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Position Paper

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Standardisation in Support of the Digital Single Market

With this paper, OFE would like to contribute to the discussion about boosting competitiveness through interoperability and standardisation.

OpenForum Europe (OFE) welcomes the European Commission's initiative on the Digital Single Market (DSM). OFE received with great interest the Communication on the DSM strategy and the corresponding Staff Working Paper. Both documents, in our opinion, outline a powerful direction for Europe, building on the achievements around digital technologies reached so far and moving on to new horizons and global leadership in the increasing digital transformation of society and industry. In our response at the time of the announcement¹, welcoming the proposals, we also expressed the view that some policy areas would benefit from more ambitious proposals. In the OFE Vision Paper² "Towards an Open Digital Single Market", we presented a three-pronged approach for the completion of the DSM, which is based on a set of Openness Principles. This approach envelops an Open Culture, a Common Framework and being Digital by Default. On a dedicated website³, OFE provides specific recommendations to achieve these goals.

OFE agrees with the Commission that interoperability and standardisation each play a key role in the digital transformation, and OFE is ready to contribute to the respective discussions and definition of actions based on the expertise of its broad membership and network from industry, academia and open source communities.

As a first step, OFE organised a Round Table Event in early July in Brussels, on Standardisation supporting the DSM. The results of this well attended event with vivid discussions were captured in an OpenForum Academy White Paper "ICT Standardisation for the Digital Single Market" which is available for download on the OpenForum Academy website. Building on these Round Table results, below we would like to provide some further thinking on the key aspects around standardisation as mentioned in the DSM strategy.

¹ http://www.openforumeurope.org/press-release-towards-an-open-digital-single-market-ofe-welcomes-the-commission-strategy-but-calls-for-more-ambitious-proposals/

^{2 &}lt;u>http://www.openforumeurope.org/wp-content/uploads/2015/07/Vision_Paper_OFE_final.pdf</u>

^{3 &}lt;u>http://www.openforumeurope.org/press-release-towards-an-open-digital-single-market-ofe-welcomes-the-commission-strategy-but-calls-for-more-ambitious-proposals/</u>

^{4 &}lt;u>http://openforumacademy.org/events/ofa-round-table-ict-standards-for-the-digital-single-market-1/OFA White Paper ICT Standardisation final.pdf</u>

Integrated standardisation plan to identify and define key priorities for standardisation

OFE welcomes the positive assessment of the EU Rolling Plan on ICT Standardisation, and sees benefit in complementing this with a Priority Plan for identifying those areas that have highest priority in the short and medium range for boosting competitiveness and growth for Europe. Above all, we consider this as an important opportunity for adding some strategic direction driving the digitisation of society and industry.

The approach which the Commission has chosen for identifying priorities by leveraging the expertise present in the ICT Multi-Stakeholder Platform (MSP) is strongly supported by OFE, and we are ready to contribute effectively to this task. The MSP is unique in the world, bringing all relevant stakeholders in standardisation around the table, including Member States, European Standardisation Organisations (ESOs), global ICT standardisation fora/consortia, Societal Stakeholders, Industry, etc. All these stakeholders are available for providing their expertise, first-hand advice as well as in their readiness for action around standardisation in support of EU policy objectives.

Supporting the Commission in this direction, OFE would like to propose the following:

- Rely on stakeholder support for new standardisation activities: Experience has shown that the most successful standards are the ones that have broad stakeholder support especially from industry as the main contributor to standardisation regarding technologies and expertise. Where there is a clear market need, there will be a critical mass of stakeholders which develop the respective standardisation deliverables in a timely fashion and with the clear intention to implement them afterwards.
- Aim for global relevance: For global competitiveness it is important that ICT standards are
 implemented globally. Therefore, stakeholders pay a lot of attention to global relevance when
 getting involved in standardisation work. This includes the choice of standards setting body
 where global representation and acceptance are of similar importance to key expertise in the
 given domain.
- **Include global fora/consortia:** Many of the most relevant and globally successful ICT standards are developed in global fora/consortia like W3C, OASIS, the IETF, Ecma International, etc. These fora/consortia are part of the MSP, and are ready to invest by contributing to European standardisation needs and supporting policy objectives. Like the formally recognised standards bodies, they operate with similar open processes and a broad and diverse membership, and provide global open standards.
- **Strive for clear policy objectives and requirements:** Standardisation in support of policy objectives is most successful if the objectives and requirements are as clear and precise as possible. Industry and other stakeholders take up these requirements and work on the respective standards development.
- **Avoid duplication of effort:** Successful standardisation depends on the availability of key industry experts in the respective technology areas. However, the number of these experts is limited. Therefore, duplication of effort in standardisation should be avoided and a survey of available and ongoing work in global standardisation should be conducted before initiating new

