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 nationality?

Germany ▾

* What is your place of residence?

Germany ▾

* What is your name?

Tino

* What is your surname?

Langer

* Please enter your email address:

tino.langer@iwu.fraunhofer.de

Please enter your telephone number:

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:

good idea to join efforts

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:

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production and manufacturing. increasingly important. digitisation in
manufacturing
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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:

```
make absolutely sure to be as representative and inclusive as possible.
prevent domination of particular parties by all means. do open surveys,
gather opinions,
```

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

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INCLUSIVENESS taking into account research players and not only
industry. Include SMEs, too. maybe invite opinions through industry and
SME and research associations to get as many opinions as possible.
```

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	○	○	○
A Commission Recommendation	○	○	●
Standardization requests issued to EU standard-setting organisations and included in the Annual Union Work Programme for European standardisation	●	○	○
Regulation	○	○	○
Priorities stated in the Rolling Plan for ICT Standardisation	○	●	○
No opinion	○	○	○
None of them	○	○	○

Your comment:

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:

```
no comment
```

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

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?

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:*

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

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

B - The *QUALITY of involvement*:
- ○ Is appropriate
- ○ Should be improved
- ● No opinion

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	○	○	○	○	○
Domain 2: Cloud computing	○	●	○	○	○
Domain 3: Cybersecurity	○	○	●	○	○
Domain 4: Data driven services and applications	●	○	○	○	○
Domain 5: Digitisation of European Industry	○	○	○	○	●
Domain 6: eHealth and aging	○	○	○	○	○
Domain 7: Intelligent Transport Systems (ITS)	○	○	○	○	○
Domain 8: Internet of Things	○	○	○	●	○
Domain 9: Smart Cities	○	○	○	○	○
Domain 10: Smart and Efficient Energy Use	○	○	○	○	○
Others	○	○	○	○	○

Domain 2: Cloud computing

at most 3 answered row(s)

	1	2	3
Application portability	◯	◯	◯
As a service solutions (IaaS, PaaS, SaaS)	◯	◯	◯
Cloud networking infrastructures	◯	◯	◉
Cloud platforms	◉	◯	◯
Moving non-personal data between service providers	◯	◉	◯
Service Level Agreements (SLAs)	◯	◯	◯
Process Computation Integrity	◯	◯	◯
Others	◯	◯	◯

Domain 3: Cybersecurity

at most 3 answered row(s)

	1	2	3
Cyber security design requirements	◉	◯	◯
Process standard for incident reporting	◯	◯	◯
Process standard for cyber risk management	◯	◯	◯
Process standard for vulnerability disclosure	◯	◯	◉
Technical standards for encryption	◯	◯	◯
Technical standards for public key infrastructure	◯	◯	◯
Technical standard for security and privacy by design	◯	◉	◯
Others	◯	◯	◯

Domain 4: Data driven services and applications

at most 3 answered row(s)

	1	2	3
APIs for simplified data sharing and reuse between data-driven services and applications	●	○	○
Big Data technologies (such as interoperability of Big Data technologies in software stacks)	○	●	○
Data licensing conditions	○	○	○
Data related processes (such as data collection, data curation, data management)	○	○	○
Data representation formats (such as XML)	○	○	○
Data service protocols	○	○	●
Entity identifiers for the sector	○	○	○
Metadata schemata	○	○	○
Others	○	○	○

Domain 5: Digitisation of European Industry

at most 3 answered row(s)

	1	2	3
Product Planning, Product design, Product identification, Product tracing and Product life cycle management	○	○	○
Manufacturing equipment, Production process (including maintenance and supervision)	○	○	◉
Human Machine Interfaces and Human Machine Interaction	◉	○	○
Modelling, Simulation, Testing and Verification of products and processes	○	○	○
Integration of the value chain (including supply chain, marketing, distribution, sales and support, ERP (Enterprise Resource Planning))	○	○	○
Models for different areas of digitisation of industry, terminology, reference architectures, use cases and interoperability profiles	○	◉	○
Security, IT Security, Information security	○	○	○
Safety of persons and environment	○	○	○
Reliability and robustness of systems including real time considerations	○	○	○
Communication platforms, Coexistence of wireless applications in a factory	○	○	○
Others	○	○	○

Domain 8: Internet of Things

at most 3 answered row(s)

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

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

* 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

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no comment
```

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.	○	○	○	●	○	○	○	○	○
• Foster cooperation among standards development organisations for ICT priorities	○	○	○	○	○	○	●	○	○
• Support Research & Innovation projects to contribute to standardisation	●	○	○	○	○	○	○	○	○
• Community Building	○	○	○	○	●	○	○	○	○
• Support creation of public-private partnerships - PPP	○	○	○	○	○	●	○	○	○
• Increase strategic coordination of ICT standardisation at EU level.	○	○	○	○	○	○	○	●	○
• Ensure consistent application of existing standards	○	○	●	○	○	○	○	○	○
• Accelerate the identification of ICT technical specifications most commonly used for their reference in public procurement	○	●	○	○	○	○	○	○	○
• Other	○	○	○	○	○	○	○	○	●
• No opinion	○	○	○	○	○	○	○	○	○

