 - Would your organisation be prepared to invest resources in standard-setting to achieve the priority standards within the proposed time-frames?

Please answer this question only if you are responding as the representative of an organisation/company/institution.

- YES
- YES, provided some conditions are met
- NO
- No opinion

*Q2.2 - For the **Domain 3: Cybersecurity** and the subdomains which you have selected, please explain briefly how the criteria indicated in Box I apply to them.

We copy the criteria for your convenience:

- Link to DSM objectives and other EU policies
- Competitiveness of the European industry
- Clear and achievable targets
- Evidence of market relevance and stakeholders needs
- Domains where standard setting has direct benefits for consumers

European (cyber) security industry is highly innovative and competitive. Governments in EU member states are extremely active in developing (cyber)security solutions. Any measure that may realistically support standardization and interoperability in this domain is likely to contribute to further market developments, therefore industrial developments within a consistently growing sector. Protecting trade secrets and designs from EU enterprises against competitive intelligence from other entities is also an important endeavour which many SME can't actually afford and could be eased up by standardized products and practices.

Q2.3 - The Priority ICT standards plan should lead to the production of technical specifications, standards or architectures where there is a need/gap, but could also propose any other type of standardisation action such as landscape analysis, gap finding, roadmaps or, ecosystem building that could contribute to ensure that standardisation plays its role in achieving a Digital Single Market. Please explain if a standardisation need/gap exists in the **Domain 3: Cybersecurity** and the subdomains which you have selected. Please also indicate within which time-frame such need could be addressed. Please limit to a maximum of five needs/gaps per domain or sub-domain:

There are few examples of cybersecurity frameworks actually applied across the EU, none of them is mandatory if not in very specific contexts. This allows the provision of insecure services and products both by private enterprises and governments. Cybersecurity frameworks engineered to be related with incentives schemes for providing secure services and products could prove decisive to support an improvement in this perspective.

Q2.4 - Among those below, which action could be a priority in the *Domain 3: Cybersecurity* and the subdomains which you have selected? Please rank the list below and explain your choice.

	1	2	3	4	5	6	7	8	9
• Mandating European Standardisation Organisations (ESOs) for fast delivery of standards/technical specifications.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Foster cooperation among standards development organisations for ICT priorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Support Research & Innovation projects to contribute to standardisation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Community Building	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Support creation of public-private partnerships - PPP	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Increase strategic coordination of ICT standardisation at EU level.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
• Ensure consistent application of existing standards	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Accelerate the identification of ICT technical specifications most commonly used for their reference in public procurement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
• Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• No opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Please explain:

Actions for raising awareness of SME and supporting the use of cyber-security standards by SMEs are necessary, because the smaller organisations are the weakest ring of the security chain and they make the all system vulnerable.

Q2.5 - Please indicate any other standardisation initiatives which would help achieving the Digital Single Market in the **Domain 3: Cybersecurity** and the subdomains which you have selected, and who in the standardisation landscape would be best placed to lead on these initiatives:

Q2.6 - Would your organisation be prepared to invest resources in standard-setting to achieve the priority standards within the proposed time-frames?

Please answer this question only if you are responding as the representative of an organisation/company/institution.

- YES
- YES, provided some conditions are met
- NO
- No opinion

* Please explain your choice and specify conditions:

Experts working in Cybersecurity technical committees at ETSI and at ISO/IEC

* Q2.2 - For the **Domain 8: Internet of Things** and the subdomains which you have selected, please explain briefly how the criteria indicated in Box I apply to them.

We copy the criteria for your convenience:

- Link to DSM objectives and other EU policies
- Competitiveness of the European industry
- Clear and achievable targets
- Evidence of market relevance and stakeholders needs
- Domains where standard setting has direct benefits for consumers

IoT is a concept that covers many different areas, many of which still left to be developed. However, the proliferation of sensors, connected objects and services pleads for the necessity to go for standards and support the interoperability of solutions, products and services to the extent workable -and realistic, even if the necessity to have “cross domains” interoperability in IoT is currently debated.

Advanced Manufacturing / M2M:

Manufacturing is an essential factor in any advanced economy. It is an area in which the EU has great value and global excellence. The emergence of the industrial IoT together with other enabling technologies, including data analytics, remote monitoring and mobility, opens up new opportunities to enhance productivity, drive better decision making, create new business models, and generate new revenue streams.

With highly mobile workforce, evolving customers and a compelling need for better supply chain network integration, standards are essential both to ensure interoperability and as a means to focus businesses.

Reference architectures and related standardised interfaces:

IoT is emerging as a major horizontal activity which will impact the work of many standardisation bodies. There is an urgent need for the development of reference architectures, which can help ensure a consistent approach to IoT standardisation. A single IoT reference architecture for all possible application domains is probably not an achievable goal, therefore it seems reasonable to identify a number of IoT reference architectures and at the same time identify the differences between them (e.g. limitations, suitability for different applications).