projects. The MSP with its broad membership of all stakeholders can provide a solid basis for such a survey. Moreover, the ICT Rolling Plan already provides a basic overview of relevant ongoing and available work for the respective policy areas.

Integrating national catalogues into European catalogues of standards

A European catalogue or catalogues will be a helpful instrument for providing information on available standards and specifications and thus for promoting the uptake and implementation of standards on a pan-European level. It may be helpful to consider the following principles and process steps so as to achieve a fast and effective implementation of such catalogue:

- **Promote the voluntary use of ICT standards:** While there is wide agreement in Europe about the benefits of standards for improving interoperability and avoiding lock-in situations, voluntary use of standards and specifications are key pillars of European standardisation. The catalogue will promote the use of standards by providing information about their availability, and so encourage their use. The same positive effects can be seen with the experience gained at national level.
- Close linkage to Priority Plan and Regulation 1025/2012: To be most effective, the European catalogue should be closely linked to the key policy priorities as identified in the Priority Plan. It could list those standards and specifications that are optionally available for the respective domain for use in public procurement. Thus it should include (but not be limited to) those specifications that have been identified via the identification procedure according to Regulation 1025/2012, Art. 13.
- **Leverage national catalogues:** The catalogues and lists which are available at a national level are sure to be valuable sources of input regarding those standards that are available and relevant in support of policy objectives. A common subset of these standards from all national catalogues and lists could act as a fast starting point for consulting the MSP on these standards and feeding the initial list for a European catalogue.

Updating and extending the European Interoperability Framework

OFE considers the European Interoperability Framework (EIF) to be of high relevance for achieving pan-European e-Government interoperability. Europe set global leadership with its EIF since the very first documents were published in the last decade. Many countries and regions followed the European example.

The EIF largely relies on the positive effects of standardisation for interoperability. For the area of eGovernment, the EIF also correctly requires the use of standards that can be implemented in Open Source – in other words: the use of Open Standards and Open Technologies. OFE is a strong supporter of this direction which has proved to be the right way for increasing competitiveness on fair grounds – including Open Source technologies on equal grounds with proprietary offerings and promoting the combination and integration of the best available technologies. At the same time, use of Open Standards and Open Technologies avoids vendor lock-in.

In this context OFE also takes note and expresses its support of the extensive work undertaken by

governments in Europe like the Netherlands and the UK adoption of its Open Standards Principles⁵.

For leveraging further on the strength of the EIF, OFE recommends :

- **Further strengthen the principles of open standards:** Open standards are at the core of ICT technologies, enabling interoperability as well as innovation at the standards implementation level. They are implementable in open source, and thus contribute to fair competition with open source and proprietary offerings being available on equal grounds.
- **Include some focus on open source:** An extension of the EIF should include explicit mention of open source software, not only as an alternative that should be treated equally to proprietary offerings, but also as a way that is increasingly pursued for technology innovation. Community work today forms one basis for many innovations and innovative platform offerings.
- **Include open technologies within the scope of the EIF:** Open technologies successfully combine open source and open standards and thus provide trusted platforms and infrastructures for emerging technologies, on top of which proprietary vendors as well as open source technology providers can achieve competitive differentiation.

Balanced Framework for Standards Essential Patents

OFE agrees that a balanced approach in the area of patents and standards is important for the overall health of the entire standardisation ecosystem. Such a balanced approach should include some level of differentiation regarding the requirements that are made to standards with respect to the use of patents and the terms and conditions under which standards should be available.

A major aspect of ICT is software interoperability, i.e. allowing software components to communicate, exchange information and thus to interoperate. The world wide web is a prime example for software interoperability. Standards in this context should be available as open standards, i.e. including royalty-free status, and implementable in open source. These are requirements, which, for instance, the EIF rightly puts on standards that are to be used in the area of eGovernment interoperability.