* Please explain:

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no comment
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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

* Please explain your choice and specify conditions:

```
no comment
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* 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

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no comment
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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:

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.	○	●	○	○	○	○	○	○	○
• Foster cooperation among standards development organisations for ICT priorities	○	○	○	○	○	○	●	○	○
• Support Research & Innovation projects to contribute to standardisation	●	○	○	○	○	○	○	○	○
• Community Building	○	○	●	○	○	○	○	○	○
• Support creation of public-private partnerships - PPP	○	○	○	○	○	○	○	○	●
• Increase strategic coordination of ICT standardisation at EU level.	○	○	○	●	○	○	○	○	○
• Ensure consistent application of existing standards	○	○	○	○	●	○	○	○	○
• Accelerate the identification of ICT technical specifications most commonly used for their reference in public procurement	○	○	○	○	○	●	○	○	○
• Other	○	○	○	○	○	○	○	●	○
• No opinion	○	○	○	○	○	○	○	○	○

* Please explain:

> no comment

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:

> no comment

* Q2.2 - For the **_Domain 4: Data driven services and applications_** 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

> no comment

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 4: Data driven services and applications** 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 4: Data driven services and applications** 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.	○	○	○	○	○	○	○	◉	○
• Foster cooperation among standards development organisations for ICT priorities	○	○	◉	○	○	○	○	○	○
• Support Research & Innovation projects to contribute to standardisation	◉	○	○	○	○	○	○	○	○
• Community Building	○	◉	○	○	○	○	○	○	○
• Support creation of public-private partnerships - PPP	○	○	○	◉	○	○	○	○	○
• Increase strategic coordination of ICT standardisation at EU level.	○	○	○	○	○	◉	○	○	○
• Ensure consistent application of existing standards	○	○	○	○	◉	○	○	○	○
• Accelerate the identification of ICT technical specifications most commonly used for their reference in public procurement	○	○	○	○	○	○	◉	○	○
• Other	○	○	○	○	○	○	○	○	◉
• No opinion	○	○	○	○	○	○	○	○	○

* Please explain:

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no comment
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Q2.5 - Please indicate any other standardisation initiatives which would help achieving the Digital Single Market in the *Domain 4: Data driven services and applications* 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 5: Digitisation of European Industry* 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

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no comment
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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 5: Digitisation of European Industry* 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 5: Digitisation of European Industry* 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.	○	○	○	○	○	○	○	●	○
• Foster cooperation among standards development organisations for ICT priorities	○	○	○	○	○	●	○	○	○
• Support Research & Innovation projects to contribute to standardisation	○	●	○	○	○	○	○	○	○
• Community Building	○	○	○	○	●	○	○	○	○
• Support creation of public-private partnerships - PPP	○	○	●	○	○	○	○	○	○
• Increase strategic coordination of ICT standardisation at EU level.	●	○	○	○	○	○	○	○	○
• Ensure consistent application of existing standards	○	○	○	●	○	○	○	○	○
• Accelerate the identification of ICT technical specifications most commonly used for their reference in public procurement	○	○	○	○	○	○	●	○	○
• Other	○	○	○	○	○	○	○	○	●
• No opinion	○	○	○	○	○	○	○	○	○

*Please explain:

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no comment
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Q2.5 - Please indicate any other standardisation initiatives which would help achieving the Digital Single Market in the *Domain 5: Digitisation of European Industry* 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:

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no comment
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* 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

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no comment
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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.	○	○	○	○	◉	○	○	○	○
• Foster cooperation among standards development organisations for ICT priorities	○	○	○	◉	○	○	○	○	○
• Support Research & Innovation projects to contribute to standardisation	○	◉	○	○	○	○	○	○	○
• Community Building	○	○	◉	○	○	○	○	○	○
• Support creation of public-private partnerships - PPP	◉	○	○	○	○	○	○	○	○
• Increase strategic coordination of ICT standardisation at EU level.	○	○	○	○	○	◉	○	○	○
• Ensure consistent application of existing standards	○	○	○	○	○	○	◉	○	○
• Accelerate the identification of ICT technical specifications most commonly used for their reference in public procurement	○	○	○	○	○	○	○	◉	○
• Other	○	○	○	○	○	○	○	○	◉
• No opinion	○	○	○	○	○	○	○	○	○

* Please explain:

> no comment

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:

> no comment

II.3 Other Comments

Other comments:

Background Documents

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

Contact

✉ ec-ict-std-platform@ec.europa.eu