

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

Fields marked with \* are mandatory.

### General information on respondents

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\* 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?

Wenning

\* What is your surname?

Rigo

\* Please enter your email address:

rigo@w3.org

Please enter your telephone number:

+33673848731

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

World Wide Web Consortium (W3C)

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

Yes

No

Please register in the [Transparency Register](#) before answering this questionnaire. If your organisation/institution responds without being registered, the Commission will consider its input as that of an individual and as such, will publish it separately.

\* Please enter the address of your organisation:

2004, Route des Lucioles, 06902 Sophia Antipolis

\* My institution/organisation/business operates in:

Other

\* Please specify:

Globally

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

Sophia Antipolis, France

\* 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).

Standardisation

\* Please select the description that applies to your organisation.

International Standardisation Organisation (ISO, IEC, ITU) 

## Questions

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### 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:

W3C is mentioned explicitly in I.2 of the Analysis of the Commission. We believe that a large part of the issues identified by the Commission for the Digital single market have a connotation to Web standards. A standardisation in the Digital single market that does not take account of or influences Web standards will face difficulties. Having done Web standards by the ESOs will distort and confuse the market, globally.

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:

Web standards are key enablers and a prerequisite for the creation of markets. Missing web standards can be a great inhibitor for a strategy to achieve the digital single market. E.g. the eIDAS framework does not connect yet to the Web because of a missing API to connect the hardware to the browser. But 80% of the eIDAS use cases are web related. W3C is working on this, but without support it will remain a niche in a market that is dominated by US manufactured browsers.

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:

A clear policy vision influences the industry and encourages them to invest in certain areas. This includes the making of the needed technical specifications. It allows organisations like W3C to encourage its members to be more active in a certain area. But the timeline should be thought flexible as normally, deadlines don't work well in a consensus driven process.

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

The Commission needs to directly support the fora/consortia activities that develop standards required to implement the EC ICT policies. Without such support, fora/consortia priorities will be mostly set by the industry, with no guarantee of alignment, either in technical functionalities, or in timing. Support will enable W3C to "herd the cats" and encourage, create discussion platforms, workshops to build momentum around a certain objective.

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 checked="" 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 type="radio"/>	<input checked="" type="radio"/>
Regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Priorities stated in the Rolling Plan for ICT Standardisation	<input checked="" 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:

As said already and included in the Commission's analysis: It is not enough to send standardisation requests to the ESOs. They are not the relevant organisations in key areas. The MSP has all key players around the table. It can be used to dispatch standardisation needs. But the Commission also lacks the instruments to support the needed non-ESO activities.

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:

This can be positive if it does not pursue the old pathways that already failed in the OSI/ISO vs Internet split. The UK strategy and pragmatism can serve as an example. With the MSP, the Commission has direct access to all relevant standardisation organisations

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:

Standards predominantly help small and medium sized actors. Those are the most frequent type of ICT company found in the EU. The priority plan helps to identify gaps and align actors behind a goal

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?

Re-establish standardisation as relevant impact in H2020 project evaluation criteria. In the Patent discussion, the Commission was very helpful by organising a series of workshops that reached out to new actors that would not go otherwise to such events. This may introduce new actors to standardisation. Furthermore, the EC needs to continue on its path (started in the MSP and the Rolling Plan) to official recognition of the activities of some important global fora/consortia SSOs that are central to the EU ICT standardisation landscape, e.g. W3C, IETF, IEEE. For instance, the Commission could promote participation of EU companies in those fora/consortia SSOs.

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:

If adaptation is needed, the Commission should send people to those organisations, where the technical specification was done. This way, the Commission connects to the community while helping to bring the needed specification up to date.

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

For both, the evolution and the design of new standards, the W3C recommends that SSOs, whether de-jure or consortia, follow the OpenStand principles for modern standardisation. A standard must be relevant and timely, not necessarily fast. And it must have the endorsement of the relevant market forces.

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:

W3C has several examples where involvement of Commission people had a decisive influence on the outcome and the usability of the resulting technical specification for the EU. The latest in date is Do Not Track.