Market players in ICT have for a long time reacted to the need for a nuanced approach towards standards and patents. As a result, the major global ICT standardisation fora/consortia have royalty-free patent policies or options in place in order to allow for the development and availability of standards on a royalty-free basis, and compatible with open source community needs.

OFE sees the market in general as a good way to differentiate between different requirements that need to be addressed by standards regarding the intersection between patents and standards. OFE would encourage standards bodies that have so far only operated with a FRAND policy from now on also to include options for royalty-free, in order to further improve the basic framework conditions for cooperation with open source in those areas where this makes sense and has market support from the stakeholders.

Further considerations for an effective support of the DSM

⁵ https://www.gov.uk/government/publications/open-standards-principles/open-standards-principles

In addition to these major objectives as outlined in the DSM Communication, further aspects are addressed in the Staff Working Document. OFE supports the overriding objective to further drive the digital transformation and thus the move towards a single digital market for Europe. Regarding ICT standardisation in general, but also with respect to the identified specific areas of high relevance for growth and innovation in Europe – Smart Manufacturing, 5G, Internet of Things, Data driven services, and Cloud services – OFE would like to add the following aspects to the process of planning for actions:

- **Differentiation between standardisation deliverables:** Standards bodies develop different kinds of deliverables in support of policy objectives. While there are basic technology standards, e.g. for connectivity etc., there are also other relevant layers, e.g. regarding semantics, processes, architectures, use cases, etc. Moreover, some of these different standards belong to horizontal ICT building blocks while others are more vertical, i.e. domain-specific, such as architectures or use cases. When defining concrete actions it is important to differentiate between these standardisation deliverables and to be as precise as possible regarding the requirements that are put up and against which the standards development activities need to work.
- **Build on the available basis of horizontal technology standards:** ICT standards are often seen as one of the drivers of ICT innovation. Indeed, the availability of certain ICT standards forms the basis for some innovative applications and services to become possible at all. Many of the "smart" areas like Smart Grid, Smart Manufacturing, Intelligent Transportation could evolve only because the respective ICT standards have been available for some time and have triggered the respective integration of technologies into innovative systems. Most often therefore, the need is not for new standards but rather for the gathering of best practices on how to apply the available standards within new, innovative contexts. Other standardisation deliverables, such as reference architectures and use cases, to some extend address this need. Again, the better the differentiation the more effective will actions be for promoting the uptake of standards and new technologies.
- Promote the interaction between pilot projects, open source implementations and standardisation: For most of the identified areas with high priority for Europe, standardisation is well advanced and a lot of stakeholder investment and effort has been undertaken around standardisation. Further progress towards broad market adoption of the technologies depends very little on the development of new or additional standards but rather more on gaining real-life experience with implementations. Therefore, pilot projects and open source implementations should be promoted as an efficient way to bring technologies to the market and, at the same time, to gain experience with the implementation of available standards and information and to identify possible incremental enhancements. The increasing ubiquity of open source developments should provide a fertile ground for cooperation between such software development communities and the standardisation work within not only fora/consortia but also formal SDOs.
- Strive for competitive differentiation on top of the standards: Successful standards provide a basis for competition at the standards implementation level. They don't solve the technical problems, but provide a trusted and agreed baseline. It is with competitive offerings whether proprietary or open source on top of or implementing the standards that best-of-breed solutions are provided to customers. In this respect, standards contribute to an open, competitive market and to increasing competitiveness of the industry. This should be acknowledged regarding expectations towards standardisation deliverables. It is, therefore, for instance not Cloud or security standards which will provide the proper technical offerings and

solutions; rather, the added value that is provided in an open, competitive environment will be found in the competitive technologies and offerings on top of those standards.

OFE provides this input and recommendations as a contribution to the DSM strategy, with the main objective of quickly identifying relevant actions and generating an effective set-up to drive the objectives of the DSM. OFE is committed to contributing further, based on the broad expertise present within OFE and within its OpenForum Academy think tank. We are ready for further discussion, or for clarification and further information, at any time.

For more information, please contact OFE's CEO Graham Taylor at graham@openforumeurope.org or OFE's Director in charge of European Policy & Government Relations Maël Brunet at +32 2 210 02 80 or <a href="mailto:m

About OpenForum Europe

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