

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?

Wattel-Meijers

* What is your surname?

Kristel

* Please enter your email address:

kmeijers@minez.nl

Please enter your telephone number:

0031625022788

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

Ministry of Economic Affairs

* 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:

Bezuidenhoutseweg 73, 2594 AC Den Haag

* My institution/organisation/business operates in:

Netherlands

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

Den Haag

* 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).

Policy development

* Please select the description that applies to your organisation.

Public authority

Is your organisation active in ICT standardisation?

- Yes
 No

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

Multi Stakeholder Platform on ICT standardisation. The Ministry of Economic Affairs is responsible for policy development in the field of ICT Standardisation

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:

Entities (organisations, countries, communities) that want to play a role in the globalised world, need interoperable systems and processes. Therefore the use of open standards is a prerequisite. Development and adoption of the right standards/specifications is crucial to create a backbone under the European Digital Single Market.

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:

In all sectors of society digitisation is an ongoing/evolving practice. In the IT sector there is a 'winner takes it all' trend. On the long run this is not good for innovation, competition and freedom of choice. Maybe IT standards are not the cure but can help to limit the consequences.

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:

The domains are well chosen, but from policy view it is difficult to prioritise the standards. As a government we have limited involvement in the development of technical specifications and standards. Many standards are still under development. It is a responsibility of the market (industry parties) to develop standards and to indicate priorities.

The proper standards can be, but are not exclusively/necessarily, indicated by policy makers. Many communities contribute in various and beneficial ways to standards setting too. Besides especially in the field of ICT the focus should not only be on the traditional standard setting organisations.

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

- support and encourage innovative initiatives
- connect with/participate in global standardisation initiatives.
- develop best practices to show what the interoperability issues and there consequences are
- participate in SDO's

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 checked="" 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 type="radio"/>	<input type="radio"/>
Regulation	<input type="radio"/>	<input type="radio"/>	<input checked="" 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:

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:

Focus, convergence and support innovation

There are many different initiatives in the field of standardisation, in Europe, VS, China, etc. Harmonisation of these initiatives is essential to Ensure compatibility.

Cooperation at European level can help to influence the development of international standards in order to create a global level playing field.

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:

Give direction, guidance and support for European Companies going abroad.

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?

Making guidelines/ implementation guidelines
practice what you preach; use open standards (e.g. every EU website does IPv6 per 2016)

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:

Don't hesitate and don't talk too much, just do it for example with test beds. Most of the time standard setting organisations are bureaucratic and it takes very long to develop or adjust a standard.

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

Start acting, for example with test beds in cooperation with knowledge partners.

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:

B - The *QUALITY of involvement*.

- Is appropriate
- Should be improved
- No opinion

Please explain:

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 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 type="radio"/>
Domain 3: Cybersecurity	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input 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 checked="" 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 checked="" type="radio"/>	<input type="radio"/>
Domain 8: Internet of Things	<input 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 checked="" type="radio"/>
Domain 10: Smart and Efficient Energy Use	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<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 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 checked="" 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 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):

Standards for Authentication and authorisation

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 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 type="radio"/>	<input checked="" type="radio"/>
Models for different areas of digitisation of industry, terminology, reference architectures, use cases and interoperability profiles	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Security, IT Security, Information security	<input type="radio"/>	<input checked="" 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 type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Domain 7: Intelligent Transport Systems (ITS)

at most 3 answered row(s)

	1	2	3
Access to in-vehicle resources and data	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connected and/or automated driving (Connectivity, Data-Handling, Cybersecurity)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Connected vehicles applications (e.g. Emergency vehicle notification)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
eFreight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Service Platforms (for mobility and in-vehicle services) Smart charging solutions for electric vehicles	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Multimodal passenger transport systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
European Electronic Toll Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Domain 9: Smart Cities

at most 3 answered row(s)

	1	2	3
Application Programming Interfaces for urban platforms	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Urban Indicators	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban Management System (city planning)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban Ontologies (for specific domains (including city objects, geometric elements and themes) or cross-domain)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Urban Platforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban transactions (payments, identification, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Domain 10: Smart and Efficient Energy Use

at most 3 answered row(s)

	1	2	3
BIM – Building Information Modelling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Building automation and smart appliances	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electrical vehicles integration with smart grid and home management systems	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Energy efficiency indicators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heating/Cooling networks including heat supply from waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interconnection of electricity, gas and heating networks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interfaces to Storage systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lighting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Power electronics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smart grids, smart metering	<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

Technical standards for security and privacy by design.
Security and privacy by design are expected to be key elements of the upcoming Data Protection Regulation. In the light of the compulsory character of the regulation, guidance on these issues that go beyond theoretical constructs will aid stakeholders in the European Marketplace in bolstering their competitive position. Technical standards will make the targets of European industry tangible and comparable, thus aiding market transparency. Also, consumers will be able to assess the compliance of products with the latest regulatory requirements.