Smart living environment for ageing well:

This sub-domain largely overlaps with “Medical and health care systems” and also Domain 6 (eHealth and aging) to which it is inextricably linked (particularly sub-domains “ICT infrastructure for the implementation and delivery of services for independent living in age-friendly buildings”, “interoperability profiles for independent living” and “telemedicine”). Population is ageing nearly all over the world, however in Europe (and Japan) this trend is particularly relevant. This phenomenon poses serious social and economic issues but offers also big opportunities, particularly for innovative ICT industries with large companies but also innovative SMEs, developing new products and services. In this context, IoT is a necessary enabling technology and calls for integration, standardisation and interoperability work on required ICT platforms, services and data sources. This challenge is relevant for consumers, because it addresses the needs of an increasingly large part of the populations, and for institutions as well, because it promises to mitigate the growing social expenditures that have been forecasted. This sub-domain is also relevant because it can act as a cornerstone for many other domains and sub-domains: besides the ones that have already been mentioned, it calls for integration with other domains such as energy, transport, smart cities.

Q2.3 - The Priority ICT standards plan should lead to the production of technical specifications, standards or architectures where there is a need/gap, but could also propose any other type of standardisation action such as landscape analysis, gap finding, roadmaps or, ecosystem building that could contribute to ensure that standardisation plays its role in achieving a Digital Single Market. Please explain if a standardisation need/gap exists in the **Domain 8: Internet of Things** and the subdomains which you have selected. Please also indicate within which time-frame such need could be addressed. Please limit to a maximum of five needs/gaps per domain or sub-domain:

Q2.4 - Among those below, which action could be a priority in the **Domain 8: Internet of Things** and the subdomains which you have selected? Please rank the list below and explain your choice.

	1	2	3	4	5	6	7	8	9
• Mandating European Standardisation Organisations (ESOs) for fast delivery of standards/technical specifications.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Foster cooperation among standards development organisations for ICT priorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Support Research & Innovation projects to contribute to standardisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Community Building	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Support creation of public-private partnerships - PPP	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Increase strategic coordination of ICT standardisation at EU level.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Ensure consistent application of existing standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Accelerate the identification of ICT technical specifications most commonly used for their reference in public procurement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• No opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2.5 - Please indicate any other standardisation initiatives which would help achieving the Digital Single Market in the **Domain 8: Internet of Things** and the subdomains which you have selected, and who in the standardisation landscape would be best placed to lead on these initiatives:

Q2.6 - Would your organisation be prepared to invest resources in standard-setting to achieve the priority standards within the proposed time-frames?

Please answer this question only if you are responding as the representative of an organisation/company/institution.

- YES
- YES, provided some conditions are met
- NO
- No opinion

* Please explain your choice and specify conditions:

Participation of experts at ETSI

* Q2.2 - For the **Other(s) Domain(s)** and the subdomains which you have selected, please explain briefly how the criteria indicated in Box I apply to them.

We copy the criteria for your convenience:

- Link to DSM objectives and other EU policies
- Competitiveness of the European industry
- Clear and achievable targets
- Evidence of market relevance and stakeholders needs
- Domains where standard setting has direct benefits for consumers

e-skills are indicated as a priority in the DSM. For SMEs it is important that the formal education and VET schemes are more harmonised at EU level, such that companies are able to recruit staff from other countries.

Q2.3 - The Priority ICT standards plan should lead to the production of technical specifications, standards or architectures where there is a need/gap, but could also propose any other type of standardisation action such as landscape analysis, gap finding, roadmaps or, ecosystem building that could contribute to ensure that standardisation plays its role in achieving a Digital Single Market. Please explain if a standardisation need/gap exists in the **Other(s) Domain(s)** and the subdomains which you have selected. Please also indicate within which time-frame such need could be addressed. Please limit to a maximum of five needs/gaps per domain or sub-domain:

Q2.4 - Among those below, which action could be a priority in the **Other(s) Domain(s)** and the subdomains which you have selected? Please rank the list below and explain your choice.

	1	2	3	4	5	6	7	8	9
• Mandating European Standardisation Organisations (ESOs) for fast delivery of standards/technical specifications.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Foster cooperation among standards development organisations for ICT priorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Support Research & Innovation projects to contribute to standardisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Community Building	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Support creation of public-private partnerships - PPP	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Increase strategic coordination of ICT standardisation at EU level.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Ensure consistent application of existing standards	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Accelerate the identification of ICT technical specifications most commonly used for their reference in public procurement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• No opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Please explain:

Public intervention in this field (ie ICT competences) is well justified by the fact that the primary stakeholders both societal and economic, especially SMEs, are unable to commit resources to the development of standards. Beyond the delivery of standards, it is necessary to enforce their use by public authorities and industry.

Q2.5 - Please indicate any other standardisation initiatives which would help achieving the Digital Single Market in the **Other(s) Domain(s)** and the subdomains which you have selected, and who in the standardisation landscape would be best placed to lead on these initiatives:

CEN PC 428 on ICT Competences

Q2.6 - Would your organisation be prepared to invest resources in standard-setting to achieve the priority standards within the proposed time-frames?

Please answer this question only if you are responding as the representative of an organisation/company/institution.

- YES
- YES, provided some conditions are met
- NO
- No opinion

* Please explain your choice and specify conditions:

Participating expert at CEN

II.3 Other Comments

Other comments:

Background Documents

analysis.pdf (/eusurvey/files/f2d6718c-7e07-4955-9505-c94113bbbe0f)

Contact

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