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

## **I Analysis: Standards in the Digital Single Market**

### **I.1 Political context**

The rapid integration of digital technologies into daily business practices is fundamentally changing entire sectors and processes. From the Internet of Things, Cloud Computing, the advent of 5G technologies, digitisation of industries, big data to eHealth applications, smart and efficient energy and intelligent transport systems, digital technologies are becoming the foundation of a modern economy and societies. Europe is well placed to reap all the benefits of this digital transformation given its strengths in manufacturing and public and private services, and its leading role in important technologies such as fixed and mobile telecommunications, business software and embedded systems.

However, for these technologies to yield the expected benefits, and contribute to generating sustainable growth, jobs and social well-being, they need to be deployed at large scale. For Europe, this means exploiting the Digital Single Market to the fullest, which the Commission has identified as one of its key priorities. It adopted on 6 May 2015 its Digital Single Market Strategy<sup>1</sup>, clarifying that *"A Digital Single Market is one in which the free movement of goods, persons, services and capital is ensured and where individuals and businesses can seamlessly access and exercise online activities under conditions of fair competition, and a high level of consumer and personal data protection, irrespective of their nationality or place of residence. Achieving a Digital Single Market will ensure that Europe maintains its position as a world leader in the digital economy, helping European companies to grow globally."*

Standards<sup>2</sup> play a key role in achieving these objectives. The EU can help create the scale necessary for standards development as important tools for improving interoperability and stimulating the

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<sup>1</sup> The strategy is described in the Communication COM(2015) 192 final available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0192&qid=1438594190467&from=EN> .

<sup>2</sup> Along this document the term "standards" is used only for the sake of brevity and means "technical specifications developed by a standardisation body recognised according to Regulation (EU) 1025/2012, or by private fora & consortia, in accordance with the principles recognised by the World Trade Organisation (WTO)

emergence of new eco-systems across a (digital single) market of more than 500 million consumers, thereby boosting innovation and reinforcing the competitiveness of European industry, including SMEs, on the global scene.

## **I.2 Analysis**

Standards are developed by a number of different actors as part of a voluntary process, which is consensus-oriented.

Regulation (EU) No 1025/2012 on European standardisation<sup>3</sup> recognises CEN, CENELEC and ETSI as European standardisation organisations (ESOs) and ITU, ISO and IEC as formal international standardisation bodies. For the purpose of this consultation, standard setting organisations comprise these formal standardisation organisations as well as international fora and consortia developing ICT technical specifications in accordance with the WTO founding principles.

The European standardisation is organised by and for the stakeholders concerned based on national representation (CEN and CENELEC) or direct participation (ETSI). International standard organisations, such as ITU, ISO and IEC are also playing an important role and European experts are also actively participating in them. At the same time, in particular in the digital sphere, ICT technical specifications are increasingly developed by fora and international consortia (e.g., W3C, IEEE, IETF, OMG, OASIS, ECMA, OMA, Open Group, etc.).

It will be important to promote timely standard-setting that reflects European interests as much as possible. As is to be expected, standard-setting organisations have limited resources to organise their activities, so they will need to make critical choices and organise standard-setting work accordingly. At the same time, there are important socio-economic policy and public interest objectives, notably the effective functioning of the Digital Single Market that EU and its Member States are keen to promote. Therefore, in order to organise standardisation work effectively and to ensure appropriate sequencing and timely availability of standards priorities should be set up.

It is with these objectives in mind that the European Commission in its Digital Single Market Strategy adopted on 6 May 2015 proposed *"to launch an integrated standardisation plan to identify and define key priorities for standardisation with a focus on the technologies and domains that are deemed to be critical to the Digital Single Market (...)"*.

## **I.3 Process**

With this consultation, the Commission seeks input from stakeholders to achieve broad convergence around a set of priority standards and standardisation actions in key technology areas and time-tables for their development which can guide standard-setting organisations in their work and which, once delivered, can constitute a technological foundation upon which other standards can be built.

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in the field of standardisation, namely coherence, transparency, openness, consensus, voluntary application, independence from special interests and efficiency ('the founding principles').

<sup>3</sup> OJ L316, 14.11.2012, p.12.

Several of the technology areas which are part of this consultation are particularly vast, and in order for standardisation work to be organised efficiently, it is important to have a clear idea about the subdomains where standardisation should be focused on during an initial phase.

The European Commission, following and taking into account the results of this public consultation and further targeted consultations, intends to use the following criteria to define the priorities:

- 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

#### **Box I: Selection Criteria**

The present consultation is structured into two parts:

The first part (section II.1) collects views on the framework and the problem statement explained in the analysis section.

The second part (section II.2) includes questions on how to set priorities for standardisation by: (i) first, identifying a **limited set of key domains** that seem most relevant for the DSM, (ii) then, identifying within each of those selected domains a **limited set of subdomains** and (iii) within each of those subdomains, defining **concrete actions** (such as support for research & innovation projects, community building, support presence of EU experts in international standardisation bodies, etc.).

The European Commission has identified 10 domains to facilitate the priority-setting exercise:

- 5G communications
- Cloud computing
- Cybersecurity
- Data driven services and applications
- Digitisation of European Industry
- eHealth
- Intelligent Transport Systems (ITS)
- Internet of Things
- Smart Cities
- Smart and efficient energy use

Moreover, within each domain a set of sub-domains has also been identified. Other additional technology areas that may need to be considered as priorities for standardisation purposes in the DSM are also of interest, in particular in the light of the digitisation of more traditional economic sectors.

**Policy objectives**

The contributions to this consultation will serve to build an ICT Priority Standards Plan, as set out in the Communication of 6<sup>th</sup> May 2015 on a Digital Single Market Strategy<sup>4</sup>.

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<sup>4</sup> COM(2015) 192 final