Process standards for cyber risk management
Cyber risk management is a rapidly emerging aspect of generic risk management. Stakeholders will benefit from practical guidance. A process standard for cyber risk management is expected to facilitate supply chain integration.

Standards for authentication and authorisation
eInteraction/ eServices / e Delivery all need trust. Businesses as well as citizens benefit from proper authentication and authorisation structures and mechanisms. Given the evolving Internet environment, the use of e-mail authentication and related secure internet specifications should get more attention. Trust is an important foundation for online business.

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:

Technical standards for security and privacy by design

Guidance on security and privacy by design, that go beyond theoretical constructs to facilitate and enhance implementation.

In design the Internet deserves special attention. To most people the Internet has now become indispensable. The technical fundament of the Internet, however, is completely invisible and unknown to most of its users. Implementation of modern, secure internet standards needs to be enforced.

Process standard for cyber risk management

Because of its relative novelty of cyber risk management unclarity of terms and definitions hampers the effective and efficient cooperation between European stakeholders. This is exacerbated by the continued growing integration of production and service processes, for which end-to-end security assurance is becoming indispensable. A process standard for cyber risk management should provide a common vocabulary for the partners involved, thus facilitating supply chain integration, and help organizations to deal with vulnerabilities.

Standards for authentication and authorisation

Access and access control are extremely important. The eIDAS regulation is a meaningful initiative in this context, but unambiguous choices for standards as well as ongoing development of existing specifications is needed.

Many appropriate specifications are already there. Raising awareness and providing implementation guidelines should and can be started at short notice.

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 type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 checked="" 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 checked="" 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 checked="" 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"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
• Ensure consistent application of existing standards	<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"/>
• 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 checked="" 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:

Other: 'Practice what you preach': use open standards

Cybersecurity is definitely a worldwide topic. It should not be considered in the European context. Mandating ESOs or coordination at European level is not the way to go.

Fostering cooperation and community building are not expected to deliver substantial added value.

As there exist already many standards in this field, supporting usage and adoption is appropriate. Consistent application is key.

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:

1. Make formal best practices and implementation guidelines for open standards. The NIST-approach in the US is considered a best practice in this context.
2. Invest in interoperability test tools for open standards. For example: Is your internet up to date?

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:

Already many standards exist, no need for standard-setting. We are prepared to contribute to activities to improve proper implementation of standards.

* 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

Aspects of the digitisation of industry are currently under development or in test in field labs or by individual entrepreneurs/organizations. These include e.g. the use of robots, 3D printers, other flexible manufacturing technologies and the usage of data coming from various internal processes. The key challenge is the scaling-up of these developments to industry at large. The Digital Single Market strategy uses the platform concept as a paradigm for this scale-up. Europe should provide the next 'Googles' and 'Amazons' for industry/manufacturing, driven by industry needs.

Within this vision we believe that all topics mentioned in the table above are important. Nevertheless three topics mentioned stand-out when considering scaling-up of small/individual initiatives.

- Models for different areas (..): we think this is especially important from a business model point of view. E.g.: robots and 3D printers need to fit-in an existing production network, information-value providers should work together with industrial actors providing and using their data, etc. They all should have a sustainable and scalable business model and they all should be able to work together. Interoperability profiles/frameworks can play an important role in facilitating this.

- With data becoming an ever-important asset security is a key-requirement. However too-often it is overlooked. Many technologies are not developed with (information) security in mind. Many companies are not aware of the risks and threats posed by security breaches.

- The ultimate value of the digitization trend will be the collaboration of various actors in the supply chain. Digitisation is blurring the boundaries between end-users, logistics/supply chain and manufactures. E.g. through life-time involvement manufactures remain responsible for a product-as-a-service as it is used by and end-user. Mass-customization requires re-shoring of several manufacturing and assembly steps, new manufacturing technologies and smart supply chains will enable this.