B - The *QUALITY of involvement*.

- Is appropriate
- Should be improved
- No opinion

Please explain:

Just monitoring a development is not sufficient. Because once a technical decision is made, it is very hard to revert that decision later, even with a lot of political pressure. Be there in time and speak up at the right moment will help to avoid later painful discussions.

## 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"/>				
Domain 2: Cloud computing	<input 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Domain 5: Digitisation of European Industry	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Domain 6: eHealth and aging	<input type="radio"/>				
Domain 7: Intelligent Transport Systems (ITS)	<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"/>				
Domain 10: Smart and Efficient Energy Use	<input type="radio"/>				
Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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

Testing

### Domain 3: Cybersecurity

*at most 3 answered row(s)*

	1	2	3
Cyber security design requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Process standard for incident reporting	<input type="radio"/>	<input 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 type="radio"/>
Technical standards for encryption	<input type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

\*Other(s) subdomain(s):

Web security (see <http://www.strews.eu/> ) , data formats for security breach notifications

### 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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Big Data technologies (such as interoperability of Big Data technologies in software stacks)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data licensing conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data related processes (such as data collection, data curation, data management)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data representation formats (such as XML)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Data service protocols	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Entity identifiers for the sector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Metadata schemata	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manufacturing equipment, Production process (including maintenance and supervision)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Human Machine Interfaces and Human Machine Interaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Modelling, Simulation, Testing and Verification of products and processes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Integration of the value chain (including supply chain, marketing, distribution, sales and support, ERP (Enterprise Resource Planning))	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Models for different areas of digitisation of industry, terminology, reference architectures, use cases and interoperability profiles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Security, IT Security, Information security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safety of persons and environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliability and robustness of systems including real time considerations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication platforms, Coexistence of wireless applications in a factory	<input checked="" 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 type="radio"/>	<input type="radio"/>
Energy / Environment monitoring	<input type="radio"/>	<input type="radio"/>	<input 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 checked="" 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 checked="" 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 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

DSM objectives need further security interoperability standards. Web security has direct benefits to consumers and companies alike. After the Snowden revelations, IETF and W3C have decided to do more for encryption. This includes new encryption schemes and verification whether existing schemes were affected by manipulations. Finally, cybersecurity also includes eIDAS and its connection to the Web.

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:

<http://www.strews.eu/images/STREWS-D3.2-roadmap.pdf> identifies clear gaps and further work in the area of web security. Additionally, support is needed for the web integration of eIDAS and secure hardware elements. Even more importantly, the movement around IoT and Industry 4.0 needs interoperability standards that connect to the web in order for SMEs and medium sized companies to be able to use this trend without lock-in. The smart city movement assumes an interoperable web without creating the relevant standards. The risk is that a lot of investment is done in a platform that remains an island.

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"/>					
• Foster cooperation among standards development organisations for ICT priorities	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
• Support Research & Innovation projects to contribute to standardisation	<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"/>
• 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 type="radio"/>					
• Increase strategic coordination of ICT standardisation at EU level.	<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"/>
• 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 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"/>					
• No opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					

\* Please explain:

`http://www.strews.eu/images/STREWS-D3.2-roadmap.pdf` identifies clear gaps and further work in the area of web security. Additionally, support is needed for the web integration of eIDAS and secure hardware elements.

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:

Prof. Dr. Wahlster said that the term "Industry 4.0" he coined meant "linked data over IoT". In the meantime, the term has been abused to mean anything. But manufacturing is a place where interoperability is lacking and where stunning productivity gains could be achieved by the use of more open, interoperable systems.

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:

We are already investing resources as we are producing the technical specifications that are widely used in the digital single market. But W3C is a not-for-profit organisation that is relatively small entity. Thus the ability to help without support is limited. But W3C is known for its high impact in areas where we are active.