Remark : reliability and robustness of systems : does it mean production systems or reliable network systems? This is not clear.

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:

Product Planning, Product design, Product identification, Product tracing and Product life cycle management

- Development of standards for Integration of external design and engineering processes and manufacturing process

Manufacturing equipment, Production process (including maintenance and supervision)

- Development of standards for additive manufacturing (3 d printing) including adaptation of testing protocols for individual batch 1 production.

Human Machine Interfaces and Human Machine Interaction

- Development of standards for co-workers -robotics

Integration of the value chain (including supply chain, marketing, distribution, sales and support, ERP (Enterprise Resource Planning))

- Development of standards for integration of administration with manufacturing process

- Development of standards for integration of logistic /distribution processes in manufacturing processess

Security, IT Security, Information security

- Development of regulation regarding data exchange protection

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 checked="" 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"/>	<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 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 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 checked="" 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 checked="" 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 checked="" 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:

Mandating European Standardisation Organisations (ESOs) for fast delivery of standards/technical specifications; Yes, mandating ESO's for development of market driven standards: Not urging them to fast delivery. Standardisation organisations have already accelerated the process of standards making (fast track).

Digitisation leads to a confluence of standards from the industry/manufacturing and ICT domain. The EU can foster this cooperation e.g. through the support of vertical use cases in ICT standards development (e.g. the PPPs on 5G and Big Data), the clear positioning of ICT within manufacturing initiatives (e.g. EFFRO) and the fostering of collaboration.

We believe research & innovation projects should aim to deliver results that contribute to standardisation of particular areas. This can be done by providing certain (open) specifications to industry. E.g. through formal standardization organisations or industry bodies, alliances and consortia. It should be assessed to what extent the results of the project can scale-up to an industry-wide level.

Several initiatives can promote community building. Nevertheless it is important to align European and national/local initiatives. To foster the involvement of SMEs and industry-wide adoption we believe it is essential to work together with regional/national bodies/initiatives.

It is difficult to enforce standards in industry/manufacturing from a governmental point of view. This can only be done in specific areas. E.g. in B2G/G2B/G2G-chains and in areas where authorities have specific jurisdiction (e.g. spectrum/mobile frequency-use, taxes and customs, health & safety).

In general this is an important aspect. For manufacturing/digitisation this should focus on specific areas where governments have a role in procurement. Examples could be: the maintenance of infrastructures (road, rail, energy), healthcare equipment, construction.

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:

Standardisation in this field is not an European activity but should focus on a global level. Focussing on a European level is denying that ICT already is a pure global level playing field. Standardisation in ICT manufacturing should focus on a global level, not European. EC should focus on a Digital Single global market as much as possible.

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:

Resources are available from Industry partners for the development of market relevant standards. Standardisation is a voluntary process and should not be used to implement and include policy objectives which are not market relevant to stakeholders. Such objectives should be the responsibility for regulators, not standardisers.

As standardisation is a voluntary and market driven process done by market experts time frames should not be dictated by EU but set in agreement and close cooperation with the relevant industry stakeholders.

* Q2.2 - For the **Domain 7: Intelligent Transport Systems (ITS)** 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

upcoming technology and important for the economy

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 7: Intelligent Transport Systems (ITS)** 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:

ITS is an open technology in which interchange of information and common means of communication are essential.

Q2.4 - Among those below, which action could be a priority in the **Domain 7: Intelligent Transport Systems (ITS)** 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Other	<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"/>
• 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:

Other: cooperation of automotive and telecom parties for interoperability

Q2.5 - Please indicate any other standardisation initiatives which would help achieving the Digital Single Market in the **Domain 7: Intelligent Transport Systems (ITS)** and the subdomains which you have selected, and who in the standardisation landscape would be best placed to lead on these initiatives:

cooperation of automotive and telecom parties for interoperability

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 9: Smart Cities** 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

Cooperation and atandardization gives an extra boost to the open innovation environment for Smart Cities and to the development of Smart City applications. This adds to the growth, innovation and viability of 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 9: Smart Cities** 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:

Support of open initiatives aimed at standardization and joint applications.
 Contribute to standardization and developments around joint Smart City architecture and infrastructure.

Q2.4 - Among those below, which action could be a priority in the **Domain 9: Smart Cities** 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 checked="" 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 type="radio"/>	<input type="radio"/>	<input checked="" 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 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 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 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"/>
• 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 checked="" 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 checked="" 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:

To ensure future interoperability, promote cooperation and coordination across city (and other) boundaries.

Q2.5 - Please indicate any other standardisation initiatives which would help achieving the Digital Single Market in the **Domain 9: Smart Cities** 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:

standardisation is a voluntary and market driven process in cooperation with relevant stakeholders

*Q2.2 - For the **Domain 10: Smart and Efficient Energy Use** 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

Standards are crucial for the development of smart energy systems. This applies to (home)energy management systems, but also for aggregators that want different devices to communicate. Also standards create a level playing field and stimulate the competitiveness of the European industry. The world behind smart energy systems is quite broad and due to the large amount of different parties and also very small parties hard to organise. This is especially relevant for building automation and smart appliances and applications that are connected with smart meters. In the field of electric vehicle integration standardization is also essential, but the companies involved are larger. On different fields within smart energy use Dutch parties are working on standardisation, however all of them stress that working on standardisation on EU level is very relevant. Standard setting will lead to a better competitiveness of the European industry in the different domains and to lower prices and more innovations that benefit consumers.

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 10: Smart and Efficient Energy Use** 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:

We have signals that standardisation need/gap exists in these subdomains. Specific knowledge on these needs and the time-frame to address them is not directly available on government level. The industry and knowledge institutes (for instance DNG GL and TNO) would probably have this information.

Q2.4 - Among those below, which action could be a priority in the *Domain 10: Smart and Efficient Energy Use* 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 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 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:

Supporting Research & Innovation projects and Community Building seem 'no-regret' actions in the field of standardization. Standardization always has the effect of benefitting some parties and disappointing other parties. Government policy should be very careful in 'picking the winners'. So, other actions might be important and beneficial for consumers, but it would take consideration to avoid negative effects.

Q2.5 - Please indicate any other standardisation initiatives which would help achieving the Digital Single Market in the **Domain 10: Smart and Efficient Energy Use** and the subdomains which you have selected, and who in the standardisation landscape would be best placed to lead on these initiatives:

There are three initiatives in the Netherlands that are relevant and could help in achieving a Digital Single Market in the domain of smart and efficient energy use. These are:

a. Universal Smart Energy Framework: [HTTP://WWW.USEF.INFO/HOME.ASPX](http://www.usef.info/home.aspx) . USEF delivers the market model for the trading and commoditisation of energy flexibility, and the architecture, tools and rules to make it work effectively. By providing an international common standard for smart energy, USEF unifies markets and ensures that projects and technologies are connected at the lowest cost.

b. Flexiblepower Alliance Network: a network of companies and institutions that jointly develop and manage the international FAN standard. The alliance assures the quality of the standard and monitors compatibility of devices and services that are FAN-labeled. Fan is an independent foundation.

c. The Dutch Energy Atlas: this is an initiative (1 of the 12 iconprojects) within the Dutch Green Deal on smart energy cities that aims to develop a national format with which anonymised data on electricity, heating and tapwater can be made available for society.

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

II.3 Other Comments

Other comments:

Comment: In standards setting the role of governments, including the European Commission, should be that of enabling rather than directing. The enabling role of government consists of the creation and protection of a broadly useful infrastructure. Innovation and the choices of things to evolve can be left to the market players.

Also: In many cases pro-active standards setting should be avoided because standards tend to freeze a technology or technological perspective before its components have been proven in practice.

The domains we consider eligible to be left to market-development at this moment are:

-5G

5G is still very undefined. It is not a field in which the NL government nor the EC should initiate standardisation related activities. Important is to have spectrum available.

- Internet of Things

Seen from a technology perspective 'Internet of Things' is a container concept that holds a veritable laundry list of architectures, technologies and applications. Industry is quite capable of coming up with good designs and solutions at all three levels and the market will select the winners. Early standardization will only restrict the solutions and the choices.

Please realize that these domains are not of minor importance, on the contrary, but the market should be, at least in this phase, the dominant player.

Ehealth is also important and of top priority, but the development of technical standards in the care is left to the industry.

Other domains can benefit significantly from governmental interference. This applies for example for Cybersecurity, which is a real cross-cutting concern. We recommend the EC to focus on infrastructures and protecting the common good through requirements for safety, privacy, resource sharing and pollution control.

Background Documents

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

Contact

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