\*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

We are talking about a data driven economy. The interoperability of data has led to an environment where one can talk about a data driven economy. This interoperability was achieved in large part by putting things on the web or in web formats. As the data driven economy is key to the DSM, it needs more interoperability. More interoperability, also transborder in the EU, will help SMEs to target the EU market instead of the domestic market only. We already see data re-use in open data strategies by the EU and Governments, although a little patience is still in order. If the Industry 4.0 interoperability promise succeeds, we will see more need for interoperability specifications in the area of semantics concerning manufacturing.

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:

The main gap today is in the IoT interoperability and the semantics in this area. Furthermore, the application of big data technologies on linked data (that has a slight performance issue) has to be researched, explored and helped with technical specifications for acquiring, processing and exporting data.

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.	<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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
• Support Research & Innovation projects to contribute to standardisation	<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"/>
• 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 type="radio"/>					
• Increase strategic coordination of ICT standardisation at EU level.	<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"/>
• 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 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"/>					
• No opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					

\* Please explain:

Data driven services face two issues: Interoperability and regulatory compliance. In both cases, technical specifications and community building through Workshops can help a great deal

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

\* Please explain your choice and specify conditions:

We area already investing in projects around open data, linked data and we are the premier venue for those technologies

\* 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

We have already the extranets where large manufacturers organise their supply chain. eInvoicing and better semantification will lead to more interoperability and thus to faster and easier exchanges.

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.	<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 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 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 checked="" 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"/>

\* Please explain:

The digitisation needs interoperability to avoid lock-in. But specifications in this area are already rather mature. Thus it needs more coordination between the standards organisations in order to allow an easy implementation of services using standards from several organisations

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:

We are currently standardising the ePub format and complement it for better interoperability and missing features.

\*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

Smart cities and IoT are tightly linked. An opportunistic use of data and information in the environment can lead to very interesting new insights and gains in productivity, but also to a totally new level of production techniques, scientific analysis, but can be used also for the convenience of citizens. (e.g. very exact wheather or traffic information)

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:

IoT needs to connect to the Web. In order to integrate IoT into the production of goods in a non-proprietary way, it needs semantics that are part of the sensor messaging. It will be interesting to balance the information provided by the sensor and the energy it consumes. There are large fields where technical specifications for basic interoperability are needed.

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 checked="" type="radio"/>	<input type="radio"/>				
• Support Research & Innovation projects to contribute to standardisation	<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"/>
• 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 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 checked="" 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"/>

\* Please explain:

The Internet of things still needs a lot of research. This touches on technical interoperability, semantics to be able to recognize what those things provide, but also technical challenges in the area of resilience, security and data protection. In all those cases, standards are used as a platform for joined development in areas where all competitors benefit and where they do not want to compete, especially when it comes to compliance and technical helpers to achieve compliance.

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:

The Web of Things: <http://www.w3.org/WoT/IG/>

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:

W3C has already started an Interest Group called "Web of Things" that looks into interoperability issues around the Internet of Things and how Web technologies can help

\* 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

For W3C, IoT, smart cities and Industry 4.0 are tightly related and are a new challenge to the Web technology stack.

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 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 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 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"/>
• 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 checked="" 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"/>				
• Ensure consistent application of existing standards	<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"/>				
• No opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				

\*Please explain:

The STREWS web security roadmap has identified clear targets for further action. The Commission is strongly encouraged to take up those suggested high impact actions:

<http://www.strews.eu/images/STREWS-D3.2-roadmap.pdf>

The current discussion in the EU turns more around cybersecurity and process standards while there is a lack of technical specifications and investment into web security research. The community building should help to make the cybersecurity world and the normal IT security world to cooperate more and recognize each other's needs. They need to come out of their respective sandboxes.

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:

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:

W3C was the lead partner in the STREWS project and identified clear ways forward. Additionally, eIDAS may fail if we do not manage to connect it to the Web.

## II.3 Other Comments

**Other comments:**

The survey is timely. The MSP has already started to give input to the Priority plan on the DSM. The quality of input there should not be underestimated. At the same time, W3C has realized that the H2020 programme is less and less focused on interoperability and the creation of new level playing fields. The resulting gap hasn't been filled by something else

## Background Documents

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

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## Contact

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